





KW Aufzugstechnik GmbH Mikroprozessorsystem DAVID-613 Version V1.27 from 24.01.2022

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1.0 SYSTEM DESCRIPTION

1.1 PRODUCT LIABILITY AND WARRANTY

All work on this microprocessor system must only be performed by qualified staff (electrician or electrically trained person). Please note the safety instructions in this manual.

This manual is therefore directed to the elevator technician who installed the control and putting it into service, as well as to control the farmer who installs the device in the control panel and performs the necessary wiring.

We guarantee the product accuracy and not a product that we publish this information and operating instructions. There is no guarantee, legal responsibility, nor any liability for the cost-or error-free operation for a purpose other than the grants defined in section 1.2.

WARRANTY CONDITIONS

The function of the device according to this manual are guaranteed for 12 months. Prerequisite for the free shipment of spare parts is the demonstrated compliance with the operating instructions for storage, transportation, installation, commissioning and operation, and maintenance. The General Terms and Conditions of KW AUFZUGSTECHNIK GmbH.

1.2 SAFETY CONDITIONS

IN GENERAL

Running the controller system DAVID-613 without casing is forbidden, because of the high voltage in there. If you do run it without casing, there could be personal damage.

Disregard of this provision is a risk of serious personal injury and property damage. All work on the microprocessor system may be performed only by qualified personnel. The following safety rules are observed: DIN VDE 0100, DIN VDE 0110, IEC 364, IEC-664.

People who are familiar with the installation and commissioning of Microprocessor Systems DAVID-613, respecting the national accident prevention regulations and demonstrate appropriate professional qualifications are properly qualified personnel in accordance with this manual.

USE OF THE CONTROLLER SYSTEM DAVID-613

The controller system DAVID-613 is device for the use in elevators. Other using is forbidden without the prior written consent of KW Aufzugstechnik GmbH. The following laws must be considered, when you are building in the inverter:

- EG-Guidelines 89/392/EWG (machine guideline)
- EN 60204
- Low Voltage Guidelines 73/23/EWG
- EMV-Guideline (89/336/EWG)
- prEN 50178/DIN VDE 0160
- EN 60439-1/DIN VDE 0660 Teil 500
- EN 60146/DIN VDE 0558

TRANSPORT AND MOUNTING

The microprocessor system DAVID-613 contains electrostatically sensitive components which can be easily damaged by improper handling. Electrical components must not be mechanically damaged or destroyed. To connect the device it is not necessary to remove the appliance lid. The installation and cooling of equipment must be carried out in accordance with the provisions of the manual.

The control computer must be protected from excessive strain during transport and handling. The electronic components and contacts must be avoided.

SERVICE

Only parts of manufacturer are allowed to use. The lead gel accumulator is aging between the lifetime. With demand for highest availability a preventive exchange is recommended after one year. The cleaning is permissible only with halogeneous-free means.

1.3 EU DECLARATION OF CONFORMITY & EMC TEST REPORT

Product Controller for Elevators
Type Microprocessor System DAVID -613

We confirm that the a.m. product complies with the applicable EG-guidelines mentioned below, and that it has been designed and manufactured in accordance with these standards. An operating instruction is issued with each unit. The safety advices must be studied in detail, before operating the unit.

Perform the test according to EN 12015: 2005 Emissions and EN12016: 2008 Immunity

The test was performed according to the following individual standards:

EN 61000-4-2 : 2009-12
EN 61000-4-3 : 2008-06
EN 61000-4-4 : 2005-07
EN 61000-4-5 : 2007-06
EN 61000-4-6 : 2008-04
EN 55011 : 2007-11

Oberursel, 28.09.2013



Hans-Werner Walbert

EMV Prüfbericht**SERVICEFORCE.COM**
SERVICES FOR COMMUNICATIONS AND AUTOMATION ENGINEERING**Service Center**ServiceForce.Com GmbH
Kleyerstr. 92
60326 Frankfurt am Main**Prüfbericht-Nr.:** 043_11F
Datum: 02.03.2011
Projekt-Nr.: 505000300

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Prüfort:	(falls nicht mit der Adresse des Labors identisch)		

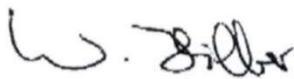
Prüfling: Steuergerät David 613

Seriennummer: 2011-01-010

Beschreibung: Bei dem Prüfling handelt es sich um ein Steuergerät für Aufzüge.

Aufgabenstellung: Durchführung der Prüfung nach EN12015:2005 und EN12016:2008

Ergebnis: Der o. g. Prüfling hat die durchgeführten Tests bestanden.

Bearbeiter: Wolfgang Hilber**Freigabe:** Ulrich Pohle**Datum:** 13.04.2011**Datum:** 13.04.2011

Unterschrift



Unterschrift

1.4 DESCRIPTION OF PROCESSOR INQUIRY - SAFETY CIRCUIT

Product	Control system for elevator systems
Type	Microprocessorsystem DAVID-613 – Centralunit ZR
Description	Prozessor Monitoring Safety-Circuit control system DAVID- 613 ZR, based on EN 81-1: 1998 + A3:2009, EN 81-2: 1998 + A3:2009 and EN 81-20: 2020, EN81-50: 2020 clause 5.15

USAGE

The polling circuit is to inform the processor system of the states of the individual taps in the safety circuit.

FUNCTION

The Central Processing Unit contains a function through which the voltage level in the safety circuit of the elevator system is monitored. The safety circuit voltage is divided through X2 capacitors and resistors and then forwarded to the input of the opto-couplers. Further processing of these signals is executed through the connected electronic circuits, under potential separation.

ENVIRONMENT CONDITIONS

The ambient temperature range of the processor system including the interrogation circuit is 0 ° C - 45 ° C in the control cabinet.

The input voltage range for each sample input is 230VAC + 5%, -15%.

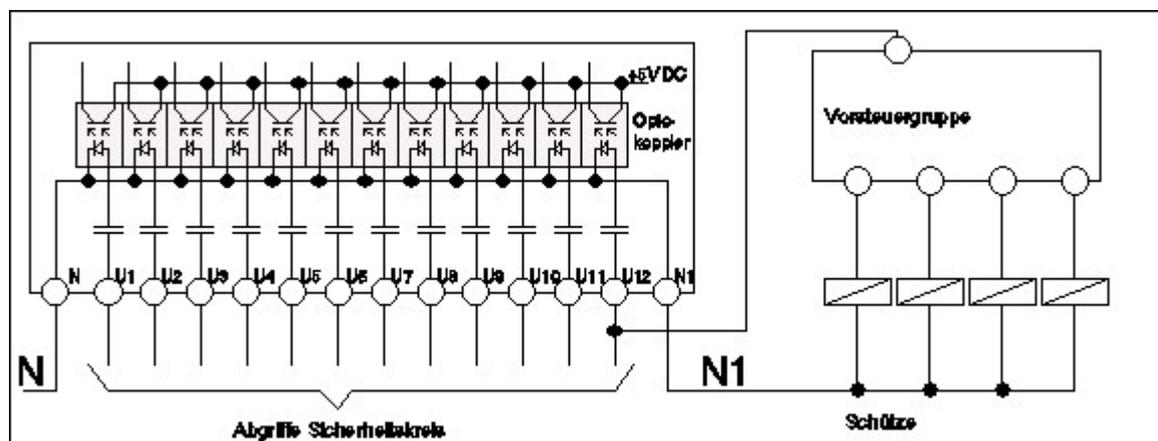
The input impedance of the individual sample inputs is approx. 10KOhm, the power consumption per sample input is approx. 20mA.

FUNCTION TEST

All safety-relevant contactors must only use the N1-potential as zero potential. For the purpose of testing, the N1-potential can be disconnected. This must cause all safety-relevant contactors to trip.

DECRPTION OF TERMINAL CONNECTIONS

For the inquiry of voltage levels in the safety circuit, 12 input terminals (U1 up to U12) are available. These terminals are plug-in terminals in the 7,62 mm standard. The N and N1 potential are also connected to these terminals. The wiring diagram shown below represents the actual circuit layout as tested and executed.



Certificate



Nr./No.: 968/FSP 1267.01/21

Prüfgegenstand Product tested	Elektronische Abfrageschaltungen (Teilbereich der Leiterplatte DAVID613) Electronic monitoring circuits (subarea of PCB DAVID613)	Zertifikatsinhaber Certificate holder	KW Aufzugstechnik GmbH Zimmersmühlenweg 69 61440 Oberursel Germany
Typbezeichnung Type designation	DAVID613		
Prüfgrundlagen Codes and standards	EN 81-20:2020, 5.11.2.3.2 + 5.11.2.3.3	EN 81-50:2020, 5.15	
Bestimmungsgemäße Verwendung Intended application	Abfrageschaltungen zum Einsatz an Personen und Lastenaufzügen als Abgriffe an verschiedenen Stellen der elektrischen Sicherheitskette für Informationszwecke entsprechend EN 81-20:2020, 5.11.2.1.2. Monitoring circuits for use at passenger and goods passenger lifts as connections to different points of the electric safety chain for gathering information acc. to EN 81-20:2020, 5.11.2.1.2		
Besondere Bedingungen Specific requirements	Die Hinweise in der zugehörigen Installations- und Betriebsanleitung sowie im Anhang zu diesem Zertifikat sind zu beachten. The instructions of the associated Installation and Operating Manual as well as in the annex to this certificate shall be considered.		

Gültig bis / Valid until 2026-04-06

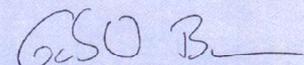
Der Ausstellung dieses Zertifikates liegt eine Evaluierung entsprechend dem Zertifizierungsprogramm CERT FSP5 V1.0:2017 in der aktuellen Version zugrunde, deren Ergebnisse im Bericht Nr. 968/FSP 1267.01/21 vom 12.03.2021 dokumentiert sind. Dieses Zertifikat ist nur gültig für Erzeugnisse, die mit dem Prüfgegenstand übereinstimmen.

The issue of this certificate is based upon an evaluation in accordance with the Certification Program CERT FSP5 V1.0:2017 in its actual version, whose results are documented in Report No. 968/FSP 1267.01/21 dated 2021-03-12. This certificate is valid only for products, which are identical with the product tested.

TÜV Rheinland Industrie Service GmbH
Bereich Automation
Funktionale Sicherheit
Am Grauen Stein, 51105 Köln

Köln, 2021-04-06

Certification Body Safety & Security for Automation & Grid



Dipl.-Ing. Gebhard Bouwer

12.03.2021

Anlage zum Zertifikat 968/FSP 1267.01/21 vom 06.04.2021

1. Komponente	Elektronische Abfrageschaltungen
2. Hersteller	KW Aufzugstechnik GmbH Zimmersmühlenweg 69, 61440 Oberursel
3. Typbezeichnung / Baugruppe	Abfrageschaltungen als Teilbereich auf der Leiterplatte DAVID613
4. Frühere Prüfgrundlagen	- EN 81-1/-2:1998 + A3:2009, 14.1.2.3 - EN 81-1/-2:1998 + A3:2009, Anhang H - EN 81-20:2014, 5.11.2.3.2 und 5.11.2.3.3 - EN 81-50:2014, 5.15
5. ID-Nr. / Kennzeichnung auf der Komponente	DAVID613
6. Anwendungsbereich	Anwendung bei Personen- und Lastenaufzügen.
7. Bestimmungsgemäßer Gebrauch / Bestimmungsgemäße Verwendung	Rückwirkungsfreie Abfrageschaltungen zum Einsatz an Personen und Lastenaufzügen als Abgriffe an verschiedenen Stellen der elektrischen Sicherheitskette für Informationszwecke entsprechend EN 81-20:2020, 5.11.2.1.2, EN 81-20:2014, 5.11.2.1.2 und EN 81-1/-2:1998 + A3:2009, 14.1.2.1.3.
8. Nenndaten	Eingangsspannung, Klemmen U1...U12: 230VAC +5%, -15% Neutralleiter-Klemmen: N, N1 max. Eingangsstrom je Abfrageschaltung: < 15 mA Eingangsimpedanz: > 16 kΩ Verschmutzungsgrad: 3 Werkstoffgruppe: III Schutzgrad: IP 4x (durch Gehäuse/Schalt-schrank zu gewährleisten) Betriebstemperatur: 0...+45°C
9. Wartung	Die korrekte Funktion ist regelmäßig zu überprüfen.
10. Installation	- Die Vorgaben in der Betriebsanleitung für Installation, Inbetriebnahme sowie Betrieb der Baugruppen DAVID613 sind zu beachten. Bei der Installation sind die relevanten nationalen Vorschriften und die EN 81-20 / EN 81-1/-2 einzuhalten und eine EMV-gerechte Verdrahtung ist zu gewährleisten. - Durch die Wahl eines geeigneten Einbauorts muss sichergestellt sein, dass Umwelteinflüsse wie z. B. Wasser, leitfähige Stäube und Betauung keine negativen Auswirkungen auf die sicherheitsgerichtete Funktion der Baugruppen haben. - Der Neutralleiter ist so zu verlegen und zu sichern, dass ein Lösen und Berühren mit spannungsführenden Teilen ausgeschlossen ist. - Nach der Installation der Abfrageschaltungen ist die sichere Verbindung der Neutralleiter von elektromechanischen Schaltgliedern und der Leiterplatte zu überprüfen. - Der N1-Leiter zu den Spulen der sicherheitsrelevanten Schütze ist entsprechend der Vorgaben in der Betriebsanleitung zu führen und darf keine weitere Verbindung zu den Rückleitern der übrigen Steuerung haben.
11. Besondere Bedingungen	Im Rahmen der Erstinbetriebnahme und der wiederkehrenden Prüfungen des Aufzugs sind folgende Überprüfungen durchzuführen: - Prüfung der korrekten Installation, - Prüfung der Hardwareversion, - Prüfung der N-Leiterunterbrechungen der Abfrageschaltungen gemäß Prüfanweisung in der Betriebsanleitung.

2021-03-12

Annex to Certificate 968/FSP 1267.01/21 dated 2021-04-06

1. Component	Electronic monitoring circuits	
2. Manufacturer	KW Aufzugstechnik GmbH Zimmersmühlenweg 69, 61440 Oberursel Germany	
3. Designation / Type	Monitoring inputs as subarea on the PCB DAVID613	
4. Previous test regulations	<ul style="list-style-type: none"> - EN 81-1/-2:1998 + A3:2009, 14.1.2.3 - EN 81-1/-2:1998 + A3:2009, Appendix H - EN 81-20:2014, 5.11.2.3.2 and 5.11.2.3.3 - EN 81-50:2014, 5.15 	
5. ID-No. / Marking on the component	DAVID613	
6. Area of application	For use in passenger and goods passenger lifts.	
7. Intended use	Interference free monitoring circuits for use in passenger and goods passenger lifts as connections to different points of the electric safety chain for gathering information acc. to EN 81-20:2020, 5.11.2.1.2, EN 81-20:2014, 5.11.2.1.2, EN 81-1/-2:1998 + A3:2009, 14.1.2.1.3.	
8. Characteristics	Input voltage, terminals U1 ... U12:	230 VAC +5%, -15%
	Neutral lead terminals:	N, N1
	max. input current per monitoring circuit:	< 15 mA
	Input impedance	> 16 kΩ
	Pollution degree:	3
	Material group:	III
	Protection degree:	IP 4x (to be ensured by housing/enclosure)
	Operating temperature:	0... +45°C
9. Maintenance	The correct operation has to be checked periodically.	
10. Installation	<ul style="list-style-type: none"> - The specifications in the operating manual for installation, commissioning as well as operation of the component DAVID613 has to be considered. The relevant national regulations and the EN 81-20 / EN 81-1/-2 have to be followed on the installation and an EMC-compatible wiring has to be ensured. - By the selection of an appropriate installation place it has to be ensured that environmental influences like water, conductive dust and condensation don't have a negative impact on the safety-related operation if the component. - The neutral wire is to be installed and clamped in a way that a de-clamping and contacting with live parts can be excluded. - After the installation of the monitoring circuits the reliable connection of the neutral wires of electromechanical switching elements and the PCB has to be checked. - The N1-wire to the coils of the safety-relevant contactors shall be connected according to the specifications of the operating manual and must not have any further connection to N-wires of the remaining control system. 	
11. Specific conditions	<p>In line with the commissioning and the recurring checks of the lift the following checks have to be performed:</p> <ul style="list-style-type: none"> - Check of the correct installation, - Check of the hardware version, - Check of the N-wire interruptions of the monitoring circuits according to the inspection instructions in the operating manual. 	

1.5.1 Function description Monitoring of the Braking Elements

In General

In gearless drives the service brakes have been used as a protective device for the car moving against overspeed. The braking devices are therefore redundant and are monitored by a micro-switch / proximity switch per circuit. These switches are used to monitor the braking elements for protection against inadvertent movement of the car.

With traction elevator systems to EN81-1 with certified braking devices to the new standard EN 81-1:1998 + A3: 2009, like e.g. the types MAYER, Warner, ..., as a operating brake on the drives of the companies Wittur-SAD, Thyssenkrupp-Liftequipe, Ziehl-Abegg, Tornado, Sassi, ..., or with A3 Certification brake control unit on the driving wheel, like the types of MAYER, Warner, ..., on the drives of Thyssenkrupp-Liftequipe-NBS, Sassi, ..., the monitoring is done by independent input channels of brake control elements monitoring of the regulation unit.

At hydraulic lifts of the company ALGI and the types AZRS and AZFR, according to the new standard EN 81-2:1998 + A3: 2009, the down travel is initiated with two series-connected hydraulic valves, which have a monitoring of the open and closed position. The monitoring is done by independent input channels of brake control elements monitoring of the regulation unit. The following description is part of the manual.

Function steps

A) Before Starting - Motor and Controller are in standby state

In the standby state is expected that the brake element is not active and the brake switch elements have the following signal levels:

Brake element monitoring input	Expected status
Configured as Closer (NO)	0V Signal level at the monitoring input
Configured as Opener (NC)	+24V Signal level at the monitoring input

If there is no expected signal levels at the control DAVID-606/613/2005, it locks with the error messages "**F51 brake element function**" or "**F54 brake element synchronization**".

Only by **RESET in menu C0** or a reset pulse at an input to the programmed input function can control if DAVID E506-606/613/2005 will be unlocked.

B) Start – Braking elements are opening

With activation of the braking element is "open brake element monitoring" period started. Within this time window, it is expected that the braking element is activated and the signal change is performed on the brake element monitoring switches:

Brake element monitoring input	Expected status
Configured as Closer (NO)	0V Signal level at the monitoring input
Configured as Opener (NC)	+24V Signal level at the monitoring input

If the signal change within the time frame, or the synchronization of input channels is not guaranteed, the control DAVID-606/613/2005 lock with the error message "**F51 brake element function**" or "**F54 brake element synchronization**". Only by **RESET in menu C0**, the controller DAVID-606/613/2005 will be unlocked.

Solely through the on / off switching of the controller, the controller is not unlocked, i.e. if the error message F51 or F54 is applied and the system shuts off and then switched on again, the control with the appropriate error message is locked.

C) End of Travel - Braking elements are closing

With drop in braking element, the monitoring time "close monitoring braking element" starts. Within this time window, it is expected that the braking element is deactivated and the signal exchange is performed on the brake element monitoring switches:

Brake element monitoring input	Expected status
Configured as Closer (NO)	0V Signal level at the monitoring input
Configured as Opener (NC)	+24V Signal level at the monitoring input

If the signal change within the time frame, or the synchronization of input channels is not guaranteed, the control DAVID-606/613/2005 lock with the error message "**F51 brake element function**" or "**F54 brake element synchronization**". Only by **RESET in menu C0**, the controller DAVID-606/613/2005 will be unlocked.

Solely through the on / off switching of the controller, the controller is not unlocked, i.e. if the error message F51 or F54 is applied and the system shuts off and then switched on again, the control with the appropriate error message is locked.

1.5.2 Digital Inputs

All these channels can be Inputs-, but also Output-channels. The channels are potential-free about opto couplers and designed for +24V DC. The inputs can used with the +24V DC Voltage of the inverter or the +24V DC Voltage of the lift controller (pay attention to the GND connection to the lift controller !).

The inputs and outputs are freely programmable. The desired input function can be found in the **menu B72 assignment inputs. For the brake elements are monitoring up to 3 input functions, i.e. it can monitor up to 3 braking circuits.**

Programming of the Digital Inputs

When the brake releases up to 3 independent brake coils can be monitored. The choice of inputs is free, should the appropriate input functions to be occupied (E25, E438-E439 menu B72).

Assignment of the inputs menu B72

All inputs can be used in principle and are assigned to the features listed below. Assign menu B72 just as many input channels with features as you have brake circuits.

No.	Display-Layout	Function
E25	E25 - Brake Monitoring Coil-1	Input function for Brake Monitoring Coil 1
E438	E438- Brake Monitoring Coil -2	Input function for Brake Monitoring Coil 2
E439	E439- Brake Monitoring Coil -3	Input function for Brake Monitoring Coil 3

1.5.3 Teach in of the Monitoring Times

In the **Menu B600 monitoring** the brake members shall be activated. In addition, the switch type (NO or NC) is defined. With the help of monitoring times, the behavior of the respective braking element type is adapted.

Brake Monitoring	
	At the brake monitoring you can look over three brake coils
Brake Monitoring Input	
	Here you can put the switch-behaviour. There are two possibilities, like NC-Normally Closed and NO-Normally Open . Standart value is NC.
Brake Monitoring Opening	
	The time needed for the operation of the brake opening a window of up to 2000 ms can be clamped.
Brake Monitoring Closing	
	The time needed for the process of dropping the maximum brake a time window of 2000 ms are clamped.

Brake Monitoring Synchronization	
	The brake elements are monitored for synchronization. The default value for this tolerance time is 500ms.

1.5.4 Fault clearance and Reset

Depending on the number of connected brake circuits may appear in the event of an error of up to 4 errors. In the Menu C3 all error messages are marked present.

ERROR 51	Brake element monitor	There is no expected signal levels at the monitoring braking inputs of the control DAVID-606/613/2005.
	Brake element synchronization	The monitoring of the braking elements has been activated. One of the monitor inputs is out of order or it is slower than the other(s) channel. Please check it.
ERROR 54		

After remedying the lack of the brake elements / or the external wiring, the drive can be **unlocked by selecting the error menu C0 RESET memory.**

E506	E506 RESET Brake Element	Possibility of the external reset for brake monitoring elements
-------------	---------------------------------	-----------------------------------------------------------------

It is also possible to program a free entrance to the input function E506. By connecting a bowl button it is possible to unlock the system via a pulse on this input.

Solely through the on / off of the controller, the control is not unlocked, i.e. if the error message F51 or F54 is applied and the system shuts off and then switched on again, the control with the appropriate error message locked.

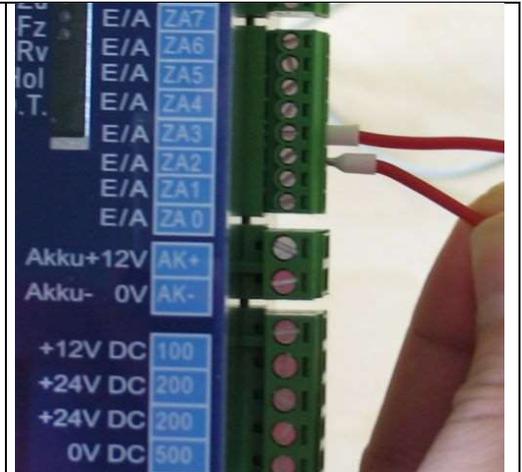
1.5.5 Function test – Self-Monitoring of the Braking Elements after EN81-1/2:1998+A3:2009

Generally

Due to the development of the software, the function of the brake elements in-plant monitoring at KW Aufzugstechnik GmbH in the testing, as well as in the on-site commissioning of the lift system must be examined. The description of the functional test is part of the manual.

Test cable break - Monitoring Input 1

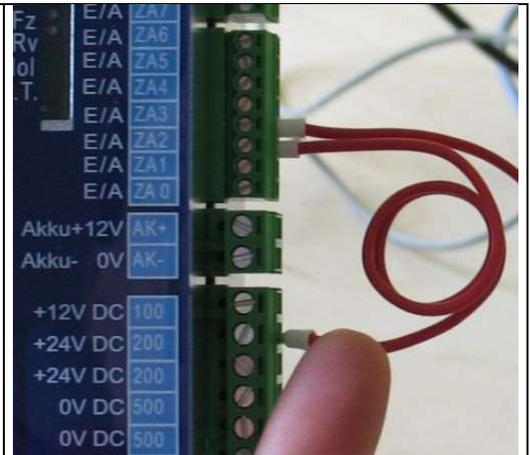
- 1.) Switch off the signal line at the monitoring input channel 1.
- 2.) Return Motion Drive UP or DOWN
- 3.) The Controller DAVID 606/613/2005 gives the error message "F54 – Brake Element Synchronization" and locks. More trips are not possible!
- 4.) Switch on the signal line at the monitoring input channel 1.
- 5.) With the Return-Drive to try to take a ride. A drive may be not possible!
- 6.) In the menu C0 the Controller DAVID 606/613/2005 can be unlocked in the fault memory by selecting the error. The elevator system is ready to start again.



Removing the monitoring channel 1

Test cable bridge - Monitoring Input 1

- 1.) Switch off the signal line at the monitoring input channel 1 and put in a jumper between terminal 200 (+24 V DC) and channel 1.
- 2.) Return Motion Drive UP or DOWN
- 3.) The Controller DAVID 606/613/2005 gives the error message "F51 – Brake Element Function" and locks. More trips are not possible!
- 4.) Put off the jumper between the terminal 200 and channel 1. Switch on the Signal line at the monitoring input channel 1.
- 5.) With the Return-Drive to try to take a ride. A drive may be not possible!
- 6.) In the menu C0 the Controller DAVID 606/613/2005 can be unlocked in the fault memory by selecting the error. The elevator system is ready to start again.



Setting the jumper between 200 and Channel 1

Repeat the test steps

After the two test steps were carried out for the monitoring braking element 1, then for all other brake circuits have now equivalent to the test steps that are carried out!

1.5.6 EG-Declaration of Conformity



TYPE EXAMINATION CERTIFICATE FOR LIFTCOMPONENTS

Issued by Liftinstituut B.V.

Certificate no. : NL12-400-1002-170-01 Revision no.: 1

Description of the product : Self-Monitoring of the braking elements as part of the protection against unintended car movement and/or ascending car overspeed means

Trademark, type : DAVID-606-613-2005

Name and address of the manufacturer : KW Aufzugstechnik GmbH
Zimmersmühlenweg 69
D-61440 Oberursel
Germany

Name and address of the certificate holder : KW Aufzugstechnik GmbH
Zimmersmühlenweg 69
D-61440 Oberursel
Germany

Certificate issued on the following requirements : Lifts Directive 2014/33/EU

Certificate based on the following standard : EN 81-20:2014 clause 5.6.6.2 and 5.6.7.3

Test laboratory : None

Date and number of the laboratory report : None

Date of type examination : July 2012;
Rev.1; July 2017

Additional document with this certificate : Report belonging to the type examination certificate no.: NL12-400-1002-170-01 rev.1

Additional remarks : None

Conclusion : The lift component meets the requirements referred to in this certificate taking into account any additional remarks mentioned above.

Amsterdam

Date : 05-07-2017
Valid until : 05-07-2022
ing. J.L. van Vliet
Managing Director
Certification decision by

1.6 DESCRIPTION OF TEMPERATURE MONITOR ZR

Product Controller for Elevators

Type Microprocessorsystem DAVID-2001/2005/613 – Main Unit ZR

The central unit ZR has an electronic circuit for the collection of the temperature within the equipment. In the software the temperature threshold can for the cycle non-repeat function of the plant can between 30 degrees Celsius and 100 degrees Celsius be adjusted.

During factory setting the temperature threshold was specified on 60 degrees Celsius.

Stopping the plant means an entry with a rope elevator into the next stop and/or with a hydraulic elevator the execution of an emergency sinking in the lowest stop and refusal of call acceptance to the switch gear cabinet temperature below the limit value threshold sinks.

Oberursel, 01.03.2006



Hans-Werner Walbert

1.7 DESCRIPTION OF ENERGY EFFICIENCY VDI 4707

The control system 613 DAVID supports all 4 modes of operation according to VDI 4707.

DAVID 613	OPERATING-MODE	DESCRIPTION	WAKE UP TIME	ACTIVE POWER (Watt)
TRAVEL DEMAND	P0	The component is in function.		38 Watt
DOWNTIME REQUIRED	S0	This component is ready for use.	0 Sec.	38 Watt
	S1	Simplest sleep mode. All displays are completed off.	< = 250 ms.	36 Watt
	S2	Soft-Off mode (deep sleep) doors are closed. The car controller FKR is turned off.	< = 1 Sec.	25 Watt,

VDI 4707 Page 2

BASICS: THE FIVE USE CATEGORIES

Depending on frequency of use with the help of the five categories can use the downtime and travel needs of an elevator system in an energy efficiency rating to be converted.

USE CATEGORIES	1	2	3	4	5
FREQUENCY OF USE	VERY RARE	RARE	OCCASIONALLY	OFTEN	VERY OFTEN
AVERAGE DOWNTIME	23,8	23,5	22,5	21	18
TYPICAL BUILDING	House to 6 flats	House to 10 flats, Small office building	House to 20 flats, Mediator Office and administrative building	Residential apartment building with more than 50 apartments, high office and administration building, small to medium hospital	office and administration building, > 100m Great hospital, Freight elevator in the production process for multi-shift operation

VDI 4707 Page 1

BASICS: WEIGHTING OF THE FIVE USE CATEGORIES

Calculation of stagnation energy demand according to VDI 4707 with emphasis on operational modes S0, S1 and S2.

USE CATEGORIES	1	2	3	4	5
WEIGHTING S0	1 %	2 %	5 %	7 %	10 %
WEIGHTING S1	24 %	33 %	60 %	73 %	85 %
WEIGHTING S2	75 %	65 %	35 %	20 %	5 %

VDI 4707 Page 1

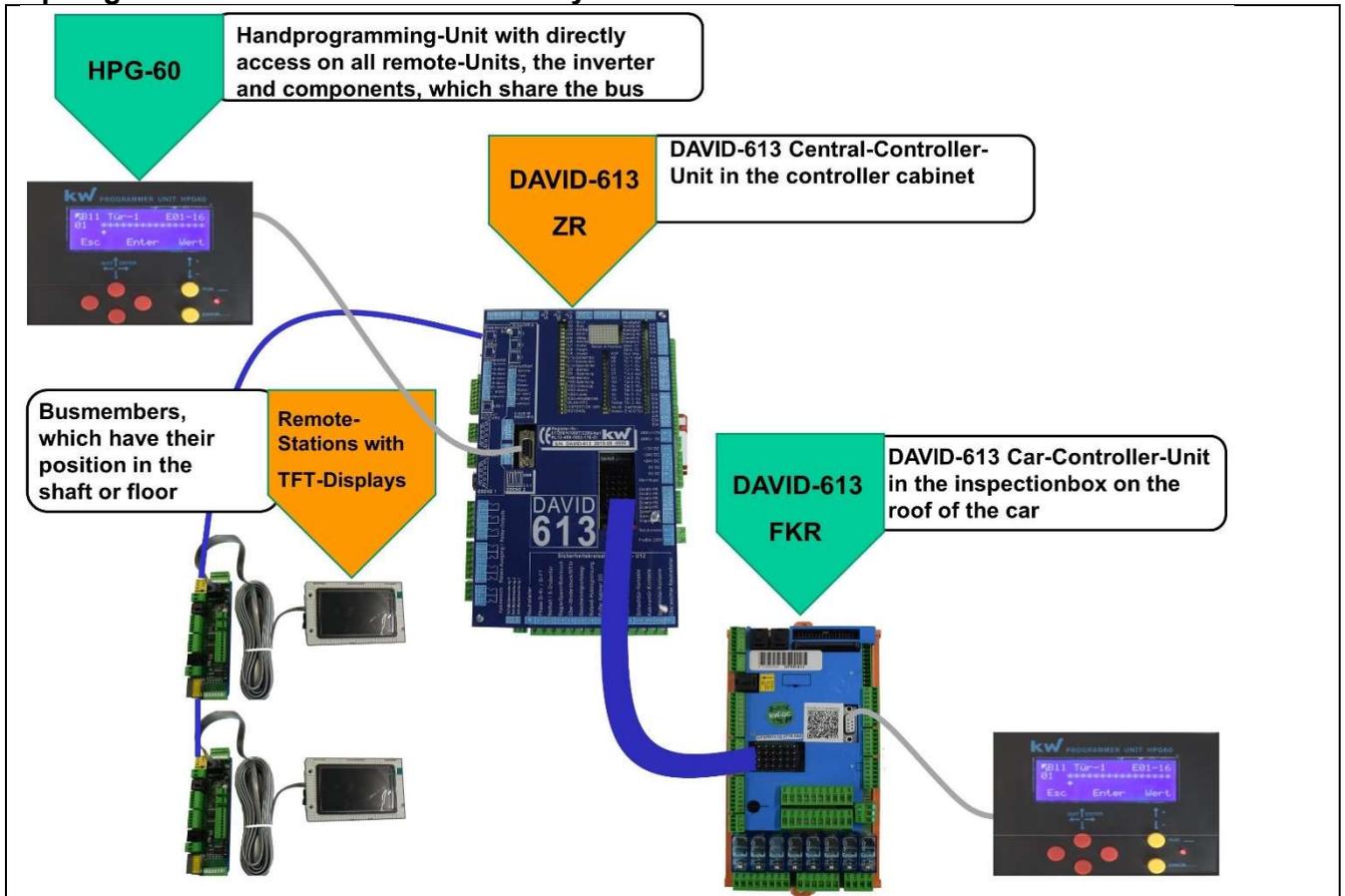
2. Performance description

2.1 Range of services of the microprocessor system DAVID-613

The highly flexible microprocessor control system DAVID-613 enables the realization of rope, hydraulic, chain, rack, stationary & traveling drives, passenger and goods lift systems also with pin placement device of all kinds according to EN81-20, EN81-1 / 2, MRL & ATEX, with up to eight group lifts, and a maximum floor space of 64 stops and up to 3 door sides. This type diversity is included extensively in the standard software.

The control concept of the DAVID-613 is a decentralized topology that lets its members communicate via the bus connections. The master structure is located in the central controller (ZR) which communicates with the car controller (FKR) via the bus on the car and in the individual floors via the remote-stations in the floors (ER).

Topologie of the DAVID-613 Controller-System



2.2 Device description Central Controller ZR

The standard software included in the control computer includes the setting of all types of elevators. All functions such as selective door controls, evacuations, FW controls, priority retries, group operation, energy management, lift warden function, access management ... can be set on site.

All inputs and outputs are freely programmable and can be assigned with over 2000 input and output functions. The function library is part of the control system.

The control system DAVID-613, as well as its predecessors, have 12 information taps from the safety circuit of the elevator system to perform an accurate and fast safety circuit diagnosis.

The control computer has a metal housing to fully encapsulate the internal electronics. The radiation emissions of the device are extremely low, but the device has a high resistance to external radiation. The emission complies with EN 55011 Level B, with the control cabinet open.

All printed circuit boards are coated with insulating varnish on both sides (coating). As a result, the overall system gains in stability against condensation in the case of strong temperature fluctuations and dielectric strength when foreign bodies penetrate.

The processor systems are interconnected via shielded and metallized RJ-45 network cable systems. These pre-assembled and standardized communication lines guarantee highest transmission performance and easy handling.

A hand-held terminal, which can also be used for diagnostics purposes in the shaft or on the cab or for external devices, is used for setting and parameterizing. The KW app for Android and Apple OS operating systems offers the same functionality.

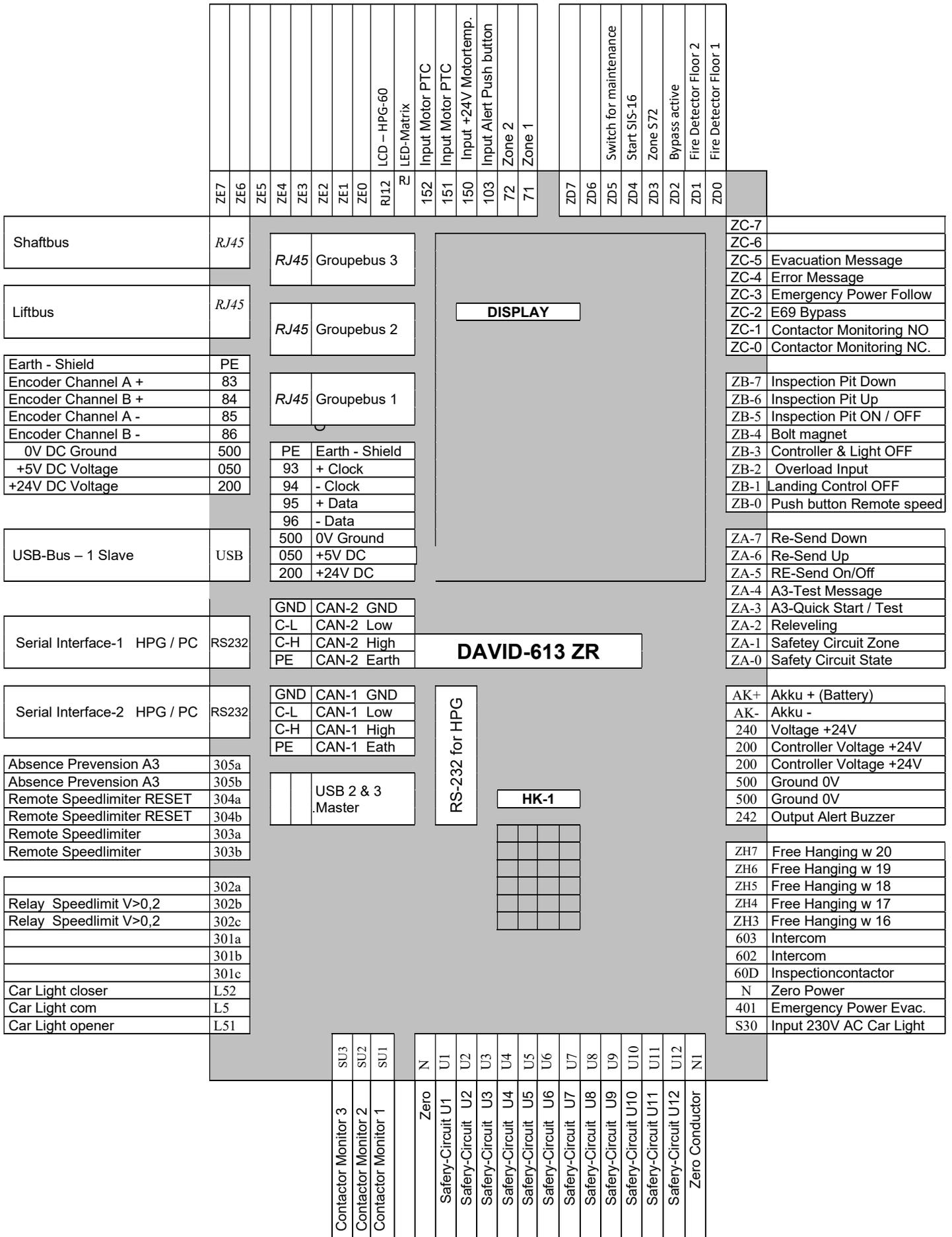
The processor system has a battery-backed real-time clock, serial interfaces, USB interfaces and CAN-open interfaces. By default, a WLAN transceiver is installed in the central unit, which serves as an interface for communication with smartphone apps. There is no need for another router or internet connection.

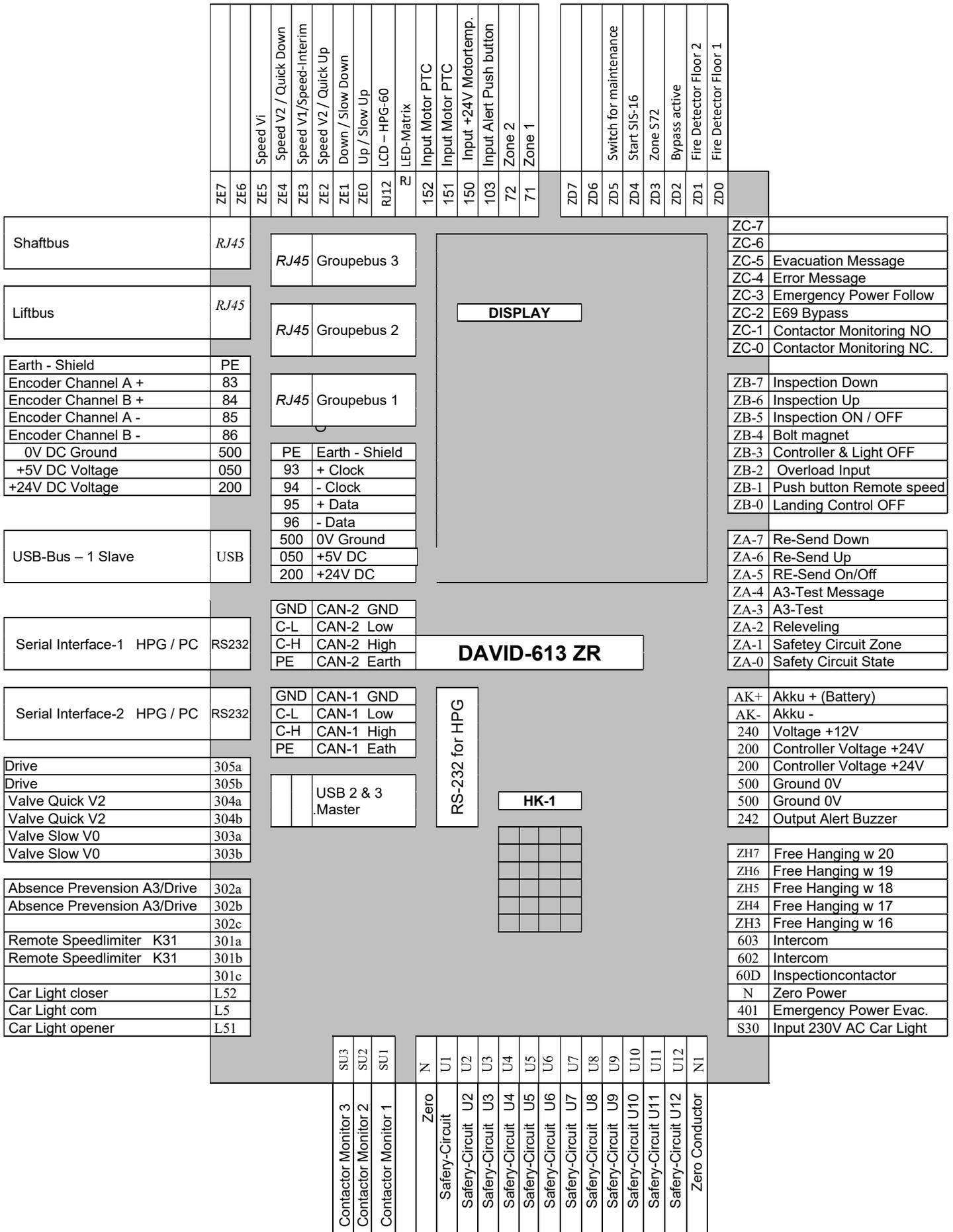
Central control functions

Basically, the controller has all the functions and facilities required by the EN81-20. As an incomplete short summary the following functions are available:

- Output of diagnostic messages to a terminal
- Permanent operating and status messages via an integrated LED panel
- Remote diagnosis via gateways or modems
- WLAN transceiver and APP connection
- Maintenance time generation function (preventive maintenance)
- Error memory & event memory with a depth of 200 messages including the states such as vehicle position, current position of the travel curve and zone and precision monitoring
- Integrated timer functions, as well as timer functions with up to 2 switching points each
Timer with weekday selection
- Inspection run pit & canopy with the millimeter accuracy of the
Inspection delay and stop for both directions, to increase the safety levels for maintenance personnel, as well as the automatic, point-tion of the car via the inside tableau key combination to enter the car roof.
- Bypass circuit for bridging the manhole car door and bolt contacts
- Detection of the bridged manhole car and bolt contacts in normal operation
- Fire control, fire evacuation drive, flood evacuation
- FW control systems, national & international
- Emergency power evacuations, emergency diesel, battery pack and UPS supplies
- Implementation of all types of call processing, such as collective control Direction-dependent & independent, dead man's control, transmission control, taxi control, destination selection, driver's operation, as well as page separation by outside calls for exact selection of the door sides.
- Parking garage control with filling and empty mode.
- Traffic detection with appropriate adaptation of the rated speed.
- Special trip functions for the chemical industry with "gas travel" or "dangerous goods transport"
- Return controls.
- TÜV menu, which includes all relevant points for a ZÜS exam.
- Monitoring of phase failure or sequence in the power supply.
- Overtemperature protection circuit for the motor with automatic reset.
- Temperature monitoring of the central unit and the control cabinet.
- Runtime monitoring at all state points of the travel curve.
- Monitoring counter for plastic-coated rope and belt systems.
- Automatic reference journey / or teach-in.
- Integration of SIL 3 shaft copying systems.
- Integration of one-touch dialing terminals and one-touch dialing functionality.
- Quick start function for stop loss time optimization.
- 80 Freely adjustable inputs & outputs for 2000 functions, with expansion option up to 224 free programmable inputs and outputs.
- 16 potential-free relay outputs, freely programmable

<p>Button for service doors-to When the button is pressed, the doors remain closed for 15 minutes. 2.th Press -> open doors</p>	<p>Button for the top call -> Elevator car moves to the top stop.</p>	<p>Button for the lowest call -> Elevator car drives to the lowest stop.</p>	
			<p>Upper side panel: (left to right) 2x input & output terminals (8 free I / O) ZD0.7, Zone, Alarm & Motor PTC, Bus display RJ12 push button call Lowermost stop, Call top call button, Maintenance button Doors closed For 15 minutes, Connection Maintenance indicator / HPG-RJ12 1x input & output terminals (8 free I / O) ZE0.7</p>
			<p>Left sidewall: (from left to right) Upper level: 3x group bus, 1x absolute encoder connection, 2x CANOpen bus, 2 USB masters Middle level: 1x Chassis bus RJ45, 1x Liftbus RJ45, 1x incremental connection, 1x USB slave, 2x serial interfaces, 6 freely assignable relay outputs (K301 to K306) Lower level: Power connections for phase processor & emergency power (N, L6, L5, PE).</p>
			<p>Right sidewall: (from left to right) 24 freely assignable inputs and outputs ZA0.7, ZB0.7, ZC0.7, 2x 230V AC inputs for emergency evacuation and cabin lighting Connection inspection contactor K60, 2xintercom, 5 free hanging cable veins</p>
			<p>Lower part of the page: (left to right) 3x outputs for contactor monitoring of the positively driven control relays 12x 230V-AC inputs for safety circuit interrogation (U1 to U12),</p>

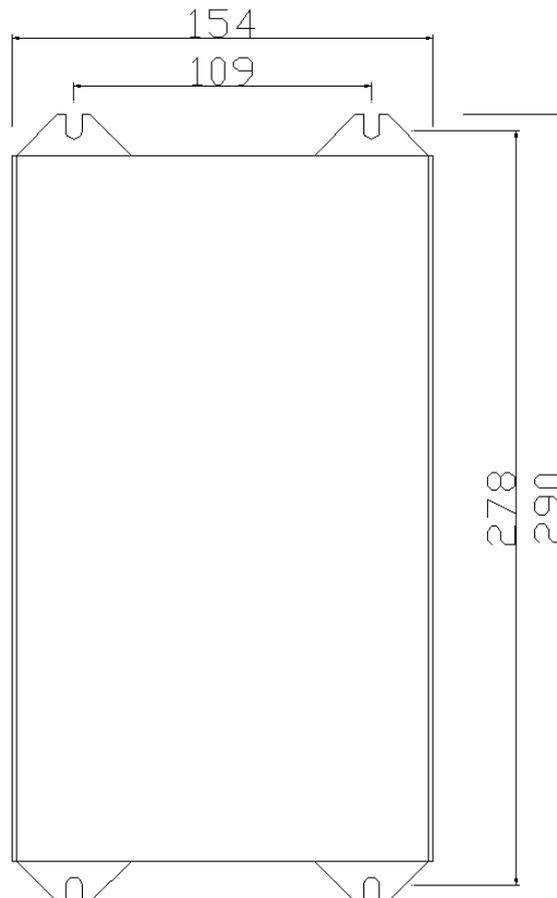




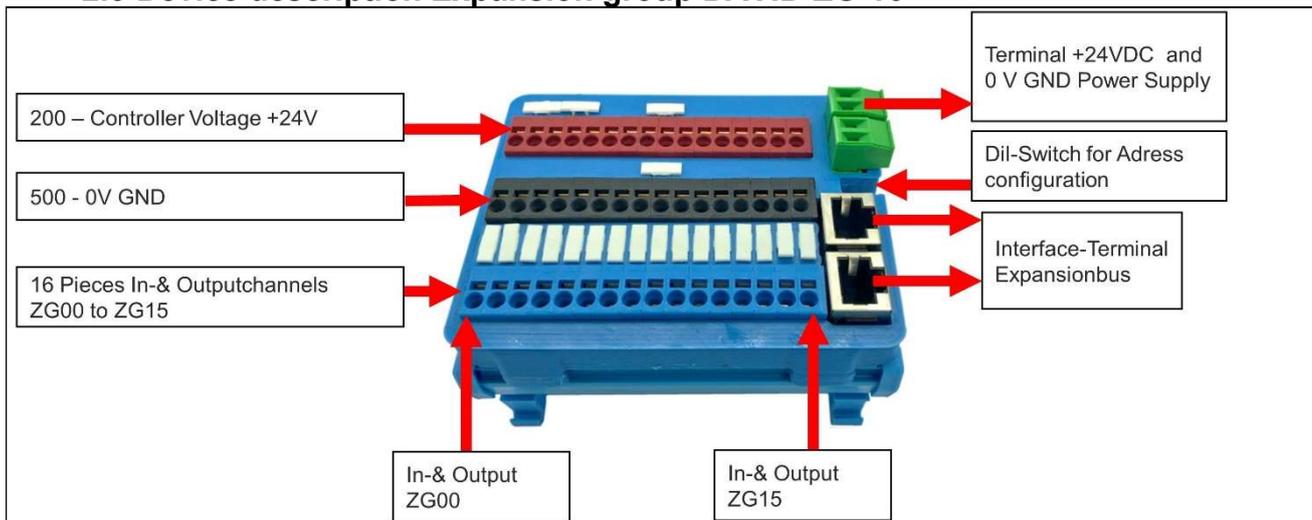
U1	Safety-Circuit U1				11A	11A Brakept. Up
U2	Safety-Circuit U2				11B	11B Brakept.Down
U3	Safety-Circuit U3				12A	12A Level Up
U4	Safety-Circuit U4				12B	12B Level Down
U5	Safety-Circuit U5				13B	13A Correction Top
U6	Safety-Circuit U6				13A	13B Correction Bot
U7	Safety-Circuit U7				71	71 Zone 1
U8	Safety-Circuit U8				72	72 Zone 2
U9	Safety-Circuit U9				Pulses	Pulses
U10	Safety-Circuit U10				D1 Open	Door 1 Open
U11	Safety-Circuit U11	Auf	rec		D1 Close	Door 1 Close
U12	Safety-Circuit U12	Ab	rec		D1 Lg	Door 1 Photocell Active
ZR-Run	Run ZR-CPU	V0	bee		D1 Rev	Door 1 Reverse Motion
ZR-Spg	Power-ZR-CPU	V1	Speed V1		D2 Open	Door 2 Open
FKR-Run	Run FKR-CPU	V2	Speed V2		D2 Close	Door 2 Close
FKR-Spg	Power-FKR-CPU	V3	Speed V3		D2 Lg	Door 2 Photocell Active
NSG-Spg	NSG-Under voltage	Vi1	Speed Vi1		D2 Rev	Door 2 Reverse Motion
NSG-Alarm	NSG-Alert	Vi2	Speed Vi1		D3 Open	Door 3 Open
NSG-Lad.	NSG-Accu Loading	Vna	Speed Vna		D3 Close	Door 3 Close
NSG-Akku	NSG-Accu Drive	FS	Error memory		D3 Lg	Door 3 Photocell Active
WLAN HPG	WiFi Operation Active	Fault	Error in drive		D3 Rev	Door 3 Reverse Motion
INSPECT	Inspection Operation	GRP.MS	Group Master-Slave		NH	Releveling
RÜCKHOL	Re-Send Operation	MODEM	Modem Operation		EoT	Pre-Open Door

Indicator with LEDs and Carpostion matrix indicator

Technical Dimensions of the Central-Unit ZR



2.3 Device description Expansion group DAVID-ZG-16



The additional group ZG-16 offers 16 additional inputs and outputs. The ZG-32 is connected with a bus cable RJ45, the power supply (200 and 500) to the central unit ZR.
The input and output assignment is freely selectable. Up to 4 ZG16 auxiliary groups can be operated in a D613 control system.

Address setting additional group:

	DIPP-0	DIPP-1	DIPP-3
1. ZG16	OFF	OFF	
2. ZG16	ON	OFF	
3. ZG16	OFF	ON	
4. ZG16	ON	ON	

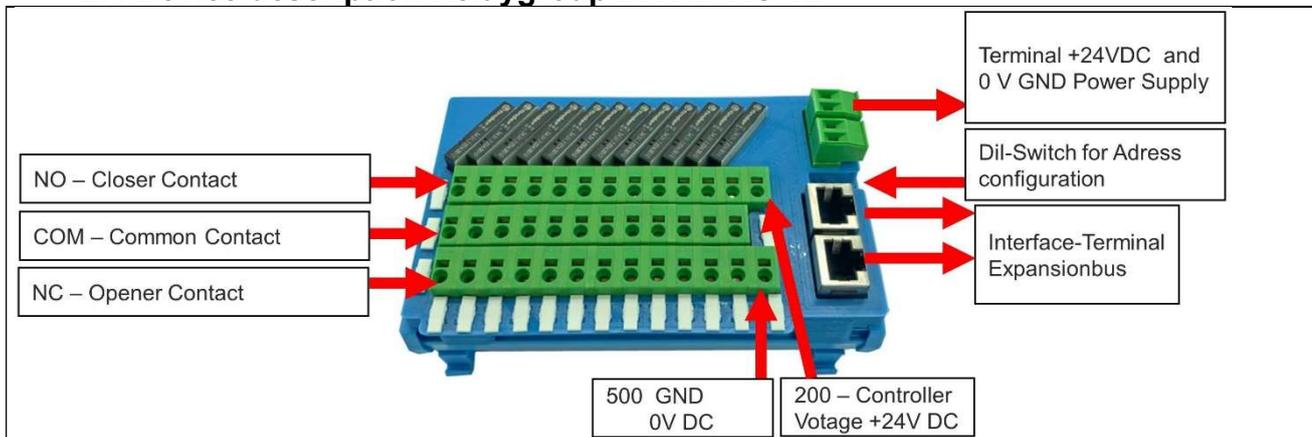
KW-Nr. 1100059

For the last ZG-16 assembly in the chain, the Dipp-4 switch is set to ON to terminate the line.

Activation takes place:

- 1.) By plugging in the module on the ZR computer Expansion bus Green
- 2.) By activating the I / Os in the B7 menu:

2.4 Device description Relaygroup DAVID-RG-12



The relay group RG-12 offers 12 additional relay outputs. The RG-12 is connected with a bus cable RJ45, the power supply (200 and 500) at the central unit ZR.
The output assignment is freely selectable. Up to 4 RG12 relay groups can be operated in a D613 control system.

Address setting additional group:

	DIPP-0	DIPP-1	DIPP-3
1.RG12	OFF	OFF	
2.RG12	ON	OFF	
3.RG12	OFF	ON	

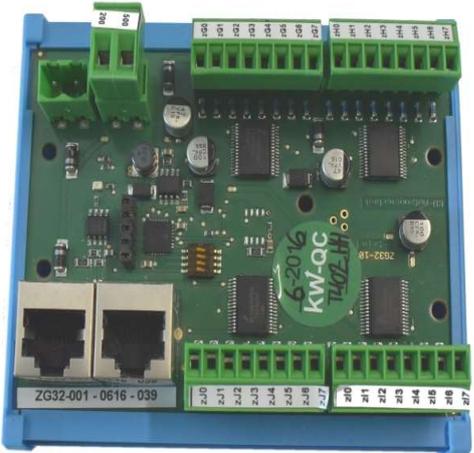
KW-Nr. 1100059

For the last RG-12 assembly in the chain, the **Dipp-4 switch is set to ON** to terminate the line.

Activation takes place:

- 1.) By plugging in the module on the ZR computer Expansion bus.
- 2.) By activating the I / Os in the **B7 menu**.

2.5 DESCRIPTION EXPANSION DEVICE DAVID-ZG-32



The expansion unit ZG-32 offers 32 additional inputs and outputs. The ZG-32 is connected to a bus cable RJ45, the voltage supply (200 and 500) at the central unit ZR.

The input and output assignment is freely selectable. Up to 4 additional groups of type ZG32 can be operated in a control system D613.

Address-switching of the Expansion Unit:

	DIPP-0	DIPP-1	DIPP-3
1. ZG32	OFF	OFF	
2. ZG32	ON	OFF	
3. ZG32	OFF	ON	
4. ZG32	ON	ON	

KW-Nr. 1100059

On the last ZG32 module in the chain, the Dipp-4 switch is set to ON and serves as termination of the line.

Activation takes place:

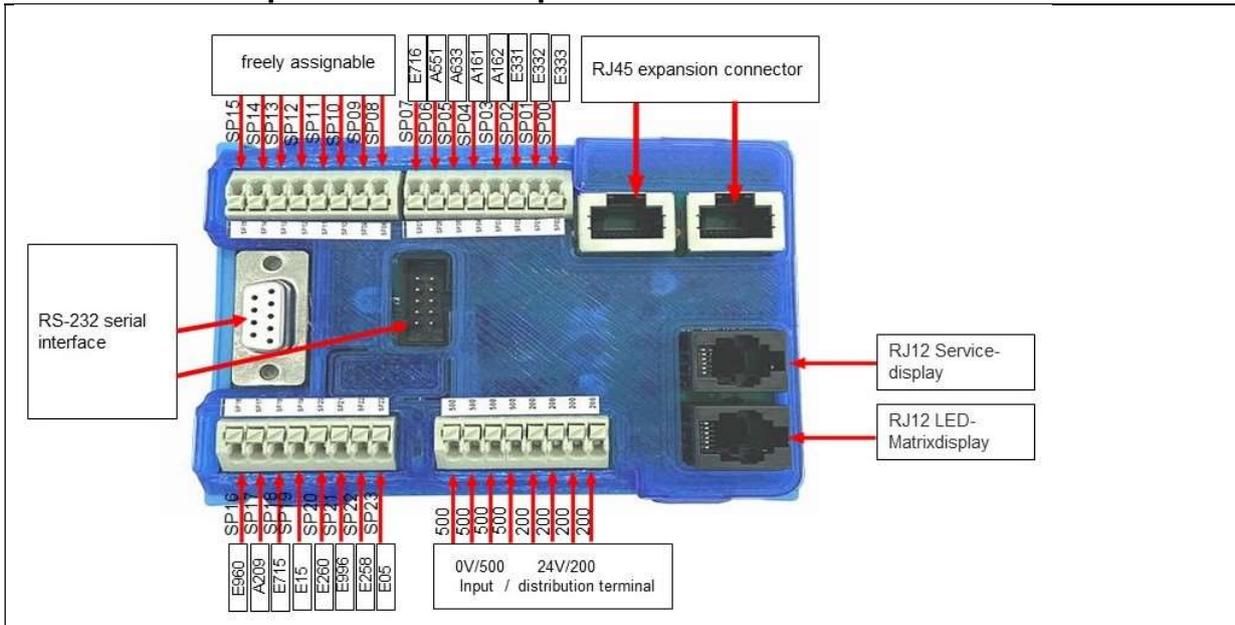
- 1.) Insert the module on the ZR computer.
- 2.) By activating the I/O's in the **B7 menu**.

Terminal -Description Expansion Unit DAVID-ZG-32

Busconnection		<p>DIPP-SWITCH</p> <div style="display: flex; align-items: center; justify-content: center;"> <div style="border: 1px solid black; padding: 2px; margin-right: 5px;">3</div> <div style="border: 1px solid black; padding: 2px; margin-right: 5px;">2</div> <div style="border: 1px solid black; padding: 2px; margin-right: 5px;">1</div> <div style="border: 1px solid black; padding: 2px; margin-right: 5px;">0</div> ON </div>		
RJ-45			200	+24V DC Voltage
			500	0V GND
Busconnection			200	+24V DC Voltage
RJ-45			500	0V GND
Free In-/ Output	ZJ0		ZG0	Free In-/ Output
Free In-/ Output	ZJ1		ZG1	Free In-/ Output
Free In-/ Output	ZJ2		ZG2	Free In-/ Output
Free In-/ Output	ZJ3		ZG3	Free In-/ Output
Free In-/ Output	ZJ4		ZG4	Free In-/ Output
Free In-/ Output	ZJ5		ZG5	Free In-/ Output
Free In-/ Output	ZJ6		ZG6	Free In-/ Output
Free In-/ Output	ZJ7		ZG7	Free In-/ Output
Free In-/ Output	ZI0		ZH0	Free In-/ Output
Free In-/ Output	ZI1		ZH1	Free In-/ Output
Free In-/ Output	ZI2		ZH2	Free In-/ Output
Free In-/ Output	ZI3	ZH3	Free In-/ Output	
Free In-/ Output	ZI4	ZH4	Free In-/ Output	
Free In-/ Output	ZI5	ZH5	Free In-/ Output	
Free In-/ Output	ZI6	ZH6	Free In-/ Output	
Free In-/ Output	ZI7	ZH7	Free In-/ Output	

DAVID-ZG-32
Expansion Unit

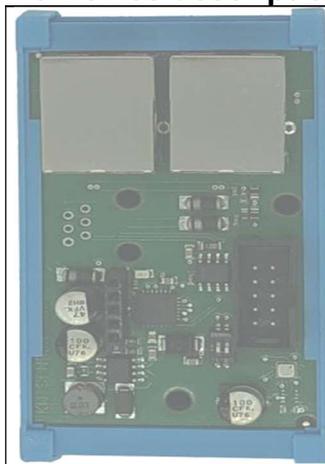
2.7 Device description X13-Servicepanel



Activation takes place:

- 1.) By plugging the RJ-45 cable into the expansion bus
- 2.) By activating the I / Os in the **B7 menu**.

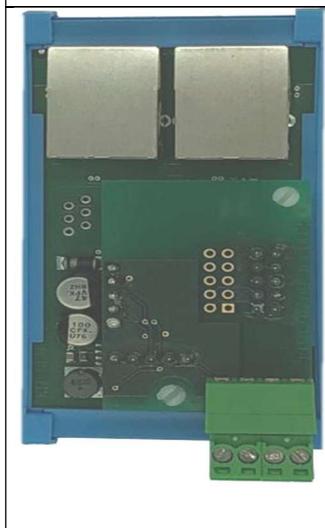
2.8 Device description Environmental module SENSOR-102 for car and shaft



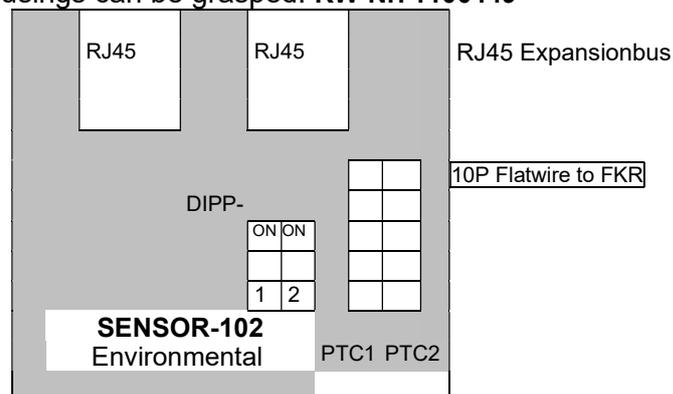
The environmental module SENSOR-102 provides the current values for temperature, humidity and air pressure. The environmental module is connected to the car with a 10-pin ribbon cable on the FKR613 car computer.

Environmental modules can also be used at various points (pit / head / engine room) for the lift shaft. Up to 4 environmental modules can be operated on the expansion bus in a D613 control system. Address setting of the environmental module in the shaft: **KW-Nr. 1100448**

	DIPP-0	DIPP-1
1. SENSOR-102	OFF	OFF
2. SENSOR-102	ON	OFF
3. SENSOR-102	OFF	ON
4. SENSOR-102	ON	ON



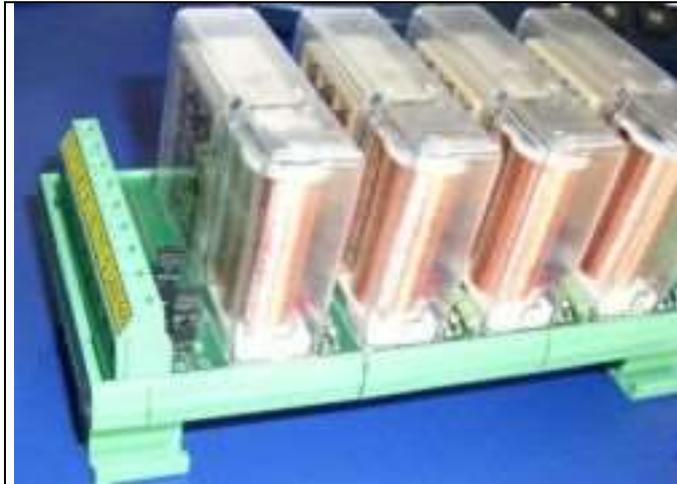
The SENSOR-102 module can be equipped with a Huckpack conductor plate, which has two PTC inputs that allow temperature measurement. Thus, the outside temperature of motor housings can be grasped. **KW-Nr. 1100449**



Activation takes place:

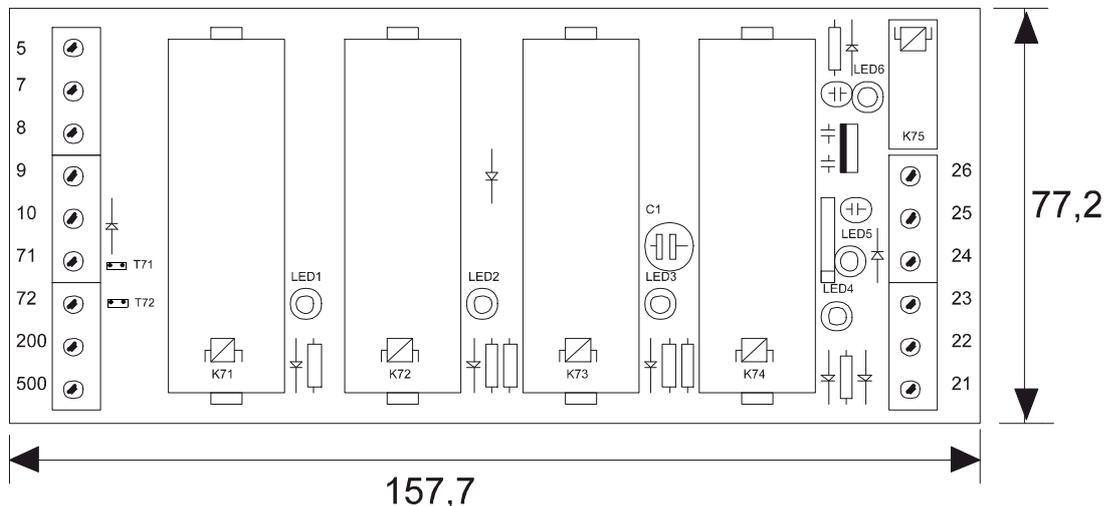
- 1.) By plugging in the 10 pin ribbon connection of the module at the FKR computer resp
- 2.) By plugging the RJ-45 cable into the expansion bus

2.9 DESCRIPTION SECURITY CIRCUIT SIS-16-101



The Safety Circuit SIS16-101 has 4 safety relays and a small relay for the level-indicator. Screw terminals are on the right and on the left of the Safety Circuit. SIS16-101 is preparatory for the Mounting-rail- assembly. To the test of normal function of protection circuit is necessary to set the Jumper!

The security circuit has a type-examination certificate for the EN.81-1/2-A3.



Relay- and Indicating elements:	K71= Zone Relays 71 with red LED-Display LED1 K72= Zone Relays 72 with red LED-Display LED2 K73=Controll Relay 73 with red LED-Display LED3 K74=Start Relay Drive/Releveling with red LED-Display LED4 K75=Concise Relay with red LED-Display LED 6 LED Status= Color green, Control display LED 5
Dimensions (with basin):	(L x B x H) 157,7mm x 77,2mm x 65,0mm
Weight:	Approx. 700 Gram
Voltage Supply:	Terminals 5,7 - 250V AC / 4A Terminals 71,72 - +24V DC / 50mA Terminals 200 - +24V DC / 100mA Terminals 24 - +12V bis +24V DC / 250mA source of emergency power Akku Terminals 26 - +12V bis +24V DC / 250mA Concise announcement
Switching Cycles:	Ca. 1.000.000 Switching cycles
Protective Class	IP 43
Ambient temperature:	0°C to +65 °C
Reaction time from departure of the zone to switch off maincon-factor	Worst-Case: 0,021 Seconds

Technischer Überwachungs-Verein Thüringen e.V.
Zertifizierungsstelle für Aufzüge und deren Sicherheitsbauteile



Melchendorfer Str. 64
99096 Erfurt
Tel.: (0361) 42 83 0
Fax: (0361) 42 83 242
e-mail: info@tuev-thueringen.de

EU-Baumusterprüfbescheinigung gemäß Anhang IV A der Aufzugsrichtlinie 2014/33/EU

Benannte Stelle: Zertifizierungsstelle für Aufzüge und deren Sicherheitsbauteile
Kennnummer 0090

Nr. der EU-Baumusterprüfung: **FT/16/009/40 Rev.01**

Produkt: Detektor zum Erkennen des Verlassens der Haltestelle des Fahrkorbes bei offenen Fahrkorbtüren als Teil einer Schutzeinrichtung gegen unbeabsichtigte Bewegung des Fahrkorbes

Typ: **SIS16-101**

Inhaber der Bescheinigung: KW Aufzugstechnik GmbH
Zimmersmühlenweg 69; 61440 Oberursel

Hersteller / Fertigungsstätte: KW Aufzugstechnik GmbH
Zimmersmühlenweg 69; 61440 Oberursel

Antragsdatum: 14.01.2021

Prüfgrundlagen: DIN EN 81-20: 2020-06
DIN EN 81-50: 2020-06

Prüfstelle: TÜV Thüringen e.V.
Prüflabor für Aufzüge und deren Sicherheitsbauteile
Melchendorfer Str. 64, 99096 Erfurt

Prüfbericht-Nr.: FT/16/009/40

Datum EU-Baumusterprüfung/
Beginn der Gültigkeit: 20.04.2021

Ende der Gültigkeit: 19.04.2026

Als Anlagen sind folgende, mit der Nummer der EU-Baumusterprüfung **FT/16/009/40 Rev.01** gekennzeichnete Unterlagen beigelegt:

- Anlage 1 zur Baumusterprüfbescheinigung FT/16/009/40 Rev.01, 2 Seiten

Zusätzliche Angaben:
Keine



Dipl.-Ing. (FH) Reichelt
Leiter der Zertifizierungsstelle

Zella-Mehlis, 08.04.2021
Ort, Datum

Diese EU-Baumusterprüfbescheinigung gilt nur im Zusammenhang mit der Anlage 1

Anlage 1 zur EU-Baumusterprüfbescheinigung

Nr. der EU-Baumusterprüfung: FT/16/009/40 Rev.01

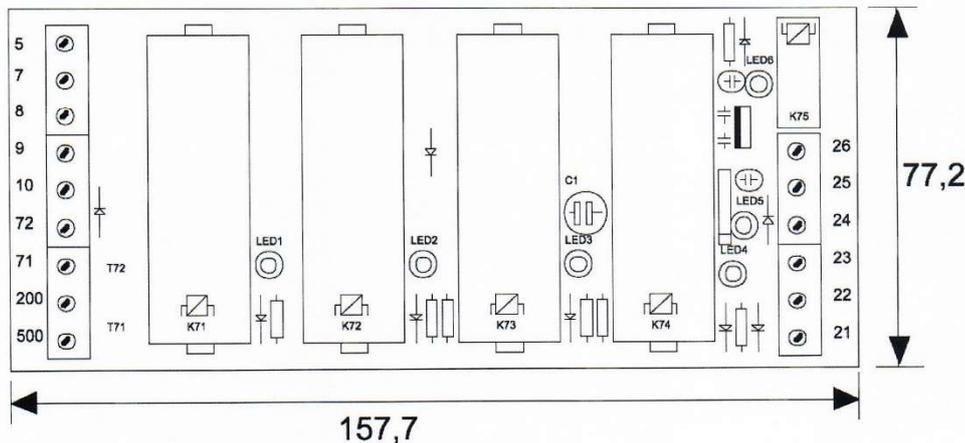
1 Anwendungsbereich

1.1 Die Sicherheitsschaltung SIS16-101 ist für den Einsatz in Aufzugsanlagen vorgesehen. Sie dient zur Detektierung des Verlassens der Entriegelungszone durch den Fahrkorb bei offener Fahrkorbür. Bei Bewegungen des Fahrkorbes über die Entriegelungszone hinaus ist sie in der Lage eine Kette von Kontaktelementen zu öffnen.

1.2 Technische Daten:

Typ / Revisionsstand: SIS16-101 / Version 116-D
 Versorgungsspannung: 24V DC / 0,1A (Klemmen 200, 500)
 Eingangsimpedanz: > 510 Ohm (Klemmen 71, 72)
 Ausgangsspannung: 0 - 250V AC (Klemmen 5, 7)
 Ausgangsstrom: < 4A (Klemmen 5, 7)
 Betriebstemperatur: 0...+65°C
 Schutzgrad: IP 43 (durch Gehäuseschutzgrad sicherzustellen)
 Montage: auf Hutschiene im Gehäuse
 Verzögerungszeit: 21 ms
 (Die Verzögerungszeit ist die Zeit welche zwischen Änderung des Signals am Eingang (Klemmen 71, 72) und der Änderung des Signals am Ausgang (Klemmen 5, 7) vergeht.)

2 Abmessungen und Aufbau



Technischer Überwachungs-Verein Thüringen e.V.
 Zertifizierungsstelle für Aufzüge und deren Sicherheitsbauteile
 Anlage 1 zur Baumusterprüfbescheinigung Nr. FT/16/009/40 Rev.01
 Seite 2 von 2



Relais- und Anzeigenelemente:	K71= Zonenrelais mit roter LED-Anzeige LED1 K72= Zonenrelais mit roter LED-Anzeige LED2 K73=Kontrollrelais mit roter LED-Anzeige LED3 K74=Startrelais Einfahrt/Nachregulieren mit roter LED-Anzeige LED4 K75=Bündigrelais mit roter LED-Anzeige LED 6 LED Status= Farbe Grün, Kontrollanzeige LED 5
Abmessungen (mit Schale):	(Länge x Breite x Höhe) 157,7mm x 77,2mm x 65,0mm
Gewicht:	Ca. 700 Gramm
Spannungsversorgung:	Klemmen 5,7 - 250V AC / 4A Klemmen 71,72 - +24V DC / 50mA Klemmen 200 - +24V DC / 100mA Klemmen 24 - +12V bis +24V DC / 250mA Notstromquelle Akku Klemmen 26 - +12V bis +24V DC / 250mA Bündiganzeige
Schaltzyklen:	Ca. 1.000.000 Schaltspiele
Schutzgrad	IP 43
Umgebungstemperatur:	0 bis +65 °C
Reaktionszeit vom Verlassen der Zone bis zum Abfall der Hauptschützes	Worst-Case: 0,021 Sekunden

3 Bedingungen

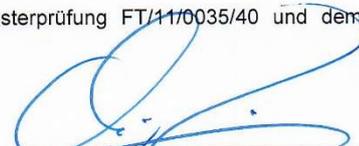
- 3.1 Das Bauteil SIS16-101 stellt nur einen Teil (Detektor) der Schutzeinrichtung gegen unbeabsichtigte Bewegungen des Fahrkorbes bei offenen Türen dar. Erst in Verbindung mit weiteren Bauteilen, welche ebenfalls EU-Baumustergeprüft sein müssen, ist das Gesamtsystem geeignet die Anforderungen an eine Schutzeinrichtung nach DIN EN 81-20:2020-06, Pkt. 5.6.7 zu erfüllen.
Die Eignung der Gesamtschutzeinrichtung bedarf einer eigenen Prüfung.
- 3.2 Das Sicherheitsbauteil ist mit einem Typenschild mit folgenden Mindestangaben zu versehen:
 - a) der Name des Herstellers der Schutzeinrichtung,
 - b) die Nummer der EU-Baumusterprüfbescheinigung,
 - c) der Typ der Schutzeinrichtung.
- 3.3 Der Montagebetrieb hat eine Prüfanweisung zu erstellen und ggf. notwendige Hilfsmittel bereitzuhalten um eine gefahrlose Prüfung (z.B. bei geschlossenen Türen) zu gewährleisten.
- 3.4 Die Montage der Signalgeber muss in der Entriegelungszone erfolgen.
- 3.5 Die korrekte Installation und Funktion ist wiederkehrend zu überprüfen.

4 Hinweise

- 4.1 Die Baumusterprüfung umfasst nur die Teile der Anforderungen aus DIN EN81-20:2020-06, Pkt. 5.6.7 welche sich mit der Detektion der unbeabsichtigten Bewegung befasst. Sie ist keine Baumusterprüfung für das Gesamtsystem "Schutzeinrichtung gegen unbeabsichtigte Bewegung des Fahrkorbes".
- 4.2 Die Baumusterprüfbescheinigung darf nur zusammen mit dieser Anlage verwendet werden.
- 4.3 Dem Bauteil SIS16-101 ist die Betriebsanleitung mit Angaben zur Montage, Inbetriebnahme und Prüfung sowie eine Kopie der Baumusterprüfbescheinigung beizugeben.
- 4.4 Die EU-Baumusterprüfung basiert auf der freiwilligen Baumusterprüfung FT/11/0035/40 und dem Bewertungsbericht FT/16/009/40 Rev.01.

Zella-Mehlis, 08.04.2021
 Ort, Datum



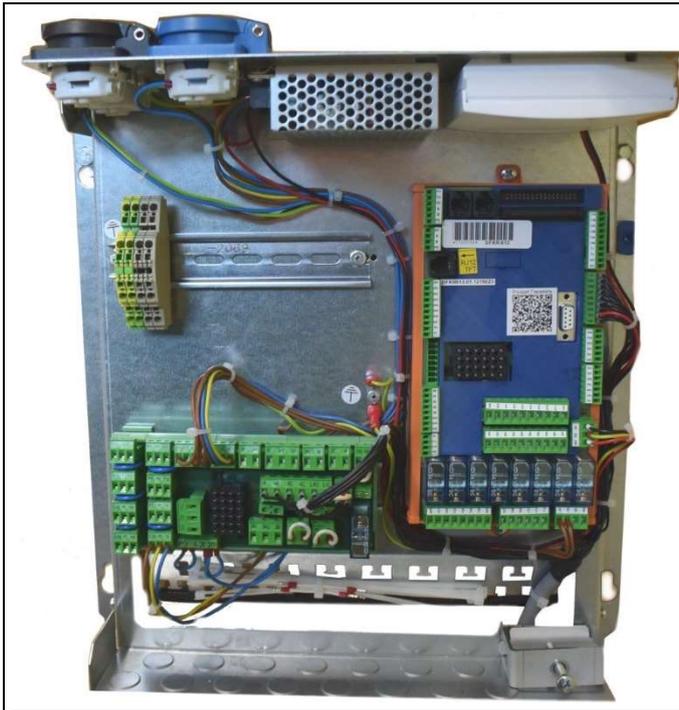

 Dipl.-Ing. (FH) Reichelt
 Leiter der Zertifizierungsstelle

Sie wurden betreut durch:
 Hauptgeschäftsstelle:
LP_NB_L_ZP_008_ZERT_2016_03_Anlage BMP Sicherheitsbauteil

Service-Center Südthüringen, Am Köhlersgebäu 58, 98544 Zella-Mehlis, Tel.-Nr.: 03682 4528
 TÜV Thüringen e. V. Melchendorfer Straße 64, 99096 Erfurt,
 E-Mail: info@tuev-thueringen.de, Internet: www.tuev-thueringen.de

Seite 2 von 2
Anlage 1 EU-BMP-16-009-40 rev01-SIS16-101.doc

2.10 Device Description Car Controller FKR



The lift control system DAVID-613 is a distributed control system. The information is serially transmitted from the central unit to the car controller unit FKR. In the figure on the left of the box with complete inspection is FKR (middle right), terminal block X11 (below), power outlet, power supply and alarm horn.

The FKR coordinates the shaft copy, load measurement, cabin-gong, and door control. Up to three inside panels, as well as matrix, LCD and TFT displays can be connected.

All connections for the system components, in or on the cabin are pre-assembled.

Connection options on the car controller FKR 613



3	Controller - Voltage
2	Gong-output
1	Load-sensor-input
28	+24V DC Inputs
1	Digital Encoder-inputs
1	Absolute value Encoder-inputs
16	+24V DC Outputs
7	Relay outputs
2	RJ-12-Interface for Carposition- and Drive Indicator
2	Flatwire Interface 34 pole for two Car-panel-Interfaces
3	Serial Interface RS 232 / RS 485
2	Car-Panel-Interfaces f0r EIT
1	CANOpen Interface
1	RJ-12-Interface for TFT-Graphic displays
1	Hanging wire interface
1	Expansionport

2.10 DESCRIPTION CAR CALLING INTERFACE EIT

The car calling interface EIT (actual version MK 106) is the interface for the call- & indicator devices of the car panel. The in- & output channels are programable freely.

Car interface EIT-MK106-indicator K, with screw terminals for mounting the call- & indicator devices:

A) Version: 8x car-calls with car indicator 1 of N

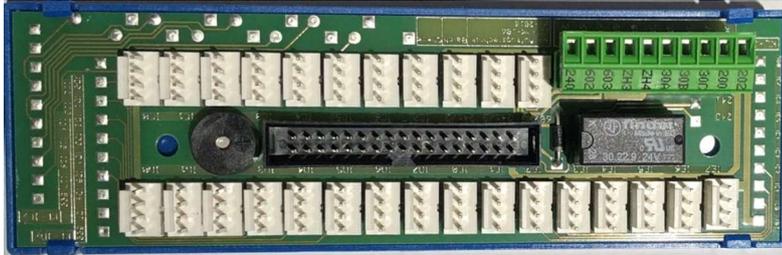
202	Switch.Voltage +24V		500	GND
IE0	Arrow UP 97		IC7	Car postion 28h
IE1	Arrow DOWN 98		IC6	Car postion 27h
IE2	Overload Indicator 63		IC5	Car postion 26h
IE3	Car Fan		IC4	Car postion 25h
IE4	Door-2 OPEN		IC3	Car postion 24h
IE5	Door-1 CLOSE		IC2	Car postion 23h
IE6	Door-1 OPEN		IC1	Car postion 22h
IE7	Car Priority S36	IC0	Car postion 21h	
500	0V GND	200	Voltage +24V	

243	Alert Message	202	Switch.Voltage +24V ->Bridge to Pin 200	500	GND 0V
241	Emergency Light +24V	200	Voltage +24V	ID7	Car Call Floor 08
		30C	Alert Contact	ID6	Car Call Floor 07
		30B	Alert Contact	ID5	Car Call Floor 06
		30A	Alert Contact	ID4	Car Call Floor 05
		ZH4	Intercom optional	ID3	Car Call Floor 04
		ZH3	Intercom optional	ID2	Car Call Floor 03
		603	Intercom	ID1	Car Call Floor 02
		602	Intercom	ID0	Car Call Floor 01
		240	Accu Voltage +24V	200	Voltage +24V

B) Version: 12x car-calls car indicator binär / gray

202	Switch.Voltage +24V	500	GND 0V
IE0	Car Call Floor 09	IC7	Ount Of Order 65
IE1	Car Call Floor 10	IC6	Overload Indi. 63
IE2	Car Call Floor 11	IC5	Arrow UP 97
IE3	Car Call Floor 012	IC4	Arrow DOWN 98
IE4	Door-2 OPEN	IC3	Car postion 24h
IE5	Door-1 CLOSE	IC2	Car postion 23h
IE6	Door-1 OPEN	IC1	Car postion 22h
IE7	Car Priority S36	IC0	Car postion 21h
500	0V GND	200	Voltage +24V

Car interface EIT-MK106-indicator M, with push terminals for Pushbuttons of the serie of KW 40, KB44, KI44..

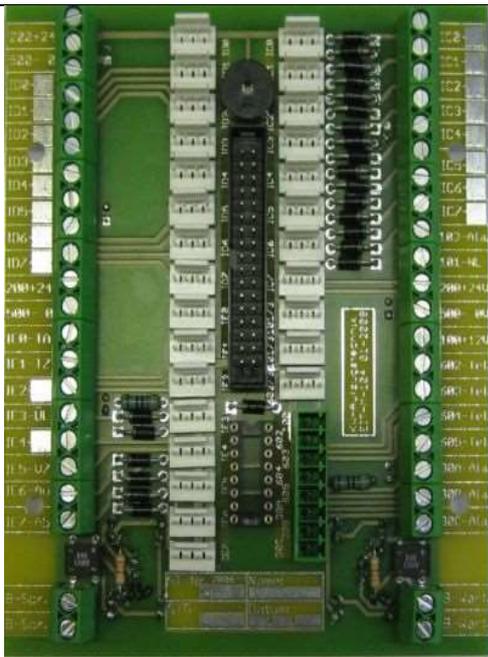


IC0	IC1	IC2	IC3	IC4	IC5	IC6	IC7	101	103	100	240	602	603	ZH3	ZH4	30A	30B	30C	200	202
500	500	500	500	500	500	500	500	500	500	500										
200	200	200	200	200	200	200	200	100	100	100										

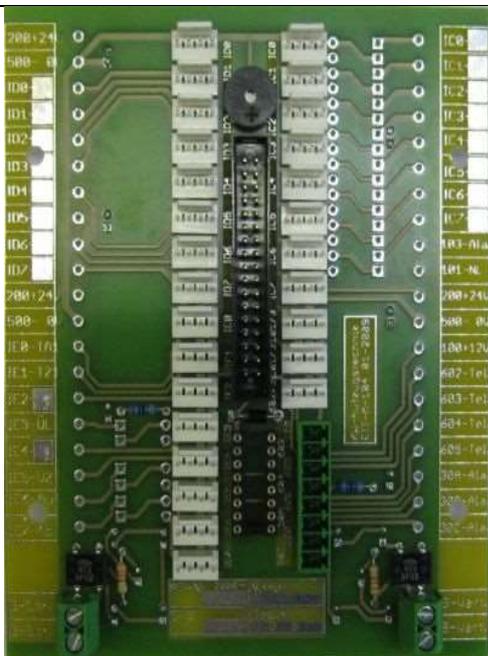
Terminal of a 34 pole flat wire / EIT-106 M with push terminals

ID0	ID1	ID2	ID3	ID4	ID5	ID6	ID7	IE0	IE1	IE2	IE3	IE4	IE5	IE6	IE7
500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500
200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200

2.0 Technical Mounting of the PCB EIT-105 Full Version for KW-Carpanels

Kl.	Function		Function	Kl.
200	+24V DC Voltage		21h – Car position Floor 01	IC0
500	0V DC GND		22h – Car position Floor 02	IC1
ID0	– Carcall Floor 01 (high active)		23h – Car position Floor 03	IC2
ID1	– Carcall Floor 02 (high active)		24h – Car position Floor 04	IC3
ID2	– Carcall Floor 03 (high active)		25h – Car position Floor 05	IC4
ID3	– Carcall Floor 04 (high active)		26h – Car position Floor 06	IC5
ID4	– Carcall Floor 05 (high active)		27h – Car position Floor 07	IC6
ID5	– Carcall Floor 06 (high active)		28h – Car position Floor 08	IC7
ID6	– Carcall Floor 07 (high active)		S103 – Alert Button	103
ID7	– Carcall Floor 08 (high active)		E101 – Emergency Light	101
200	+24V DC Voltage		+24V DC Voltage	200
500	0V DC GND		0V DC GND	500
IE0	S43A – Door 1-Open Button		100 +12V Voltage	100
IE1	S44A – Door 1-Close Button		603 - Intercom	602
IE2	S43B – Door 2-Open Button		602 - Intercom	603
IE3	E63 - Overload Indicator		604 - ZH3 – Free HK-PIN	604
IE4	S150 – Carfan Button		605 - ZH4 – Free HK-PIN	605
IE5	S36 – Priority Operation		Alert Relay	30A
IE6	Arrow – Traveldirection UP		Alert Relay	30B
IE7	Arrow – Traveldirection DOWN		Alert Relay	30C
B-S	Please Speak Indicator	Please Wait Indicator	B-W	
B-S	Please Speak Indicator	Please Wait Indicator	B-W	

3.0 Technical Mounting of the PCB EIT-105 Light Version for KW-Carpanels

Kl.	Function		Function	Kl.
200	+24V DC Voltage		21h – Car position Floor 01	IC0
500	0V DC GND		22h – Car position Floor 02	IC1
ID0	– Carcall Floor 01 (high active)		23h – Car position Floor 03	IC2
ID1	– Carcall Floor 02 (high active)		24h – Car position Floor 04	IC3
ID2	– Carcall Floor 03 (high active)		25h – Car position Floor 05	IC4
ID3	– Carcall Floor 04 (high active)		26h – Car position Floor 06	IC5
ID4	– Carcall Floor 05 (high active)		27h – Car position Floor 07	IC6
ID5	– Carcall Floor 06 (high active)		28h – Car position Floor 08	IC7
ID6	– Carcall Floor 07 (high active)		S103 – Alert Button	103
ID7	– Carcall Floor 08 (high active)		E101 – Emergency Light	101
200	+24V DC Voltage		+24V DC Voltage	200
500	0V DC GND		0V DC GND	500
IE0	S43A – Door 1-Open Button		100 +12V Voltage	100
IE1	S44A – Door 1-Close Button		603 - Intercom	602
IE2	S43B – Door 2-Open Button		602 - Intercom	603
IE3	E63 - Overload Indicator		604 - ZH3 – Free HK-PIN	604
IE4	S150 – Carfan Button		605 - ZH4 – Free HK-PIN	605
IE5	S36 – Priority Operation		Alert Relay	30A
IE6	Arrow – Traveldirection UP		Alert Relay	30B
IE7	Arrow – Traveldirection DOWN		Alert Relay	30C
B-S	Please Speak Indicator	Please Wait Indicator	B-W	
B-S	Please Speak Indicator	Please Wait Indicator	B-W	

Option-1: Functionset to 8 Floors and use of a 1 of N-Indicator

PIN	Type	Term	Function	Function	Term	Type	PIN
1	EA	ID0	- Car Call HS 01 (highly active)	21h - Car Position Indicator HS01	IC0	EA	2
3	EA	ID1	- Car Call HS 02 (highly active)	22h - Car Position Indicator HS02	IC1	EA	4
5	EA	ID2	- Car Call HS 03 (highly active)	23h - Car Position Indicator HS03	IC2	EA	6
7	EA	ID3	- Car Call HS 04 (highly active)	24h - Car Position Indicator HS04	IC3	EA	8
9	EA	ID4	- Car Call HS 05 (highly active)	21h - Car Position Indicator HS05	IC4	EA	10
11	EA	ID5	- Car Call HS 06 (highly active)	22h - Car Position Indicator HS06	IC5	EA	12
13	EA	ID6	- Car Call HS 07 (highly active)	23h - Car Position Indicator HS07	IC6	EA	14
15	EA	ID7	- Car Call HS 08 (highly active)	24h - Car Position Indicator HS08	IC7	EA	16
17	EA	IE0	S43A- Door Open Push Button D1 open	100 +12V Voltage (Battery-puffer)	100	A	18
19	EA	IE1	S44A- Door Close Push Button -D1 close	E101 - Emergency Light +12V DC	101	A	20
21	EA	IE2	S43B- Door Open Push Button - D2 Open	S103 - Alarm button	103	E	22
23	EA	IE3	E63 - Overload Indicator	603 - Telephone	602	S	24
25	EA	IE4	S150 -Car fan Button Open	602 - Telephone	603	S	26
27	EA	IE5	S36 - Landing Calls (opener)	604 - ZH3 - Free Hanging Wire	604	S	28
29	EA	IE6	Car Arrow Indicator-Direction Up	605 - ZH4 - Free Hanging Wire	605	S	30
31	EA	IE7	Car Arrow Indicator -Direction Down	Pieco Signal	-	A	32
33	A	200	200 +24V DC Controller Voltage	GND	500	A	34

If you need new functions, you must erase the input- and output channels IE1, IE2, IE4.

Option-2: Functionset to 12 Floors and use of codable Indicators (Binar or Gray-Code)

PIN	Type	Term	Function	Function	Term	Type	PIN
1	EA	ID0	- Car Call HS 01 (highly active)	- Car Call HS 09 (highly active)	IE0	EA	2
3	EA	ID1	- Car Call HS 02 (highly active)	- Car Call HS 10 (highly active)	IE1	EA	4
5	EA	ID2	- Car Call HS 03 (highly active)	- Car Call HS 11 (highly active)	IE2	EA	6
7	EA	ID3	- Car Call HS 04 (highly active)	- Car Call HS 12 (highly active)	IE3	EA	8
9	EA	ID4	- Car Call HS 05 (highly active)	21h - Car Position Indicator HS01cod.	IE4	EA	10
11	EA	ID5	- Car Call HS 06 (highly active)	22h - Car Position Indicator HS02cod.	IE5	EA	12
13	EA	ID6	- Car Call HS 07 (highly active)	23h - Car Position Indicator HS03cod.	IE6	EA	14
15	EA	ID7	- Car Call HS 08 (highly active)	24h - Car Position Indicator HS04cod.	IE7	EA	16
17	EA	IE0	S43A - Door Open Push Button -D1 Open	100 +12V Voltage (Battery-puffer)	100	A	18
19	EA	IE1	S44A- Door Close Push Button -D1 Close	E101 - Emergency light +12V DC	101	A	20
21	EA	IE2	S43B- Door Open Push Button - D2 Open	S103 - Alarm button	103	E	22
23	EA	IE3	E63 - Overload Indicator	603 - Telephone	602	S	24
25	EA	IE4	S150 - Car fan Button Open	602 - Telephone	603	S	26
27	EA	IE5	S36 - Landing Calls (opener)	604 - ZH3 - Free Hanging Wire	604	S	28
29	EA	IE6	Car Arrow Indicator -Direction Up	605 - ZH4 - Free Hanging Wire	605	S	30
31	EA	IE7	Car Arrow Indicator -Direction Down	Pieco Signal (highly active)	-	A	32
33	A	200	200 +24V DC Controller Voltage	GND	500	A	34

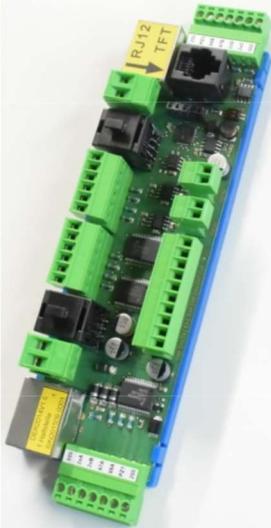
If you need new functions, you must erase the input- and output channels IE1, IE2, IE4.

Option-3: Functionset to 16 Floors and use of Bus-Matrix-Indicator of Type KW

Ader	Typ	Kl.	Function	Function	Kl.	Typ	Ader
1	EA	ID0	- Car Call HS 01 (highly active)	- Car Call HS 09 (highly active)	IE0	EA	2
3	EA	ID1	- Car Call HS 02 (highly active)	- Car Call HS 10 (highly active)	IE1	EA	4
5	EA	ID2	- Car Call HS 03 (highly active)	- Car Call HS 11 (highly active)	IE2	EA	6
7	EA	ID3	- Car Call HS 04 (highly active)	- Car Call HS 12 (highly active)	IE3	EA	8
9	EA	ID4	- Car Call HS 05 (highly active)	- Car Call HS 13 (highly active)	IE4	EA	10
11	EA	ID5	- Car Call HS 06 (highly active)	- Car Call HS 14 (highly active)	IE5	EA	12
13	EA	ID6	- Car Call HS 07 (highly active)	- Car Call HS 15 (highly active)	IE6	EA	14
15	EA	ID7	- Car Call HS 08 (highly active)	- Car Call HS 16 (highly active)	IE7	EA	16
17	EA	IE0	S43A-Door Open PushButton-Door1 Open	100 +12V Voltage (Battery-puffer)	100	A	18
19	EA	IE1	S44A-Door Close PushButton-Door1 Close	E101 - Emergency Light +12V DC	101	A	20
21	EA	IE2	S43B-Door OpenPushButton-Door2 Open	S103 - Alert Push Button	103	E	22
23	EA	IE3	E63 - Overload Indicator	603 - Intercom	602	S	24
25	EA	IE4	S150 - Car fan Button Open	602 - Intercom	603	S	26
27	EA	IE5	S36 - Landing Calls (opener)	604 - ZH3 - Free Hanging Wire	604	S	28
29	EA	IE6	Car Arrow Indicator -Direction of Travel Up	605 - ZH4 - Free Hanging Wire	605	S	30
31	EA	IE7	Car Arrow Indicator -Direction of Travel Down	Piece Signal (high active)	-	A	32
33	A	200	200 +24V DC Controller Voltage	GND	500	A	34

If you need new functions, you must erase the input- and output channels IE1, IE2, IE4.

2.12 DESCRIPTION REMOTE STATION ER-2014

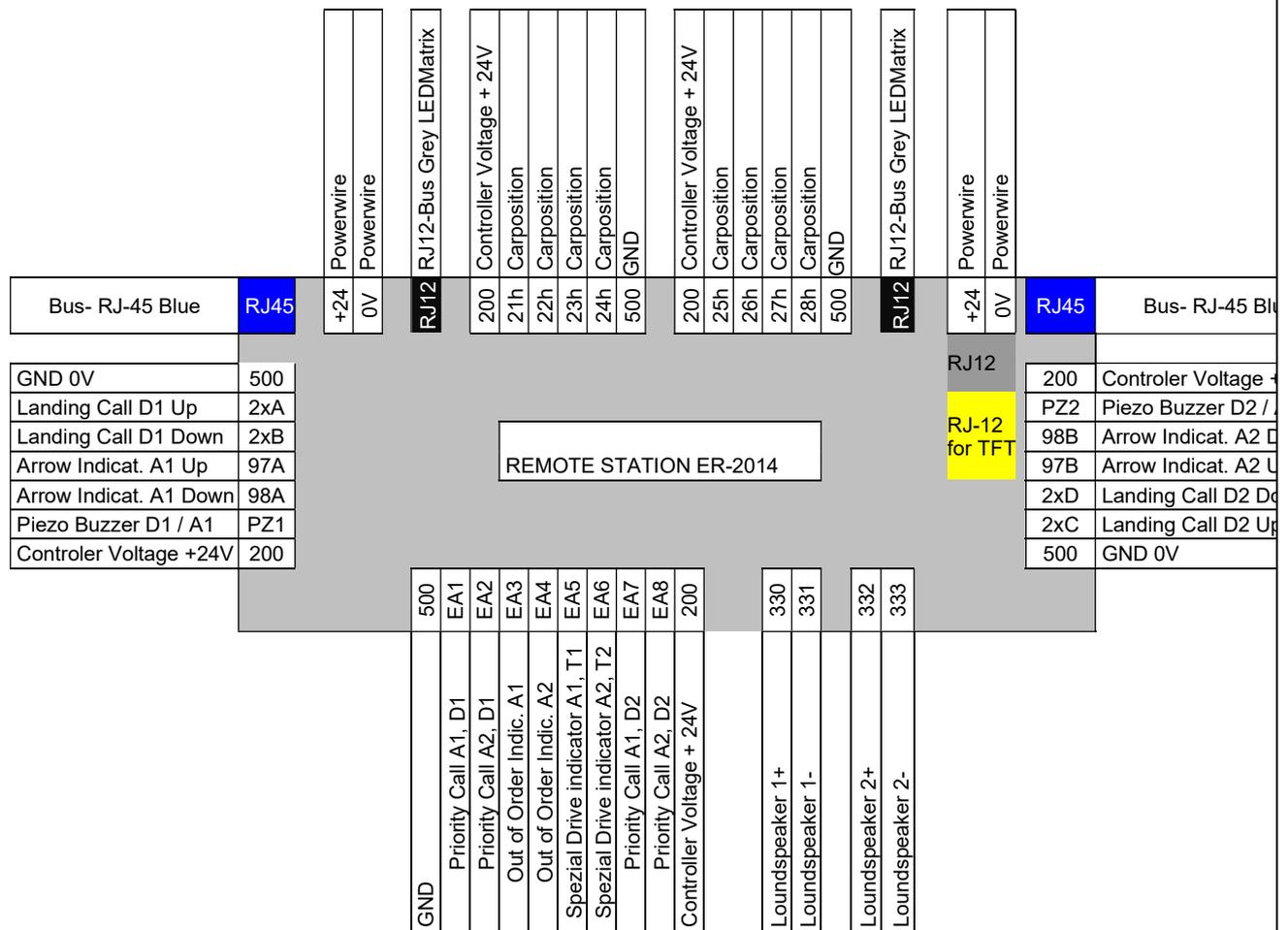


The remote station **ER-2014** provides 16 inputs and outputs, including 6 free inputs and outputs. There are 2 piece-outputs for the call messaging of bus-matrix-indicator. The remote station has all necessary call-channels and arrow-outputs (even for selective door-controlling). For group are operating according 4 outputs for displaying car position and 2 arrows per elevator. In addition, there are 2 Outputs for landing operation and special trip per elevator. You connect 2 speakers (8 ohms impedance) for the gong of the floor.

You can modulate your gong signal at the options (volume, peach, repetition and trips I which it sounds. (Car Call Up and Down, Landing Call Up and Down, Special trip...) The lower 7-pin plug with the call-messaging 2xA & 2xB is responsible for the Door 1, the upper plug with 2xC & 2xD for the Door 2.

The matrix-indicator with RJ-12 cable are to put in the 2 black jacks.

The yellow marked RJ-12 jack for high-quality TFT graphic displays with KW-bus connection.



Terminal	Function
2xA	Landing Call Door 1 Up
2xB	Landing Call Door 1 Down
2xC	Free: for example Landing Call Door 2 Up at selective Door
2xD	Free: for example Landing Call Door 2 Down at selective Door
97A	Free: for example Level Arrow Door 1 Up
98A	Free: for example Level Arrow Door 1 Down
97B	Free: for example Level Arrow Door 2 Up
98B	Free: for example Level Arrow Door 2 Down
500	GND
200	Controller Voltage +24V



FUNCTION-VISUALISATION

When the ER-2013/2014 connected with bus line and the control is active, the green LED is blinking. In short circuit on the busline or malfunction expires or shine the LED. You can control the Remote Station in Menu C6 Modul Monitor/ Remote Station ER01-16 and Remote Station ER 17-32.

For every remote station which function is ok, there will be shown an „E“ in the display of the HPG-60. From left to right, you can see in the display all remote stations from the first floor to the highest floor which are recognized in the system.



ADDRESS SETTING

All ER-2014 preset for the individual floors. The bottom floor has always marked "Floor 01". The setting of floors is no longer address switch on the Remote Station, like ER-2005, but by setting software.

- 1. STEP:** Switch off the controller (**Main Switch Q1, and Fuses F6 & F7 switch off**).
- 2. STEP:** The Remote Station programmed with the RJ-45 cable with the central unit. All other Remote Stations may not be connected.
- 3. STEP:** It must be set a jumper on the 5-pin socket Print between pins 2 and 3 (-> see picture left). Then, the system can be put under power (main switch Q1, Q6 is switched on).
- 4. STEP:** You can regulate the parameter "Remote Station Address programming" in menu C6 Modul Monitor. The ER-2014 gets his address with the selection of the number of floors. (01-64). Then the ER-2014 can be installed in the corresponding floor.



TERMINAL: MATRIX-INDICATOR TYPE ANZ-xx

The connection of the Matrix-indicator of type ANZ-XX (ANZ-22, ANZ-32, ANZ.-33, ANZ-52 & ANZ-53) takes place on the black RJ-12 jack with the black RJ-12 cable.

Don't put the RJ-12 in the silver RJ-45 jack!



Connection of a TFT-Displays at a ER-2014

The connection of TFT displays is done by the yellow RJ-12 jack with the included RJ-12 cable.

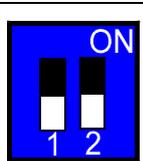
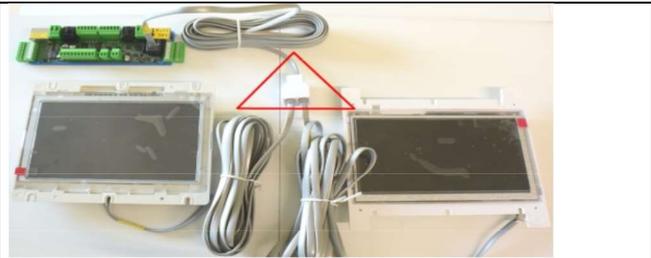
The RJ-12 cable **is not allowed to be plugged** into the RJ-45 jack silver or in one of the two RJ12 sockets for matrix display!



Connection of several TFT-Displays at an ER-2014

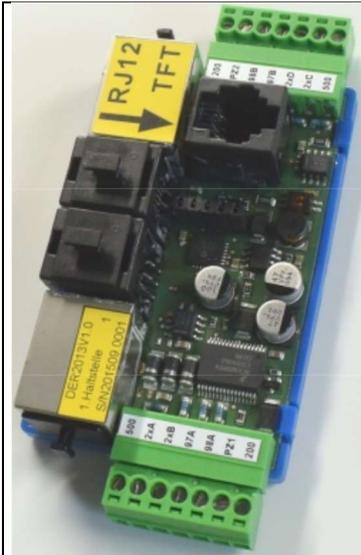
Several TFT displays can be operated at a terminal by means of a RJ-12 splitter.

This is necessary in elevator installations with several door sides, or in elevator groups.



- On the remote station ER-2014 is a 2-pole DIL switch for activating functions.
1. Switch-1 can be used to switch on termination. The termination is only to be activated for the last floor computer on the bus.
 2. The passive bus is activated on switch-2. A passive bus can only output information, e.g. Arrows and cabin stand. It therefore operates in the same address space as the Shaftbus-1.

2.13 DESCRIPTION REMOTE STATION ER-2013



The remote station **ER-2013** provides 8 inputs and outputs, including 6 free inputs and outputs. There are 2 piece-outputs for the call messaging of bus-matrix-indicator.

The remote station has all necessary call-channels and arrow-outputs (even for selective door-controlling)

The installation of Remote Station is in the standard shaft cable channel 90x40. You combine the Bus and Power only with blue connection cable RJ-45-Cable.

The lower 7-pin plug with the call-messaging 2xA & 2xB is responsible for the Door 1, the upper plug with 2xC & 2xD for the Door 2.

The two 10 pin ribbon cable connectors have the same functional assignments, such as the green plug.

The matrix-indicator with RJ-12 cable are to put in the 2 black jacks.

The yellow marked RJ-12 jack for high-quality TFT graphic displays with KW-bus connection.

		RJ12-Bus Grey LEDMatrix				
Bus- RJ-45 Blue				Bus- RJ-45 Blue		
GND 0V	500	Remote Station ER-2013		TFT	200	Controler Voltage +24V
Landing Call D1 Up	2xA			RJ-12	PZ2	Piezo Buzzer D2 / A2
Landing Call D1 Down	2xB			98B	Arrow Indicat. A2 Down	
Arrow Indicat. A1 Up	97A			97B	Etagenfeil T2 Auf	
Arrow Indicat. A1 Down	98A			2xD	Landing Call D2 Down	
Piezo Buzzer D1 / A1	PZ1			2xC	Landing Call D2 Up	
Controler Voltage +24V	200			500	GND 0V	
Terminal	Function					
2xA	Landing Call Door 1 Up					
2xB	Landing Call Door 1 Down					
2xC	Free: for example Landing Call Door 2 Up at selective					
2xD	Free: for example Landing Call Door 2 Down at selectiv					
97A	Free: for example Level Arrow Door 1 Up					
98A	Free: for example Level Arrow Door 1 Down					
97B	Free: for example Level Arrow Door 2 Up					
98B	Free: for example Level Arrow Door 2 Down					
500	GND					
200	Controller Voltage +24V					
		<p>On the remote station ER-2014 is a 2-pole DIL switch for activating functions.</p> <p>1. Switch-1 can be used to switch on termination. The termination is only to be activated for the last floor computer on the bus.</p> <p>2. The passive bus is activated on switch-2. A passive bus can only output information, e.g. Arrows and cabin stand. It therefore operates in the same address space as the Shaftbus-1.</p>				



FUNCTION-VISUALISATION

When the ER-2013/2014 is connected to the bus line and the control is active, the green LED blinks. In short circuit on the busline or malfunction expires or lights the LED. You can control the Remote Station in Menu C6 Modul Monitor/ Remote Station ER01-16 and Remote Station ER 17-32.

For every remote station with an acceptable function, there will be shown an „E“ in the display of the HPG-60. From left to right, you can see in the display all remote stations from the first floor to the highest floor which are recognized in the system.



ADDRESS SETTING

All ER-2013 preset for the individual floors. The bottom floor has always marked "Floor 01". The setting of floors is no longer address switch on the Remote Station, like ER-2005, but by the setting software.

- 1. STEP:** Switch off the controller (**Main Switch Q1, and Fuses F6 & F7 switch off**).
- 2. STEP:** The Remote Station programmed with the RJ-45 cable with the central unit. All other Remote Stations may not be connected.
- 3. STEP:** It must be set a jumper on the 5-pin socket Print between pins 2 and 3 (-> see picture left). Then, the system can be put under power (main switch Q1, Q6 is switched on).
- 4. STEP:** You can regulate the parameter "Remote Station Address programming" in menu C6 Modul Monitor. The ER-2013 gets his address with the selection of the number of floors. (01-64). Then the ER-2014 can be installed in the corresponding floor.



TERMINAL: MATRIX-INDICATOR TYPE ANZ-xx

The connection of the Matrix-indicator of type ANZ-XX (ANZ-22, ANZ-32, ANZ.-33, ANZ-52 & ANZ-53) takes place on the black RJ-12 jack with the black RJ-12 cable.

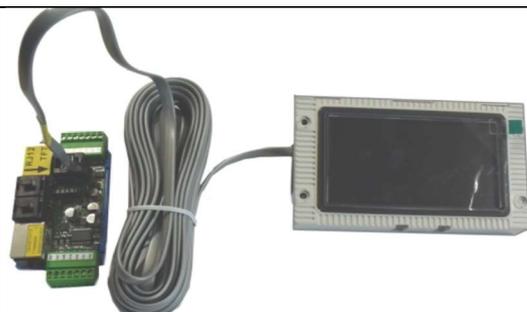
Don't do the RJ-12 in the silver RJ-45 jack!



Connection of a TFT-Displays at an ER-2013

The connection of TFT displays is done by the yellow RJ-12 jack with the included RJ-12 cable.

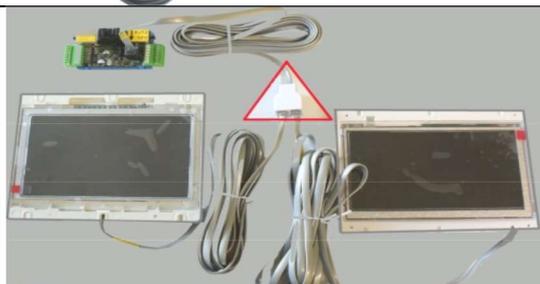
The RJ-12 cable is **not allowed to be plugged** into the RJ-45 jack silver or in one of the two RJ12 sockets for matrix display!



Connection of several TFT-Displays at an ER-2013

Several TFT displays can be operated at a terminal by means of a RJ-12 splitter.

This is necessary in elevator installations with several door sides, or in elevator groups.



2.15 DEVICE DESCRIPTION HANGING WIRE EHK40 & 48



The Hanging wire EHK40 is the physical connection between the central-unit-controller and the car-controller. You can use it for elevators with 32 Floors and a height of 100m.

It is always the same pinning. There is no difference in a 2 or a 32 Floor elevator system. The Hanging wire has three shield twisted pairs of wires.

With these pairs, you can do the multiprocessor-communication, the telephoneconnection, the encoder channels for the shaft encoder on the top of the car.

The Hanging Wire EHK 48 has optional a Cat-7 element inside.

White hanging wire pins with black numbers				Black Hanging wire pins with white numbers			
Pin-socket	Name	Pinr	Function	Pin-socket	Name	Pin	Function
1	PE		Shield = Earth	1	3	1	Safety Circuit Safety gear
2	PE		Shield = Earth	5	3A	2	Safety Circuit Inspection
3	PE		Shield = Earth	9	4A	3	Safety Circuit Re-Send
4	PE		Shield = Earth	13	5	4	Safety Circuit Inspection
5	Sbus-S	1	Data wire RS485-A S	17	6	5	Safety Circuit Car Door
9	Sbus-S	2	Data wire RS485-B S	21	6C	6	Safety Circuit Car Door
6	Sbus-E	3	Data wire RS485-A E	22	L20	7	Doorengine 230V/
10	Sbus-E	4	Data wire RS485-B E	23	N4	8	Neutral N4
7	CAN-Bus	5	CAN-Bus Low	24	N6	9	Neutral N6
11	CAN-Bus	6	CAN-Bus High	20	710	10	Doorengine 400V
8	602 - P4	7	Telephone	16	711	11	Doorengine 400V
12	603 - P4	8	Telephone	12	712	12	Doorengine 400V
13	500	9	GND	8	L40	13	Socket 230V AC Car Top 10A
14	100	10	Voltage +12V DC	4	L41	14	Button Shaft Light
15	101	11	Emergency Light Car	3	L51	15	Car Light 10A
16	103	12	Alert Button Car	2	L6	16	Phase uProzessor 10A
17	71	13	Zone 1 71	6	N	17	Neutral N
18	72	14	Zone 2 72	10	715	18	Mechanical Lock
19	60D	15	Inspection Contactor	14	716	19	Mechanical Lock
20	RA16	16	free	18	PE	PE	Earth
21	RA17	17	free				
22	RA18	18	free				
23	RA19	19	free				
24	RA20	20	free				

2.16 DESCRIPTION HANDPROGRAMMING UNIT HPG60



Structure Of The Display:

Parameter name
 Parameter And Value
 Controller Mode
 Function Of The Push-Buttons

Yellow Push-Buttons:

Push-Button To Increase The Value / Name

Push-Button To Decrease The Value / Name

Red Push-Buttons:

Menu Direction Up

Quit Of The Menu Enter Of The Value

Menu Direction Down

The hand programming unit HPG60 is a universal In- and Output device for the controller- and invertersystem. It has 6 Buttons, a four line LCD-Display, a red LED, and also a 9-pol. RS232-Interface. With the HPG-60 you have a look on all parameters and you can change it. Actual messages are indicated on the display about the happening in the microcontroller system. There is a memory, with a lot of volume for 100 entries. You can give calls and make a RESET about the HPG-60, too.

There are three positions, in which you can connect the HPG-60 in order to communicate the micro-processorsystem:

- 1) Central Unit Controller ZR (Casing)
- 2) Car Controller FKR (At the top of the car)

NORMAL MENU

In the normal menu the four main groups of LIFTPARAMETERS / CONTROL PARAMETERS / DIAGNOSIS / INFORMATION are stored among the parameters of the elevator. Navigation through the red button takes you to the submenu. The change in the values of the parameters using the yellow buttons.

ISTWERT MENU

If you are in the normal menu, you can (about 1 sec activity). Either press the red button to get into the left Istwert-menu or use the yellow buttons to scroll through the menu of I1 calls to I9, the modem display. In this menu, the current actions, such as existing calls, car position, door movements, state of the safety circuit shown. To return to the normal menu press the red button to the left.

MENU OF THE REGULATOR-UNIT

By pressing the red button to the left, and the lower red button you can access the menu of the regulator unit. Precondition is the use of KW Liftbus. Due to the fast data link with a cycle time of 2 ms, the display of the parameters and response to key operate in real time. In a DCP-3 connection, e.g. Ziehl-Abegg frequency-inverter, it is also possible to enter the menu of the controller. The screen display is a bit slower, cycle time due to the 17ms. The return to the normal menu is controlled in turn by pressing the red button to the left and the lower red button.

2.17 Software Description KWeb

Basics: KWeb enables the monitoring of all active elevator installations. Data of all elevator systems are collected and graphically processed in order to be able to recognize tendencies with regard to availability and maintenance.

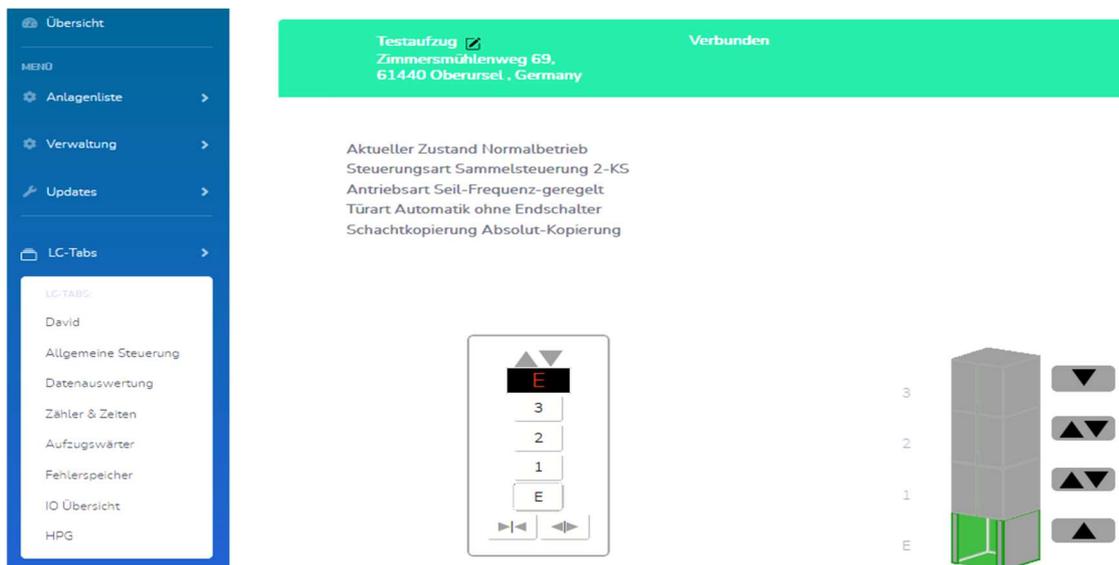
KWeb enables remote access to all active installations, so that troubleshooting is often already possible remotely. Access and connection between all participants, both between the system and the server, as well as between the user and the server, is exclusively via encrypted connections.

Management and status of the elevator system



The tile color of the attachments gives you an impression of the status of your elevators. The colors are assigned as follows:

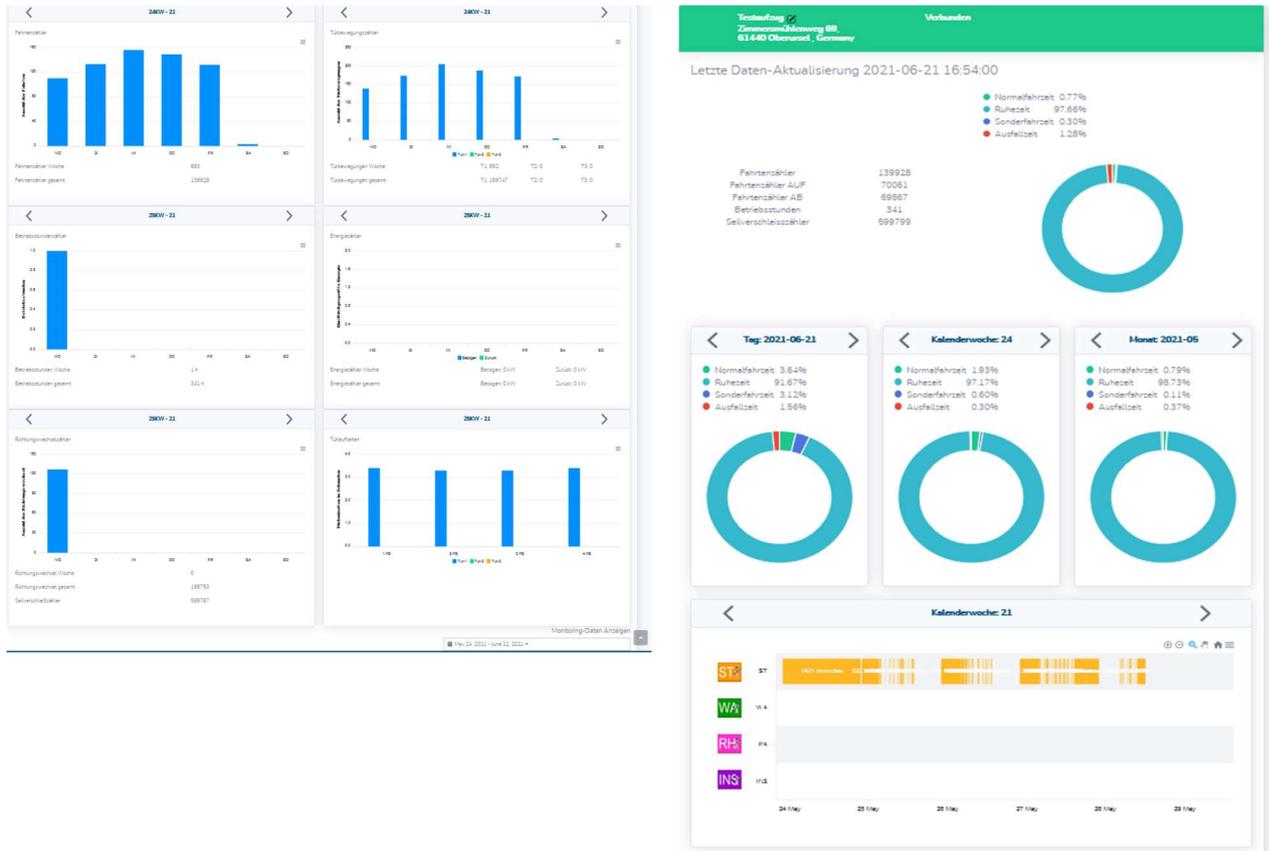
Colour	Status
Grey	Elevator offline or out of service
Green	Normal operation
Red	The system is out of operation or there is currently a fault
Yellow	Special trip: inspection, return trip, evacuation ...



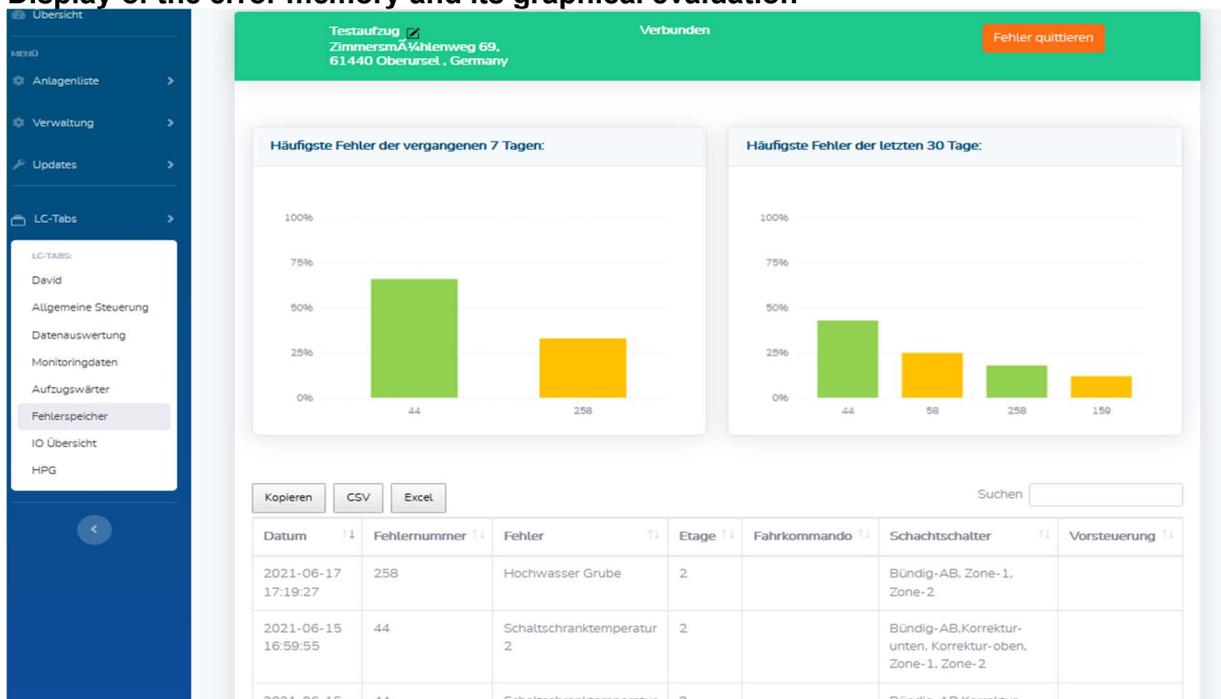
Data acquisition and analysis

The various counters and states are recorded, such as trip counters, door movement counters, operating hours counters, energy counters, direction change counters, door running times, control cabinet door open, normal operation, special trips (maintenance, return operation, inspection operation), idle times and downtimes.

This makes it possible, for example, to display the availability of the system. This is displayed in donut diagrams and can be done in the gradations days, calendar weeks and months.



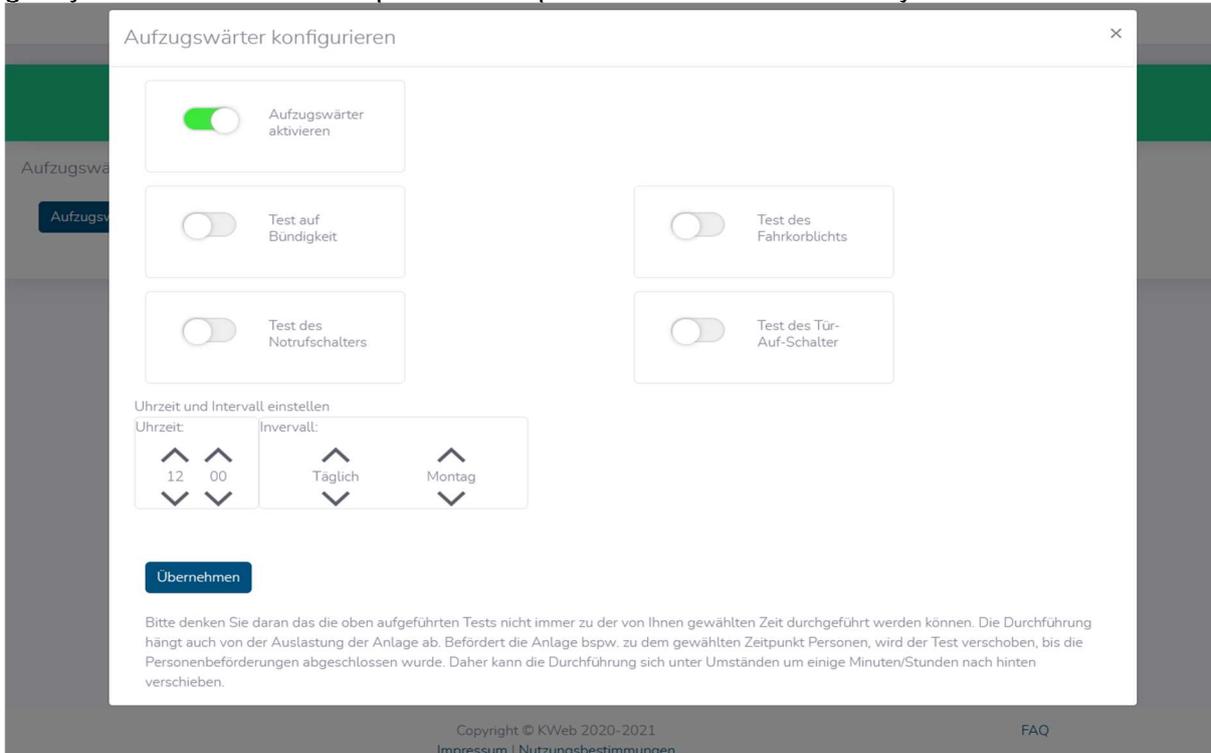
Display of the error memory and its graphical evaluation



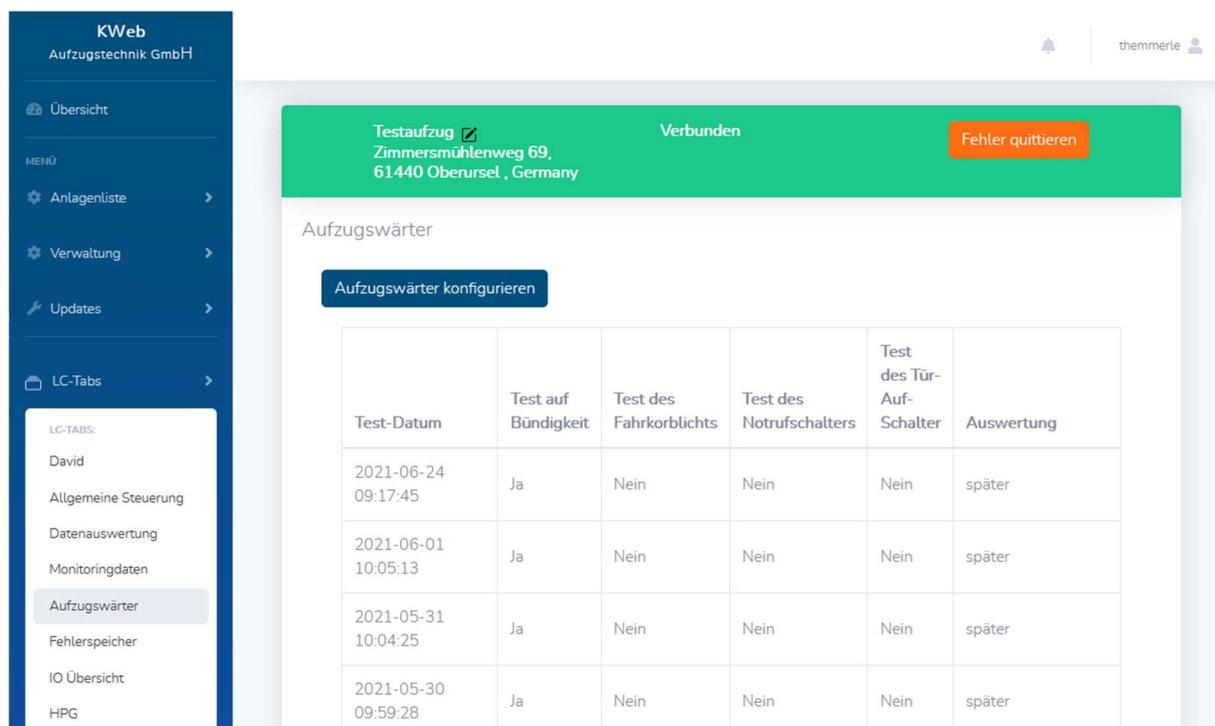
Elevator Attendant

With the elevator attendant, you can have an automated elevator attendant inspection performed at the intervals and times you specify. The selected time can also be later, e.g. due to passenger transport.

By means of a slider you can select which tests are to be carried out, for the test of the emergency call switch and door open switch special buttons are necessary.

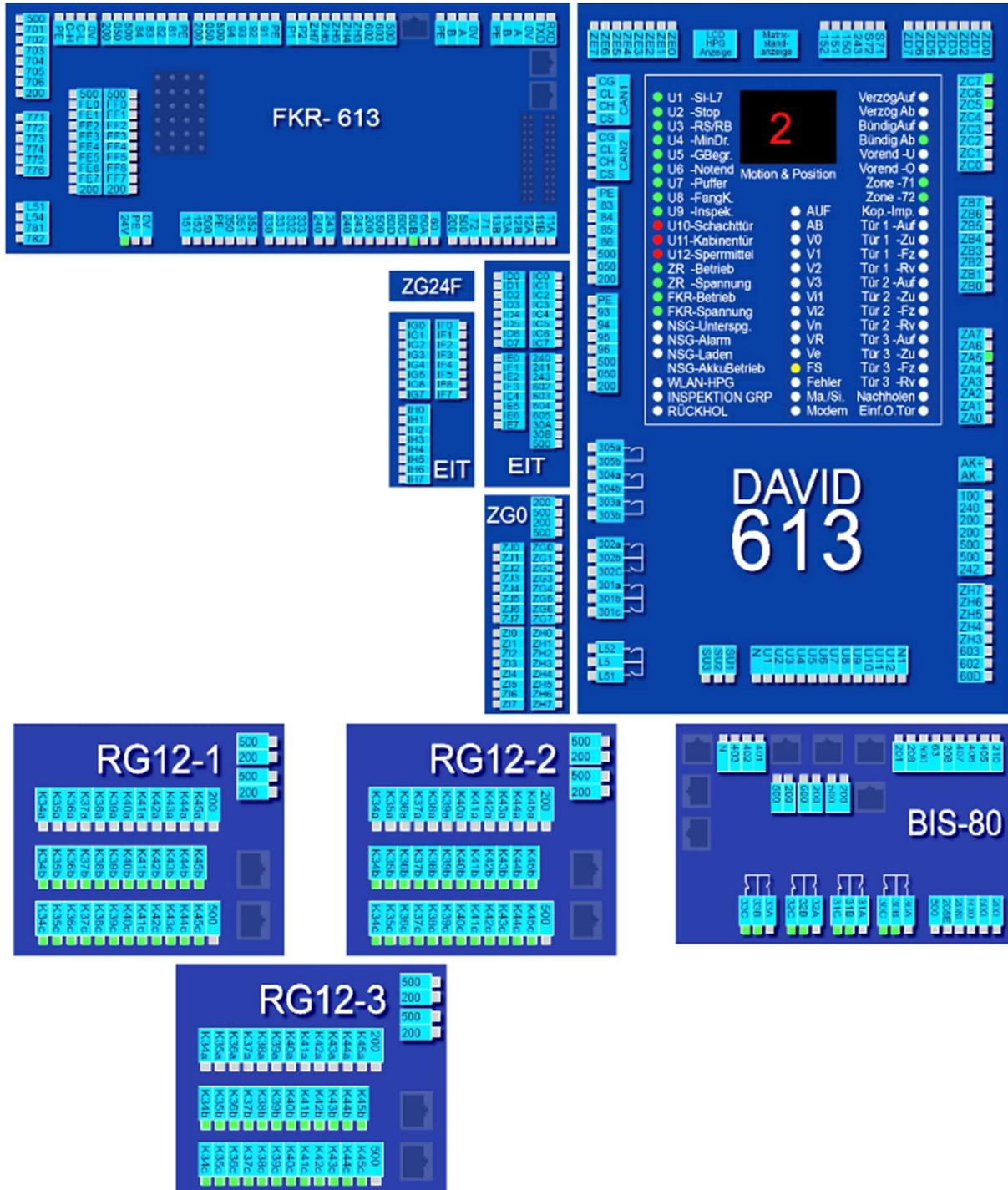


The EA message overview shows you the date, time and result of the EA check.



IO overview

On this interface, KWeb provides visualization of the current states of the inputs and outputs of the DAVID 613-ZR, DAVID-613-FKR, BIS-80, EIT-106 and the additional groups ZG24F, ZG16, ZG32, as well as the relay modules RG12. During operation, the change of levels at the inputs and outputs can be observed under real-time conditions.



Virtual hand terminal – HPG

Clicking on the HPG item opens it in a new window. In real time it is possible to view and change the parameters of the control and regulation. All parameters of the current actual values, counter readings, environmental variables, status and error memory are visible from a distance.



Structure Of The Display:

Parameter name
 Parameter And Value
 Controller Mode
 Function Of The Push-Buttons

Yellow Push-Buttons:

Push-Button To Increase The Value / Name

Push-Button To Decrease The Value / Name

Red Push-Buttons:

Menu Direction Up

Quit Of The Menu Enter Of The Value

Menu Direction Down

The function of the virtual HPG is the same as for the HPG-60. In the normal menu, the parameters of the elevator system are stored under the 4 main groups System parameters / Control parameters / Diagnostics / Information. By navigation with the red keys, one reaches the submenus. The values of the parameters are changed with the yellow buttons.

Instead of the buttons, you can also use the numeric keypad for operation. This also allows entries where you have to press several buttons at once.

The numbers on the buttons are equivalent to those on the numeric keypad.

2.18 Device description Gateway GW60-103 with LTE stick

To connect to the elevator controller via the Internet, a gateway of the type GW60-103 is required or is available in almost all current controllers. Physically, this is usually realized via an LTE stick. However, Internet access via LAN cable is also possible. This enables access to the elevator system via the KWeb software.

This gateway communicates with the DAVID D613 ZR elevator controller via a serial cable. For power supply of the gateway 24V DC, emergency power buffered, of the elevator control is required.

The settings are made in the DAVID-613 central unit in menu 621. In the information menu I9 the signal strength of the active SIM card is visualized.



3. Menu Description

3.1 Menu- and Parameterstructure

A-LIFTPARAMETER			
A1 Lift Description		Factory values	Elevator values
A1. Type	XXXXXXXXXX		
A1.2 Lift No.	XXXXXXXXXX		
A1.3 Controller No.	XXXXXXXXXX		
A1.4 Place	XXXXXXXXXX		
A1.5 Time/Date	xx:xx:xx xx.xx.xxxx		
A1.5 a Summer/Winter	Time-shift: Automatic	Yes	
A1.6 Language	German, English, Polnisch	English	
A1.7 Display Line-1	XXXXXXXXXX		
A1.8 Display Line-2	XXXXXXXXXX		
A1.9 Software Version	D613-00.091		
	PIC 00.026		
	FKR613-00.000		
	MaintenanceLCD		
	ER-Bus-1		
	ER-Bus-2		
	ER-Bus-3		
	Expansion-Bus: ZG32 – module/ Sensor – module / Pit modul		
	ZG16 & RG12 modules		
	X13		
A1.10 Password	X X X X		
A1.11 Basic menu-representation			
	Display-Line-1		
	Display-Line-2		
	Display-Line-3		
	Display-Line-4		
A2 Controller			
A2.1 Type of Drive	Scanclimber-Variable Frequency		
	Rope-Variable Frequency	X	
	Rope-Variable Voltage		
	Rope-2 speeds		
	Hydraulic-Variable Frequency		
	Hydraulic-Regulated		
	Hydraulic-Not Regulated		
A2.2 Type of Controller	TAXI – Controlling		
	One Button exclusive		
	One Button deadman		
	Destination Control		
	Two Buttons- Destination Control		
	Pre-Selection Control		
	Two Buttons UP+DOWN		
	One Button UP+DOWN		
	One Button down coll.	X	
	One Button no coll.		
	Attendand Controlling		
	Send-Controlling		
A2.3 Group	No, Yes	No	
A2.4 No. Of Lifts	2 to 8 Lifts	2	
A2.5 Group No.	1 to 8	1	
A3 Shaft			
A3.1 No. Of Floors	2 to 64	8	
A3.2 Main Floor	1 to 64	2	
A3.2 Main Floor 2	No, 1 to 64	No	
A3.3 Lowest Floor	1,2,3,4,5,6,7,8	1	
A3.4 Door Sides	1, 2, 3 Door Sides	1	
A3.5 Shaft Copy	Floor without zone		
	LÖDIGE without zone		
	LÖDIGE with zone		
	R&S-Copy		

	Minimum Copy		
	Motor-Copy		
	Absolut-Copy	X	
	Relativ-Copy		
	Standart-copy		
A3.6 Nominal speed	V-nominal 0,30 m/s – 8,00 m/s	1,00 m/s	
A3.7 Shaft	Standart / double Transport	standart	
A4 Canopen lift			
A401 CAN-1 monitor			
ID1 controller status	Operational /-----		
ID2 FU status	Operational /-----		
ID4 encoder-1 status	Operational /-----		
ID7 door-1 status	Operational /-----		
ID8 door-2 status	Operational /-----		
ID9 door-3 status	Operational /-----		
ID13 loadsensor status	Operational /-----		
ID16 IO car-u1 status	Operational /-----		
ID17 IO car-u2 status	Operational /-----		
ID18 IO car-u3 status	Operational /-----		
ID19 IO car-u4 status	Operational /-----		
ID20 IO car-u5 status	Operational /-----		
A402 CAN-1 devices			
ID2 FU activate	yes / no	yes	
ID4 encoder-1 activate	yes / no	yes	
ID7 door-1 activate	yes / no	no	
ID8 door-2 activate	yes / no	no	
ID9 door-3 activate	yes / no	no	
ID13 loadsensor activate	yes / no	no	
ID16 IO car-u1 activate	yes / no	no	
ID17 IO car-u2 activate	yes / no	yes	
ID18 IO car-u3 activate	yes / no	yes	
ID19 IO car-u4 activate	yes / no	yes	
ID20 IO car-u5 activate	yes / no	yes	
A403 CAN-1 configuration			
CAN-bus activate	yes / no	yes	
NMT-function activate	yes / no	yes	
Baudrate	250 KBaud	250 KBaud	
Adress node -ID	001	001	
Heartbeat on	500 ms	500 ms	
B-Controller parameter			
B1 Doorparameter			
B10 Doors in General			
Doorfunction	Normal Operation/ Revision-door closed/ Door sluice	Normal Operation	
Type of door-1	Automatic no Limit SW		
	Automatic w.Limit SW	X	
	Handdoor w. Cardoor no Limit SW		
	Handdoor w. Cardoor with Limit SW		
	Handdoor no Cardoor		
	No Door		
	Automatic + SW Open		
	Automatic + SW Close		
	Hand/Cargo. + SW Open		
	Hand/Cargo. + SW Close		
Limit-SW door-1	Inverted/ Not Inverted	Inverted	
Type of Door-2 (Only 2/3 Doorsides	Same as Door -1	X	
	Automatic no Limit SW		
	Automatic w.Limit SW		
	Handdoor w. Cardoor no Limit SW		
	Handdoor w. Cardoor with Limit SW		
	Handdoor no Cardoor		
	No Door		
	Automatic + SW Open		
	Automatic + SW Close		
	Hand/Cargo. + SW Open		

	Hand/Cargo. + SW Close		
Limit-SW door-2	Inverted/ Not Inverted	Inverted	
Type of Door-3 (Only 3 Doorsides	Same as Doorside -1	X	
	Automatic no Limit SW		
	Automatic w.Limit SW		
	Handdoor w. Cardoor no Limit SW		
	Handdoor w. Cardoor with Limit SW		
	Handdoor no Cardoor		
	No Door		
	Automatic + SW Open		
	Automatic + SW Close		
	Hand/Cargo. + SW Open		
	Hand/Cargo. + SW Close		
Limit-SW door-3	Inverted/ Not Inverted	Inverted	
Doorengine active	Always on / standby off / door-closed standby off	Standby off	
Doorengine 2 active	Always on / standby off / door-closed standby off	Standby off	
Doorengine 3 active	Always on / standby off / door-closed standby off	Standby off	
Shaftdoor Waiting	0,1 to 2,0 Sek.	0,5 sec	
Cardoor Waiting	0,1 to 2,0 Sek.	0,5 sec	
Later Door Opening	0,0 to 2,0 Sek.	0,5 sec	
Limited Door Opening	No, Yes 1,0 to 10 Sek.	6 sec	
Door Open Timeout	No, Yes 1,0 to 60 Sek.	13 sec	
Door Close Timeout	No, Yes 1,0 to 60 Sek.	20 sec	
Further Travel Delay Car Call	Selectiv, 1,0 bis 60	7 sec	
Further Travel Delay Landing Call	Selectiv, 1,0 bis 60	9 sec	
F. Del. C-C mainf	Selectiv, 1,0 bis 60	7 sec	
F. Del. L-C mainf	Selectiv, 1,0 bis 60	9 sec	
Door Open trig.	No, Yes	No	
Door Rev. Delay	General 0 to 1000 ms	500 ms	
Dooreng. Stb. off	Selectiv, 1 to 60 sec	10 sec	
Dooringine-2 stand-by off	Selectiv, 1 to 60 sec	10 sec	
Dooringine-3 stand-by off	Selectiv, 1 to 60 sec	10 sec	
Door standy	Open, Close 1 to 60 sec	open	
Door stby. Main.	Open, Close 1 to 60 sec	open	
Door Control Inspection	Yes, No	Yes	
Button Door op.	Together. Selectiv together. Separate. Selectiv separate		
Button Holdtime	No, button ON-OFF 2,0 to 5400 Sec	No	
Button Holdtime Function	Separate/ Together/ Auto w.photocell/ Auto with photocell 1-5s / Separate, trigger		
Button Door Close Function	Separate, Together, Selectiv together	Together	
Button Door Close Reaction	0,0 to 5,0 sec	2 sec	
Door Control Atemps	1 to 10 attempts	3	
Door Open Time	1 to 60 sec	2 sec	
Door-Opening	Normal-Function /Only Door-Open-Button	Normal Function	
Door-Closing	Normal-Function /Only Door-Close-Button	Normal Function	
B11 Table of Entrance		Door-1 Door-2 Door-3	Door-1 Door-2 Door-3
Floor -01	Existing Yes or No/...../.....
Floor -02	Existing Yes or No/...../.....
Floor -03	Existing Yes or No/...../.....
Floor -04	Existing Yes or No/...../.....
Floor -05	Existing Yes or No/...../.....
Floor -06	Existing Yes or No/...../.....
Floor -07	Existing Yes or No/...../.....
Floor -08	Existing Yes or No/...../.....
Floor -09	Existing Yes or No/...../.....
Floor -10	Existing Yes or No/...../.....
Floor -11	Existing Yes or No/...../.....
Floor -12	Existing Yes or No/...../.....
Floor -13	Existing Yes or No/...../.....
Floor -	Existing Yes or No/...../.....
Floor -64	Existing Yes or No/...../.....
B12-Safety Photocell			

Safety Photosell	Off/ On / CEDES / Duometric	Off	
Photocell- Monitor	Off, On 1 to 600 sec	60 sec	
Ramp Travel	Off,ON	Off	
Door Close del.	Off, On 1 to 10 sec	2 sec	
Photocell Input	Not Inverted/Inverted	Inverted	
Reverse Contact	Not Inverted/Inverted	Inverted	
LG-monitoring Input	Not Inverted/Inverted		
Photocell Door Open By Hand	No / Yes	No	
B13-Nudging Function			
Nudging	Off, On 1 to 180 sec	Off	
Nudging Signal	Door-close & A192/193 / only A192/3	Door-close & A192/193	
B14-Entrance Monitor			
Entrance Monitor	No,Yes	No	
Time a. st. Door-1	0,5 to 10 sec, always active	2 sec	
Time a. st. Door-2	0,5 to 10 sec, always active	2 sec	
Time a. st. Door-3	0,5 to 10 sec, always active	2 sec	
Entrance Monitor	Not Inverted/Inverted	Inverted	
B15-Mech. Lock			
Pulse Buf. Delay	50 ms to 2000 ms	500 ms	
Lock Delay ON	0,0 to 5,0 sec	0 sec	
Lock Delay OFF	0,0 to 9,9 sec	0 sec	
Lock Handdoor	After Cardoor, Before Cardoor	After Cardoor	
Open after lock	0,0 to 9,9 sec	0 sec	
Mechanical Lock-OFF	10 to 720 Seconds	30 Seconds	
Mechnaical Lock Control	Normal / Inverted	Normal	
Additional Lock delay	0,5 to 5,0 sec	1,0 sec	
B16-Safety-Circuit			
Pre-Opening Doors	No,Yes	No	
Early Premagn.	No,Yes	No	
Early Premagn. delay	00,8 – 10,0 sec		
Safety Circuit	SIS-60 / SIS-16	SIS-16 (KW)	
B17 Releveling			
Releveling	No,Yes	No	
No Releveling Distance	5 to 50mm	10 mm	
Max. Releveling Distance	10 to 250mm	100 mm	
Leveling-UP	-48 to 0mm	0 mm	
Leveling-DOWN	0 to 48mm	0 mm	
Time Limit	3 to 25 sec	20 sec	
Attempt Limit	3 to 25	20	
Limit at Level 1	Releveling, No Releveling	No Limit	
Overload	Releveling, No Releveling	Releveling	
Fault Handling	Block / Error log, no block	X	
Finereleveling	No / Yes, ALGI, BUCHER	No	
Buzzer-Alert	if not leveling: No, Yes	Yes	
B2-Call Options			
B21 Car Calls			
Door Reverse Car Call	Off,On	Off	
Selectiv Car Calls	No,Yes	No	
Callreset/ Error	immediatly, 1 to 10 sec	4 sec	
Car Call CPU	Without FKR+EIT, KKR+EIT-IC..IU active, FKR+EIT-IC..IE active	EIT aktiv	
Car Call Limit	OFF, 2 to max.floor call reset	Off	
Misure Defence	No, Yes	No	
Button-Buzzer	No, Yes	Off	
Car Call Range	Off, 1-2/ 1-3/ 1-4/ 1-5/ 1-6/ 1-7/	Off	
Automatic Car Call Vehicle	Off	Off	
Deselect call	By double click: No / Yes		
B22-Landing Calls			
Door Reverse Landing Call	Off,On	Off	
Modul	Central-Unit, Level-Unit	ZR	
Selectiv Landing Calls	No,Yes	No	
Erase operative Calls	No,Yes	No	
Save Travel Direction	1 to 20 sec	5 sec	
Floor Indicator Blink	Off, On	Off	
Button Call-UP Buzzer	Off,On (1x, 2x)	Off	

Button Call-DOWN Buzzer	Off, On (1x, 2x)	Off	
Side separation by floorcall	Off, On	Off	
Side separation save floorcall	Off, On	Off	
Buzzer active if indication on:	No, Yes	Off	
Abuse protection 2 pushbuttons	Off, On	Off	
Destination dialing if indication on:	No, Yes		
B23-Car Priority			
Floor Calls	erase, store	erase	
Mail Travel	Off, On	off	
Input logic input E186 :	negative / positive	negative	
Door position	1 open, 2 open, 3 open, 1+2 open	1+2 open	
B24-Landing Priority			
Time call Input	10 to 600 sec	20 sec	
Floor Calls	erase, store	erase	
Priority Car Call	individual	individual	
	Collective		
	Soft individual		
	Individual empty		
	Individual and soft		
	Collective, EA67 empty		
	Collective-1		
	Collective, EA67 targ		
Priority Car Call: Floorcall-5sec:	Off / A1, A2	Off	
Hazardous Material Transport	Off/ On-1, On-2	Off	
Hazardous Material Transport Cabin	Off, On-1 / On-2	Off	
B25 Groupcontroller			
Door Failure	10 to 60 sec	After 60 sec	
ER-IN/OUT 2xC	Free programmable Groupfunction	G01 Call Door-2 UP	
ER-IN/OUT 2xD	Free programmable Groupfunction	G02 Call Door-2 DOWN	
ER-IN/OUT 97A	Free programmable Groupfunction	G04 priority A1-3-5-7	
ER-IN/OUT 98A	Free programmable Groupfunction	G05 priority A2-4-6-8	
ER-IN/OUT 97B	Free programmable Groupfunction	G04 priority A1-3-5-7	
ER-IN/OUT 98B	Free programmable Groupfunction	G05 priority A2-4-6-8	
Parking Zone-1: to Parking Zone-5	Off, ON, Priority 1,.. Priority 5	Off	
Parking Zone-1: to Parking Zone-5	Always active/ Timer 1 - Timer 10	Always	
Parking Zone-1: Bottom Floor	1 to 2		
Parking Zone-1: Top Floor	1 to 64		
Parking Zone-5: Bottom Floor	1 to 2		
Parking Zone-5: Top Floor	1 to 64		
Group Dynamic Travel Time Floor	Auto, 0 to 10 sec	3,0 Sec.	
Group Dynamic Stop Time Floor	Auto, 0 to 25 sec	8,0 Sec.	
Group Dynamic Call Sharing	Dynamic / Engery	Dynamic	
Output HEX5-Code ER-EA7/8	No, Yes	Off	
B3-DRIVE			
B30 Hydraulic Not Regulated			
Start	Star/Delta , Softstart	Softstart	
S/D-Reverse Time	0,1 to 4,0 sec	2 sec	
Direction Up Delayed On	No, Yes -10 to 900 ms.	100 ms	
Direction Up Delayed Off	No, Yes -10 to 4000 ms.	400 ms	
Start with Door Controlling	No, Yes -1 to 3 sec. delayed	No	
Inspection Speed	Slow, Quick	slow	
Time to go Down	Off, 1 to 15 Minuten	10 Min.	
Fault Handling	No, Yes - interrupt + godown, block, block 2.attempt	No	
Travel down at Overload	No, Yes	No	
Signal Top of Ramp	No, Yes	Yes	
Command Down Delay. On	No, Yes 10 to 900 ms.	Yes	
Command Down Delay. Off	No, Yes 10 to 1500 ms.	Yes	
Lock after End-Switch Top	No, Yes	Yes	
Liftbus	OFF, KW-Bus, DCP-3	KW BUS	
Warm Up travel	OFF, Always active, active on E492	OFF	
Warm Up travel after Time	Minutes 5 to 1250		
B31 Hydraulic Regulated			
Start	Star/Delta , Softstart	Softstart	
S/D-Reverse Time	0,1 to 4,0 Sek.	2 sec	

Direction Up Delayed On	No,Yes -10 to 900 ms.	100 ms	
Direction Delayed On	No,Yes -10 to 900 ms		
Direction Up Delayed Off	No,Yes -10 to 4000 ms.	No	
Start with Door Controlling	No,Yes -10 to 2000 ms.	400 ms	
Start with Door Controlling	No,Yes -1 to 3 sec. delayed	No	
Leveling Speed	V0, Vn		
Inspection Speed	Slow, Quick, Vi	Vi	
Time to Go Down	Off, 1 to 15 Minutes	10 Min.	
Fault Handling	No, Interrupt + godown, Block, Block 2.attempt		
Travel Down at Overload	No,Yes	No	
Signal Top Of Ramp	No,Yes	Yes	
Command Down Delay. On	No,Yes 10 - 900 ms.	No	
Command Down Delay. Off	No,Yes 10 - 1500 ms.	No	
Lock after End-Switch Top	No, Yes	Yes	
Liftbus	OFF, KW-Bus, DCP-3	KW BUS	
Warm Up travel	OFF, Always active, active on E492	OFF	
Warm Up travel after Time	Minutes 5 to 1250		
Commands Output	Standard. Oildynamic NGV-A3. Bucher iValve		
C.K32 Delay. Off	No, Yes 10 - 3000 ms.		
Commando Vi (A177) inverted	For ALGI AZRS! No, Yes	No	
B32 Hydraulic Variable Frequency			
V0 Delayed Off	No,Yes 10 to 300 ms.	No	
Conductor Delayed Off	No,Yes 10 to 5000 ms.	600 ms	
Direction Delayed Off	No,Yes 10 to 5000 ms.	1500 ms	
Leveling Speed	Vn, V0	Vn	
Inspection Speed	V0, Vi	Vinsp.	
Time to Go Down	Off, 1 to 15 Minutes	15 Min.	
Fault Handling	No, Interrupt + godown, Block, Block 2.attempt	No	
Travel Down at Overload	No,Yes	No	
Lock after Top-End-switch	No,Yes	Yes	
Command Output	Standard - Bucher / ALGI - AZFR / ALGI - AZFR V-Insp-DN / Bucher iValve		
C. Down Delay. On	No,Yes 10 - 900	No	
Liftbus	OFF, KW-Bus, DCP-3,	KW BUS	
Warm Up travel	OFF, Always active, active on E492	OFF	
Warm Up travel after Time	Minutes 5 to 1250		
B33 Rope 2 Speeds			
Motor Fan	No, Yes 1 to 600 sec	No	
Direction Cond. Delayed On	No,Yes 10 to 300 ms.	100 ms	
Inspection Speed	Slow, Quick	slow	
Reverse Time out	No,Yes, 1 to 100 ms.	No	
B34 Rope Variable Voltage			
Liftbus	Off, KW-Bus, DCP-3, DCP-4	Off	
Motor Fan	No,Yes 1 to 600 sec.	No	
V0 Delayed Off	No,Yes 10 to 300 ms.	No	
Direction Delayed Off	No,Yes 10 to 6000 ms.	1900 ms	
Main Constructor Delayed off	No,Yes 10 to 5000 ms.	2500 ms	
Reveling Speed	Command Vn / Command V0	Vn	
Fault Handling	Interrupt, Block, Block 2.attempt	Interrupt	
Command Output	Standard-GOLIATH / DIETZ: release, UP/DOWN		
B 35 Rope Variable Frequency			
Liftbus	Off, KW-Liftbus, DCP-3, DCP-4	KW-Liftbus	
Motor Fan	No,Yes 1 to 600 sec.	No	
V0 Delayed Off	No,Yes 10 to 300 ms.	No	
Direction Delayed Off	No,Yes 10 to 6000 ms.	1900 ms	
Main Conductor Delayed Off	No,Yes 10 to 5000 ms.	2500 ms	
Releveling Speed	Command Vn / Command V0	Vn	
Fault Handling	Interrupt, block, block 2.attempt.	Interrupt	
Command Output	Standard-GOLIATH / DIETZ: release, UP/DOWN		
V3 delayed on	No / Yes 100 to 6000 ms.	No	
V0 delayed	No / Yes 100 to 16000 ms.	No	
UP/ Down delayed on	No / Yes 100 to 6000 ms.	No	
B4-Shaft Copy			
B41 Standart-Copy			
Pulse Buffer Delay	10 to 150 ms	50 ms	

Correction Travel	After call/ automatic	After call	
B42 Relativ Copy			
Pulse Buffer Delay	2 to 150 ms	2 ms	
Correction Travel to	After call/automatic	After call	
2nd Prel. SW bot	No,Yes ER-speaker	No	
2nd Prel. SW top	No,Yes ER-speaker	No	
Short travels	No/1 ,2 ,3 ,4 ,5 ,6 ,7 ,8 short tr.	No	
If 1 Short-drive-> Short-drive-1 between	1<->2, 2<->3, 3<->4 ,.....		
If 2 Short-drive-> Short-drive-2 between	1<->2, 2<->3, 3<->4 ,.....		
If 3 Short-drive-> Short-drive-3 between	1<->2, 2<->3, 3<->4 ,.....		
If 4 Short-drive-> Short-drive-4 between	1<->2, 2<->3, 3<->4 ,.....		
If 5 Short-drive-> Short-drive-5 between	1<->2, 2<->3, 3<->4 ,.....		
If 6 Short-drive-> Short-drive-6 between	1<->2, 2<->3, 3<->4 ,.....		
If 7 Short-drive-> Short-drive-7 between	1<->2, 2<->3, 3<->4 ,.....		
If 8 Short-drive-> Short-drive-8 between	1<->2, 2<->3, 3<->4 ,.....		
Distance Prel. SW-ZSW	To Measure in mm	1000 mm	
Decel. Spd V0=>0 Travel up	Distance in mm	5 mm	
Decel. Spd V0=>0 Travel down	Distance in mm	5 mm	
Decel. Spd V1 Travel up	Distance in mm	500 mm	
Decel. Spd V1 Travel down	Distance in mm	500 mm	
Decel. Spd V2 Travel up	Distance in mm	1000 mm	
Decel. Spd V2 Travel down	Distance in mm	1000 mm	
Decel. Spd V3 Travel up	Distance in mm	1500 mm	
Decel. Spd V3 Travel down	Distance in mm	1500 mm	
Learn Drive	Start with V1, V2, V3	V1	
Travel by V0	If distance < 200mm		
Travel by V1	If distance < 200mm		
Travel by V2	If distance < 200mm		
Slowdown-direction DOWN to V1	Off, On 100 - 15000mm		
Slowdown-direction UP to V1	Off, 100 - 15000mm		
Encoder Termin.	At ZR/FKR	ZR	
Learn Drive Activate	No, Yes	No	
Switch Hysteres Overlapping	Xxx mm	0 mm	
Leveling by car-panel	No		
Level. Floor-01 lev. Value	Bündig-value: 000,000 m	000,000 m	
Level. Floor-64 lev. Value	Bündig-value: xxx,xxx m	xxx,xxx m	
B43 Absolut Copy			
CANopen-system	Variotech ANTS		
	Variotech ANTS safe		
	LIMNAX33CP safe		
	Rotary encoder		
Pulse Buffer Delay	2 to 50 ms	2 ms	
Distance-system	Schmersal-USP / Wachendorff		
Floorswitches	no/ prelevel+floorswitch / only floorswitch		
Floorswitches	Zone 71+72 external / Zone 72 simulation		
Short travels	No/1 – 8 short travels	No	
If 1 Short-drive-> Short-drive-1 between	1<->2, 2<->3, 3<->4 ,.....		
If 2 Short-drive-> Short-drive-2 between	1<->2, 2<->3, 3<->4 ,.....		
Decel. Spd V0=>0 Travel up	Distance 1 – 1000 mm	5 mm	
Decel. Spd V0=>0 Travel down	Distance 1 - 1000 mm	5 mm	
Decel. Spd V1 Travel up	Distance in mm	500 mm	
Decel. Spd V1 Travel down	Distance in mm	500 mm	
Decel. Spd V2 Travel up	Distance in mm	1000 mm	
Decel. Spd V2 Travel down	Distance in mm	1000 mm	
Decel. Spd V3 Travel up	Distance in mm	1500 mm	
Decel. Spd V3 Travel down	Distance in mm	1500 mm	
Travel by V0 if distance	< 10 – 200 mm		
Travel by V1 if distance	< 200 – 300 mm		
Travel by V2 if distance	< 200 – 9999 mm		
Slowdown-direction DOWN to V1	Off/ 100 – 15000 mm		
Slowdown-direction UP	Off/ 100 – 15000 mm		
Encoder Terminal	at Car-CPU (FKR)/ Central-CPU (ZR)		
Countdirection	Positiv	Positiv	
Learn Drive	V1, V2, V3 execute	V1	
Learn Drive activate	No,Yes	No	

Way Recognition Learning	No,Yes	No	
Synchronisation Floor-8	No,Yes	No	
Level Mode	Floor level// floor distance		
Leveling by Car-panel	No		
Level. Floor-01 lev. Value	Levelvalue: 000,000 m	000,000 m	
Level. Floor-64 lev. Value	Levelvalue: xxx,xxx m	xxx,xxx m	
B44 Motor Copy			
Pulse Buf. Delay	2 to 150 ms	2 ms	
Correct. Travel	After call / automatic	After call	
2nd Prel. SW bot	No,Yes ER-Speaker	No	
2nd Prel. SW top	No,Yes ER-Speaker	No	
Short travels	No/1 ,2 ,3 ,4 ,5 ,6 ,7 ,8 short tr.	No	
If 1 Short-drive-> Short-drive-1 between	1<->2, 2<->3, 3<->4 ,.....		
If 2 Short-drive-> Short-drive-2 between	1<->2, 2<->3, 3<->4 ,.....		
If 3 Short-drive-> Short-drive-3 between	1<->2, 2<->3, 3<->4 ,.....		
If 4 Short-drive-> Short-drive-4 between	1<->2, 2<->3, 3<->4 ,.....		
If 5 Short-drive-> Short-drive-5 between	1<->2, 2<->3, 3<->4 ,.....		
If 6 Short-drive-> Short-drive-6 between	1<->2, 2<->3, 3<->4 ,.....		
If 7 Short-drive-> Short-drive-7 between	1<->2, 2<->3, 3<->4 ,.....		
If 8 Short-drive-> Short-drive-8 between	1<->2, 2<->3, 3<->4 ,.....		
Distance Prel. SW-ZSW	To Measure in mm	1000 mm	
Decel. Spd V0=>0 Travel up	Distance in mm	5 mm	
Decel. Spd V0=>0 Travel down	Distance in mm	5 mm	
Decel. Spd V1 Travel up	Distance in mm	500 mm	
Decel. Spd V1 Travel down	Distance in mm	500 mm	
Decel. Spd V2 Travel up	Distance in mm	1000 mm	
Decel. Spd V2 Travel down	Distance in mm	1000 mm	
Decel. Spd V3 Travel up	Distance in mm	1500 mm	
Decel. Spd V3 Travel down	Distance in mm	1500 mm	
Learn Drive	Start with V1, V2, V3	V1	
Travel by V0	If distance < 200mm		
Travel by V1	If distance < 200mm		
Travel by V2	If distance < 200mm		
Slowdown-direction DOWN to V1	Off, On 100 - 15000mm		
Slowdown-direction UP to V1	Off, 100 - 15000mm		
Encoder Termin.	At ZR/FKR	ZR	
Learn Drive activate	No,Yes	No	
Switch-hysteresis overlapping	Xxx mm	0 mm	
Leveling by car-panel	No		
Level. Floor-01 lev. Value	Bündig-value: 000,000 m	000,000 m	
Level. Floor-64 lev. Value	Bündig-value: xxx,xxx m	xxx,xxx m	
B45 Minimum Copy			
Pulse Buf. Delay	10 to 150 ms	50 ms	
Correct. Travel	After call / automatic	After call	
B46 R&S copy			
Pulse Buf. Delay	10 to 150 ms	50 ms	
Correct. Travel	After call / automatic	After call	
B5-Indicate			
B501 Car Indication			
Cabine Code	Binary / 1 of N / gray / 7-Segment / free selection/ binary-0		
Main-CPU Code	Binary / 1 of N / gray / 7-Segment /		
Floor-CPU Code	Binary / 1 of N / gray / binary-0 / 1 of N floor level		
Code 7-Segment	Setup for every Floor	U.H.F.F.d.C.h.A.1.2.3.4.5.6.7.8.9	
Code select	Setup for every Floor, 0 – 11111111b	0000 0000 b	
Special Mode Inspect./ manual	ON / OFF	ON	
Special Mode error case	ON / OFF	ON	
Special Mode spezial travel	ON / OFF	ON	
Special Mode Attendant Mode	ON / OFF	ON	
B502 Car Arrow			
Description	Only move on		
	Direction & move on		
	Only direction		
M-Arrow-OFF	No,Yes after 1 to 60 sec	No	
M-A.Door close	No,Yes	Yes	

B503 Floor Arrow							
Arrows	No, Yes – ZR , ER, EAT			No			
ZR: Description	Only move on						
	Direction & move on						
	Only direction						
ZR:M-Arrow-Off	No, Yes after 1 to 60 sec			No			
ER: Description	Only direction			X			
	Direction+ move on						
	Only move on						
ER: ER:M-Arrow-Off	No, Yes 1 to 60 sec			No			
M-A. Door close	No, Yes			Yes			
B504 Gong At The Car							
Gongfunction	No, Yes FKR-speaker/ TFT-speaker/ FKR+TFT-speaker			No			
Car Call UP	No, one ring, double ring, triple ring			No			
Car Call DOWN	No, one ring, double ring, triple ring			No			
Floor Call UP	No, one ring, double ring, triple ring			One ring			
Floor Call DOWN	No, one ring, double ring, triple ring			Double ring			
Priority Call UP	No, one ring, double ring, triple ring			No			
Priority Call DOWN	No, one ring, double ring, triple ring			No			
Fire Fighter Tr.	No, one ring, double ring, triple ring			No			
Special Travel	No, one ring, double ring, triple ring			No			
Gongfunction Volume-TFT	1 to 100 %						
Gongfunction Volume-FKR	1 to 100 %						
Gongfunction Tone	1 to 100 %						
B505 Gongfunction At The Floor							
Gongfunction	No, Yes ER-Speaker, TFT-Speaker, ER+TFT-Speaker			No			
Car Call UP	No, one ring, double ring, triple ring			No			
Car Call DOWN	No, one ring, double ring, triple ring			No			
Floor Call UP	No, one ring, double ring, triple ring			One ring			
Floorcall DOWN	No, one ring, double ring, triple ring			Double ring			
Priority Call UP	No, one ring, double ring, triple ring			No			
Priority Call DOWN	No, one ring, double ring, triple ring			No			
Fire Fighter TR.	No, one ring, double ring, triple ring			No			
Special Travel	No, one ring, double ring, triple ring			No			
Gongfunction Volume-TFT	1 to 100 %			7			
Gongfunction Volume-ER	1 to 100 %						
Gongfunction Tone	1 to 100 %			7			
Output ER puls	Short puls, 1 - 10 sec			Short puls			
B506 LED-Matrix							
Car Display Arrow	No, Yes, Scroll			Scroll			
Car M-arrow	Blink, fixed						
Car Floor Animation	Fixed / Scroll / Trick 1			Scroll			
Car Display Segments	1 / 2 / 3			3			
Floor Display Arrow	No, Yes, Scroll			Scroll			
Floor Floor Animation	Fixed / Scroll / Trick 1			Scroll			
Floor Segments	1 / 2 / 3			2			
FLOOR INDICATOR LIGHT	Off / out of order / special travel / occupied / out of order + special						
Main Unit Display	1 to 64 / like in car			1 to 64			
B507 Floor Display							
Floor-01 Display:	HS-01		HS-17		HS-33		HS-49
Floor-02 Display:	HS-02		HS-18		HS-34		HS-50
Floor-03 Display:	HS-03		HS-19		HS-35		HS-51
Floor-04 Display:	HS-04		HS-20		HS-36		HS-52
Floor-05 Display:	HS-05		HS-21		HS-37		HS-53
Floor-06 Display:	HS-06		HS-22		HS-38		HS-54
Floor-07 Display:	HS-07		HS-23		HS-39		HS-55
Floor-08 Display:	HS-08		HS-24		HS-40		HS-56
Floor-09 Display:	HS-09		HS-25		HS-41		HS-57
	HS-10		HS-26		HS-42		HS-58
	HS-11		HS-27		HS-43		HS-59
	HS-12		HS-28		HS-44		HS-60
	HS-13		HS-29		HS-45		HS-61
	HS-14		HS-30		HS-46		HS-62

.....	HS-15	HS-31	HS-47	HS-63			
Floor-64 Display:	HS-16	HS-32	HS-48	HS-64			
B508 Messages							
Overload	Car: * Floor: -		Car: Floor:				
Evacuation	Car: * Floor: -		Car: Floor:				
Fire Evacuation	Car: * Floor: -		Car: Floor:				
Emergency Power	Car: * Floor: -		Car: Floor:				
Fire Fighter Travel	Car: * Floor: -		Car: Floor:				
Special travel	Car: * Floor: -		Car: Floor:				
Bed Travel	Car: * Floor: -		Car: Floor:				
Guide Mode	Car: * Floor: -		Car: Floor:				
Out of Order	Car: * Floor: -		Car: Floor:				
Maintenance	Car: * Floor: -		Car: Floor:				
Loadtime activ	Car: * Floor: -		Car: Floor:				
Door Opening	Car: * Floor: -		Car: Floor:				
Door Closing	Car: * Floor: -		Car: Floor:				
Please Leave Car	Car: * Floor: -		Car: Floor:				
Please Wait	Car: * Floor: -		Car: Floor:				
Please Speak	Car: * Floor: -		Car: Floor:				
B509 TFT/LCD-Car							
Backgroundpicture	Fixed, changing		Fixed				
Persons in car	0 – 250						
Loadweight	0 - 60000						
Text-1 Manufacture	Manufacture						
Text-2 Factory Number	Factory-No.						
Text-3 Build Year	Build Year						
Text-4 CE-Sign	CE-Sign						
Floor Indicator	Fixed, Rolling, Animation		Fixed				
Arrow Indicator	Fixed, Rolling, Animation		Fixed				
Display String-1	ON / OFF		ON				
Display String-2	ON / OFF		ON				
Display String-3	ON / OFF		ON				
Display String-4	ON / OFF		ON				
Display Persons	ON / OFF		ON				
Display Load	ON / OFF		ON				
Emergency light	ON / OFF		ON				
	Displaytext	Symbol	fixed/Blink	Buzzer-S	Buzzer-L	Gong	Voice An.
Overload							
Evacuation							
Fire Evacuation							
Emergency Power Evacuation							
Fire Fighter Travel							
Special Travel							
Bed Travel							
Guide Mode							
Out of Order							
Maintenance							
Loadingtime Active							
Door Opening							
Door Closing							
Please Leave Car							
Please Wait							
Please Speak							
Buzzer Short	1 to 255 ms			2 ms			
Buzzer Long	1 to 3 sec. / enduring on			1 Sek.			
Gong Signal	1x / 2x / 3x						
Display- Format	Automatic / Landscape / Upright			Automatic			
Display- Brightness	1% to 100 %			90 %			
Volume Speech	1% to 100 %			50 %			
Tone Pitch Speech	1% to 100 %			50 %			
Volume Music	1% to 100 %			50 %			
Backgroundmusic	ON / OFF			OFF			
Floor Message	ON / OFF			OFF			
Display time	ON / OFF			OFF			
Display date	ON / OFF			OFF			

Time in Textline	OFF / Display in Line-1 / -2 / -3/ -4	OFF	
B510 TFT/LCD-Etage			
Loadweight			
Text-1 Manufacture	Manufacture		
Text-2 Factory-No.	Factory-No.		
Text-3 Build Year	Build Year		
Text-4 CE-Sign			
Floor Indicator	Fixed, Rolling, Animation	Fixed	
Arrow Indicator	Fixed, Rolling, Animation	Fixed	
Display String-1	ON / OFF	ON	
Display String-2	ON / OFF	ON	
Display String-3	ON / OFF	ON	
Display String-4	ON / OFF	ON	
	Displaytext Symbol	fixed/Blink	Buzzer-S Buzzer-L Gong Voice An.
Overload			
Evacuation			
Fire Evacuation			
Emergency Power Evacuation			
Fire Fighter Travel			
Special Travel			
Bed Travel			
Guide Mode			
Out of Order			
Maintenance			
Loadtime Active			
Door Opening			
Door Closing			
Please Leave Car			
Please Wait			
Please Speak			
Buzzer Short	1 to 255 ms	2 ms	
Buzzer Long	1 to 3 sec. / enduring on	1 Sek.	
Gong-Signal	1x / 2x / 3x	1x	
Display- Format	Automatic / Landscape / Upright	Automatic	
Display- Brightness	1% to 100 %	90 %	
Volume Speech	1% to 100 %	50 %	
Tone pitch speech	1% to 100 %	50 %	
Volume Music	1% to 100 %	50 %	
Backgroundmusic	ON / OFF	OFF	
Floor Message	ON / OFF	OFF	
Display time	ON / OFF	OFF	
Display date	ON / OFF	OFF	
B6-Functions			
B600 Monitorfunctions			
Contactor Monitor	OFF, On 500 to 4000 ms	on	
Contactor Monitor Insp.	On,Off	on	
Contactor Monitor Reaction	Stop+Delet Calls, Stop+Block	Stop + Block	
Contactor Monitor Contact	NC., NC.+NO., NC. + SAS	NC.	
Carlight Monitor	Off / Current sensor / Input E525	on	
Starttime Monitor	1 to 60 sec	20 sec	
Journey Time Monitor	1 to 60 sec	40 sec	
Decelation Time Monitor	1 to 60 sec	20 sec	
Stop Time Monitor	1 to 60 sec	10 sec	
Fault Handling	Stop+ block,	Rope	
	Stop+ delete Calls		
	Go down+ block	Hydraulic	
BRAKE SHOE MONITOR	Off,On	OFF	
BRAKE 1 MONITOR	Off,On E25 / E25+E438 / E25+E438+E439		
BRAKE 2 MONITOR	Off, On E977 / E977+E978 / E977+E978+E979		
BRAKE MONITOR	Stop+Block / Stop+Delete Calls		
BRAKE MONITOR INPUT	Not inverted / inverted	Not inverted	
BRAKE MONITOR DELAY	500 to 6000 ms	2000 ms	
BRAKE MONITOR SYNCHRONISM	100 to 6000 ms	2000 ms	
SWITCH-CABINET T-Max	Off, On – 30 to 99°C	60 °C	
SWITCH-CABINET T-Min	Off, On - 0 to 25°C	3 °C	

PTC-Motortemperature	Off, input 1, input 2, 1 + 2 ZR / input 3 FKR / E358 select.	
Door motor	Off, On input 3 FKR	Off
DSC-Pulses	Off, On	On
ROPE STRETCH	Off, On	OFF
Batterymonitor	Off, E507, E507 & E508	OFF
Monitoring A3-CASE	ON, OFF	ON
AW-60 Monitoring	ON, OFF	ON
Monitoring U10 floor door	Off On	ON
Monitoring DSC-Direction	ON, OFF	ON
Monitoring Nominal Speed	ON, OFF	ON
Monitoring Door switch shut	ON, OFF	ON
Monitoring U11 Car door	OFF, ON	ON
Monitoring U12 door bolt	OFF, ON	ON
Monitoring UPS	OFF, ON	ON
Lock E06 U5 speed limiter	OFF, ON	OFF
B601 Inspection Travel		
Restart locking	No, Yes	No
Restart locking Door	No, Yes	No
Speed Button	No, Yes	Yes
Inspection-Stop TOP	Floor level to -500 mm	-20 mm
Inspection-Decrease TOP	-5000mm to -6000 mm	-500 mm
Inspection-Stop BOTTOM	-1000mm to +500 mm	+20 mm
Inspection-Decrease BOTTOM	+500mm to +6000 mm	+500 mm
Inspectionbulb pit	No / Yes	No
Inspectionbulb pit reset	No / Yes	No
Pit reset by 5x door lock unlatch	No / Yes	YES
Inspections call	No / Yes lowering for 100 - 3000mm	3000mm
Monitoring of Manual speed	No to 1,00 m/s	0,30 m/s
Monitoring of Inspection speed	No to 1,00 m/s	0,50 m/s
Pit-Module ERG activate	Yes / No	Yes
B602 Emergency Unit		B602 Emergency
Alert Push Button Delay	0 to 10 Sec	Alert Push Button
B603 Car Fan		B603 Car Fan
Start Of Fan	Push Button, Travel	Start Of Fan
Fan Delay	1 to 1800 sec	Fan Delay
B604 Load Mearement		B604 Load Meare-
Overload input	Not inverted/inverted	Not inverted
Load Measurem. Loadsensor FKR	No, Yes	No
Overload	10-150%	120%
Full Load	50-110%	100%
Half Load	10-100%	50%
Under Load	1-50%	10%
Save Full Load	No, Yes	No
Save Zero Load	No, Yes	No
Overload Input BIS 80	No, NPN 63=500, PNP 63=208	PNP
Underload evaluation	No, Yes / 1 / 2 / 3 / 4 Calls	No
Full load evaluation	No, Yes	No
B605 Standby Travel		
Standby Travel	No, Yes	Yes
Standby Trvl. 1 Floor	Next Floor, Floor1 to 64 max.	Next Floor
Standby Trvl. 1 OFFSET	OFF, -2500 to 2500 mm	+/- xxxx mm
Standby Trvl. 2 Floor	Next Floor, Floor1 to 64max.	Next Floor
Standby Trvl. 2 OFFSET	OFF, -2500 to 2500 mm	+/- xxxx mm
Standby Travel Door	1+2 Open/closed , 1 open , 2 open, 1 open/closed, 2 open/closed, 1+2 closed	
Standby Travel Floor Indicator	ON/OFF	ON
Standby Travel Car Indicator	ON/OFF	ON
B606 Parking Travel		
Parking Travel	No, Yes	No
Parking Travel	Dy8-64mic	
Parking Level	Floor 1 to max. Floor	Etage 2
Parking Travel Park	0 to 90 Min.	1 min
Parking Travel Door	1+2 open, 1+2 open/closed, ready	Open
B607 Floor Blocking		
Floor Blocking	Input of a blocked Floors	No
Dynam. Blocking	No, carcalls/ floorcalls/ both	No

Dynam. Call Lock	Normal (1=locked), invert. (0=locked)	Normal	
Dynam. Floor Lock	Normal (1=locked), invert. (0=locked)	Normal	
Release C.Call Feedback	Off / Blink	OFF	
Release C.Call Floor Priority	No / Yes	NO	
B608 Energy saving			
Car Light Automatic Off	No, Yes	No	
Car Light Delay	10 to 6500 sec	60 sec	
Car Indicator Automatic Off	No, Yes	No	
Car Indicator Delay	10 to 6500 sec	120 sec	
Floor Indicator Automatic Off	No, Yes	No	
Floor Indicator Delay	10 to 6500 sec	180 sec	
FU Standby Automatic Off	No, Yes	No	
FU Standby Delay	10 to 6500 sec	60 sec	
FU Switch Off Automatic Off	No, Yes	No	
FU Switch Off Delay	10 to 6500 sec	60 sec	
Door Drive Automatic Off	No, Yes	No	
Delay	10 to 6500 sec	60 sec	
Mode S1 D613 Standby	No, Yes	No	
Mode S2 D613 Standby	No, Yes	No	
B609 Emergency Power service			
Emergency Power Service	No/yes, generator, accupower, brake open, EVA90	No	
Emergency Power Service floor 1	Next floor, 1 to 64	1	
Entrance Open	1, 2, 1+2	1	
Follow-Circuit	No, Yes	No	
Piezo Buzzer	Off / on	off	
Follow Circuit Deadtime	10 to 600 sec	360 sec	
Direction From Inverter	No / Yes	No	
Drive Command VE->V0 at ZONE			
B610 Emergency Fire Service			
Emergency Fire Service	No, Yes-1, Yes-2, Yes-3, dynamic across fire, dynamic stop fire		
1. Priority	1 to max.	2	
1. P. Entrance open	1, 2, 1+2	1	
2. Priority	1 to max.	2	
2.P. Entrance open	1, 2, 1+2	1	
3. Priority	1 to max.	3	
3.P. Entrance open	1, 2, 1+2	1	
Piezo Buzzer	Off , on	off	
Emergency Fire Service Blocked	Buzzer OFF / ON	ON	
Emergency Fire Service Input	Not inverted/ inverted	Not inverted	
Emergency Fire Service Swiss Version	No, Yes	No	
Door state	Keep open, closed after 1 – 60s	Always open	
Schindler ID	Normal, inverted	Normal	
B611 Fire Fighter service			
Firefighter Travel	No, Yes, 1 priority, 2 priorities, 3 priorities	No	
1. Priority	1 to max.	2	
1.P. Entrance open	1, 2, 1+2	1	
2. Priority	1 to max.	2	
2.P. Entrance open	1, 2, 1+2	1	
3. Priority	1 to max.	2	
3.P. Entrance open	1, 2, 1+2	1	
Firefighter Travel Input	Not inverted/ inverted	Not inverted	
Firefighter Travel Model	German / English / Australian / EN 81-72:2003 / EN81-72 Frankfurt	EN 81-72	
Buzzer on leveling	Active /deactive	deactive	
Buzzer at request	On/Off		
Floor- / Inside call blocking deactivation if FW-Operation	No /Yes	Yes	
B612 Rescue Travel			
Rescue Travel	No, Yes E30	No	
Collection Floor	1 to max.	3	
Collection Floor Wait Time	10 to 2000 sec.	600 sec.	
Rescue Floor	1 to max.	2	
Rescue Floor Wait Time	1 to 2000 sec.	120 sec.	
Rescue Travel Repeat travel	1 to 10x	20 x	
B613 Guide Mode			
Guide Mode	No, Active by E23	No	

Door Control	Automatic / Manuel	Automatic	
Floor Calls reset after :	Never reset, 1 to 60 Min	60 Min	
Call Request :	Blink Car/ Blink Floor	Blink Carcalls	
B614 Hotel Stopping			
Main Floor	No/Up/Down/Up+Down	No	
B615 Time relay			
Time Relay-1	Off/switch-on delay/off delay/off puls/on puls	Off	
Time Relay-1 Delaytime	0 to 300 sec	0,5	
Time Relay-1 Pulstime	0 to 300 sec	0,5	
Time Relay-2	Off/switch-on delay/off delay/off puls/on puls	Off	
Time Relay-2 Delaytime	0 to 300 sec	0,5	
Time Relay-2 Pulstime	0,5 to 300 sec	0,5	
Speed-threshold Vx	0,1 m/s to Vmax	0,8 m/s	
Speed-threshold Vy	0,1 m/s to Vmax		
Start-1 Timer-1 to 10	00:00 Clock		
Stopt-1 Timer-1 to 10	00:00 Clock		
Start-2 Timer-1 to 10	00:00 Clock		
Stop-2 Timer-1 to 10	00:00 Clock		
Day Timer-1 to 10	MO TU WE TH FR SA SU		
Fan Switching Cabinet	Automatic delayed Temperature limit 30 to 70 degrees C - 30 degrees C		
B616 Elevator Check			
Interval	Off / modem / every week / every 2/3/4	Modem	
Weekday	MO TU WE TH FR SA SU		
Start time	xx : xx CLOCK		
Test Action leveling	No,Yes	Yes	
Test Action Car Light	No,Yes	Yes	
Test Action Alarm Button	No,Yes	Yes	
Test Action Door Open Button	No,Yes	Yes	
Reaction	Only message / message and block	Only message	
Floorblocking	No notice / notice blocked floor / only fixed blocking		
Result	Check is o.k./ x failure		
B617 Bolt			
Bolt	Off/ Static/ Mobil	off	
Floor Static	1 - 64		
Bolt Releveling	No,Yes	No	
Bolt Raising	10 - 250mm	64 mm	
Bolt Final Leg	0 - 10000ms	1000 ms	
Bolt Movement	5 – 60 sec.	60 sec.	
Bolt Preasure Leg	In ms	4000 ms	
Bolt GoDown Travel	No,Yes	Yes	
B618 Codelock calls floor			
Car Calls	No, Yes Floor 01 to max.	NO	
Codeinput floor 01 to Max.	4 digit code		
B619 Attendant Mode			
Attendant Mode	OFF / Activated by E463	OFF	
Attendant Mode	No timer deactivated / Deactive after 1 to 30 Minutes		
B620 Deadman Mode			
Deadman Mode	Release by E327 / Release by Car Call	E327	
Photocell Supervise	OFF / ON	OFF	
Floorcall with Carcall	OFF / ON	OFF	
Deadman Chimmey-Mode	OFF / ON	OFF	
Door Deadman + Preferred Car	CLOSED / OPEN		
B621 FAX-MODEM-DUN			
Type	Off / Reimann-LTP / Fax / Modem / Fax + Modem / GSM-Modem CT63 / Safeline SL5 /		
Own Number			
SMS Number 1			
Fax Number 1			
Fax Number2			
MODEM Number 1			
MODEM Number 2			
MODEM Password			
RS232-1:	HPG / KW-Protocoll , HPG / PC & Reimann-LTP, Reinmann-LTP, HPG / PC		
Error message	Off / Dial Modem-No.1 / Dial SMS-No.1	OFF	
Gateway-IP	Static / Dynamic	Static	
Gateway-IP	192.168.001.200	192.168.001.200	

Gateway-Port	10000	10000	
Gateway Password	ON / OFF	OFF	
Gateway Password	xxxxxxxxxxxxxxxxxxxxxxxxxxxx		
Router-IP	Static / Dynamic		
RS232-1	HPG / Reimann / KW-Gateway	KW-Gateway	
Error	No / Modem / SMS	NO	
B622 UCM - Monitoring			
UCM – Device Type	OFF, KW-UCM, Wittur EOS-UCM, OG-anticreep, Dynatech-Vega		
UCM - Monitoring	No, Oildynamik NGV-A3, Bucher iValve	No	
B623 OSCAR - Interface			
Oscar - Interface	OFF , Active	OFF	
Call - Deadtime	OFF, 1 ... 600 Seconds	OFF	
B624 Parking Garage			
Parking Garage - Function	OFF , Active	OFF	
Deadtime –Fill Mode	OFF, 1 ... 60 Seconds	30 Sec.	
Deadtime –Clear Mode	OFF, 1 ... 60 Seconds	30 Sec.	
B625 Traffic Capture			
Traffic Capture - Function	OFF / Active	OFF	
Calm Traffic	1 ... 60 Minutes	10 Min.	
Calm Traffic Off after	1... 10 calls	3 calls	
Calm Traffic slow drive	ON / OFF	OFF	
Calm Traffic door slow	ON / OFF	OFF	
B626 WLAN			
WLAN Access Point	ON / OFF	OFF	
AP-Password	Free		
AP-SSID	Free	Controller-D613-1	
AP-Channel WLAN-Channel-No.	01 to 15	01	
B627 Sabbat Control			
Sabbat Control	ON / OFF	OFF	
Further Travel Delay Mainfloor	5 to 240 Sec.	60 Sec.	
Further Travel Delay floors	5 to 240 Sec.	30 Sec.	
Floor-UP 1-16	Setting of the Stopp-Points		
Floor-UP 17-32	Setting of the Stopp-Points		
Floor-UP 33-48	Setting of the Stopp-Points		
Floor-UP 49-64	Setting of the Stopp-Points		
Floor-DOWN 1-16	Setting of the Stopp-Points		
Floor-DOWN 17-32	Setting of the Stopp-Points		
Floor-DOWN 33-48	Setting of the Stopp-Points		
Floor-DOWN 49-64	Setting of the Stopp-Points		
B628 Penthouse Control			
Penthouse-1	OFF / Floors 1 to 64	OFF	
Penthouse-1 Door	1 / 2 / 3 Doorsides		
Penthouse-1 Visitor	Call Button / Call Automatic		
....			
Penthouse-10	OFF / Floors 1 to 64	OFF	
Penthouse-10 Door	1 / 2 / 3 Doorsides		
Penthouse-10 Visitor	Call Button / Call Automatic		
B629 Remote diagnostics			
Function	OFF / DB	OFF	
Reference run	OFF / Every day /Every Week/..	OFF	
Time of day Start at 00:00 UHR			
B630 Evacuation Liquid Pit			
Liquid Pit	No / yes	No	
Liquid Pit Floor	Next Floor / 1 to 64	2	
Liquid Pit Entrance Open	1, 2, 1 + 2	1	
B631 Evacuation Gas			
Evacuation Gas	No / yes	No	
Evacuation Gas Floor	Next floor, 1 to 64	2	
Evacuation Gas Entrance Open	1, 2, 1 + 2	1	
B632 Evacuation Earthquake			
Evacuation Earthquake	No / yes	No	
Evacuation Earthquake Floor	Next floor, 1 to 64	2	
Evacuation Earthquake Entrance Open	1, 2, 1 + 2	1	
Evacuation Earthquake Reset	No / yes	No	
B7 Inputs / Outputs			

B71 Associated Outputs			
B72 Associated Inputs			
B73 Assignment ER – EAx			
B74 Debouncing (Pulse buf.delay)			
Debouncing ZR		30 ms	
Debouncing FKR		30 ms	
Debouncing ER		30 ms	
Debouncing ZG		30 ms	
C-Diagnosis			
C0-Controller Reset			
Reset	Yes,No		
C1-Give Calls			
C10-Give Calls	Car Calls		
C11-Floor Calls	Input of Floor Calls		
C12-Random Car Calls	Off/ On	Off	
	Off after: 00,5 to 48,0 hours	8,0 hours	
C13-Random Floor Calls	Off, On	Off	
	Off after: 00,5 to 48,0 hours	8,0 hours	
C2-In/Output Signals			
All In/Outputs ZR,FKR,ITR,ER	- = no Signal / * = +24V Signal	Exxx = Input Signall	Axx= Output Signal
C3-Event/Fault Log			
C30 Event/Fault Log	Fault Count		
C31 Logposition	Fault Position xxx		
	Number of Fault	Errortext	
	Time xx:xx:xx	Date xx.xx.xxxx	
C4-INSECTOR			
C40 Run Time Test	All running times are set on 1.0 seconds for the next trip:		
C41 Buffer Travel-Car	With the resend drive speed can be driven downward without delay 13B		
C42 Buffer Travel-Counterweight	With the resend drive speed can be driven upward without delay 13A		
C43 Claw Test	Disconnection of the short-circuit protection with the catch sample		
C44 Car-/Motospeed	For the driving ability examination with MRL processor		
C45 Brake Test	For MRL with electrical manual brake operation		
C46 Remote Trigger Car	Start up the function remote trigger		
C47 Reset Remote Trigger Car	Start up function resets remote trigger		
C48 Remote Trigger Counterweight	Start up the function remote trigger Counterweight		
C49 Reset Remote Trigger Counterw.	Start up the function reset remote trigger		
C410 Endswitch-Travel Top	Limit switch trip UP with reduction of the V. but over driving concisely Top		
C411 Endswitch-Travel Bottom	Limit switch trip Down with reduction of the V. but over driving concisely Bottom		
C412 Switchcabinet Temperature-Test	Lower the temperature minimum trigger level to immediate reasing		
C413 Motor-PTC-Test			
C414 DSC-Puls-Encoder-Test			
C415 Test Sink - Prevention	Excessive switching off the sink - prevention for immediate release		
C416 Test UCM drive Off Level	Simulation of the journey from the zone with the door open to EN81-1 / 2-A3		
C417 Test Brake Monitor brake 2	Excessive disconnection of the braking element software for instant monitoring trigger		
C418 Brake test	Activation of the brake test and output of the braking distance in mm		
C419 Test direction change counter	Test for triggering the direction change counter for suspension ropes & belts		
C420 Test rope wear counter	Test for triggering the rope wear counter for carrying ropes & belts		
C421 Test brake monitor brake 2	Software-based triggering of brake element monitoring on drive-2		
C422 Test RESET GB pre-shutdown	Resetting the override of the overspeed governor		
C423 Hydraulic Test-Drive Broken Pipe	Test Drive for testing the Broken Pipe Valve		
C5-Leveling Cotrol			
Expenditure of the current driving cab hoising depth in mm; Consise become with+ or- at over or under drive			
C6-modul Monitor			
Shaftbus 1 to 16			
Shaftbus 17 to 32			
Shaftbus 33 to 48			
Shaftbus 49 to 64			
DSC-Pulses			
Revision Number			
ER-Adress prog. Adress			
C7 –Assembling Travel			
Ignoring the SiKr entrances U3 to U12 resent option at assembly option			
C8 – EVENT LOG			
Messages & Events			
C9 -Door Control - Manuell			

C91 Tür - 1			
C92 Tür - 2			
C93 Tür - 3			
D-Information			
D1-In/Output			
D2-Trip Counter			
All Trips			
Reset Tripcounter			
Tripcounter UP			
Tripcounter DOWN			
Reset Tripcounter			
Floorcounter Floor 1			
Floorcounter Floor max.			
Reset Floorcounter			
Change-Direction-Counter		To xxxxxxxx	Change
D3-Run-Time Counter			
Mainpowercounter			
Travel Time			
Reset Travel Time			
Reset Counter			
Failure Time			
Reset f. counter			
Delate operating time			
Length hours counter			
Reset length hours counter			
Normal running time			
Reset normal running time			
Special travel time			
Reset special travel time			
Rest time			
Reset rest time			
D4-Doormove Counter			
Doorside 1			
Doorside 2			
Doorside 3			
Reset Doormove- Counter			
Disp. Doormaintan at 100 ..100.000		Expenditure of message over A126 maintenance counter doors	
D5-Energy-Counter			
Energy-Consumpt in KWh		xxxx xxxx	
Energy Recover in KWh		xxxx xxxx	
Energy-Reset energy-ct		Yes / No	
Energy-Consumpt		0001 pulses / KWh	
Energy-Recover		0001 pulses / KWh	
D6-Environmental conditions			
Temperature D613-ZR		Current temperature in the central computer in Grad Celsius	
Temperature D613-ZR Max		Max. temperature reached in the central computer in Grad Celsius	
Temperature D613-ZR Min		Min. temperature reached in the central computer in Grad Celsius	
Temperature D613-FKR		Current temperature of the elevator car in Grad Celsius	
Temperature D613-FKR Max		Max. temperature of the elevator car in Grad Celsius	
Temperature D613-FKR Min		Min. temperature reached of the elevator car in Grad Celsius	
Temperature control cabinet		Current temperature in the control cabinet in Grad Celsius	
Temperature control cabinet Max		Max. temperatue reached in the control cabinet in Grad Celsius	
Temperature control cabinet Min		Min. temperature reached in the control cabinet in Grad Celsius	
Temperature pit-brow		Current temperature in the pit-brow in Grad Celsius	
Temperature pit-brow Max		Max. temperatue reached in the pit-brow in Grad Celsius	
Temperature pit-brow Min		Min. temperature reached in the pit-brow in Grad Celsius	
Temperature shaft pit		Current temperatue in the shaft pit in Grad Celsius	
Temperature shaft pit Max		Max. temperature reached in the shaft pit in Grad Celsius	
Temperature shaft pit Min		Min. temperature reached in the shaft pit in Grad Celsius	
Humidity control cabinet		Current humidity in the control cabinet in %	
Humidity control cabinet Max		Max. humidity achieved in the control cabinet in %	
Humidity control cabinet Min		Min. humidity achieved in the control cabinet in %	
Humidity pit-brow		Current humidity in the pit-brow in %	
Humidity pit-brow Max		Max. humidity achieved in the pit-brow in %	
Humidity pit-brow Min		Min. humidity achieved in the pit brow in %	

Humidity shaft pit	Current humidity in the shaft pit in %
Humidity shaft pit Max	Max. humidity achieved in the shaft pit in %
Humidity shaft pit Min	Min. humidity achieved in the shaft pit in %
Min / Max memory reset?	
D7-Maintenance menu	
Maintenance counter activated	Yes / No
Maintenance in	xxx Days
Delete maintenance counter	Yes / No
Drive per month	xxxx
Special environmental conditions	Yes / No
Special conditions of use	Yes / No
Availability	Less important / Very important
Age 70ft it facilities	< 10 years / > 10 years
Location	Priority-1 / Priority-2 / Priority-3 / Priority 4
Maintenance display line 01	- Travel counter
	- Travel counter erasable
	- Travel counter up
	- Travel counter down
	- Change of direction counter
	- Power hour meter
	- Operating-hours meter
	- Operating-hours meter erasable
	- Failure hour counter
	- Door count T1
	- Door count T2
	- Door count T3
	- Energy reference counter
	- Energy feedback meter
	- Temperatur D613-ZR
	- Max. temperature D613-ZR
	- Min. temperature D613-ZR
	- Temperature D613-FKR
	- Max. temperature D613-FKR
	- Min. temperature D613-FKR
	- Temperature control cabinet
	- Max. temperature control cabinet
	- Min. temperature control cabinet
	- Temperature pit-brow
	- Max. temperature pit-brow
	- Min. temperature pit-brow
	- Temperature shaft pit
	- Max. temperature shaft pit
	- Min. temperature shaft pit
	- Humidity control cabinet
	- Max. humidity control cabinet
	- Min. humidity control cabinet
	- Humidity pit-brow
	- Max. Humidity pit-brow
	- Min. Humidity pit-brow
	- Humidity shaft pit
	- Max. humidity shaft pit
	- Min. humidity shaft pit
Maintenance display line 02	- As with display line 01
Maintenance display line 03	- As with display line 01
Maintenance display line 04	- As with display line 01
Maintenance display line 05	- As with display line 01
.....	
Maintenance display line 21	- As with display line 01
D8-Speed	
Speed of the cabin in m/s	
Speed of U/min Motor	
D9- Safe Copy	
Status:	- Normal operation
Relais:	- Sikr*Zone*Door 1:
State bits:	- .**- ---- -.**-

Zone	-	Length: 400mm
Inspection	-	Only speed control monitoring
Monitoring	-	Nominal speed: 1,2 m/s
Limit switch	-	UP
Limit switch	-	DOWN
Delay control	-	DOWN
Delay control	-	UP
Floors ANTSAFE/LIMAX33CP:	-	04
ANTSAFE-Software:	-	CRC: 7950DE2A
	-	CRC: CE7824DD
LIMAX33CP-Software:	-	CRC: 0B55D094

4. FUNCTION DESCRIPTION

4.1 GENERAL WORKING WITH THE HPG60 & NAVIGATION



The handheld programming device HPG60 has 6 buttons, a four-line LCD display, a red light-emitting diode, and a 9-pin RS232 interface.

The supplied serial cable is to be plugged into the 9-pin interface socket on the HPG60, as well as on the central computer, car computer or interior panel computer in the 9-pin interface socket.

If the access authorization of the HPG60 matches that of the microprocessor system, "A1 system parameters" appears in the display.

The six buttons are divided into two groups. On the one hand, the four red buttons form a two-axis control, i.e. the upper and lower keys can be used to step through the individual menu items.

There are eight main menus, between which you can scroll from one to eight and back using the arrow up and arrow down keys. The individual parameters can be selected in the menu using the left or right red button. The value of the parameter appears on the right.

If the VALUE of the parameter is to be changed, the two yellow buttons come into action. The value is increased with the upper yellow button, minimized with the lower one.

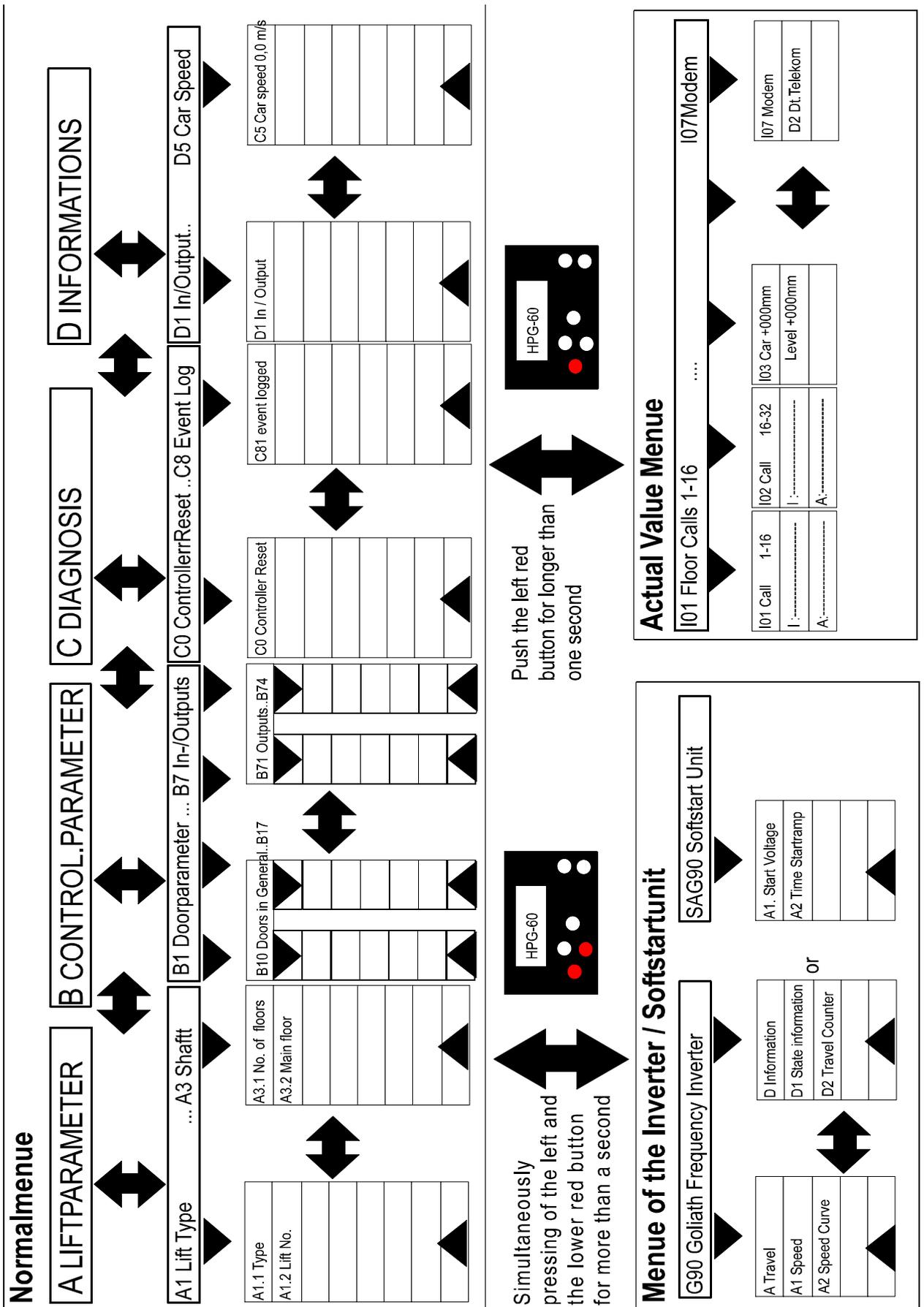
The parameter value is shown flashing. If the new value is to be saved, press the right red key (ENTER).

If the new value is to be discarded, the left red key can be pressed (ESCAPE).

The valid key assignment is shown in the fourth line of the display. Parameters can only be changed when the device is at a standstill and without entering a command. The red LED lights up constantly during operation. If an error occurs, it starts to flash.

The display is composed as follows:

1.Line	MENU	e.g.	B10 Door General
2.Line	Menu Element Parameter Value	e.g.	Shaft Door Bounce Suppression 100 ms
3.Line	Status Mode		„Regular Operation“
4.Line	Error Messages		Error 41: Operating Time Surveillance



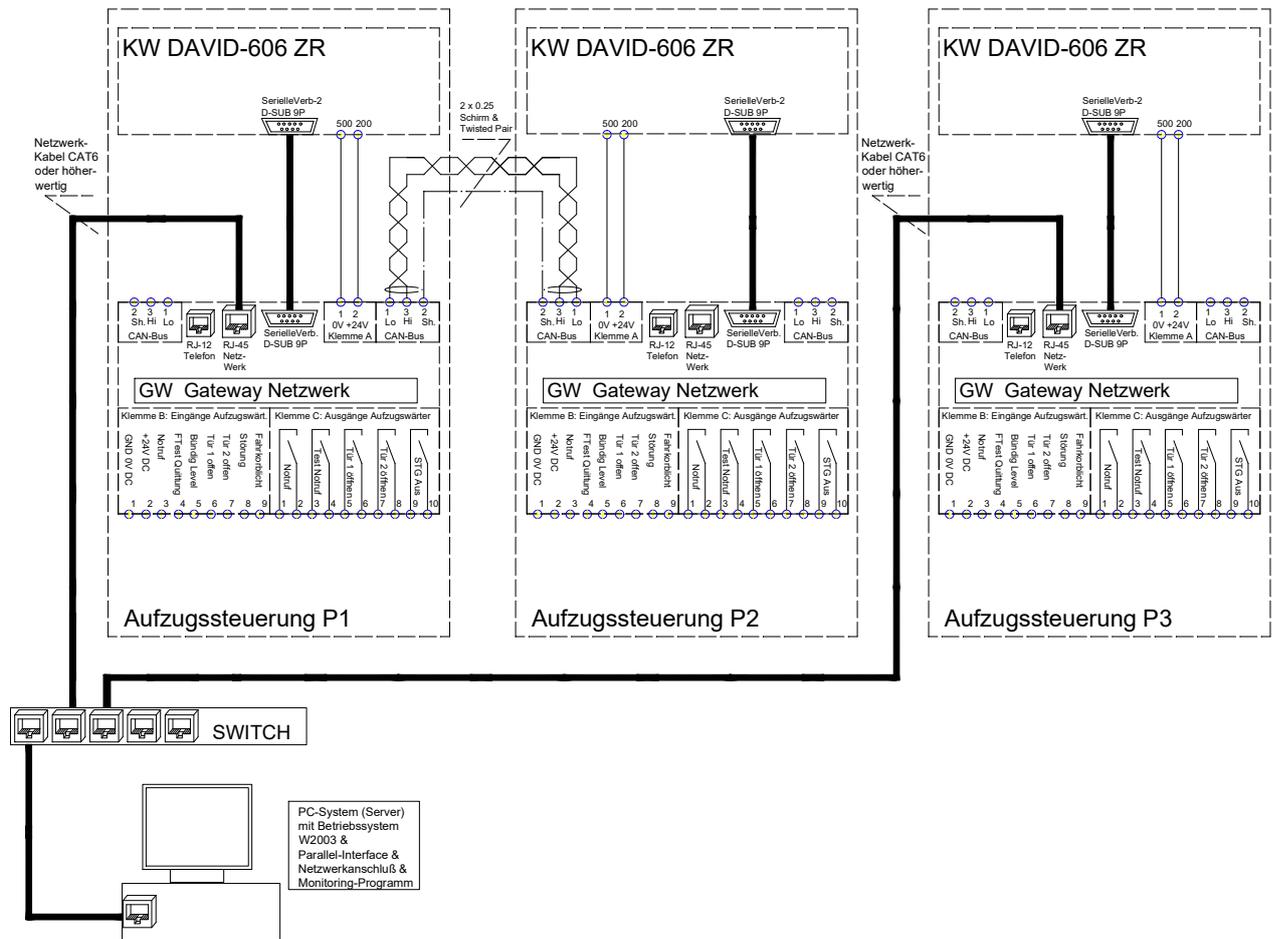
4.2 Serial Interface 1 and 2

The serial interface 1 is used to connect the hand programming unit HPG60 and to connect a PC with parametersoftware or flash software.

The second serial interface is reserved for the DFÜ. The software supports the protocol-files of the Reimann company. You have the access to all data parameters groups A to D. Optional there two different modems for connections over telephone or Internet TCP/IP.

Optional are two different gateways (LON / BACnet / Profibus / S-bus) as well, via a connection modes (Analog / GSM), respectively, by allowing bus based on TCP / IP.

Example: Gateway TCP/IP



4.3 USB Interface 1, 2 & 3

The USB interface 1 (slave) is used for connection of a PC-based system for communicating with the control computers. With the parameterization software or Flash software, the parameters in the control system can be 613 DAVID changed.

The second and third USB port is reserved for USB devices that require a USB master. In the future, here you can connect USB flash drives, USB modems, USB printers.

4.4 CANOpen Interface 1, 2 & 3

With the new processor system DAVID 613 there are on the central unit two CANOpen interfaces and on the car unit there is another one available.

In the future here can be CANOpen Komponenten as shaft copy systems, control devices, etc. connect.

4.5 WLAN / WiFi Transceiver

The processor system DAVID 613 has an access point for WLAN / WiFi. With smart phones and tablets and the corresponding apps can be accessed on the parameters of the controller.

Communication with Apple devices such as iPhone and iPad is currently possible.

A-LIFTPARAMETER

A1- LIFT TYPE

PARAMETER: A1.1 TYPE

There is a place of 20 characters to put in the name of the type or the company. The whole character-set is 95 characters.

PARAMETER: A1.2 LIFT NUMBER

There is a place of 20 characters to put in the lift number. The whole character-set is 95 characters.

PARAMETER: A1.3 CONTROLLER NUMBER

There is a place of 20 characters to put in the controller-number. The whole character-set is 95 characters.

PARAMETER: A1.4 PLACE

There is a place of 20 characters to put in the name of the place. The whole character-set is 95 characters.

PARAMETER: A1.5 TIME/DATE

You must use the form **xx:xx:xx = time & yy.yy.yyyy = Date** to put in the time and the date.

PARAMETER: A1.5a Summer/Wintertimeswitching

You can make a automaticly or manual switching.

PARAMETER: A1.6 LANGUAGE

There are two languages, which you can choose **German and English**. The standart is German.

PARAMETER: A1.7 & A1.8 - DISPLAYLINE 1 AND 2

There is a place of 20 characters in every line to put in the name of the building, or the company. These two lines are visible at the start on the HPG-60. The whole character-set is 95 characters.

PARAMETER: A1.9 SOFTWARE VERSION

In this menu the software version will be shown.

- DAVID-613 ZR – 00.076 or higher
- DAVID-613 PIC – 00.025 or higher
- DAVID-613 FKR – 00.013 or higher
- Maintenance-LCD – 00.01 or higher
- ER-Bus-1 to ER-Bus-3 All ER-Shaft bus calculator
- Expansionbus ZG32 / Sensormodule / Shaft pit calculator – 4 Piece
- Sensormodule – 3 Piece
- Shaft-Pity-Remaotestation – 1 Piece
- BIS80 - 1 Piece
- ZG16 – 6 Piece
- Relay group RG12 – 3 Piece
- X13 Servicepanel – 1 Piece

PARAMETER: A1.10 CODEWORD INPUT

If the Code-word is >< 0000, then it is active, e.g. after switch off the D613 ZR or put off the HPG-60.

If the parameter code-word is active, you must put in the right code-word, before you can change the others parameters.

In four waye, the code-word protection is active:

- Unit is switched off
- At 00:00 clock
- A wrong code-word is put in
- A new code-word is put in

The following unit are without code-word protection:

- To give car calls
- To give landig calls
- Error memory

Parameters: A1.11 Basic menu-representation

In this basic menu it is possible to define the four lines on the "HPG" at the start. All the counters of the maintenance display are available.

On the display line 1: Main menu: 0. Standard A1.7 / Counter off D7 Service Display

On the display line 2: Main menu: 0. Standard A1.8 / Counter off D7 Service Display

On the display line 3: Main menu: 0. Standard control status / Counter off D7 Service Display

On the display line 4: Main menu: 0. Standard date/time / Counter off D7 Service Display

A2- Controller

PARAMETER: A2.1 TYPE OF DRIVE

In this parameter, you have to choose the type of drive:

- **Scanclimber- Variable Frequency**
- **Rope- Variable Frequency**
- **Rope- Variable Voltage**
- **Rope- 2 Speeds**
- **Hydraulic-Variable Frequency**
- **Hydraulic- regulated**
- **Hydraulic-Not regulated**

PARAMETER: A2.2 TYPE OF CONTROLLER

With this parameter you can specify the following basic types of controls:

- **One Button Exclusive**
- **One Button Deadmean**
- **Preselection Controlling**
- **Two Button Collection**
- **One Button Up and Down Collection**
- **One Button Down Collection**
- **One Button No Collection**
- **Attendant Controlling**
- **Send-Controlling**
- **Taxi Controlls**

PARAMETER: A2.3 GROUP

In this parameter, you can activate the group-drive. Please look at the points A2.4 and A2.5.

PARAMETER: A2.4 NO. OF LIFTS

In this parameter, you can put in the numbers of the lifts in the group. The maximum number is 8.

PARAMETER: A2.5 GROUP NO.

Each lift in the group has its own number. You can give the lift a number between 1 and 8.

A3- Shaft

PARAMETER: A3.1 NO. OF FLOORS

In this parameter, you can put in the value, how many floors the elevator has. The maximum is eight floors.

PARAMETER : A3.2 MAIN FLOOR

In this parameter, you can put in the value, of the main floor.

PARAMETER : A3.2 MAIN FLOOR-2

In this parameter, you can put in the value, of the main floor.

PARAMETER: A3.3 LOWEST FLOOR

If you have a group with a different number of floors, you must put in the number of the floor, which is the lowest floor of the elevator.

PARAMETER: A3.4 DOOR SIDES

In this parameter, you can put in the value, how many door sides the elevator has. The maximum is three door sides.

PARAMER: A3.5 SHAFT-COPY

In this parameter, you have to choose the type of shaft-copies:

- **Standart-Copy**
- **Relativ-Copy**
- **Absolut-Copy**
- **Motor-Copy**
- **Minimum-Copy**

PARAMETER: A3.6 NOMINAL SPEED

In this parameter, you can put in the value of the nominal speed of the elevator in m/s.

PARAMETER: A3.7 SHAFT**In principle**

It is possible to combine two elevator shafts (telescopic shaft). The hydraulic unit 1 of shaft 1 moves the elevator car. The unit-2 moves the elevator shaft 1. This function is available from software version 00.072.

If this function has been activated, the controller may only be operated with absolute value copying. Learning the floors is only possible via a shaft table.

NORMAL OPERATION:

The output function A623 selects aggregate-1 (inner duct, A623 = 0) or aggregate-gat- (outer duct, A623 = 1).

The setting A3.7 selects the floor at which switching from shaft 1 to shaft 2 takes place. Rides between the lowest floor to the change over days are done with Aggre-gat-1 (A623 = 0). Rides from the change-over days to higher floors are carried out with the Ag-gregat-2 (A623 = 1). If the elevator is in the change-over days always with Ag-gregat-1 is made up.

When driving over the switchover days, the lift will always make a stopover in the switchover days to switch over the units.

INSPECTION SERVICE

In inspection mode, only drive with unit-1. Inspection operation only works until the transfer date.

Return mode

In return mode, after learning the floor, depending on the position, it is driven with unit 1 or unit 2. Below the switchover days, drive until the changeover days with unit-1. With Bündig the STOP occurs in the changeover day. Thereafter, when driving up to the Aggre-gat-2 is switched. Downwards, the process is reversed.

A4- CANopen lift

A401 CAN-1 Monitor

The D613 system provides physically two CAN buses. The CAN-1 monitor is used to view the CAN devices on the CAN bus. In this case, the state of the device is illustrated as being "operational", ie. The device works in the CAN community, resp. "-----". The device is not connected.

The following CAN devices show their status:

- ID1 Controller - This is the central unit D613
- ID2 FU - This is the Frequency Inverter
- ID4 Encodersystem 1 - These are absolute shaft copying systems that operate on the basis of the CANopen lift protocol.
- ID7 Doorcontroller 1 - The state of the CANopen door control device of the door 1, e.g. Wittur ECO / Meiler Midrive is shown here.
- ID8 Doorcontroller 2 - The state of the CANopen door control device of the door 2, e.g. Wittur ECO / Meiler Midrive is shown here.
- ID9 Doorcontroller 3 - The state of the CANopen door control device of the door 3, e.g. Wittur ECO / Meiler Midrive is shown here.
- ID13 Loadmeasurement - The state of the load measuring system, e.g. Henning is shown here.
- ID16 IOs Car-1 - The State of the IO-Channel of the car at the 1.Byte is shown here.
- ID17 IOs Car-2 - The State of the IO-Channel of the car at the 2.Byte is shown here.
- ID18 IOs Car-3 - The State of the IO-Channel of the car at the 3.Byte is shown here.
- ID19 IOs Car-4 - The State of the IO-Channel of the car at the 4.Byte is shown here.
- ID20 IOs Car-5 - The State of the IO-Channel of the car at the 5.Byte is shown here.

A402 CAN-1 Devices

The D613 system offers the possibility to operate control and control components with the most diverse buses. If CANopen devices are used, they are activated in menu item A402 CAN-1 devices so that they are available to the controller.

- ID2 FU - If there is a CANopen Frequency Inverter in use, it should be activated here.
- ID4 Encodersystem 1 - If a CANopen lift encoder system is to be used, it should be activated in this menu. The special type of the bay coiling system is still set in menu B43 Absolute value copying.
- ID7 Doorcontroller 1 - If a CANopen door control unit for door 1 is to be used, it should be activated here.
- ID8 Doorcontroller 2 - If a CANopen door control unit for door 2 is to be used, it should be activated here.
- ID9 Doorcontroller 3 - If a CANopen door control unit for door 3 is to be used, it should be activated here.
- ID13 Loadmeasurement - If a CANopen load measuring system is used, it is activated here.
- ID16 IOs Car-1 - If there is a CANopen IO-groupe / display in the car(1.Byte), it should be activated here.
- ID17 IOs Car-2 - If there is a CANopen IO-groupe / display in the car(1.Byte), it should be activated here.
- ID18 IOs Car-3 - If there is a CANopen IO-groupe / display in the car(1.Byte), it should be activated here.
- ID19 IOs Car-4 - If there is a CANopen IO-groupe / display in the car(1.Byte), it should be activated here.
- ID20 IOs Car-5 - If there is a CANopen IO-groupe / display in the car(1.Byte), it should be activated here.

A403 CAN-1 Configuration

The fact that the CANopen bus runs on a D613 system and can operate its devices requires a few points.

Activate the CAN bus - In order to be able to transport data on the CAN bus, it must be switched on. This is done by a clear YES in this menu item. The green LED on the interface is switched on as a sign of the operation. If the red LED is lit, you have a fault on the CAN bus.

Activate NMT-Function - As on any real boat or ship there must be one who has the say. In the case of an elevator control, this is usually the control, which is the master and gives the devices the command to drive up. Baudrate
- In order for all bus users to be able to communicate well, the "speech speed" must be set. The baud rate is adjustable from 10 kBaud to 1 MBaud. A good factory setting represents the value of 250 kBaud.

Note-ID - In order for the boss (master) to be accessible in a system, he needs an address as in real life. In our CANopen system, the master therefore has the address 001.

Heartbeat - As the term is already associated, it is about the heartbeat. In humans, as in the CANopen system, this is a sign that he is still alive. We send this signal, according to the factory setting, every 500 milliseconds, so that the peripherals are soothed.

CAN bus termination

The term "termination" in bus systems describes the necessary use of a terminating resistor (120 Ohm in the high-frequency technique, also the wave resistance) at the end of the bus line in order to avoid reflections at the open end of the data line. These reflections can lead to a corruption of the data bits and thus to the loss of the data.

Both CAN-Bus interfaces on the central computer ZR and on the car calculator FKR offer the option of activating terminating resistors by means of a DIL switch as standard. In our factory setting, all DIL switches have already been set to ON on both CAN bus interfaces.

CAN bus chain - If the topology of the chain is used when connecting the CAN bus devices, i.e. the devices are connected in series, the last device in the chain should have the connected terminating resistor.

CAN bus star - If the topology of the star is used when connecting the CAN bus devices, i.e. each device is connected to the computer interface, a terminating resistor should be connected to all devices.

CAN-Bus Token ring - An annular wiring of the devices must be rejected!

B1- Doorparameter

1.0 Description of the in- and outputchannels of the door-function

Terminal	Hardware	Function
Free choice of the Relay Output	Relay Output	Door command line Door 1 Open- This output is used to control the door scheme to drive the car or by 400V AC drives to control the reversing contactor K401. If K402 is on, so is K40A software locked.
Free choice of the Relay Output	Relay Output	Door command line Door 1 Close- This output is used to control the door scheme to drive the car or by 400V AC drives to control the reversing contactor K402. If K401 is on, so is K41A software locked.
Free choice of the Relay Output	Relay Output	Door command line Door 2 Open- This output is used to control the door scheme to drive the car or by 400V AC drives to control the reversing contactor K403. If K404 is on, so is K40B software locked.
Free choice of the Relay Output	Relay Output	Door command line Door 2 Close – This output is used to control the door scheme to drive the car or by 400V drives to control the reversing contactor K404. If K403 is on, so is K41B software locked.
Free choice of the Relay Output	Relay Output	Door command line Door 3 Open- This output is used to control the door scheme to drive the car or by 400V AC drives to control the reversing contactor K403. If K404 is on, so is K40C software locked.
Free choice of the Relay Output	Relay Output	Door command line Door 3 Close – This output is used to control the door scheme to drive the car or by 400V drives to control the reversing contactor K404. If K403 is on, so is K41C software locked.
(Inputs FF0 or FF4)	24V DC Input	Photocell input Door 1, 2 or Door 3 The Photocell is blocked if you have +24V DC at the Input. That means somebody or something is in Door 1 or Door 2. 0V DC indicates that the Drive-way of the door 1 or door 2 is without obstacles. Evaluation of the photocell input only within the door zone or concise contact with open and/or part-open door. (Working model normally maker NO). Reaction: Reversion of the door movement to “door open”.
Inputs fkt E986,E987, E988	24V DC Input	Monitoring functions for door 1, 2 or door 3 in relation to blockage of the door wings & indentation of limbs and objects during door movement. Triggering the function leads to the removal of the door commands.
	24V DC Input	Button Door Open Door 1 / 2 / 3 If passenger wishes door movement, it means that button Door 1 /button door 2 was operated and you get at the Output + 24V DC (Working model normally maker NO) Reaction: Reversion of the door movement on door open. The door is kept open over in load time duration. To abort the load time function over the time you have to push the button door close or button door open.
	24V DC Input	Button Door close input Door 1 / 2 / 3 If the passenger wishes door movement, meaning that button Door 1 /button door 2 was operated and you get at the Output + 24V DC (Working model normally maker NO). Dely-time for the door motion „Close“ is programmable.
(Inputs FF1 or FF5)	24V DC Input	Door reversion entrance Door 1 / 2 / 3 24V DC at this input means that somebody or something is in Door 1 or 2 or 3. 0V DC meaning there are no barriers. (Working model normally maker NO) Reaction: Reversion of the door movement on door open.
(Inputs FF2 or FF6)	24V DC Input	Door limit switch Open Input Door 1 / 2 / 3 If the Door 1/ Door 2 is completely opened, you have 0V DC at this Input. (Working model normally maker NO) Reaction: Switch the door command line door 1 open/ door 2 / door 3 open.
(Inputs FF3 or FF7)	24V DC Input	Door limit switch close entrance Door 1 / 2 / 3 The Door is completely closed, in the end position, that means 0V DC at this Input. Reaction: Switch the door dommand line Door 1 close/ Door 2 /Door 3 close.
U10	230V AC Input	Shaft-door input Safety-circuit-terminals U10 All shaft doors are electrically closed if you have the Input 230 V AC.
U11	230V AC Input	Car-door-inputs Safety-circuit-terminals U11 All car doors are electrically closed if you have the Input 230 V AC.
U12	230V AC Input	Blockedswitch-imputs Safety-circuit-terminals U12 All shaft doors are locked, if this input has 203V AC. At the input is 0V AC, that means actually stop doesn´t lock and the door can be opened.

B10- General

PARAMETER: DOOR FUNCTION

For the software used in this system, the term “Automatic Door“ refers to a telescopic shaft door in connection with a telescopic cabin door, which are jointly operated by an electric system.

PARAMETER: TYPE OF DOOR

In this parameter you can choose the type of the door. The following door types are in the software:

- **No Door**
- **Handdoor no Cardoor**
- **Hand/Cardoor with 2 Endswitch**
- **Hand/Cardoor with Door-Open-Endswitch**
- **Hand/Cardoor with Door-Close-Endswitch**
- **Hand/Cardoor without Endswitch**
- **Automaticdoor with Door-Open-Endswitch**
- **Automaticdoor with Door-Close-Endswitch**
- **Automaticdoor without Endswitch**

In menu A3.4 you can activate “Door 2” and apply the setup “like Door 1”. The doors 1 and 2 have the same setups. But you can change the setup for door 2.

The term of the automatic door means for the implemented software a telescope shaft door in connection with a telescope car and door car, both should to be coupled together.

For the automatic door without door limit switches, in principle the same description is valid, as with the door limit switch. The door instructions Open and Close remain in the final positions.

Some door engines have however no cyclic duration of 100%. Therefore the parameter must be activated “Door engine in standby Off”.

The term of the turning door means for the implemented software a turning door as shaft door in connection with a telescope driving car door or /and a folding door.

The closing of the shaftdoors happens with the blockedswitch. The control of the blocked switch can take place again mechanically or with solenoid operated bolt magnet.

PARAMETER: DOOR LIMIT SWITCH

At this parameter you can choose between 2 options. (Opener/ Closer) This parameter comes out only if the kind of door with door limit switch are chosen. The standard value is Opener.

PARAMETER: DOOR ENGINE 1 ACTIVE / DOOR ENGINE 2 / DOOR ENGINE 3 ACTIVE

At this parameter, you can choose between two values, namely „always“ and „standby off“. The door-engines, which have no switch-on-time of 100%, you must be choose the value “standby off”.

PARAMETER: SHAFTDOOR WAITING

The use of this parameter is to have a delay-time for the shaft-door-contacts in the safety-circuit. When the time is over, there is an interpretation, if the door is open or closed. If you have old doorcontacts in the safety circuit of the shaftdoor, you must set the time high. The best way is to always use new doorcontacts. The standard value is 0,5 seconds.

PARAMETER: CAR DOOR WAITING

The use of this parameter is to have a delay-time for the car-door-contacts in the safety-circuit. When the time is over, there is an interpretation, if the door is open or closed. If you have old door contacts in the safety circuit of the cardoor, you must set the time high. The best way is to always use new doorcontacts. The standard value is 0,5 seconds.

PARAMETER: LATER DOOR OPENING

The start of opening the door has a delay-time. The standard value is 0,5 seconds. The maximal value is 8.0 seconds.

PARAMETER: LIMITED DOOR OPENING

Default value is 6.0 seconds.

PARAMETER: DOOR MONITOR OPEN

Within the watch dog time the door must be opened. If this does not take place, then the door is reversed and closed again. The procedure is repeated depending on the entered number of door attempts. The universal time for the monitoring amounts to 13.0 seconds.

PARAMETER: DOOR MONITOR CLOSE

Within watch dog time the door must be closed. If this does not take place, then the door is reversed and opened again. The procedure is repeated depending on the entered number of door attempts. The universal time for the monitoring amounts to 13.0 seconds.

PARAMETER: FURTHER TRAVEL DELAY CAR CALL

If the elevator holds at the stop with car call and other several calls are present, then this time starts after opening the door. Passengers are also able to leave the cab in this time. Upon the expiration of the driving on time inside, the door is closed and drives to the next stop. The standard value is 7,0 sec.

PARAMETER: FURTHER DELAY LANDING CALL

If the elevator holds at the stop with landing call and other several calls are present, then this time starts after opening the door. Passengers are also able to entry the cab in this time. Upon the expiration of the driving on time outside, the door is closed and drives to the next stop. The standard value is 7,0 sec.

PARAMETER: FURTHER DELAY TIME TRIGGER

At expiration of the driving on time the door is closed. If the door is blocked, then it can be decided in this parameter whether after the door reversion the driving on time is started again. The standard value is NO.

PARAMETER: DOOR RESERVE DELAY

If the door is closing and it should be reversed, meaning it should be opened, then you need a delay time to prevent a mechanical damage of the door. The standard value is 0,5 seconds.

PARAMETER: DOOR ENGINE 1/2/3 AT STANDBY OFF

In parameter you can select the time if the door engine does not work and the cab stands with closed doors. You can use this preference if you choose the parameter „Door engine“ and actively select the attitude „always“. (Parks-Standby-Ready)

PARAMETER: DOOR STANDBY MAIN

If there are no car- and landing-calls present in the elevator controller, then the lift is in the Stand-By for future calls. In this condition you can choose for the door between open or close. The standard value is open.

PARAMETER: DOOR ENGINE INSPECTION

In this parameter you can choose whether with manipulation of the inspection controller the door is headed for. However you can operate the door controller over a separate control.

PARAMETER: DOOR OPEN**Selective together**

Both buttons are parallel. If you push of a button (Button1/ Button2), so opens the last running up to door. When both doors are closed and you push the button (Button1/ Button2) so opens only that door, which are last closed.

Together

Both buttons are parallel. Both doors open by the pushing of the button (Button1/ Button2)

Single

Button-1 opens Door-1, Button-2 opens Door-2

Selectively individually

Both buttons are running individually. If you push of a button (Button1/ Button2) , so opens the last running up to door. When both doors are closed and you push the button (Button1/ Button2) so opens only that door, which was last closed.

PARAMETER: BUTTON HOLDTIME

If a time is registered with this parameter, and the load time tracer operates, then the door can run not for the adjusted time. During the load time if the load time tracer is pushed, then the load time is interrupted and the door closes. The range of values for the load time extends between 1 and 600 seconds.

PARAMETER : HOLDTIME FUNCTION

In that parameter you can choose between "single" and "together". Together means that a load time tracer is responsible for both door sides. Single means that two load time tracers, which react separately for the two door sides.

PARAMETER: BUTTON DOOR CLOSE FUNCTION

In that parameter you can choose between **single**, **together** and **selective**. **Together** means that the Door-close-button, which is connected to Input of the EIT-device, is responsible for both door sides.

Single mean that you need 2 Door-close-buttons, which react seperately for the two door sides.

During the setting **selective**, only one door button is attached during a selective door control. The reaction of the button is always arranged the last door movement at Door 1 / Door 2. The standard value is **together**.

PARAMETER: BUTTON DOOR CLOSE REACTION

At this parameter you can choose the delay-time, when the push-button door-close is active.

PARAMETER: DOOR CONTROL ATTEMPS

At this parameter you can choose how many attempts you can make to close or open the door, before there it would show a door-fault. The standard value is 3 attempts.

PARAMETER: DOOR OPEN TIME

If you have a car-door without endswitches, you can choose the parameter's time, when the ZR-Unit shows you that the door is open. Please measure the time, which the doors need to open.

PARAMETER: DOOR OPEN

There are two possibilities – automatically -> Normal Function or Only with Door Open-Push-Button.

PARAMETER: DOOR CLOSE

There are two possibilities – automatically-> Normal Function or Only with Door Close-Push-Button.

B11- Table of Entrance

Menu B11 is active only if you choose in menu “ **A Liftparameter/ A3 Shaft/ A3.4 Door Sides**” the option “**3 Door Sides**”. For every floor, there are three sides prepared. Now you can decide, which door really exists.

	<p>B11 Table of Entrance</p> <table border="1"> <tr> <td>B11 Door-1</td> <td>E01-16</td> </tr> <tr> <td colspan="2">*****</td> </tr> <tr> <td colspan="2">^</td> </tr> <tr> <td>Esc</td> <td>Enter</td> <td>Value</td> </tr> </table> <p>Here the existing doors are set by the star, or by the - away.</p> <p>(* Door exist, - No door)</p>	B11 Door-1	E01-16	*****		^		Esc	Enter	Value
B11 Door-1	E01-16									

^										
Esc	Enter	Value								

B12- Saftey Photocell

PARAMETER: SAFETY PHOTOCCELL

Setting Saftey Photocell: At an elevator with a shaft door without a car door the entrance “safety photocell” can be seen. In the stop or standard drive, i.e. the jets of the safety photocell are not interrupted, meaning that landing and car calls are accepted and progressed. If there is an interruption of the safety photocell, then the input safety photocell is deactivated at the FKR. As a result all callings are erased. The drive is only possible with car calls. The landing calls are not possible.

Setting CEDES: In this setting, you can support the system CEDES LI.

- A. Testing the saftey photocell also before lowering travel
- B. No lowering travel, if there was a break in the journey of the saftey photocell before. Only possible after a reset at the input channel of function E254.
- C. No releveing, if there was a break in the journey of the saftey photocell before. Only possible after a reset at the input channel of function E254.
- D. Locking after there was a break in the journey of the saftey photocell, except when releveing.
- E. When CEDES Li, after saftey photocell interruption and subsequent reset the elevator can return with car or landing calls.
- F. As long as the input (E187 = 0), no operation is applied, and the landing door is open is in the floor, then you can releve with open doors.

Setting DUOMETRIK: This setting takes the requirements of the DUOMETRIK Li safety light curtain into account.

- A. Test the light grid with each ride.
- B. No lowering, if a break in the light grid existed before. Only possible after a reset to input with function E254
- C. No catch-up, if there was a break in the light grid before. Only possible after a reset to input with function E254.
- D. Blocking after each light curtain interruption while driving, except when catching up.

E. Before the start of the journey, the output for LI test is set. If, following this, the SiKr is not interrupted in U11, the error "Li error" occurs.

PARAMETER: PHOTOCELL-MONITOR

With this parameter a time can be set in, which is used, if the photocell is permanently blocked. After the adjusted time the photocell is ignored and the door can be closed, if an instruction to start for the park stop or a command comes for the disconnection of the control and the cab light.

PARAMETER: TRAVEL

With this parameter the function of the ramp trip can be selected. If the entrance IE0 goes on the ITR controller on +24V DC, then the ramp trip is active, i.e. the cab can be positioned with open door over the entrances of the inspection control.

PARAMETER: DOOR CLOSE DELAY

With this parameter a time can be stopped, which represents the photocell time. After the photocell was permanently blocked, the door can be closed after applying the adjusted time. The standard value time is 2,0 sec.

PARAMETER: PHOTOCELL

The entrance behavior of the photocell input can be selected here between closer and opener. The standard value is opener.

PARAMETER: REVERSE CONTACT

The entrance behavior of the reversing contact can be selected here between closer and opener. The standard value is opener.

PARAMETER: PHOTOCELL DOOR OPEN BY HAND

If the parameter is active, then the light barrier evaluation is active if the door was opened manually (U10 / 11 disappears). If the light barrier is now interrupted, the door opens.

B13- Nudging Function

PARAMETER: NUDGING

With this parameter a time can be stopped, which is used, if the photocell is permanently blocked. The function is reserved for the normal-drive of the elevator. After the adjusted time the photocell is ignored and the door can be closed, if a car or landing call is in present.

Parameter: Nudging –Signal

Setting Door-Close&A192/A193: Here is the NUDGE signal in addition to the door-issued command.

Setting Only A192 / A193: Here, only the NUDGE output signal.

B14- Entrance Monitor

PARAMETER: ENTRANCE MONITOR

This parameter activates the function and inputs of the entrance-monitor.

PARAMETER: TIME A START DOOR 1/DOOR 2/ DOOR 3

With this parameter a time can be set in, which is used, if the door closes. After the adjusted time an output is switched, which can serve the lobby-monitor.

PARAMETER: ENTRANCE MONITOR

The entrance behavior of the lobby-monitor can be selected here between closer and opener. The standard value is closer.

B15- Mechanical Lock

PARAMETER: PULSE BUF. DELAY

With this parameter you can choose the delay-time of the lock-magnet in order to compensate contact difficulties of the safety-contacts. The standard value is 500 ms.

PARAMETER: LOCK DELAY ON

This parameter allows a delay on the locked magnet. The standard value is without delay.

PARAMETER: LOCK DELAY OFF

With this parameter you can realize a delay-off-function of the lock-magnet. If you have horizontal car doors, you need this function. The standard value is without delay.

PARAMETER: LOCK HANDDOOR

If you have a handdoor and a horizontal car door, you must pay attention at this parameter. You can choose between the following values "Before the car door" and "After the car door". The standard value is "After the car door".

PARAMETER: OPEN AFTER LOCK

At the use of automatic shaft- and car doors with lock-magnet (electric sword), it is necessary to switch off the lock-magnet, before you try to open the car door. The delay-time for the car door is free programmable.

PARAMETER: MECHANICAL LOCK-OFF

This is the maximum time for activating the lock magnet without travel. The standard value is 30 seconds.

PARAMETER: LOCK-SIGNAL

"Normal" or "Inverted" can be set. With "Normal" the lock is tightened while driving. The default value is "Normal".

PARAMETER: Additional bolt delay

For cabin door locks you can program a delay here. This is required in conjunction with the control of the car door. The factory setting has no delay. A possible average would be the setting of **1,0 seconds**.

B16- Safety-Circuit

PARAMETER: PRE-OPENING DOORS

If the lift-controller has an integrated safety-circuit-pcb, you can activate the function for drive into the floor with open doors. During the drive into the floor, you need the message of the frequency inverter, if the speed is below $v < 0,3$ m/s. Then the door can be opened.

PARAMETER: EARLY PREMAGN.

When this parameter is active and the frequency inverter in use support this function, the motor can be set under voltage during the door-close-motion. After the safety circuit is closed, they can start without time-delay. With this function the floor-delay-time can be reduced very powerful. Activation and commissioning of the function only after consultation with the technical hotline.

PARAMETER: EARLY PREMAGN.DELAY

You can choose a delaytime between 0.8 and 10 seconds. The standard value is 0.8 seconds.

PARAMETER: SAFETY CIRCUITS

In this parameter you can choose the type of the safety-circuit-pcb. The standard value is the safety-circuit-pcb SIS-16. For very old controller-systems, like DAVID-2001 you need the SIS-60 (Rekoba).

B17- Releveling

PARAMETER: RELEVELING

If the elevator controller has the option of a safety-circuit-pcb, you can switch on the function releveling in the software.

Depending on the shaft-copy-system in use, you can make it in a digital system with the programming unit HPG-60 in mm steps, or you have a magnet-system, having to move the magnets.

PARAMETER: NO RELEVELING DISTANCE

This option is only necessary by a digital shaft copy system in use. If you have a standard- or simple-shaft-copy the length of the no releveling distance depends on the overcut of the level-distance 12A and 12B.

The standard value for this parameter is 5 mm. The tolerance in the way is 2,5mm over and 2,5mm under the level mark. The exact value is depending of the art of ropes and the art of use of the elevator.

PARAMETER: MAX. RELEVELING DISTANCE

This option is only necessary by a digital shaft copy system in use. If you have a standard- or simple-shaft-copy the length of the releveling distance depends of the length of level-distance 12A or 12B. The length of the level-distance 12A and 12B must be shorter than the zone area.

The standard value for this parameter is 100mm. This is the releveing-way for one direction.
Please look at the lenght of the door-sword!

PARAMETER: LEVELING UP/DOWN

This option is only possible by a digital shaft copy system in use.

PARAMETER: TIME LIMIT

The parameter of the time limit is crucial for a retrieving procedure. The standard value is 20 sec. In this time interval if the retrieving procedure is not successfully brought to end, then it is broken.

PARAMETER: NUMBER OF ATTEMPS

With this parameter the number of attempts can be limited with the regulation, in order to e.g. protect the hydraulic aggregate against overheating. The standard value is 20 efforts.

PARAMETER: LIMIT AT LEVEL 1

When car is in bottom level, you can choose in this parameter if the number of the releveing-attempts should be reduced, like in the parameter before or with no limit.

PARAMETER: OVERLOAD

With this parameter you can choose, if the releveing-function is active when the overload procedure is present. The standart value is the active releveing, according to the EN81.

PARAMETER: FAULT HANDLING

If there is an error at the releveing-function, the following reactions are possible:

- **“Lowering & Block”**- This value can be used for hydraulic elevators. The car is lowered into the lowest stop place, in order to avoid an uncontrolled lowering.
- **„Block Immediately“** – This value can be used for rope elevators.
- **„Next Floor & Block“** – This value can be used for rope elevators.
- Only **“Fault Entry”** – no blocking.

PARAMETER: FINE –RELEVELING

The releveing will be handled by an external hydraulic-aggregate. Made the following settings:

- 1) ALGI - fine releveing
- 2) BUCHER - fine releveing

PARAMETER: PIEZO-ALERT AT UNLEVELING

If the car is not flush in the range of more than 20mm and smaller than 500mm and this parameter is activated, the piezo alarm rings. The standard setting is **YES**.

B2 Call Options

B21 Car Calls

PARAMETER: DOOR REVERSE CAR CALL

With activation of this function, the closing of the door will be reversed if the control button in the car is pushed at the current landing, i.e. the door stops and reopens.

PARAMETER: SELECTIV CAR CALLS

In this parameter the selective door control activates with a second car call strand. At the floor with front and back door in each case 2 call buttons are present. Button 1/ 2 opens Door1/ 2.

PARAMETER: SELECTIV CAR CALLS

In this parameter you choose the time after which the car calls are deleted, if an error happens. The standard value is 4,0 sec.

PARAMETER: CAR PANEL CONTROLLER

In this parameter you can indicate whether the selective car calls realize with one or two car controller ITR. Up to 8 stops the realization you can use an car calling controller, and/or can alternatively second car calling controller ITR.

PARAMETER: MISUSE PROTECTION

The car calls deletes with the next stop, if 2 following each stops no light barrier interruption takes place.

PARAMETER: BUTTON BUZZER

In this parameter you can indicate whether an acoustic messaging at the push button movement.

PARAMETER: CAR CALL RANGE

In this parameter the lift can be divided into two ranges, which will not leave by car calling.

PARAMETER: CAR CALL LIMIT

Car call border: > xx calls delete

Function: If elevator drive into the floor and more car calls indicated than in the parameter is set in, then the car calls will be automatically deleted.

Parameter: Automatic Carcall Vehicle

At carelevator with two stops, you can set the car calls automatically.

Parameter: Delete call with double-click

If the parameter is active, this call can be deleted by double-clicking on the already set indoor call button.

B22- Landing Calls

GENERAL

Since spring 2007 all controls are delivered with a remote station for the external control. According to standard selective 2-KS control is present (2xA,2xB,2xC and 2xD), as well as further four in- and output channels, which are free provable. Later you can realise functions like landing prioritys and other. The advantage consists of the fact that practically no hardware re-tooling expenditure exists, since all missing functions can be modulated by software.

Standard Setting: In- and Output channels at the Remotestations **ER-2007 / 2009:**

Term	Function at Terminal	Output Menu B71	Input Menu B72
2xA	Fix: Landing Call Up		
2xB	Fix: Landing Call Down		
2xC	Free programabel -> Standard: Landing Call Door 2 Up	A199 c. mess.-D2 Up	E248 l.call-D2 Up
2xD	Free programabel -> Standard: Landing Call Door 2 Down	A200 c.mess.-D2 Down	E249 l.call-D2 Up
97A	Free programabel -> Standard: Floor arrow Door side 1 Up	A201 ER Arrow D1 Up	E00 no function
98A	Free programabel -> Standard: Floor arrow Door side 1 Down	A202 ER Arrow D1 Down	E00 no function
97B	Free programabel -> Standard: Floor arrow Door side 2 Up	A203 ER Arrow D2 Up	E00 no function
98B	Free programabel -> Standard: Floor arrow Door side 2 Down	A203 ER Arrow D2 Down	E00 no function
RJ-12	KW-Bus-Matrix-indicator, free programable Characterset, Scroll of signs & arrows, A1		
RJ-12	KW-Bus-Matrix-indicator, free programable Characterset, Scroll of signs & arrows, A2		
PZ1	Piezo Bruzzer for doorside 1		
PZ2	Piezo Bruzzer for doorside 2		

In the use of remotestation **ER-2005** there are more In- and output functions and floor gongs.

Specialparameter set: In- and Output at the **Send-and Resend Controller:**

Term	Function at Terminal	Output Menu B71	Input Menu B72
2xA	Fix: Landing Call Up		
2xB	Fix: Landing Call Down		
2xC	Free programabel -> Standard: Landing Call Door 2 Up	A199 c.mess.-T2 Up	E248 l.call-D2 Up
2xD	Free programabel -> Standard: Landing Call Door 2 Down	A200 c.mess.-T2 Down	E249 l.call-D2 Down
97A	Fix: Landing Call HS 01		
98A	Fix: Landing Call HS 02		
97B	Fix: Landing Call HS 03		
98B	Fix: Landing Call HS 04		
RJ-12	KW-Bus-Matrix-indicator, free programable Characterset, Scroll of signs & arrows, A1		
RJ-12	KW-Bus-Matrix-indicator, free programable Characterset, Scroll of signs & arrows, A2		
PZ1	Piezo Bruzzer for doorside 1		
PZ2	Piezo Bruzzer for doorside 2		

PARAMETER: DOOR REVERSE LADING CALL

If the door revision is active with the landing call, the door movement reverses with pushing the landing call button at the current stop, then the door continues and opens.

PARAMETER: MODUL

In this parameter you can indicate if landing calls are received at the central unit ZR or remote station ER-XXXX.

PARAMETER: SELECTIVE LANDING CALLS

In this parameter the selective door control activates with a second landing call strand. At the floor with front and back door 2 call buttons are present in each case at the two external call sides. Depending on which of the two door sides the external call pushers are operated, the door opens. The realization is made by the two call entrances 2xC and 2xD at the Remote Station ER-2013 and/or ER-2014.

PARAMETER: ERASE UP AND DOWN CALLS

During the attitude 2KS Up call and Down call can be given false operations both calls, i.e. although only one trip desire is present. Thus it comes to unnecessary movements of the lift. If the parameter opportunity call erasement 2KS is active, then the second call, which is given within a short time interval, is suppressed. With entry into the goal stop both calls are deleted. The standard value for this function is off.

PARAMETER: SAVE TRAVEL

During the attitude 2KS you can select, how long is the driving move on direction.

Parameter: Call acknowledgement Flashing

Here the function can be switched ON and OFF.

Parameter: Button call up to beep

This parameter can be used to specify whether an acoustic acknowledgement is to be made when the button is pressed in the upright position.

Parameter: Button call down to beep

In this parameter it is possible to specify whether an acoustic acknowledgement is to be made when a button is pressed when the elevator should go down.

Parameter: side separation landing calls

With activated side separation, only the landing calls of this door side, as well as the internal calls and Door On of this door side are released when the landing call is set. The other door side remains blocked. It is possible to change the door side after no calls have been received for 4 seconds and the doors have been closed.

Parameter: side separation landing calls storage

If page separation is activated, the existing calls can be saved.

Parameter: Beep when acknowledgement on

Activate the acoustic acknowledgement.

Parameter: Protection against misuse 2KS

If this parameter is active, a simultaneous landing call UP+DOWN on the same floor is prevented. An opposite landing call is accepted only after 2 seconds. (Pincer grip). This only works in group mode and only with ER from SW-Version 00.004.

Parameter: Destination input Acknowledgment on

If the control setting "Quick Dialing" or "2KS + Quick Dialing" is activated, this parameter should be activated.

B23- Car Priority

PARAMETER: CAR CALL HANDLING

At this parameter you can choose between Save or Delete as landing call handling at car priority mode. If deletion is present, after start car priority mode all external calls delete. After switch off this mode, new landing calls can put in. With the mode operation "save", all landing calls remains.

PARAMETER: MAIL TRAVEL**Switch on for the function:**

Door-open-button+Numeric code input over car calls 4-7-1-1 (Messaging: long beep tone). Now the elevator is in the mode "post office trip" and is take out of the group enterprise. As announcement SPECIAL TRIP appears as scrolling text on the cab condition announcement.

A trip can be release now only if you press at the Door-Close+1 Car call. Now the elevator drives into the desired floor and waits there the next call input or scolded after 15 min automatically again into normal operation.

Switch off the function:

After 15 min this mode is deactivated automatically, if no trip took place. The mail travel mode can be deactivated however purposefully by the following code input: Door-Open-button + Numeric code input over car calls 4-7-1-2(Messaging: short beep tone)

B24- Landing Priority

PARAMETER: TIME CALL INPUT

In order to take the lift not for a long time from normal operation, the time for the input of the priority car calls is limited. The standard value is 20 seconds.

PARAMETER: FLOOR CALLS

At this parameter you can choose between Save or Delete as landing call handling at car priority mode. If deletion is present, after start car priority mode all external calls delete. With the mode operation "save", all landing calls remains

PARAMETER: PRIORITY CAR CALL

You can choose between **Separately**, **Collectively**, **Separately softly** and **Separately emptying**.

During the setting **separately** comes the car, with assigns which the landing priority button. The car comes immediately. Car calls are deleted. Both external flash in the case of the time window call input.

With the mode of operation **collective** is needed only a landing priority button for 2 group of elevators. With the first manipulation the next car comes. With a second manipulation the second cab comes.

With **separately soft** a certain elevator comes, the car and landing controller stay. This function used at unequal groups, the cab drive in all floors.

In the case of **separately emptying** a certain elevator comes, but the lift goes out of the external control and the car calls is processed. The input of new car calls is not possible, until the floor is reached the landing priority. This function is used in order to introduce a hindrance drive without reducing the traffic capacity of the group drastically.

Parameter: Priority Car Call – Target Floor (Floor xx)

If the setting has been selected and a corresponding long button press is exerted on a landing call, an outside priority call is made. The prerequisite is that the setting "**Collective**" has been selected in parameter **B24 Forced repetition** and that the **EA6 / 7** target repetition is assigned on the **ER2014**.

The elevator moves as quickly as possible to the pick-up floor from where it was called, without opening the door and, if necessary reversing the direction of travel. Car calls are blocked on the pick-up floor. A further journey is only possible by activating the transponder / key switch function (input function E998).

Only then does the journey take place in the target level. The elevator waits there with the door opened until a car call is placed. After processing the car call, the elevator system goes back to normal operation.

Parameter: Forced overtaking – 5-second outgoing call (handicaped ride)

If the setting has been selected and a corresponding long press on an outside call is made, an external priority call will be made. The prerequisite is that the setting "**Single**" has been selected in parameter **B24 Forced recovery**.

In the parameter, the elevator system can be selected, which serves the outside priority call. A shaft bus can serve up to 2 elevator systems. Therefore, it can be decided by the settings A1 or A2 which elevator operates the priority outside call.

Disadvantage: Since the priority call is triggered by an outside call button, it can possibly happen that a second elevator enters this level.

Parameters: Dangerous goods transport via key switch in the outer panel

The transport of dangerous goods can be activated in this parameter. There are 3 variants available (see following page). The setting is made by selecting the setting (ON-1 or ON-2) and activating the corresponding input and output functions.

Parameter: Dangerous goods transport

The dangerous goods transport can be activated in this parameter. There are 4 variants available.
Settings: OFF - on-1 - on-2 -on-3 - on-4

Parameter: Dangerous goods transport via key switch in the landing panel with manual door closing & opening – option 1

Activation via parameter setting: **ON-1**

The functional sequence is as follows:

1. On the corresponding floor, the elevator is brought in by preference.
2. The special trip is triggered by the "Dangerous goods transport" key switch (E522) on the outside panel by briefly pressing the key switch.
3. The elevator goes up to the floor and the door opens. The elevator is now in the "dangerous goods transport" mode. "SPECIAL JOURNEY" is displayed. The door can only be controlled manually using the door OPEN button (E518..E521).
4. An internal call to the target floor must be pressed. This car call can be corrected by pressing again on another target floor.
5. Now the door must be closed manually using the door CLOSE button (E519). When the door is closed, the elevator moves to the target floor.
6. There is the elevator with the door closed. The door must now be opened manually using the door OPEN button (E518..E521).
7. Now the "Dangerous goods transport" mode can be ended by an impulse on the "Dangerous goods transport" key switch (E522) in the interior panel or another dangerous goods transport can be carried out.

Parameter: Dangerous goods transport via key switch in the car panel with manual door closing & opening – option 2

Activation via parameter setting: **ON-2**

The functional sequence is as follows:

1. elevator is called via the outside pull (key switch) in the outside panel.
2. The elevator enters the floor and the door is opened. Now the elevator is in the "Dangerous goods transport" mode.
3. After that, the elevator can be loaded with the dangerous good. Doors remain open. No interior calls possible.
4. The elevator door is closed by pressing the key switch in the external call panel of the loading station.
5. The operator moves to the destination stop. At the destination stop, the "Dangerous goods transport" key button in the landing call panel is pressed. Only now does the elevator travel to the destination floor and, after reaching it, opens the door automatically.
6. The elevator can be unloaded.
7. After 30 seconds, normal mode is restored. As long as the "Dangerous goods transport" mode is active, "SPECIAL DRIVE" is displayed

Parameter: Dangerous goods transport via key switch in the landing panel with automatic door control – option 3

Activation via parameter setting: **ON-3**

The functional sequence is as follows:

1. The elevator is fetched on the corresponding floor using the key switch outside preference.
The elevator goes up to the floor and the door opens. The elevator is now in the "dangerous goods transport" mode. "SPECIAL JOURNEY" is displayed.
2. The cabin is loaded and the door remains open. There are no internal calls or outside calls possible. The door can only be closed by another impulse at the preferred switch on the same floor.
3. Now the elevator can be picked up again on the target floor by outside preference.
4. The door then opens on the target floor and the elevator can be unloaded.
5. After an adjustable time (B24 parameter time call input), the elevator system returns to normal operation or can be activated by another key switch impulse on the outside.
6. Optionally, in menu B24 the option "B24 forced recovery individually" or "B24 forced recovery individually after emptying" can be selected.

Dangerous goods transport via external pull-out key in group mode (variant-4)

Activation via parameter setting: **On-4**

The function sequence corresponds to variant-3, but in group mode. The following requirements must be met:

1. The following setting must be made in the menu B24 "Forced pickup external pull": collective. The inputs EA1/2 are available for normal collection, EA7 is used for dangerous goods collection.
2. to end the loading process and start the drive, the E1002 input function must be used on the key switch in the car panel.
3. please note the adjustment of the door opening for outside call.

The functional sequence is as follows:

In menu B24 the function "Dangerous goods transport: on-4" is activated. Furthermore, the parameter "B24 Forced fetch: collective, input EA7 (dangerous goods) must be set.

On the corresponding floor, the elevator is fetched by means of an external pull for dangerous goods (pulse at input EA7/8 on ER2014). The key switch-Outside for fetching is only switched as an impulse. The selected elevator moves to the floor and the doors open. Now the elevator is in "Dangerous goods transport" mode. The cab can be loaded and no call input is possible. The doors remain open. The "Dangerous goods" mode can be canceled by another pulse on the outside of the key switch (input EA7/8). The doors are not closed until an impulse has been given via function E1002 (dangerous-goods transport start) in the interior panel and the light barrier was then interrupted (leaving the cab). Now the elevator must be picked up on the destination floor by an impulse at input EA7/8 in the external tableau (external hoist-dangerous goods transport). The elevator retracts, the doors open and the elevator cab can be unloaded. After the time B24 Call input has elapsed and after the light barrier has been interrupted, the "Dangerous goods" mode is terminated and the elevator is back in normal group mode.

As long as the "Dangerous goods transport" mode is active, "SPECIAL DRIVE" is displayed.

Dangerous goods transport-1 via key switch E985 in interior panel**The functional sequence is as follows:**

1. the elevator is called (via normal call button or key switch in the external panel of the special drive control).
2. the special trip is triggered by the key switch "Dangerous goods transport-1" (E985) in the tableau of the car (insert key, lock around, remove key).
3. a visual display follows as confirmation of the activation (display in the landing panel). The elevator is available exclusively for this transport (landing calls of the elevator system and the automatic door closing functions are switched off).
4. after that the elevator can be loaded with the dangerous goods.
5. The elevator door closes when the "Door closed" button in the landing control panel of the loading station is pressed. The button must be pressed until the door is completely closed (visual acknowledgement by lighting up of the acknowledgement ring on the button Door CLOSED input EA7 on the ER2014 & acknowledgement output 28h
6. The operator moves to the destination stop. At the destination stop, the "Dangerous goods transport" key button in the landing call panel is pressed. Only now does the elevator travel to the destination floor and, after reaching it, opens the door automatically.
7. The elevator can be unloaded.
8. the special trip is ended by closing the key switch in the cab panel.
9. the elevator is available again for normal use.

Dangerous goods transport-2 via key switch E1001 in interior panel

The functional sequence is as follows:

1. the elevator is called (via normal call button or key switch in the external panel of the special drive control).
2. the special trip is triggered by the key switch "Dangerous goods transport-I2" (E1001) in the tableau of the cab (insert key, closing impulse).
3. a visual display follows as confirmation of the activation (display in the landing panel). The elevator is available exclusively for this transport (landing calls of the elevator system and the automatic door closing functions are switched off).
4. after that the elevator can be loaded with the dangerous goods.
5. The elevator door closes when the key switch in the landing call panel (input EA6) of the special travel control of the loading station is actuated. The key switch must be actuated until the door is completely closed (optical acknowledgement via output 28h on ER2014).
6. The operator goes to the destination stop. At the destination stop, the "Dangerous goods transport" key button (input EA6) is pressed in the landing call panel. Only now does the elevator travel to the destination floor and open the door automatically after reaching it.
7. the elevator can be unloaded.
8. the special trip is ended by another impulse of the key switch in the cab panel (E1001).
9. the elevator is available again for normal use.

B25- Group

FUNCTION

The group control works according to the principle „flying of the master“ to take over the group control meaning that each central computer (ZR) is able to take over the group control. It is possible to interconnect a maximum of 8 central computers by the group bus and to realize thus groups of eights.

One of the central computer takes over the function of the master, where ZR is the master is unimportant. The group master fails or switches off, so automatically another central computer takes over this function. By the group bus all branches of landing call, at which the remote station is tied up, are connected with all central computers. Thus all ZR has each other the full access to all remote station independently of. The elevator bus is used physically on that kind of industrial condition RS485 on one high-speed minutes runs.

INFORMATION EXCHANGE:

The lining up landing calls are read in by the group master and distributed to the central computers (elevators) the available distributes. With the distribution information about door times, track curves and floor distances of the individual lifts is considered. The master knows exactly, how long a trip lasts the door in the started goal stop from floor X to floor Y, how long it lasts, to open itself and additionally the master knows the average driving on the time in this stop place. Further are well-known the master all lying close interior and other calls well as the loading condition of all elevators. All these information makes an intelligent, optimal traffic management possible.

CALL DISTRIBUTION:

A new landing call is accepted, the group master with the above mentioned information from all lifts the available will measure exactly, which elevator this landing call in the indicated driving direction fastest to serve can pass and the landing call on to this elevator. A fully loaded elevator will start e.g. no landing call, if in these goal floor the elevator has no car calls.

The landing call distribution as well as the exchange of all above mentioned information about the status of the group elevators in real time 10 times per second one updates. That means the fact that landing call this already assigned is e.g. removed from the elevator No.1 again and is assigned to the elevator No.2, if the elevator will be longer No.1 due to a longer driving on time or new interior calls than originally computed on the way.

The driving on direction for each floor is spent on each elevator at the remote station ER.

This should be absolutely represented for each elevator optically, so that the passengers can go before the arrival of the cab to the correct elevator.

ADVANTAGES OF THE STRATEGY

A direct entry and a mechanism of kind of snapping (premagnetion last to the door close motion) the group concept can be supported by the regulation. The advantages of an optimized call dispatching under consideration of the condition model of the single elevators result in the thereby:

- Even extent of utilization of all elevators and balanced energy balance of the individual lifts
- Shorter waiting periods in the individual floors and dynamic adjustment to the call arising
- High availability of the group system
- Optimized processing of the external calls guarantees shortest drives

PARAMETER: DOOR DISTURBANCE AFTER

If door handicaps in a stop of the lift arise, e.g. to photoelectric cell blockings, then the plant goes to applying the adjusted time out of the group enterprise. Other lifts can take over the processing of the available calls and start the blocked stop.

PARAMETER: ALLOCATION OF THE ENTRANCES AND EXITS FOR THE GROUP ENTERPRISE

Two lifts divide a remote station. On the remote station there are free programmable in- and outputs channels:

Term	Function at Terminal	Output Menu B71	Input Menu B72
2xA	Fix: Landing Call Up		
2xB	Fix: Landing Call Down		
2xC	Free programabel -> Standard: Landing Call Door 2 Up	A199 Mess.LCall-T2 UP	E248 LCall-T2 UP
2xD	Free programabel -> Standard: Landing Call Door 2 Down	A200 Mess.LCall-T2 Dn	E249 LCall-T2 Down
97A	Free programabel -> Standard: Arrow Up, A1	A201 ER Arrow A1 Up	E00 No Function
98A	Free programabel -> Standard: Arrow Down, A1	A201 ER Arrow A1 DW	E00 No Function
97B	Free programabel -> Standard: Arrow Up, A2	A201 ER Arrow A2 Up	E00 No Function
98B	Free programabel -> Standard: Arrow Down, A2	A201 ER Arrow A2 DW	E00 No Function
RJ-12	KW-Bus-Matrix-indicator, free programmable Characterset, Scroll of signs & arrows, A1		
RJ-12	KW-Bus-Matrix-indicator, free programmable Characterset, Scroll of signs & arrows, A2		
PZ1	Piezo Bruzzer for doorside 1		
PZ2	Piezo Bruzzer for doorside 2		

In the case of use the remote station **ER-2009** are free in- and outputs channels and integrated floor gong outputs.

Term	Function an the terminal	Output Menu B71	Input Menu B72
EA1	Fix: Priority Call A1 Door 1		
EA2	Fix: Priority Call A2 Door 1		
EA3	Fix: Indicator Out of Order elevator A1		
EA4	Fix: Indicator Out of Order elevator A2		
EA5	Fix: Indicator Spezial Drive elevator A1		
EA6	Fix: Indicator Spezial Drive elevator A2		
EA7	Fix: Priority Call A1 Door 2 Setting at 09-2013 Version 1.14g		
EA8	Fix: Priority Call A2 Door 2 Setting at 09-2013 Version 1.14g		
330-31	Piezo Bruzzer for elevator A1		
332-33	Piezo Bruzzer for elevator A2		

These channels can be assigned with certain group functions, and / or determine lifts with their own in- and output functions.

G00	no function	
G01	Landing call door 2 Up	Selective landing call up Door 2
G02	Landing call door 2 Down	Selective landing call down Door 2
G03	Collective priority call	To call the next elevator with priority
G04	Priority landing call elevator 1	To call elevator 1 with priority
G05	Priority landing call elevator 2	To call elevator 2 with priority
G06	Priority landing call elevator 3	To call elevator 3 with priority
G07	Priority landing call elevator 4	To call elevator 4 with priority
G08	Priority landing call elevator 5	To call elevator 5 with priority
G09	Priority landing call elevator 6	To call elevator 6 with priority
G10	Priority landing call elevator 7	To call elevator 7 with priority
G11	Priority landing call elevator 8	To call elevator 8 with priority
G12	Arrow elevator-1 Up	Arrow output Up for elevator 1
G13	Arrow elevator-1 Down	Arrow output Down for elevator 1
G14	Arrow elevator-2 Up	Arrow output Up for elevator 2
G15	Arrow elevator-2 Down	Arrow output Down for elevator 2
G16	Arrow elevator-3 Up	Arrow output Up for elevator 3
G17	Arrow elevator-3 Down	Arrow output Down for elevator 3
G18	Arrow elevator-4 Up	Arrow output Up for elevator 4
G19	Arrow elevator-4 Down	Arrow output Down for elevator 4
G20	Arrow elevator-5 Up	Arrow output Up for elevator 5
G21	Arrow elevator-5 Down	Arrow output Down for elevator 5
G22	Arrow elevator-6 Up	Arrow output Up for elevator 6
G23	Arrow elevator-6 Down	Arrow output Down for elevator 6
G24	Arrow elevator-7 Up	Arrow output Up for elevator 7
G25	Arrow elevator-7 Down	Arrow output Down for elevator 7
G26	Arrow elevator-8 Up	Arrow output Up for elevator 8
G27	Arrow elevator-8 Down	Arrow output Down for elevator 8
G28	In-Output Elevator-1	Free function at elevator 1
G29	In-Output Elevator-2	Free function at elevator 2
G30	In-Output Elevator-3	Free function at elevator 3
G31	In-Output Elevator-4	Free function at elevator 4
G32	In-Output Elevator-5	Free function at elevator 5
G33	In-Output Elevator-6	Free function at elevator 6
G34	In-Output Elevator-7	Free function at elevator 7
G35	In-Output Elevator-8	Free function at elevator 8

PARAMETER PARKINGZONE

In the menu B25-Group controller it is possible to have above 5 different parking zones. For each parking zone you can put in the priority. The parking zone with the highest priority (lowest number) has the quickest drive in.

- Parkingzone-1: OFF / ON, Priority-1/ ON, Priority-2ON, Priority-5/ ON
- Parkingzone-2: OFF / ON, Priority-1/ ON, Priority-2ON, Priority-5/ ON
- Parkingzone-3: OFF / ON, Priority-1/ ON, Priority-2ON, Priority-5/ ON
- Parkingzone-4: OFF / ON, Priority-1/ ON, Priority-2ON, Priority-5/ ON
- Parkingzone-5: OFF / ON, Priority-1/ ON, Priority-2ON, Priority-5/ ON

For each active parking zone you can put in the day and the time, if the parking zone is active or tilt for a certain time. For the controlling, you can use certain timers (Timer-01 to 10). The timer programming happens in the menu B615-TIMERELAYS.

- Parking zone-1: always active / Timer-01 / Timer-02.... Timer-10
- Parking zone-2: always active / Timer-01 / Timer-02.... Timer-10
-

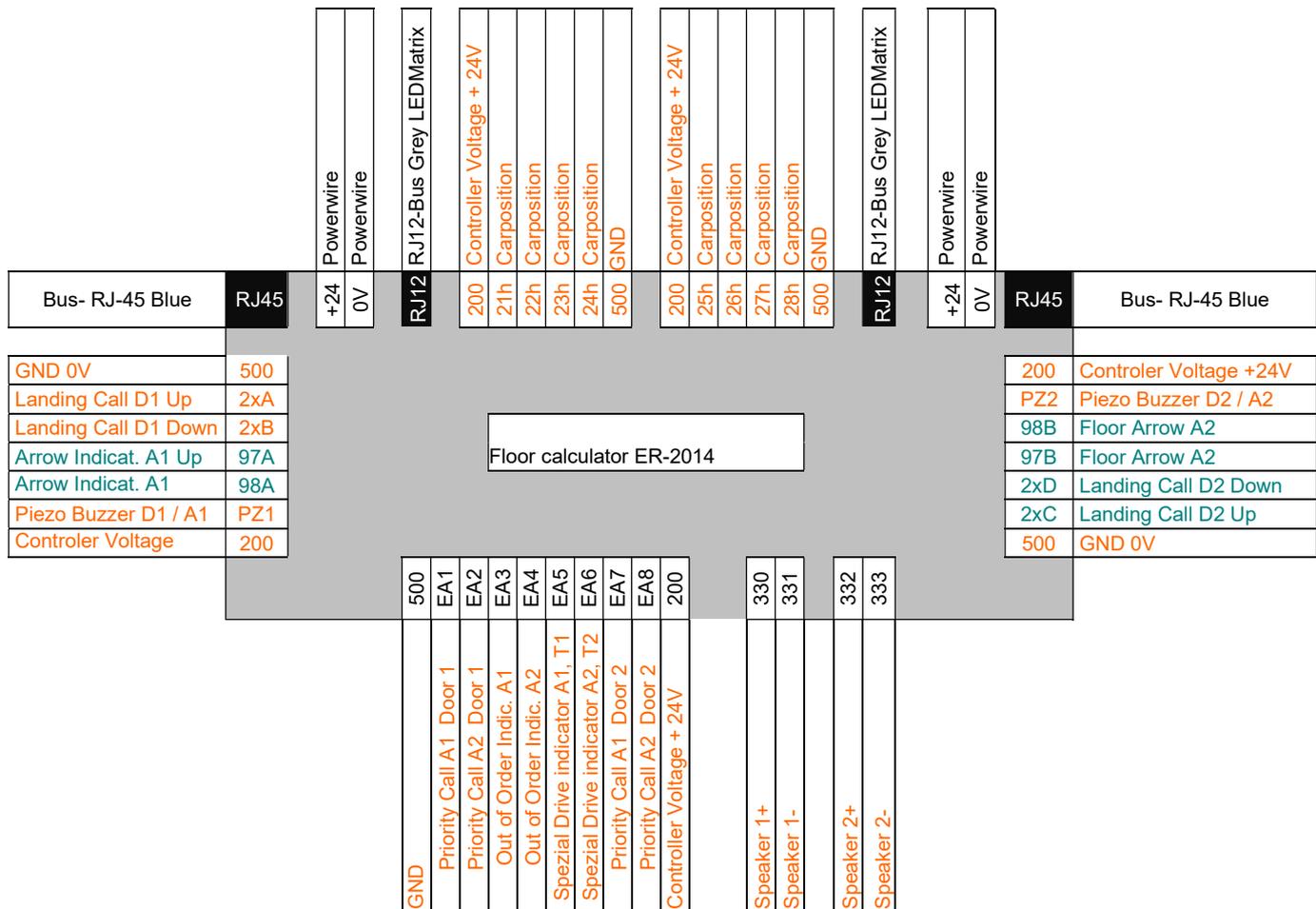
Also, you must put in, which floors are members of the parking zone. The way it is, you must put in the lowest floor and the highest floor of the parking zone. If the parking zone only has one floor, you must put in the same value in the lowest and highest floor.

e.g.:

- Parking zone-1: lowest floor: 02
- Parking zone-1: highest floor: 04
- ...

Function: If there is no elevator in the parking zone, then the next free elevator which has no travel, will drive into the parking zone and will wait until there is a call. If an elevator has an active function Praking Travel, then it cannot choose for the function Parking Zone. This elevator will drive to his Parking Floor, if it has no calls.

The door-constellation (open or closed) will be changed in the menu B606.



The output of the car controller conditions effected with group plants codes. An output in "the 1 of N"-format is not possible, but the Binary code and Gray code are available. The output for arrow is selectable between far trip and direction of travel arrows. The output for gong separately takes place for both plants. At the exits 330 & 331 as well as 332 & 333 only one miniature speaker is attached. Volume and pitch, as well as multiple gong are adjusted over the control.

Each remote station needs its own address in the system. This address is modulated with the ER-2005 over DIP switch on the PCB.

Address input remote station 1. group-bus (for 2 elevators)			
Floor	Number / Setup at the Dipp-switch	Floor	Number / Setup at the Dipp-switch
1	000000	9	001000
2	000001	10	001001
3	000010	11	001010
4	000011	12	001011
5	000100	13	001100
6	000101	14	001101
7	000110	15	001110
8	000111	16	001111
Address input remote station 2. group-bus (for 2 elevators)			
Floor	Number / Setup at the dipp-switch	Floor	Number / Setup at the dipp-switch
1	010000	9	011000
2	010001	10	011001
3	010010	11	011010
4	010011	12	011011
5	010100	13	011100
6	010101	14	011101
7	010110	15	011110
8	010111	16	011111

Parameter: Group Dynamic – Travel Time Floor

In this parameter, the average travel time is specified between two floors. Together with the holding time can be the approximate travel time for an elevator installation with the present calls extrapolate.

Parameter: Group Dynamic – Stop Time Floor

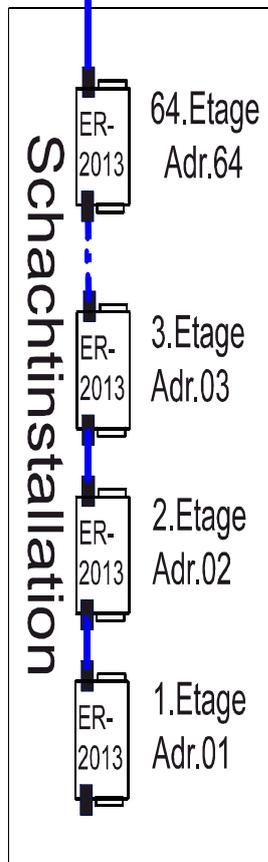
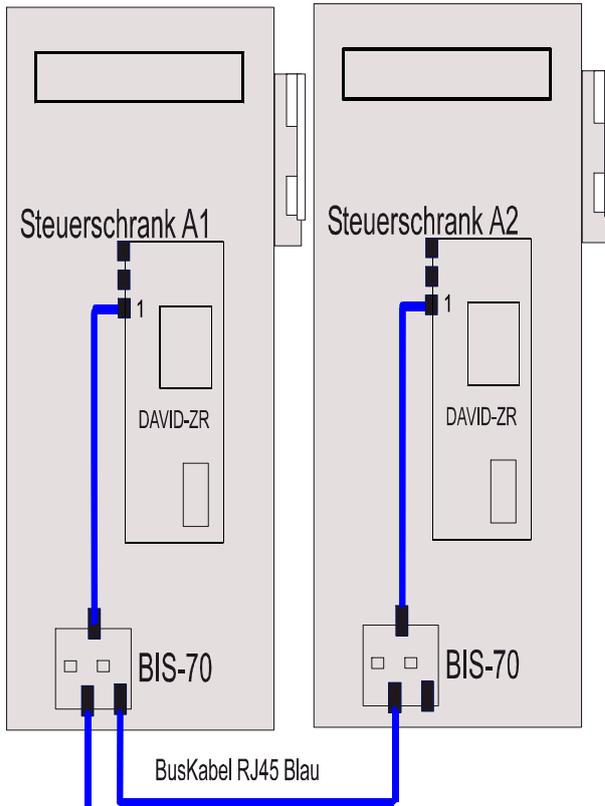
In this parameter, the average hold time is specified in the floor. Along with the travel time can be the approximate travel time for an elevator installation with the present calls extrapolate.

Parameter: Group Dynamic – Call Sharing

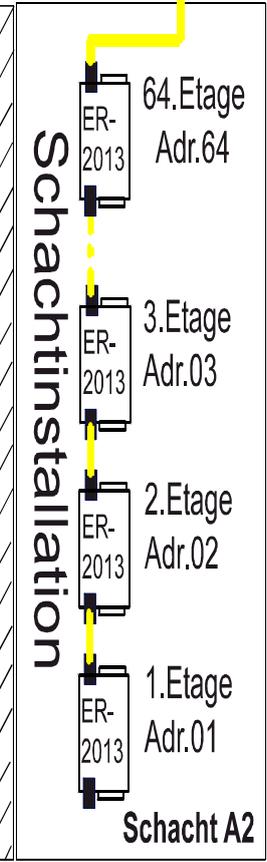
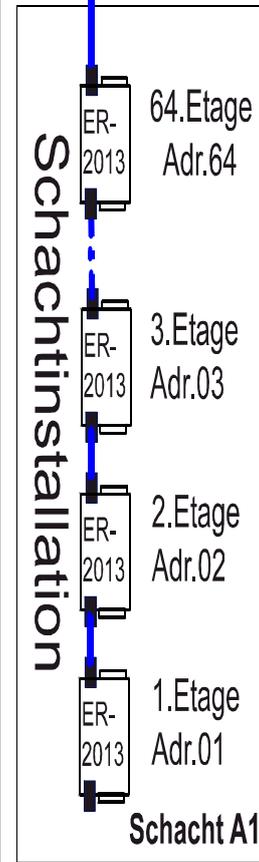
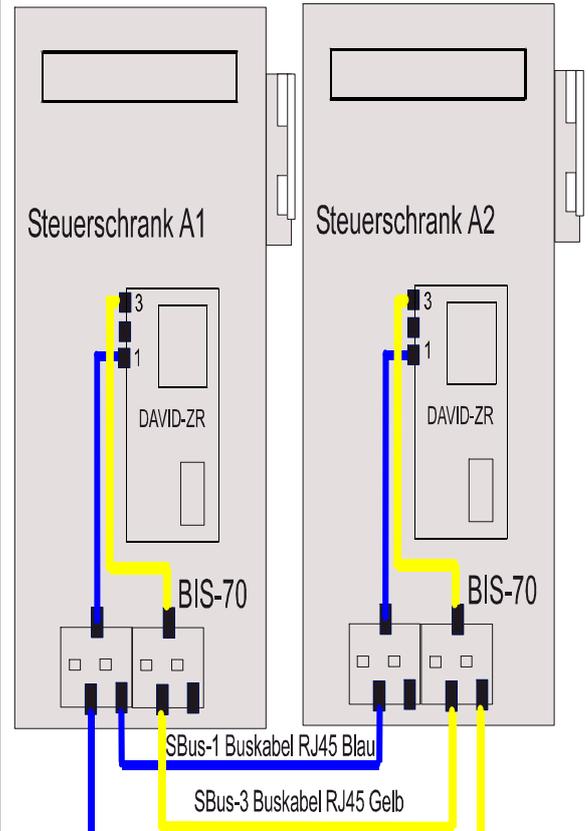
Call distribution processing can be performed in three basic settings: ECO ("energy saving") - NORMAL - DYN. ("dynamic"). The basic setting is "Normal". The ECO and DYNAMIC settings can be weighted between 1 and 5.

ECO - Mode	Groupdynamometer	DYNAMIK - Mode
<p>If the ECO setting has been selected, an attempt is made to distribute the call to an elevator that is already in motion.</p> <p>The higher the numerical value, the later a remote elevator will intervene.</p>		<p>With the DYNAMIC setting, a standing elevator is preferred for call distribution.</p> <p>The higher the numerical value, the faster an elevator located further away will intervene.</p>

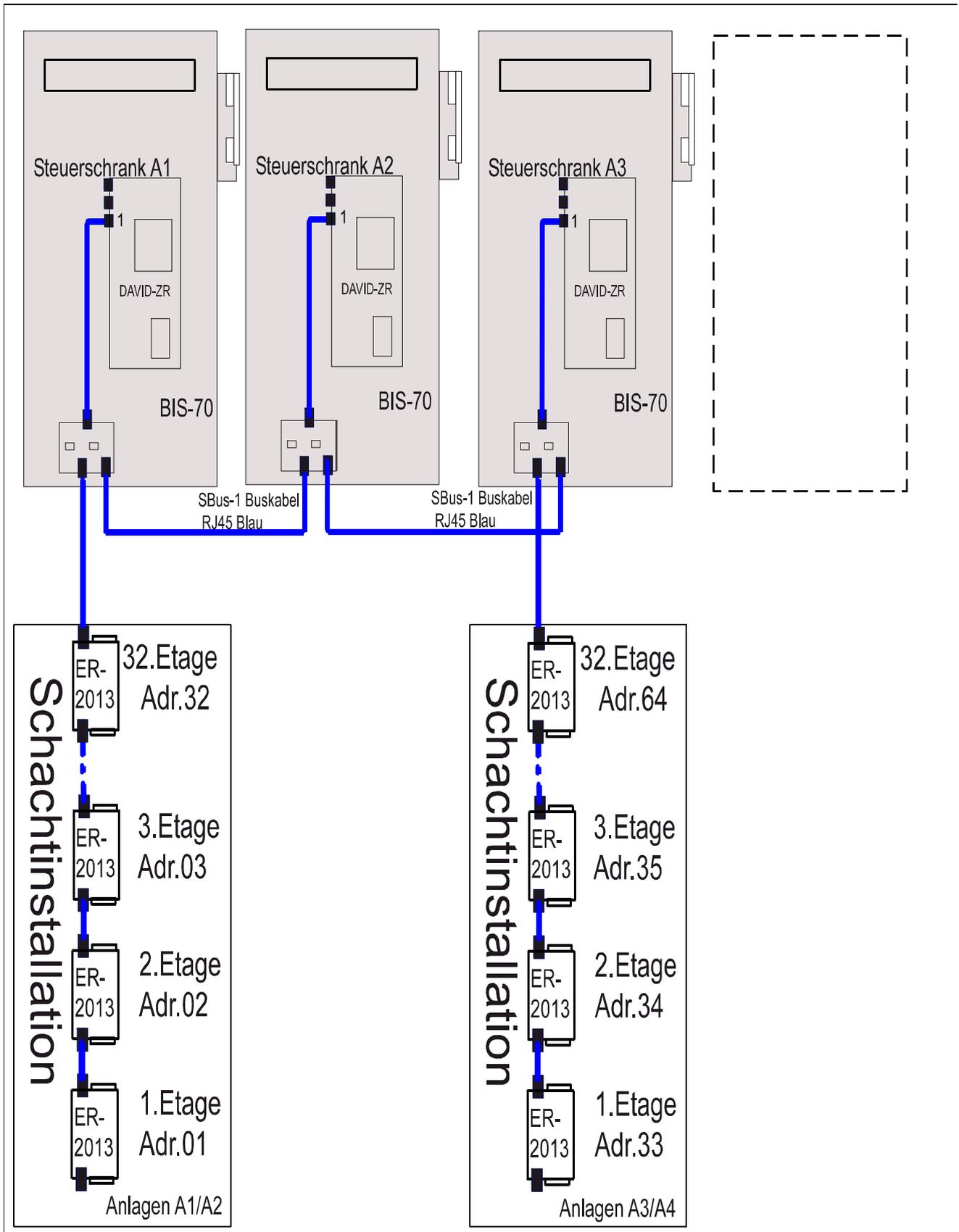
Shaft bus wiring with remote station ER-2013 with a double group with common shaft:



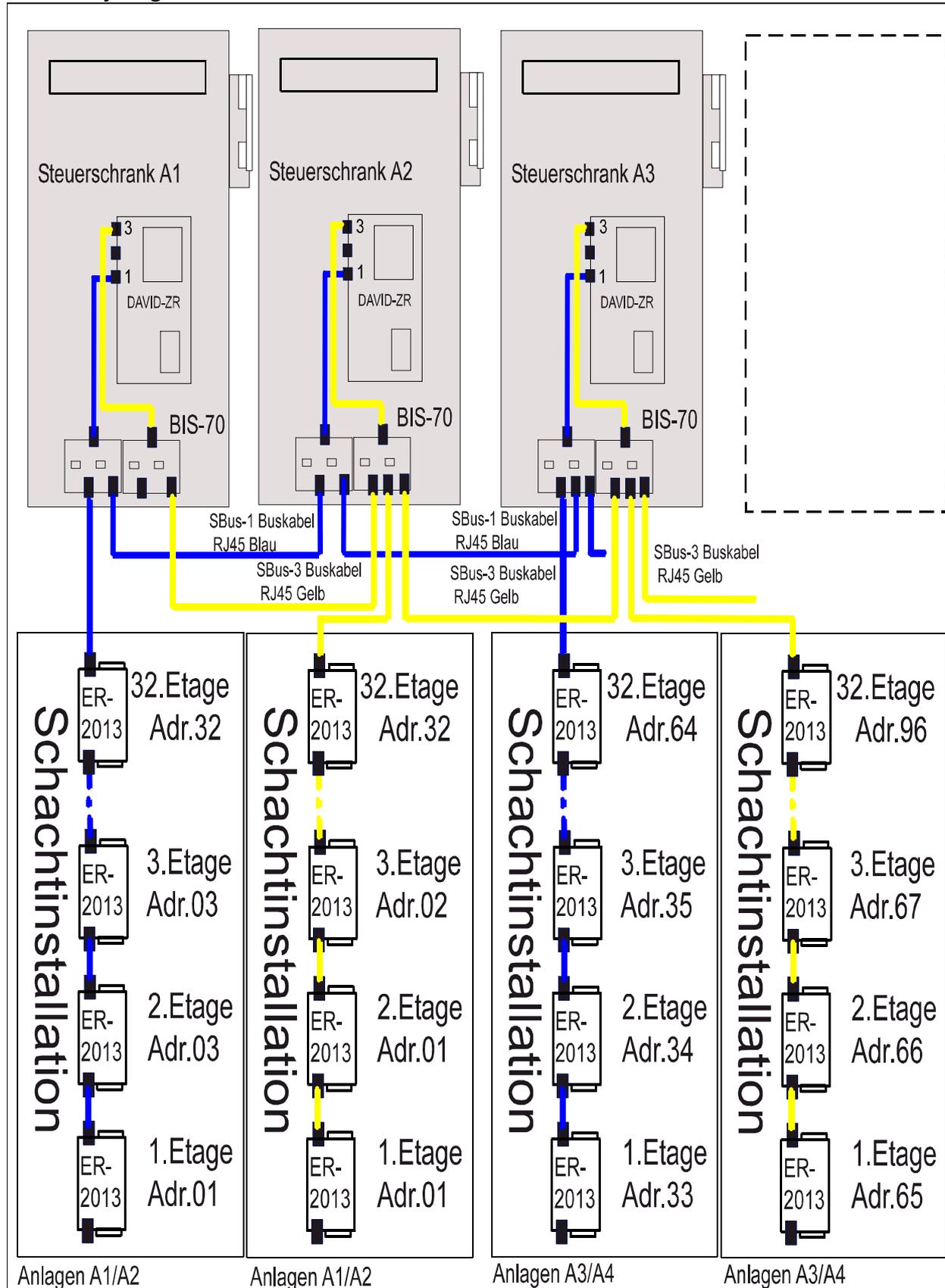
Shaft bus wiring with remote station ER-2013 with a double group with separate shafts:



Shaft bus wiring with remote station ER-2013 with a 3- or 4-member group with common shafts to 32 floors:



Shaft bus wiring with remote station ER-2013 with a 3- or 4-member group with separate / very large shafts to 32 floors:



B3 Drive

Contactor switching and Drive-diagram of hydraulic elevators

In principle three pre-signals are sufficient for the hydraulic elevator control, because with the directions also the slow speed V0 is published.

Des.	Pre Controlling	Hydraulics	Robe Frequency	Robe Unregulated
5	K31	K11/K11A Up-Contactor	K3 Drive Contactor	K1 Up-Contactor
3	K32	K2/K2A Down-Contactor	K3 Drive Contactor	K2 Down-Contactor
7	K33		K5 Main Contactor	K3 Quick-Contactor
9	K34	K12/K13 Changeover S-D	K7-Brake Contactor	K4 Slow-Contactor

Compare of the contactor switching of different types of drives.

Des.	Drive Instructions	Hydraulics	Rope Frequency Regulated
Down		Direction Down	Direction Down
Up		Direction Up	Direction Up
Vins		Speed Vi	Speed Vins
Vn		Speed Vn	Speed Vna
V0		Speed V0	Speed V0
V1		Speed V1	Speed V1
V2		Speed V2	Speed V2
V3		Drive K73	Speed V3

Compare of the drive commands of different types of drives.

B30 – Hydraulic – Drives

PARAMETER: START

In this parameter, you can choose two values, namely “Star/ Delta“ and “ Softstart”.

PARAMETER: S/D-REVERSE TIME

This parameter represents the reverse time between star-protection and triangle-protection. The standard value is 2 seconds.

PARAMETER: COMMAND UP DELAYED ON

If you activate this parameter, you can switch on the up-command with a delay-time. The standard value is 100 ms. You need this function in connection with Bucher-LRV-Regelkarten.

PARAMETER: DIRECTION UP DELAYED

The parameter has a option to switch on retarded the up direction. The standart value is NO.

PARAMETER: COMMAND UP DELAYED

If you activate this parameter, you can switch off the up-command with a delay-time. The standard value is 400 ms.

PARAMETER: START WITH DOOR CONTROLLING

If you activate the parameter, you can start the hydraulic-pump in the same time how the motion to close the door begins. In the standard-parameter set the function is not activated.

PARAMETER: INSPECTION SPEED

The are 3 possibilities:

- 1.) SPEED SLOW
- 2.) SPEED Vins
- 3.) SPEED HIGH

PARAMETER: TIME TO GO DOWN

The hydraulic elevator must lower late after first of all 15 minutes to the lowest stop place. The time is adjustable by this parameter.

PARAMETER: FAULT HANDLING

By the menu attitude can be selected, as the control has to react to error messages of the regulation.

- a. “NO“- regulation does not have a disturbance exit.
- b. “STOP + LOWERING“- If there is an error in the regulation, the driving instructions are taken back and the calls are deleted. The car is lowered into the lowest stop place.

PARAMETER: TRAVEL DOWN AT OVERLOAD

Is overload in the car it must be decided at expiration of the sinking time whether lower or not. The standart value is NO.

PARAMETER: SIGNAL TOP OF RAMP

After reaching „the Top Of the Ramp“ on the softstart unit approach equipment this further announced to the regulation. During the attitude of kind of condition this parameter is active.

PARAMETER: COMMAND DOWN DELAYED ON/OFF

The parameter contains the alternative to switch straightening on retarded. This is needed with the employment of a return flow prevention valve (e.g.ALGI-S5). The standard value is NO.

PARAMETER: DETENT END SWITCH TOP

In this parameter you can choose, if the elevator blocks after leaving upper end switcher and the following emergency sinking. Default value is YES.

PARAMETER : LIFT BUS

After market introduction of the device SAG-90 it is possible that the controller communicates by bus with control.

PARAMETER : WARM UP DRIVE

With this parameter you can operate the temperature input (Assigned with function E492 temperature Warm Up Drive). A drive starts to warm up the oil.

PARAMETER : WARM UP DRIVE AFTER XX MINUTS

In this parameter you can choose the start time of the Warm Up Drive. Start time is always after lower drive. The maximum time is 1250 minutes.

B31 – Hydraulic Regulated

PARAMETER: START

In this parameter, you can choose two values, namely “Star/ Delta “ and “ Softstart”.

PARAMETER: S/D-REVERSE TIME

This parameter represents the reverse time between star-protection and triangle-protection. The standard value is 2 seconds.

PARAMETER: COMMAND UP DELAYED ON

If you activate this parameter, you can switch on the up-command with a delay-time. The standard value is 100 ms. You need this function in connection with Bucher-LRV-Regelkarten.

PARAMETER: DIRECTION UP DELAYED

The parameter has an option to switch on retarded the up direction. The standard value is NO.

PARAMETER: COMMAND UP DELAYED

If you activate this parameter, you can switch off the up-command with a delay-time. The standard value is 400 ms.

PARAMETER: START WITH DOOR CONTROLLING

If you activate the parameter, you can start the hydraulic-pump in the same time how the motion to close the door begins. In the standard-parameter set the function is not activated.

PARAMETER: INSPECTION SPEED

Speed:

- 1- Speed slow
- 2- Speed Vi
- 3- Speed high

PARAMETER: TIME TO GO DOWN

The hydraulic elevator must lower late after first of all 15 minutes to the lowest stop place. The time is adjustable by this parameter.

PARAMETER: FAULT HANDLING

By the menu attitude can be selected, as the control has to react to error messages of the regulation.

- a) “NO”- regulation does not have a disturbance exit.
- b) “STOP + LOWERING”- If there is an error in the regulation, the driving instructions are taken back and the calls are deleted. The car is lowered into the lowest stop place.

PARAMETER: TRAVEL DOWN AT OVERLOAD

Is overload in the car it must be decided at expiration of the sinking time whether lower or not. The standard value is NO.

PARAMETER: SIGNAL TOP OF RAMP

After eaching „the Top Of the Ramp“ on the softstart unit approach equipment this further announced to the regulation. During the attitude of kind of condition this parameter is active.

PARAMETER: COMMAND DOWN DELAYED ON/OFF

The parameter contains the alternative to switch straightening on retarded. This is needed with the employment of a return flow prevention valve (e.g.ALGI-S5). The standard value is NO.

PARAMETER: DETENT END SWITCH TOP

In this parameter you can choose if the elevator blocks after leaving upper end switcher and the following emergency sinking. Default value is YES.

PARAMETER: LIFT BUS

After market introduction of the device SAG-90 it is possible that the controller communicates by bus with control.

Parameter: Warm Up Drive

With this parameter you can operate the temperature input (Assigned with function E492 temperature Warm Up Drive). A drive starts to warm up the oil.

Parameter: Warm Up Drive after XX minuts

In this parameter you can choose the start time of the Warm Up Drive. Start time is always after lower drive. The maximum time is 1250 minutes.

Parameter : Command Output

In this parameter it can be selected between **Standard** NGV-A3 attitude and **Oildynamic NGV-A3** attitude. If Oildynamic is selected then pilot control will be printed only if input E494 is on.

Attention! Also set the Bucher iValve setting for the regulated **BLAIN block SEV!**

In the case of the Bucher-iValve setting, **all commands with a high level + 24V are output** (-> note the setting on the **iCon!**):

Pin Bucher iCon	BUCHER iValve Function	DAVID D613 output function	PIN-D613 (Default)
X7.6	Command K1 Fast UP	A181 UP Fast	ZE 2
X7.5	Command K2 Slowly UP	A176 Down Slowly, UP catch up	ZE 0
X7.4	Command K3 Fast Down	A182 Down Fast	ZE 4
X7.3	Command K4 Slowly Down	A175 Down Slowly, Down catch up	ZE 1
X7.2	Command K5 Inspection	A177 Inspection	ZE 5
X6.4	Command K6 intermediate speed	A180 Intermediate speed	ZE 3
X7.2	0V GND mass	0V GND mass	500

The following output messages of the Bucher iCon are reported to the D613 (**all messages with high level + 24V**):

Pin Bucher iCon	BUCHER iValve Function	DAVID D613 input function	PIN-D613 (Default)
X2.1	Relais Error SIU	E008 Controller fault	ZC 3
X2.2	Relais Error SIU	Control voltage +24V DC	200
X2.5	Relais s1 Overload	E011 Overload	ZB 2
X2.6	Relais s1 Overload	Control voltage +24V DC	200
X2.8	Relais s2 Reduced pressure	E434 Reduced pressure	ZE 7
X2.7	Relais s2 Reduced pressure	Control voltage +24V DC	200

The following output messages of the Bucher iCon are reported to the D613 (**all messages with high level + 24V**):

Pin Bucher iCon	BUCHER iValve Function	DAVID D613 input function	PIN-D613 (Default)
X10 +SMA	Monitoring emergency stop Down UCM	E495 UCM Status	ZE 6
X10 GND	0V GND mass	0V GND mass	500

Parameter Feedforward K32 delayed OFF

The SAG-90 is switched off with a delay. The possible time range is 10 to 3000 ms.

Parameter Commando Vi(A177) inverted

For normal electronic ALGI RZRS 2.0 it is necessary to invert the commando Vi.

B32 – Hydraulic Variable Frequency

PARAMETER : V0 DELAYED OFF

The parameter contains the attitude to switch the speed V0 off retarded. The standard value is NO.

PARAMETER : MAIN CONDUCTOR DELAYED OFF

The parameter contains the attitude to switch off the main contactors retarded. The standard value is 600 ms.

PARAMETER: DIRECTION DELAYED OFF

Time-delayed will the removal of the driving direction, in order to ensure stopping without jerking. The deceleration time is adjustable in the menu. As default value are deposited 1500 ms.

PARAMETER : RELEVELING SPEED

Some regulation cannot display speed Vn for post-correction. It can be selected by the menu attitude whether the releveling time is accomplished with the speed Vn or V0.

PARAMETER: INSPECTION SPEED

Some regulation has no inspection speed Vi. It can be selected by the menu attitude whether the inspection speed is accomplished with the speed Vi or V0.

PARAMETER: TIME TO GO DOWN

The hydraulic elevator must lower after 15 minutes to the lowest stop place. The time is adjustable by this parameter.

PARAMETER: FAULT HANDLING

By the menu attitude can be selected, as the control has to react to error messages of the regulation.

- a) "NO"- regulation does not have a disturbance exit.
- b) "STOP + LOWERING"- If there is an error in the regulation, the driving instructions are taken back and the calls are deleted. The car is lowered into the lowest stop place.

PARAMETER: TIME TO GO DOWN AT OVERLOAD

Is overload in the car, it must be decided at expiration of the sinking time whether lower or not. The standard value is NO.

PARAMETER: BLOCKING UPPER LIMIT-SWITCH

If the car was in the upper limit switch in normal operation, then the car is lowered and closed into the lowest floor. During the attitude of kind of condition this parameter is active.

PARAMETER: COMMAND OUTPUT

With this parameter can be adjusted, as the expenditure for command takes place to the regulation.

Two variants are available:

- 1) With hydraulic BUCHER SATURN -Alpha
- 2) With hydraulic ALGI AZFR (code output)

PARAMETER: COMMAND DOWN DELAY ON

The parameter has the opportunity to switch on delayed Down Direction. This is needed for usage of reflow preventing valve (ALGI-S5). Default value is NO.

PARAMETER: ELEVATOR BUS

After market introduction of the device SAG-90 it is possible that the controller communicates by bus with control.

PARAMETER: WARM UP DRIVE

With this parameter you can operate the temperature input (Assigned with function E492 temperature Warm Up Drive). A drive starts to warm up the oil.

PARAMETER: WARM UP DRIVE AFTER XX MINUTS

In this parameter you can choose the start time of the Warm Up Drive. Start time is always after lower drive. The maximum time is 1250 minutes.

B33- Robe 2 Speeds

CONTACTOR SWITCHING

In general you need four signals for switching.

Term	Pre-Switching		Rope Variable Frequency	Rope 2 Speeds
5	K31		K3 Main Contactor	K1 Up Contactor
3	K32		K3 Main Contactor	K2 Down Contactor
7	K33		K5 Main Contactor	K3 Quick Contactor
9	K34		K7-Brake Contactor	K4 Slow Contactor

1.0 EXPERATION OF TRIP

The trip begins with the control of the high-speed contactor K3 in order to put the current to the fast coil. Time-delayed the up or down contactor activates. The deceleration time is adjustable in the menu. The standard value is 100ms. If the point of delay is reached then it drops to a high-speed contactor and the slow contactor is activated. With reaching the concise signal both contactors break.

PARAMETER : MOTORVENTILATION

Here you can activate the motor ventilation and put in the time. The standard value is off.

PARAMETER : CONTACTOR DELAYED ON

Time-delayed activates the up or down contactor. The deceleration time is adjustable in the menu. The standard value is 100 ms.

PARAMETER : INSPECTION SPEED

In this parameter you can put in the speed for inspection. You can choose quick or slow speed.

PARAMETER : REVERSE TIME OUT

The switching break is adjustable from the change-over of the high-speed contactor to the slow contactor. Factory setting does not plan a break.

B34- Robe Variable Voltage

Contactor Switching

In general you need four signals for switching.

Term	Pre-switching	Rope Variable Frequency	Rope Variable Voltage
3	K31	K3 Drive contactor	K1 Up contactor
5	K32	K3 Drive contactor	K2 Down Contactor
7	K33	K5 Main contactor	K5 Main contactor
9	K34	K7 Brake contactor	K7 Brake contactor

Type	Rope Variable Frequency	Rope Variable Voltage
Up	Direction Up	Direction Up
Down	Direction Down	Direction Down
Vins	Speed Vins	Speed Vins
Vn	Speed Vn	Speed Vn
V0	Speed V0	Speed V0
V1	Speed V1	Speed V1
V2	Speed V2	Speed V2
V3	Speed V3	Speed V3

PARAMETER: MOTOR VENTILATION

A free-provable exit of the central unit and logic unit for the engine ventilation can be selected. The attitude for time can be selected in menu.

PARAMETER: DIRECTION DELAYED ON

Time-delayed activates the up or down contactor. The deceleration time is adjustable in the menu. The standard value is 100 ms.

PARAMETER: MAIN CONSTRUCTOR DELAYED OFF

In order to ensure a stopping without jeking, the direction contactors and net contactor retarded break. The standard value is 600 ms.

PARAMETER: RELEVELING SPEED

In this parameter you can put in the speed for releveling. You can choose speed VN or V0.

PARAMETER: FAULT HANDING

In this parameter you can choose the reaction of the controller, if there is a fault in the inverter-part.

- 1.) „**Interrupt**“ – If there is a fault in inverter, drive-orders and calls will be erased. If there is a new call, the controller tries again to start.
- 2.) „**Block**“ – If there is a fault in inverter, drive-orders and calls will be erased. The controller is blocked. Only a RESET-signal can turn on the controller.
- 3.) „**Block at 2.Fault**“ – If there are two faults in a serie in inverter, drive-orders and calls will be erased. The controller is blocked. Only a RESET-signal can turn on the controller.
- 4.) „**Block at 3.Fault**“ – If there are three faults in a serie in the inverter, drive-orders and calls will be erased. The controller is blocked. Only a RESET-signal can turn on the controller.

B35- Robe Variable Frequency

1.0 Contactor Switching

In principle the frequency-regular rope elevator needs four vat signals.

Bez.	Pre-control	Rope Frequency Managed	Robe Variable Frequency
5	K31	K3 Drive Contactor	K1 Up Contactor
3	K32	K3 Drive Contactor	K2 Down Contactor
7	K33	K5 Main Contactor	K5 Main Contactor
9	K34	K7-Brake Contactor	K7Brake Contactor

The driving instructions are similar to those with tension-regular plants.

Term	Rope Frequency Regulated	Robe Variable Frequency
AB	Direktion Up	Direktion Up
AUF	Direktion Down	Direktion Down
Vins	Speed Vins	Speed Vins
Vn	Speed Vn	Speed Vn
V0	Speed V0	Speed V0
V1	Speed V1	Speed V1
V2	Speed V2	Speed V2
V3	Speed V3	Speed V3

PARAMETER: LIFT BUS

In the case of activation of the parameter regulations (frequency inverter) can communicate over RS 485 connection with the controller. The change-over between the display of the frequency inverter and the control is made by a combination of keys at the HPG60: The left key must remain pressed and then the lowest key is pressed. As selectable software programs are available: the KW liftbus and DCP-3.

The following inverters ar tested and the communication is stable:

Ziehl-Abegg	Zetadyn 2CF/ 2CS 3BF / 3CS & 4xx	authorization DCP-3
Emerson / CT	Commander SP mit DCP-Schnittstelle	authorization DCP-3
Liftequip / ThyssenKrupp	MFC 20 bzw. MFC 30/31	authorization DCP-3

PARAMETER: MOTOR FAN

A free-provable exit of the central unit can be selected for the engine ventilation. The attitude of the time is adjustable in the menu.

PARAMETER: V0 DELAYED OFF

The parameter contains the attitude to switch off the speed V0 retarded. The standard value is NO.

PARAMETER: DIRECTION DELAYED OFF

Time-delayed will the removal of the driving direction, in order to ensure stopping without jerking. The deceleration time is adjustable in the menu. As default value is deposited 2500 ms.

PARAMETER: MAIN CONSTRUCTOR DELAYED OFF

The driving contactors must become retarded turning-off, in order to hold the car with number of revolutions 0, until the brake contactor drops. The standard value is 2500 ms.

PARAMETER: REVELING SPEED

In this parameter you can put in the speed for releveling. You can choose VN or V0.

PARAMETER: FAULT HANDING

In this parameter you can choose the reaction of the controller, if there is a fault in the inverter-part.

- 1.) „**Interrupt**“ – If there is a fault in inverter, drive-orders and calls will be erased. If there is a new call, the controller tries again to start.
- 2.) „**Block**“ – If there is a fault in inverter, drive-orders and calls will be erased. The controller is blocked. Only a RESET-signal can turn on the controller.
- 3.) „**Block at 2.Fault**“ – If there are two faults in a series in inverter, drive-orders and calls will be erased. The controller is blocked. Only a RESET-signal can turn on the controller.
- 4.) „**Block at 3.Fault**“ – If there are three faults in a series in the inverter, drive-orders and calls will be erased. The controller is blocked. Only a RESET-signal can turn on the controller.

PARAMETER: COMMAND OUTPUT

With this parameter can be adjusted, as the expenditure for command takes place to the regulation.

Two variants are available:

- 1) With On and Off command (standart GOLIATH)
- 2) With release and a direction command (DIETZ)

Submenu Speeds (Only with setting CANopen & FU)

This parameter can be used to set how the command output for regulation takes place. There are two variants to choose from:

Parameter „Speed catching up Vn

Here you can set the speed Vn. Factory setting Vn: 00,123m/s“

Parameter „Speed inspection Vi1

Here, the speed is set Vi1. Factory setting Vi1: 00,123m/s“

Parameter „Speed inspection Vi2

Here, the speed is set Vi2. Factory setting Vi2: 00,123m/s“

Parameter „Speed return motion VR

Here the speed is set VR. Factory setting VR: 00,123m/s“

Parameter „Speed evacuation VE

Here the speed is set VE. Factory setting VE: 00,123m/s“

Parameter „Speed entrance V0

Here the speed is set V0. Factory setting V0: 00,123m/s“

Parameter „Speed Between V1

Here the speed is set V1. Factory setting: V1: 00,123m/s“

Parameter „Speed Between V2

Here the speed is set V2. Factory setting: V2: 00,123m/s“

Parameter „Speed end V3

Here the speed is set V3. Factory setting: V3: 00,123m/s“

B4 – Shaft Copy

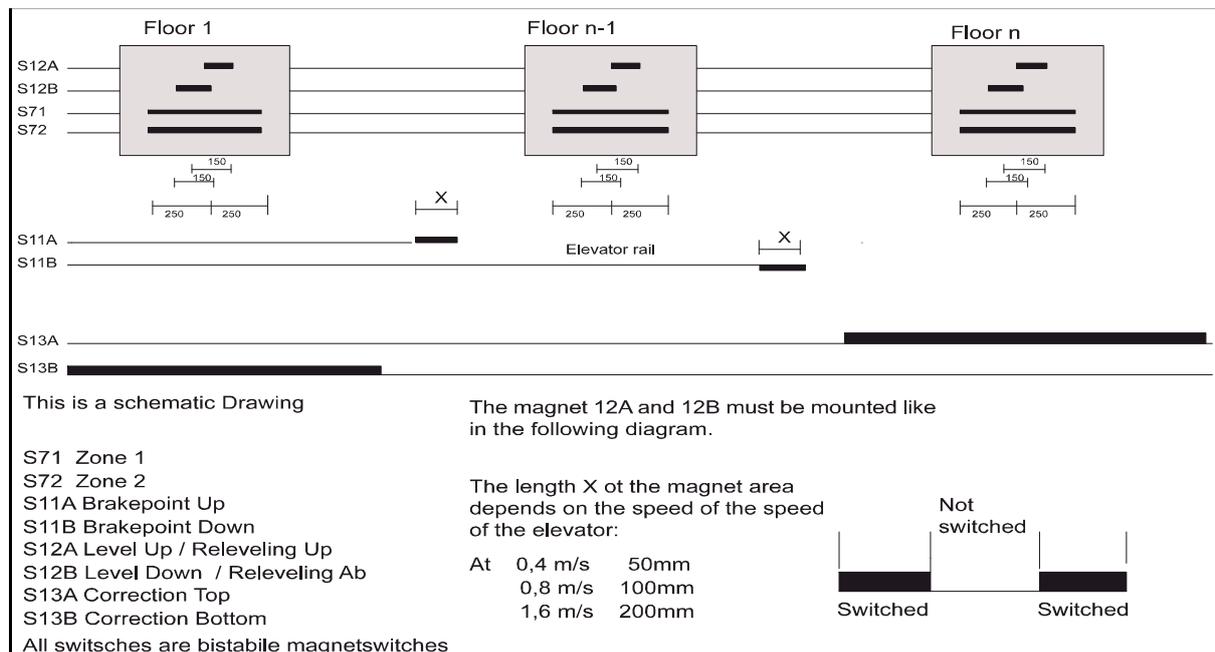
B41 – Standard Copy

1.0 General

The standard-copy is a shaft-copy method, which needs six switches in the shaft.

- S11A Brakepoint Up**
- S11B Brakepoint Down**
- S12A Level Up**
- S12B Level Down**
- S13A Correctionswitch Top**
- S13B Correctionswitch Bottom**

All magnet-switches are bipoosition-switches with the corresponding round-magnet. For the pinning of the magnets you must use the elevator-rail and shaft-flags.



2.0 Leveling

The leveling depends on the direction. With rope-elevators without pre-opening the door the stopping in direction up is with the magnet-switch 12B, and in direction down with the magnet-switch 12A.

ATTENTION!

There may be a partial overlap of the concise magnet fields with concise position. From bottom to top magnet 12B seen always before 12A. Control recognizes the direction, with injury to this rule it comes to the fact that floors are counted wrongly by control.

On hydraulic lifts and cable systems with entrance door is open or readjustment is maintained with the stopping of the counter-aligned.

As long as both concise signals overlap themselves, no post-correction is necessary.

As soon as car more deeply sinks or rises more highly so the concise signal lost and the car is after – adjusted into the opposite direction.

3.0 Brakepoints and Correction

The magnet switches 11A and 11B are the brake-switches to drive into the destination floor. If you are driving from the second floor to the first floor you do not need a brake magnet! You are braking with the correction switch 13B.

The same story is the drive to the last floor. You are braking with the correction switch 13B.

PARAMETER : PULSE BUFER DELAY

Depending on the assigned solenoids and the switching gap the pulse delay-time must be selected. Factory setting at height of 30 ms represents a good average value.

PARAMETER: CORRECTION TRAVEL

If it comes in the shaft copying to false countings, a correction trip goes on. The time of execution can take place "after call input" or immediately in "automatic" mode.

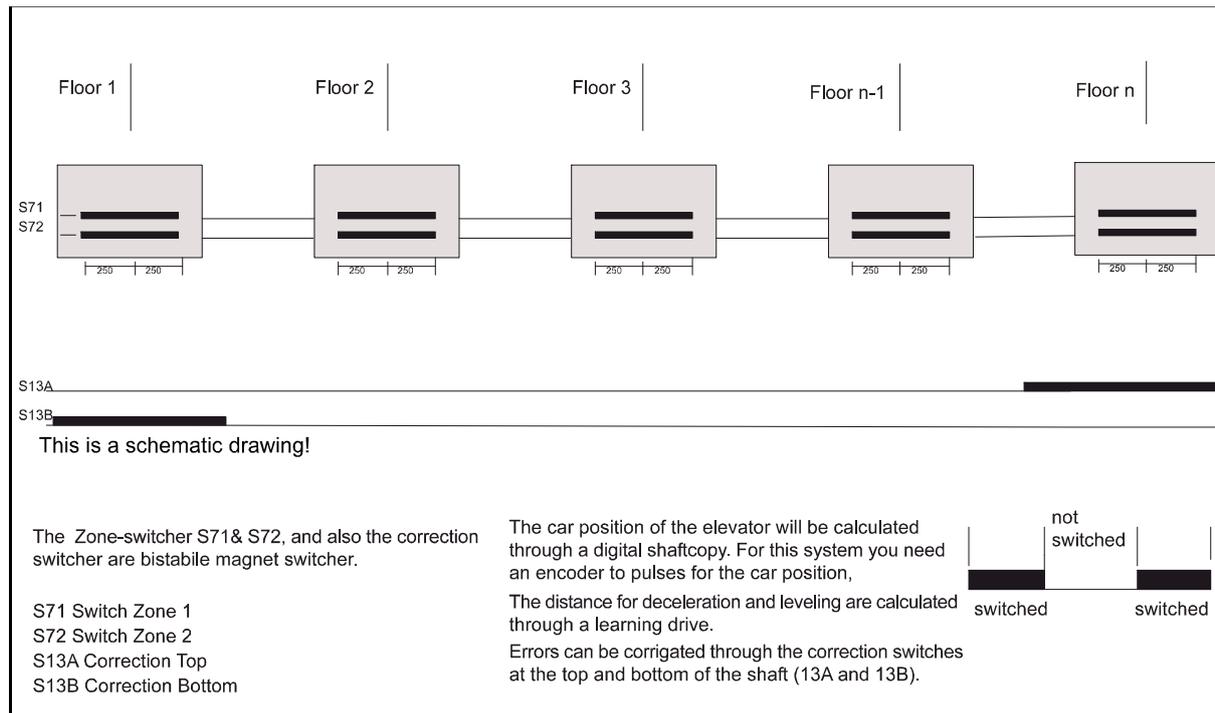
B42 Relative-Copy

1.0 General

The relative-copy is a digital shaft-copy method, which only needs three switches in the shaft.

- S72 Zone 1**
- S72 Zone 2 (Only in case of releveling or pre-opening-doors)**
- S13A Correctionswitch Top**
- S13B Correctionswitch Bottom**

All magnet-switches are bipoosition-switches with the corresponding round-magnet. For the pinning of the magnets you must use the elevator-rail. The pulses for the shaft-copy are coming from a decoder.



2.0 Releveling

After the learn-drive the middle of the Zone-way is the value of the floor-level. This can be correct by the parameter "Leveling" for each floor. A change of the position of the zone-magnets is forbidden. A very concrete description is in chapter **I01-Activation of the digital shaft presentation**.

3.0 Deceleration and Correction switches

The deceleration for the drive into the destination-floor will be managed by a digital shaft-copy. The correction switches are used only for synchronize shaft-copy-system and for a safe deceleration in end-floors in an emergency-situation, like a failure in a digital shaft-copy. A change of the position of the correctionswitches-magnets is forbidden. A very concret description is in the chapter **I01- Activation of the digital shaft presentation**.

4.0 Shaftcopy System with UCM Zone

HSK-90 / HSK46 System

The shaft copy system HSK-90 consists of the shaft and the shaft ESF16 flags SFH16 holders of the respective magnets and mounting hardware.

On the flag, the North magnets are always on top! Each 4 round magnets of a track-form an exterior and an interior zone. The outer zone is responsible for the driveway with the door open, the interior area for catching up / UCM detection. The shaft resolution approximation HSK-90 panel is mounted on the cab roof using the mounting bracket.



At the **HSK46-System** the magnets are mounted directly on the rail.



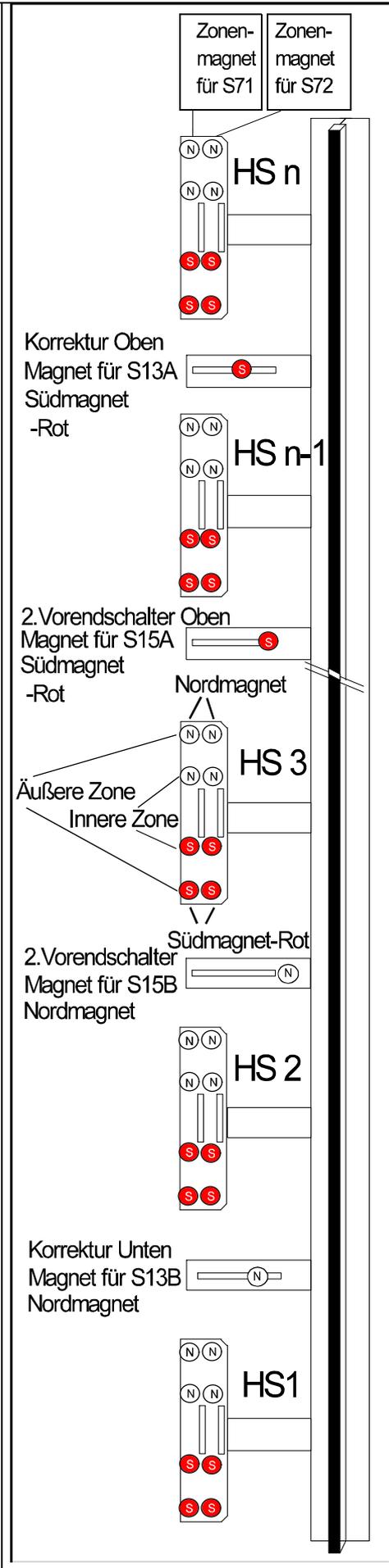
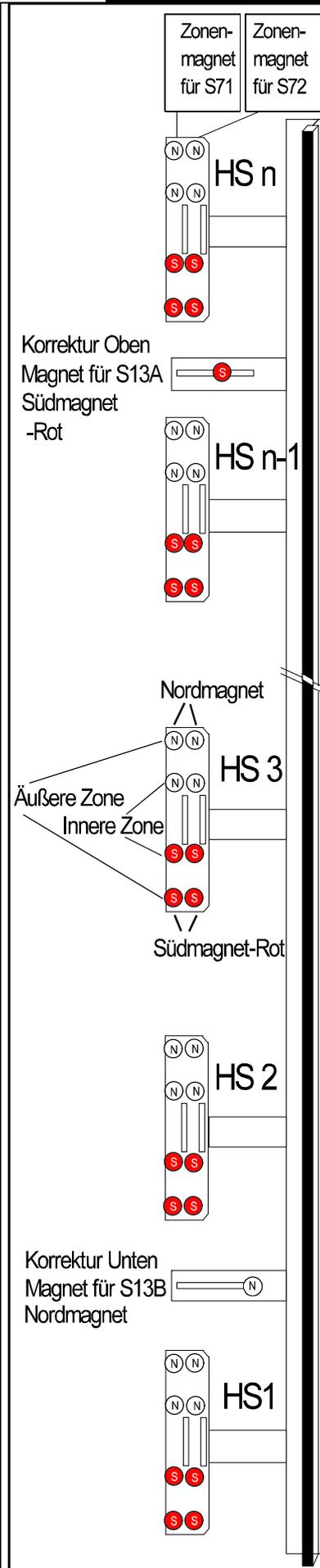
The pre-limit up / top S13A correction is turned on by a magnet south. The magnet must be between the penultimate and last floor!

The pre-limit down / bottom correction S13A is turned on a north magnet. The magnet must be between the 2 - and are lowest floor!

At a higher Speed than 2.0 m/s, or short travel stops, respectively, a second pre-limit switch is necessary.

The second pre-limit up / top S15A turned off-a South magnet. The magnet must be located between the pre-penultimate and penultimate floor.

The second pre-limit down / bottom S15B is turned on a north magnet. The magnet must be between the 3rd and 2nd Floor there.



PARAMETER: PULSE BUFFER DELAY

There is a pulse buffer-delay-time between 2 and 150ms. It depends on the type of magnets, you are using. The KW-magnets only needs a delay-time of 2ms.

PARAMETER: CORRECTION TRAVEL

If it comes in the shaft copying to false countings, a correction trip goes on. The time of execution can takes place "after call-input" or immediately in "automatic" mode.

PARAMETER: 2.PRE- END- SWITCH BOTTOM

There is a golden rule that the pre-end switch bottom must be between 1. and 2. stop. If the 2. stop is a short trip stop, then the distance pre-end switch would not be sufficient down to the zone of the 1. stop with a faulty measurement to brake the car concisely.

PARAMETER: 2.PRE -END- SWITCH TOP

There is a golden rule that the pre-end switch bottom must be between last and pre-last stop. If the pre-last stop is a short trip stop, then the distance pre-end switch would not be sufficient down to the zone of the last stop with a faulty measurement to brake the car concisely. In this situation the 2. pre-end-switch can be placed between the pre-last- and pre-pre-last-floor.

PARAMETER: SHORT TRAVELS

Extreme short trip stops are appropriate for two stops within a zone. With this parameter it is adjusted whether this case is present and if like many of these short trip stops is present.

PARAMETER: DISTANCE PRE-END-SWITCH-ZONE BOTTOM

In this parameter the distance center magnet pre-end switch is registered down to the highest magnet of the lowest zone in mm. This value must be determined absolutely accurately. It is important for the perfect functioning of the digital shaft copying.

Attention! With hydraulic, unsetteled rope and variable voltage rope plants the input the delay way of both direction takes place. (UP and DOWN-Direction)! With hydraulic and there however only V0 and V-fast are unsetteled rope plants to stop!

PARAMETER: DECELERATION SPEED V0->0

This parameter is the brake-way from the drive-in speed V0 to the stop (0). The value comes automatically by the learn drive. Nevertheless the value can be change per hand.

PARAMETER: DECELERATION V1

This parameter is the brake-way from the speed V1 to the drive-in speed V0. This value depends on the speed V1 and the deceleration in the inverter. The standard value is 500 mm.

PARAMETER: DECELERATION V2

This parameter is the brake-way from the speed V2 to the drive-in speed V0. This value depends on the speed V2 and the deceleration in the inverter. The standard value is 1000 mm.

PARAMETER: DECELERATION V3

This parameter is the brake-way from the speed V3 to the drive-in speed V0. This value depends on the speed V3 and the deceleration in the inverter. The standard value is 1500 mm.

PARAMETER: TRAVEL BY V0 – IF DISTANCE < xxxx mm

If the distance to the target floor is smaller than the specified distance xxxx mm, the speed V0 is selected, regardless of the value set in the parameter Delay at V1.

PARAMETER: TRAVEL BY V1 – IF DISTANCE < xxxx mm

If the distance to the target floor is smaller than the specified distance xxxx mm, the speed V1 is selected, regardless of the value set in the parameter Delay at V2.

PARAMETER: TRAVEL BY V2 – IF DISTANCE < xxxx mm

If the distance to the target floor is smaller than the specified distance xxxx mm, the speed V2 is selected, regardless of the value set in the parameter Delay at V3.

PARAMETER: LEARN DRIVE WITH

For the learn drive you can choose three speeds like, V1, V2, and V3. If you have a drive with a short distance, you should choose speed V1. The standard value is speed V1.

PARAMETER: ENCODER INPUT

The encoder for the shaft copying can attache on the Car (FKR) or the machine room (ZR). The location is to be registered in this parameter. As default value ZR is deposited.

PARAMETER: DRIVE ACTIVATE

If the electrical installation is fine and the software-parameters like number of floors,...., is put in, the learn-drive can be started. The car should be in a position between the first and second floor, but it must stand above the correction switch bottom. Then the learn-drive should be started. A very concrete description is in the chapter **I01-Activation of the digital shaft presentation.**

PARAMETER: SWITCH HYSTERES OVERLAPPING

After successful learning trip the value of the hysteresis was determined for the shaft switches.

PARAMETER: EVELING-FLOOR-XX

After a learn-drive, you must put in this parameter in the level-values for each floor. Here you can correct unlevels for every floor.

B43 – Absolut Copy

1.0 General

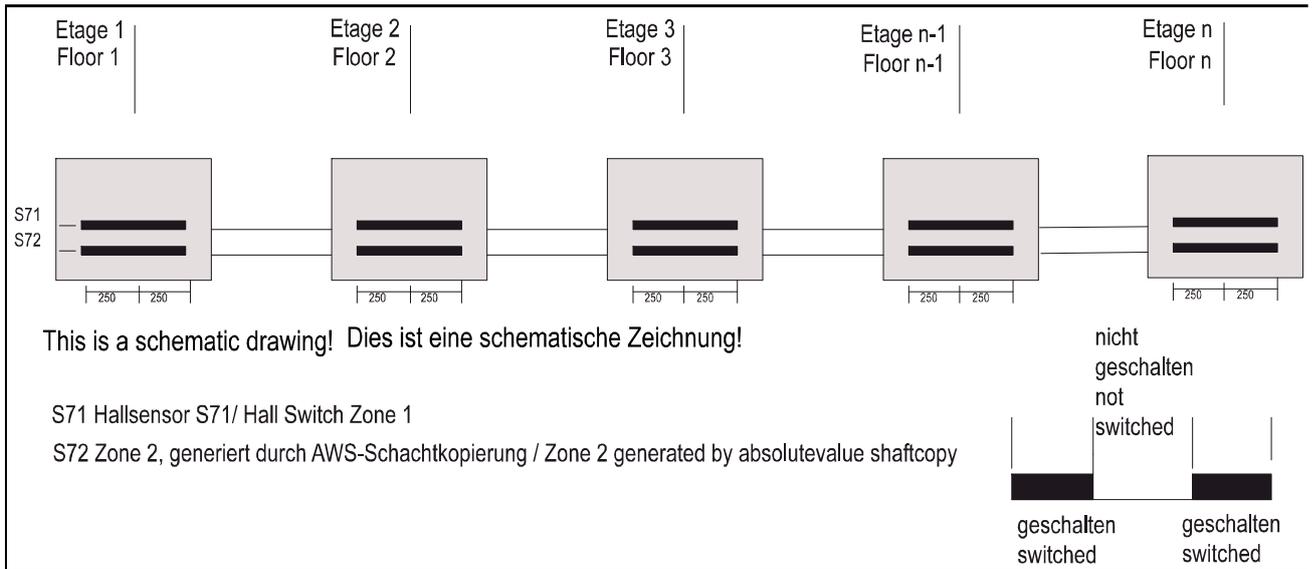
The absolute copying represents a digital shaft copying which is operated either without magnet control or with 3-4 magnet control:

2.0 With one shaft switch / HSK-10 & V-shaft-flag

In this method, the Hall switch HSK01 is used for the detection of zone 71. The second zone 72 is generated via the absolute value encoder system.

After assembly of the ABS sensor system, the car is parked between floors 1 and 2. After the start of the learning journey, counting direction and the zones of the floors are learned.

With one shaft switch



After learning, the center of the zone area is assumed to be flush. A correction can be carried out by entering the difference values for the flattening correction parameter. A change in the position of the zones must not be carried out after the learning run. A detailed description can be found in chapter I02-Startup absolute copying of the control manual or the installation instructions.

Delay and pre-limit switch

The delay to enter the station is made using absolute shaft copying.

Type 1: Connector at ZR-613: SSI-Encoder Type Schmersal UPS SSI

Terminal	Function	Colour
Pin 1: PE	Erde	Shield
Pin 2: 91	Clock +	14
Pin 3: 92	Clock -	7
Pin 4: 93	Data +	13
Pin 5: 94	Data -	6
Pin 6: 500	0 V DC	8
Pin 7: 050	+5V DC	
Pin 8: 200	+24V DC	9

Type 2: Connector at FKR-613: SSI-Encoder Type p Wachendorff WDG-SL00 – ALT

Terminal	Function	Colour
Pin 1: PE	Erde	Shield
Pin 2: 91	Clock +	Lila
Pin 3: 92	Clock -	Yellow
Pin 4: 93	Data +	Gray
Pin 5: 94	Data -	Pink
Pin 6: 500	0 V DC	White
Pin 7: 050	+5V DC	
Pin 8: 200	+24V DC	Brown

Type 3: Connector at FKR-613: SSI-Encoder Type ELGO-LIMAX-2 SSI – bin

Terminal	Function	Colour
Pin 1: PE	Erde	Shield
Pin 2: 91	Clock +	Green
Pin 3: 92	Clock -	Yellow
Pin 6: 83	Data +	Gray
Pin 7: 84	Data -	Pink
Pin 4: 500	0 V DC	White
Pin 7: 050	+5V DC	
Pin 5: 200	+24V DC	Brown

Type 4: Connector atZR-613: SSI-Encoder Type Windtscheid & Wendel W+W 10EX – SSI –bin

Terminal	Function	Colour
Pin 1: PE	Erde	Shield
Pin 2: 81	Clock +	Green
Pin 3: 82	Clock -	Yellow
Pin 4: 83	Data +	Black
Pin 5: 84	Data -	Red
Pin 6: 500	0 V DC	Blue
Pin 7: 050	+5V DC	
Pin 8: 200	+24V DC	Lila

Type 5: Connector at FKR-613: SSI-Encoder Type Wachendorff WDG-SL00 G

Terminal	Function	Colour
Pin 1: PE	Erde	Shield
Pin 2: 81	Clock +	Violet
Pin 3: 82	Clock -	Yellow
Pin 4: 83	Data +	Grey
Pin 5: 84	Data -	Pink
Pin 6: 500	0 V DC	White
Pin 7: 050	+5V DC	
Pin 8: 200	+24V DC	Brown

Type 6: Connector at FKR-613: SSI-Encoder Type Wachendorff WDG-MZS 100 G

Terminal	Function	Colour
Pin 1: PE	Erde	Shield
Pin 2: 81	Clock +	Violet
Pin 3: 82	Clock -	Yellow
Pin 4: 83	Data +	Gray
Pin 5: 84	Data -	Pink
Pin 6: 500	0 V DC	White
Pin 7: 050	+5V DC	
Pin 8: 200	+24V DC	Brown

Type 7: Connector at FKR-613: SSI-Encoder Type Kübler LM2 LM3 SSI

Terminal r	Function	Colour
Pin 1: PE	Erde	Shield
Pin 2: 81	Clock +	Violet
Pin 3: 82	Clock -	Yellow
Pin 4: 83	Data +	Gray
Pin 5: 84	Data -	Pink
Pin 6: 500	0 V DC	White
Pin 7: 050	+5V DC	
Pin 8: 200	+24V DC	Brown

Type 8: Connector at FKR-613: SSI-Encoder Type Wachendorff WDG-MEMN

Terminal	Function	Colour
Pin 1: PE	Erde	Shield
Pin 2: 81	Clock +	Violet
Pin 3: 82	Clock -	Yellow
Pin 4: 83	Data +	Gray
Pin 5: 84	Data -	Pink
Pin 6: 500	0 V DC	White
Pin 7: 050	+5V DC	
Pin 8: 200	+24V DC	Brown

Type 9: Connector at FKR-613: SSI-Encoder Type Variotech ANTS SSI-Protocol

Terminal	Function	Colour
Pin 1: PE	Earth	Shield
Pin 2: 91	Clock +	White
Pin 3: 92	Clock -	Yellow
Pin 4: 93	Data +	Grey
Pin 5: 94	Data -	Pink
Pin 6: 500	0 V DC	Brown
Pin 7: 050	+5V DC	
Pin 8: 200	+24V DC	Green

Type 10: Connector at ZR-613: SSI- actuated encoder Type ECN10TL-03 SSI-Protocol

Termina	Function	ECN10TL-03
Pin 1: PE	Earth	
Pin 2: 91	Clock +	
Pin 3: 92	Clock -	
Pin 4: 93	Data +	
Pin 5: 94	Data -	
Pin 6: 500	0 V DC	
Pin 7: 050	+5V DC	
Pin 8: 200	+24V DC	

Type 11: Connector at ZR-613: SSI- actuated encoder Type ECN10TL-05 SSI-Protocol

Termina	Function	ECN10TL-05
Pin 1: PE	Earth	
Pin 2: 91	Clock +	
Pin 3: 92	Clock -	
Pin 4: 93	Data +	
Pin 5: 94	Data -	
Pin 6: 500	0 V DC	
Pin 7: 050	+5V DC	
Pin 8: 200	+24V DC	

Type 12: Connector at ZR-613: SSI- actuated encoder Type ECN10TL10 SSI-Protocol

Termina	Function	ECN10TL-10
Pin 1: PE	Earth	
Pin 2: 91	Clock +	
Pin 3: 92	Clock -	
Pin 4: 93	Data +	
Pin 5: 94	Data -	
Pin 6: 500	0 V DC	
Pin 7: 050	+5V DC	
Pin 8: 200	+24V DC	

Type 13: Connector at FKR-613-CAN: CAN-Absolutvalueencoder CanOpen-protocol

only visible if absolute copying (Menu-A3) as well as CAN-Bus + CAN-encoder activated A402 / A403)

encoder system : Connection on FKR-613: Canopen-interface Typ Variotech ANTS CanOpen -protocol

encoder system : Connection on FKR-613: Canopen-interface Typ Variotech ANTS SAFE CanOpen -protocol

encoder system : Connection on FKR-613: Canopen-interface Typ ELGO LIMAX33CP SAFE CanOpen -protocol

encoder system : Connection on FKR-613: Canopen-interface Typ --- encoder CanOpen -protocol

4.0 Shaftcopysystem with V-Shaft-Flag Nominal Speed < 1,60 m/s

HSK01 – Magnetmounting with V-flag or mounting on the rail

The shaft copying system HSK01 consists of the shaft copying panel HSK01, the V-flags and the respective magnets.

On the V-flag or the rail, the North Magnet are always up, South Magnet (red) always down!

Four round magnets of each track form an outer and an inner zone. The outer zone is responsible for the entrance with open door, the inner zone for the catch / UCM detection.

The HSK01 shaft coping spoiler is mounted on the cab roof.

The switching distance between the magnet and the HSK01 is 7-9mm!
The adjustment is made by loosening the two M4 nuts and controlled sliding of the sensor. (Look at the picture at the bottom left).

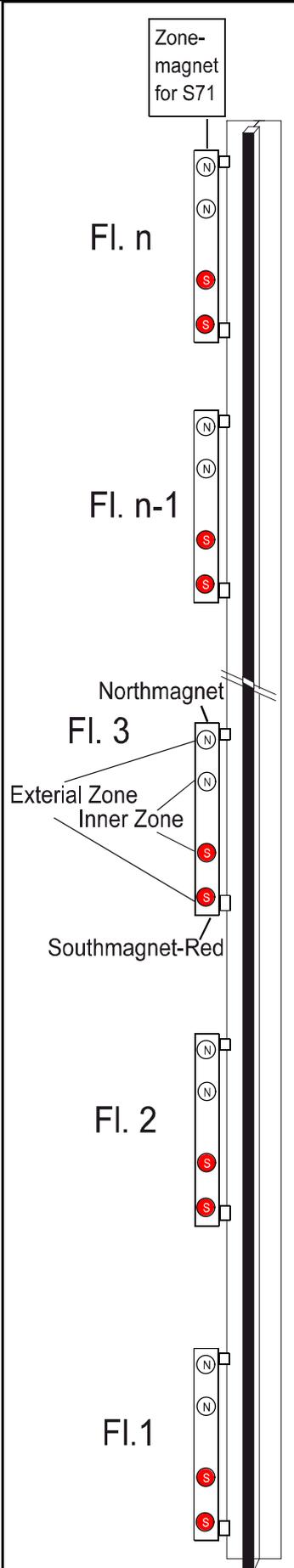
The electrical connection of the HSK01 is done with a prefabricated round cable with connector on the FKR-613.



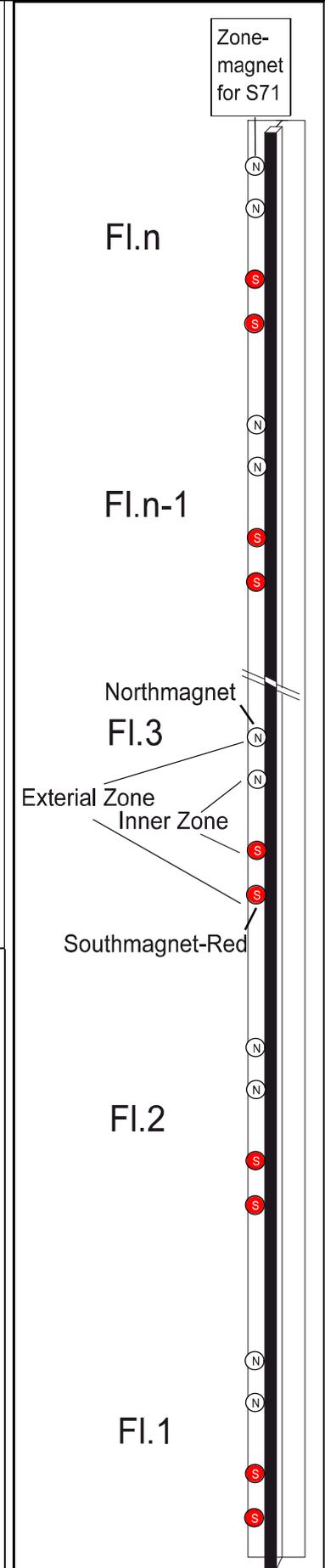
HSK01



V-Shaft-Flag-V101



V- Flag-mounting



Rail-mounting

Shaftcopysystem with UCM-Zone Nominal Speed $\geq 1,60$ m/s

HSK01 – Magnetmounting with V-flag or mounting on the rail
Vnomianl $\geq 1,60$ m/s

The shaft copying system HSK01 consists of the shaft copying panel HSK01, the V-flags and the respective magnets.

In addition, two HSK01 are required for the upper forced deceleration S11A and the lower forced deceleration S11B!

On the V-flag or the rail, the North Magnet are always up, South Magnet (red) always below!

Four round magnets of each track form an outer and an inner zone. The outer zone is responsible for the entrance with open door, the inner zone for the catch / UCM detection.

The HSK01 shaft coping spoiler is mounted on the cab roof.

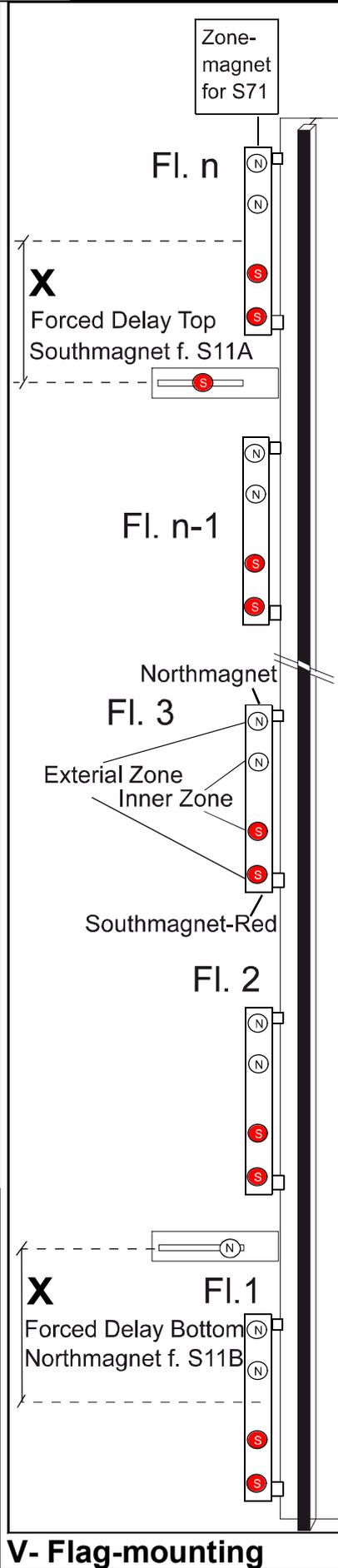
The switching distance between the magnet and the HSK01 is 7-9mm!

The adjustment is made by loosening the two M4 nuts and controlled sliding of the sensor. (Look at the picture at the bottom left).

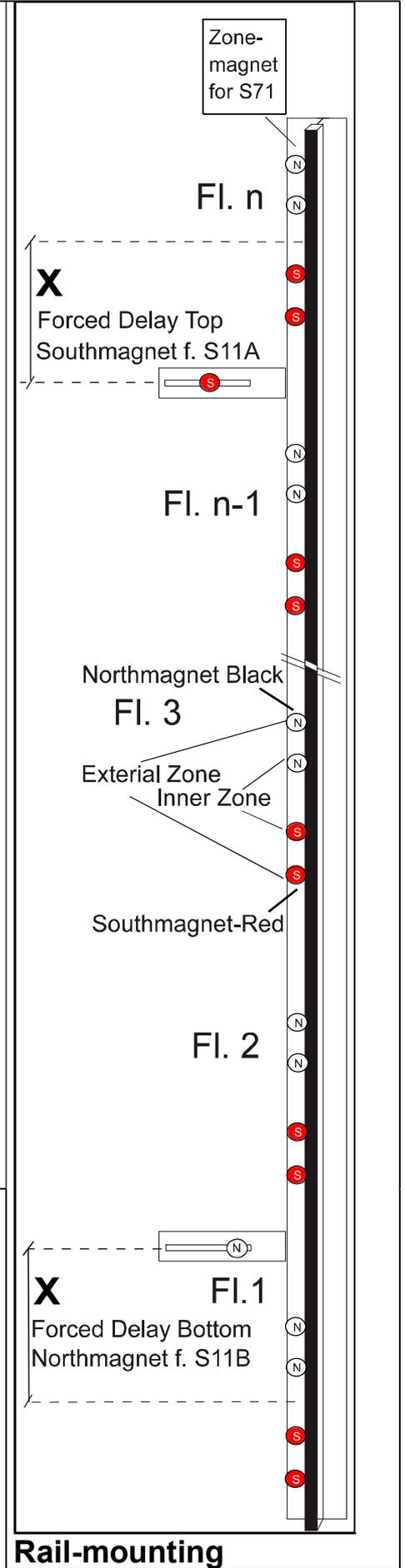
The distance X is to be set to the deceleration value at the speed V3 (menu B4).

Approximate guideline X:

- 1,6 m/s -> 3000 mm
- 2,0 m/s -> 3500 mm
- 2,5 m/s -> 4500 mm
- 3,0 m/s -> 5500 mm
- 4,0 m/s -> 7000 mm

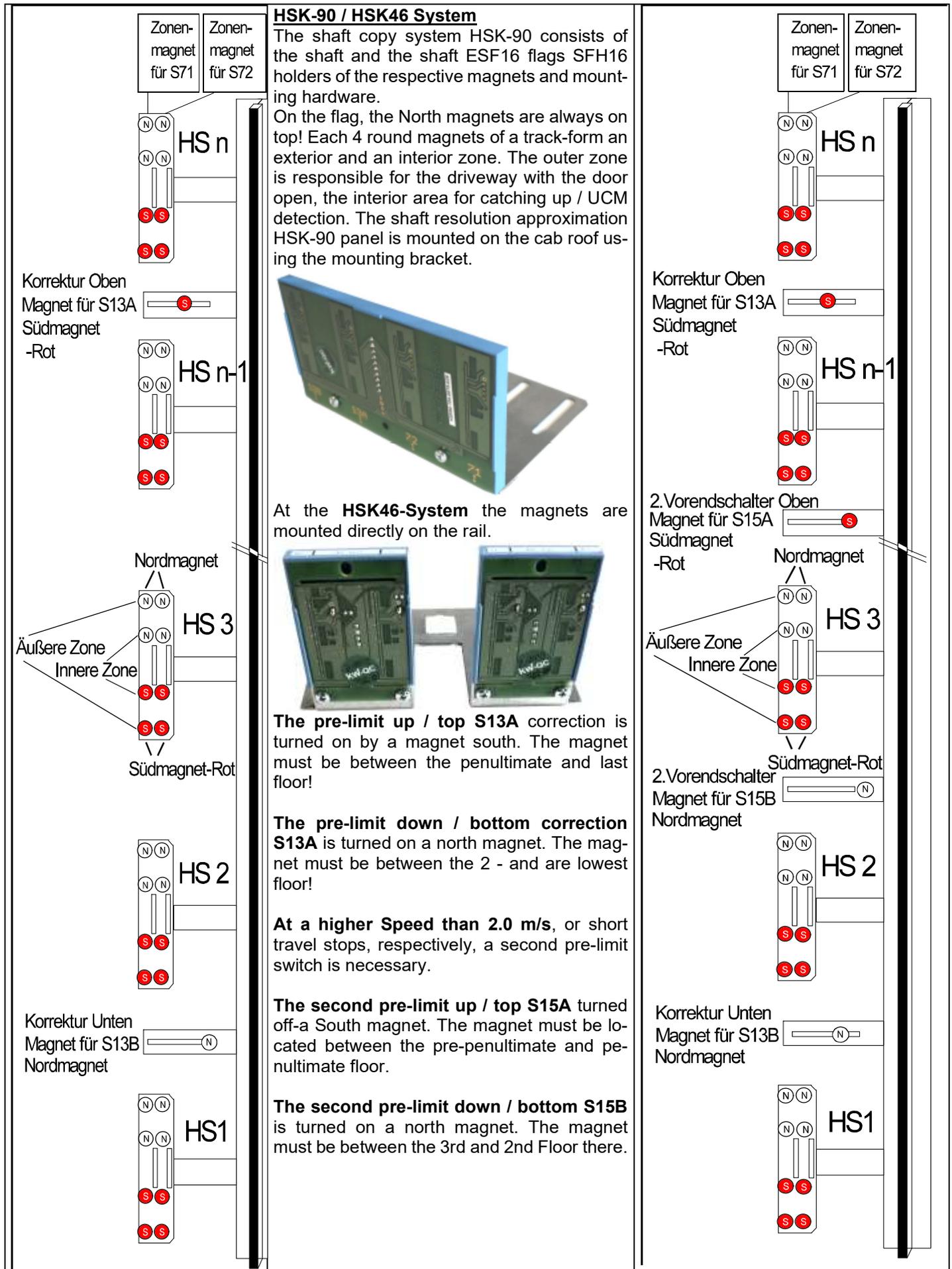


V- Flag-mounting



Rail-mounting

Shaftcopy System with UCM Zone



3.0 SSI-Encodersystems or CANopen-Encodersystems

If a CANopen shadow copying system has been activated under menu A402 / A403, you can find it in the menu for CANopen shaft bus systems.

Otherwise, you are automatically at the SSI shaft bus systems, which then follow:

3.1 SSI-Bussystems

PARAMETER: PULSE BUFFER DELAY

There is a pulse buffer-delay-time between 2 and 150 ms. It depends on the type of magnets, you are using. The KW-magnets only needs a delay-time of 2ms.

PARAMETER DISTANCE MEASUREMENT

In this parameter the used absolute-value-system can be selected.

- Wachendorff-MZS100 G
- Wachendorff-SL 00 G
- W+W 10EX SSI – Bin
- ELGO LIMAX2 SSI – Bin
- Wachendorff-SL 00 ALT
- SCMERSAL UPS

PARAMETER: SHAFT SWITCHES

In this parameter you can choose, if you want to use shaft switches or not. It depends of the settings, if some parameter menus are not invisible.

Attention! With hydraulic, unsetteled rope and variable voltage rope plants the input the delay way of both direction takes place. (UP and DOWN-Direction)! With hydraulic and there however only V0 and V-fast are unsetteled rope plants to stop!

PARAMETER : SHORT TRAVELS

With extreme short trip, stops are appropriate for two stops within a zone. With this parameter it is adjusted whether this case is present, and if like many of these short trip stops is present.

PARAMETER: DECELERATION SPEED V0 -> 0

This parameter is the brake-way from the drive-in speed V0 to the stop (0). The value comes automatically by the learn drive. Nevertheless the value can be change per hand.

PARAMETER: DECELERATION SPEED V1

This parameter is the brake-way from the speed V1 to the drive-in speed V0. This value depends on the speed V1 and the deceleration in the inverter. The standard value is 500 mm.

PARAMETER: DECELERATION SPEED V2

This parameter is the brake-way from the speed V2 to the drive-in speed V0. This value depends on the speed V2 and the deceleration in the inverter. The standard value is 1000 mm.

PARAMETER: DECELERATION SPEED V3

This parameter is the brake-way from the speed V3 to the drive-in speed V0. This value depends on the speed V3 and the deceleration in the inverter. The standard value is 1500 mm.

PARAMETER: TRAVEL BY V0 – IF DISTANCE < xxxx mm

If the distance to the target floor is smaller than the specified distance xxxx mm, the speed V0 is selected, regardless of the value set in the parameter Delay at V1.

PARAMETER: TRAVEL BY V1 – IF DISTANCE < xxxx mm

If the distance to the target floor is smaller than the specified distance xxxx mm, the speed V1 is selected, regardless of the value set in the parameter Delay at V2.

PARAMETER: TRAVEL BY V2 – IF DISTANCE < xxxx mm

If the distance to the target floor is smaller than the specified distance xxxx mm, the speed V2 is selected, regardless of the value set in the parameter Delay at V3.

PARAMETER: LEARN DRIVE (ONLY WITH SHAFT-SWITCHES: PRE-END- & ZONE-SWITCHES)

For the learn drive you can choose three speeds like, V1, V2, and V3. If you have a drive with a short distance, you should choose speed V1. The standard value is speed V1.

PARAMETER: LEARN DRIVE ACTIVATE (ONLY WITH SHAFT-SWITCHES: PRE-END- & ZONE-SWITCHES)

If the electrical installation is fine and the software-parameters like number of floors,...., is put in, the learn-drive can be started. The car should be in a position between the first and second floor, but it must stand above the corrections witch bottom. Then the learn-drive should be started. A very concrete description is in the chapter **I02-Activation of the digital shaft presentation**.

PARAMETER: COUNT DIRECTION (ONLY WITH SETUP: WITHOUT SHAFT-SWITCHES)

After installed ABS-encoder-system the counting direction must be determined. In addition the parameter is set to start and with beckgets or inspection drive will be driven downward.

PARAMETER: SYNCHRONISATION COUNT DIRECTION FLOOR (ONLY: WITHOUT SHAFT-SWITCHES)

After way collection learn, the car in the lowest floor are concise-placed and this parameter activated. Thus the control recognizes the level value of the lowest stop.

PARAMETER: UNCORRECTION (ONLY WITH SETUP: WITHOUT SHAFT-SWITCHES)

In this parameter it can be decided between two input procedures for the level table. On the one hand the attitude " floor height" with which for each floor the value in the millimeter are registered, on the other hand the attitude "level correction" with which millimeter-uncorrection can be corrected.

Parameter: Leveling by Car-Panel

The level adjustment via the cabin interior panel is possible with digital copying with an incremental encoder or with an absolute encoder. The prerequisite is that the floors have been taught in, the elevator drives to all floors via inside / outside calls and always stops in the same position on the respective floor.



B43 Leveling by Car-Panel

B43 Leveling by car-panel: yes		
Carpriority aktive		
Esc	Enter	Wert

Activate the parameter in menu B42 / 43: "Leveling by car panel: yes"

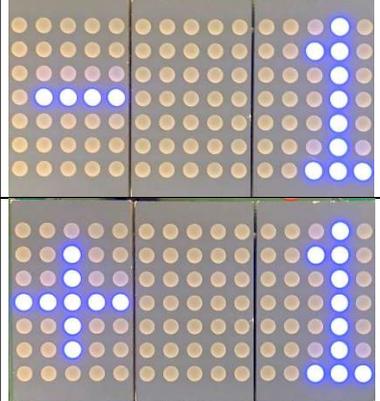
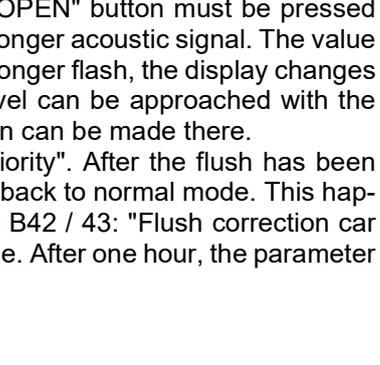
Now the elevator is in the special mode "Interior preferential", the car door remains open on the floor, the landing calls are deactivated, display "SPECIAL TRAVEL". Calls can now only be triggered via the interior panel.



In order to activate the flush adjustment with the help of the interior panel, the cabin must be within the zone area.

Now hold down the **"DOOR OPEN"** button for three seconds. There is a double acoustic acknowledgment. The two call buttons "lowest floor" and "lowest floor + 1" now flash.

The display of the TFT / LED matrix switches to the adjustment mode. Car calls can no longer be triggered now; the flashing call buttons are used to enter the level.

	<p>With the “lowest floor” call button, the level downwards can now be corrected if the cabin is too high. With the call button “lowest floor + 1”, the level can be corrected upwards if the car is too low.</p> <p>Each press of the button changes the correction value by 1mm up or down and is acknowledged with an acoustic signal. If the corresponding call button is held down for more than 2 seconds, the correction value is changed by 10mm. This is acknowledged with an acoustic double signal. The currently selected value of the flush adjustment appears in the display.</p>	
	<p>To save the corrected leveling value, the "DOOR OPEN" button must be pressed for two seconds. The entry is acknowledged with a longer acoustic signal. The value is now saved, the two lowest indoor call buttons no longer flash, the display changes back to the normal display mode. Now another level can be approached with the help of the car call button and the leveling correction can be made there.</p> <p>The control is still in the special mode "Internal priority". After the flush has been adjusted on all floors, the control must be switched back to normal mode. This happens either by deactivating the parameter in menu B42 / 43: "Flush correction car panel: no" or by briefly activating the inspection mode. After one hour, the parameter is automatically deactivated by the control.</p>	

PARAMETER: LEVELING FLOOR-XX

After a learn-drive, you must put in this parameter in the level-values for each floor. Here you can correct unlevels for every floor. If the consice position was chosen, then the value for every floor can be registered in mm. (For Example Floor1 -0000mm, Floor2 -3000mm....)

3.2 CANopen-Shaftcopy systems without SAFE

Parameter: displacement measuring system

In this parameter, the used CANopen absolute value encoder system can be selected.

- Variotech-ANTS
- Variotech-ANTS SAFE
- LIMAX-33CP SAFE
- Drehgeber

Parameter: shaft switch

This parameter is only visible if no SAFE system has been selected. The following settings are available:

- No shaft switch
- Pre-end & zone switch
- Only zone switch

Parameter: shaft switch zones

This parameter is only visible if no SAFE system has been selected. The following settings are available:

- zone 71 & 72 externally, i. via zone switch in the shaft
- zone-72 Simulation, i.e. Zone 71 via a zone switch in the shaft, zone 72 is generated via the absolute value encoder system.

Parameter: short trips

This parameter is only visible if no SAFE system has been selected. The following settings are available:

- No short stay
- 1 to 8 short stay stops

Parameter: Delay V0 => 0 – Drive UP

The deceleration value is entered in mm. The factory setting is 100 mm.

Parameter: Delay V0 => 0 – Drive Down

The deceleration value is entered in mm. The factory setting is 100 mm.

Parameter: Delay bei V1 – Drive UP & Down

The deceleration value is entered in mm. The factory setting is 500 mm.

Parameter: Delay bei V2 – Drive UP & Down

The deceleration value is entered in mm. The factory setting is 1000 mm.

Parameter: Delay bei V3 – Drive UP & Down

The deceleration value is entered in mm. The factory setting is 1500 mm.

PARAMETER: TRAVEL BY V0 – IF DISTANCE < xxxx mm

If the distance to the target floor is smaller than the specified distance xxxx mm, the speed V0 is selected, regardless of the value set in the parameter Delay at V1.

PARAMETER: TRAVEL BY V1 – IF DISTANCE < xxxx mm

If the distance to the target floor is smaller than the specified distance xxxx mm, the speed V1 is selected, regardless of the value set in the parameter Delay at V2.

PARAMETER: TRAVEL BY V2 – IF DISTANCE < xxxx mm

If the distance to the target floor is smaller than the specified distance xxxx mm, the speed V2 is selected, regardless of the value set in the parameter Delay at V3.

Parameter: Learning trip:

The following settings are available:

- Execute with V1 (factory setting)
- Execute with V2
- Execute with V3

Parameter: Forced delay Down auf V1

The deceleration value is entered in mm. The following settings are available:

- OFF, no forced delay
- From 100 mm to 15.000 mm

Parameter: Forced delay UP auf V1

The deceleration value is entered in mm. The following settings are available:

- OFF, no forced delay
- From 100 mm to 15.000 mm

3.3 CANopen-Shaftcopysystem ANTS SAFE/ ELGO LIMAX 33CP

Parameter: Displacement measuring system

In this parameter, the used CANopen absolute value encoder system can be selected.

- Variotech-ANTS SAFE
- Kübler ANTS SAFE
- LIMAX-33CP SAFE

Parameter: Status of the SAFE-copy

This parameter is only visible if a SAFE system has been selected. The display indicates whether the selected SAFE system has been connected.

Parameter: Delay V0 => 0 – Fahrt AUF

The deceleration value is entered in mm. The factory setting is 100 mm.

Parameter: Delay V0 => 0 – Fahrt AB

The deceleration value is entered in mm. The factory setting is 100 mm.

Parameter: Delay bei V1 – Fahrt AUF & AB

The deceleration value is entered in mm. The factory setting is 500 mm.

Parameter: Delay bei V2 – Fahrt AUF & AB

The deceleration value is entered in mm. The factory setting is 1000 mm.

Parameter: Delay bei V3 – Fahrt AUF & AB

The deceleration value is entered in mm. The factory setting is 1500 mm.

PARAMETER: TRAVEL BY V0 – IF DISTANCE < xxxx mm

If the distance to the target floor is smaller than the specified distance xxxx mm, the speed V0 is selected, regardless of the value set in the parameter Delay at V1.

PARAMETER: TRAVEL BY V1 – IF DISTANCE < xxxx mm

If the distance to the target floor is smaller than the specified distance xxxx mm, the speed V1 is selected, regardless of the value set in the parameter Delay at V2.

PARAMETER: TRAVEL BY V2 – IF DISTANCE < xxxx mm

If the distance to the target floor is smaller than the specified distance xxxx mm, the speed V2 is selected, regardless of the value set in the parameter Delay at V3.

Parameter: Forced delay Down auf V1

The deceleration value is entered in mm. The following settings are available:

- OFF, no forced delay
- Von 100 mm bis 15.000 mm

Parameter: Forced delay UP auf V1

The deceleration value is entered in mm. The following settings are available:

- OFF, no forced delay
- From 100 mm to 15.000 mm

Parameter: End delay V0 > 0

The following setting values are available: No or Yes.

When the parameters are activated, a short trip is triggered with an approximate length of 0.5m. The final delay is determined and saved!

Parameter: Learn floor

In this parameter, it is possible to decide between two learning methods for determining the flush values. On the one hand, the "Manual approach" setting, in which each stop is approached with the inspection drive and when reaching the flushing value, this is stored. The other method "with shaft table", the flush value is entered in millimeters for all floors and then synchronized in the lowest floor.

Parameter: Learning active (only with setting „Manual Start“)

The following settings are available:

- No -> No learning!
- Learn floor-01
- ...
- Learn floor-n

Parameter: Flush positioning (only with setting „Manual Start“)

In this parameter it is possible to decide between two input methods for the trimming table. On the one hand, the setting "floor height", in which the value for each floor is entered in millimeters, and on the other hand the setting "leveling correction", in which millimeter-like irregularities can be corrected.

Parameter: Synchronize HS01 (only with settings "With shaft table")

After the route has been detected, the car in the bottom floor is flushed and this parameter is activated. As a result, the controller recognizes the flush value of the lowest station.

Parameter: Leveling by Car-Panel

The level adjustment via the cabin interior panel is possible with digital copying with an incremental encoder or with an absolute encoder. The prerequisite is that the floors have been taught in, the elevator drives to all floors via inside / outside calls and always stops in the same position on the respective floor.



B43 Leveling by Car-Panel

B43 Leveling by car-panel: yes		
Carpriority aktive		
Esc	Enter	Wert

Activate the parameter in menu B42 / 43: "Flush correction for cabin panel: yes"

Now the elevator is in the special mode "Interior preferential", the car door remains open on the floor, the landing calls are deactivated, display "SPECIAL TRAVEL". Calls can now only be triggered via the interior panel.



In order to activate the flush adjustment with the help of the interior panel, the cabin must be within the zone area.

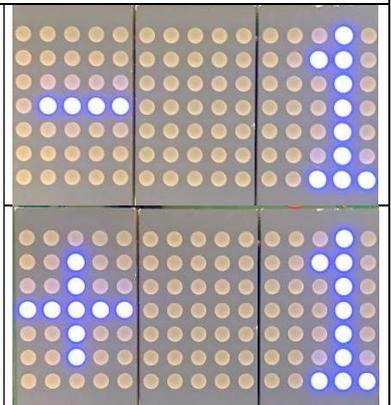
Now hold down the **"DOOR OPEN"** button for three seconds. There is a double acoustic acknowledgment. The two call buttons "lowest floor" and "lowest floor + 1" now flash.

The display of the TFT / LED matrix switches to the adjustment mode. Car calls can no longer be triggered now; the flashing call buttons are used to enter the level.



With the **"lowest floor"** call button, the **level downwards** can now be corrected if the cabin is too high. With the call button **"lowest floor + 1"**, the level can be **corrected upwards** if the car is too low.

Each press of the button changes the correction value by 1mm up or down and is acknowledged with an acoustic signal. If the corresponding call button is held down for more than 2 seconds, the correction value is changed by 10mm. This is acknowledged with an acoustic double signal. The currently selected value of the flush adjustment appears in the display.



To save the corrected leveling value, the "DOOR OPEN" button must be pressed for two seconds. The entry is acknowledged with a longer acoustic signal. The value is now saved, the two lowest indoor call buttons no longer flash, the display changes back to the normal display mode. Now another level can be approached with the help of the car call button and the leveling correction can be made there.

The control is still in the special mode "Internal priority". After the flush has been adjusted on all floors, the control must be switched back to normal mode. This happens either by deactivating the parameter in menu B42 / 43: "Flush correction car panel: no" or by briefly activating the inspection mode. After one hour, the parameter is automatically deactivated by the control.

Parameter: Flush-Level-XX

After a successful learning run or entry of the stands in the menu item flush input, the flattening levels are stored in millimeters for the individual levels in this parameter. Unboundedness can be corrected in millimeters with minus and plus on the HPG-60. If the value floor height has been selected in the flush input menu, the value in millimeters can be entered for each floor (for example HS01-0000mm, HS02-3000mm).

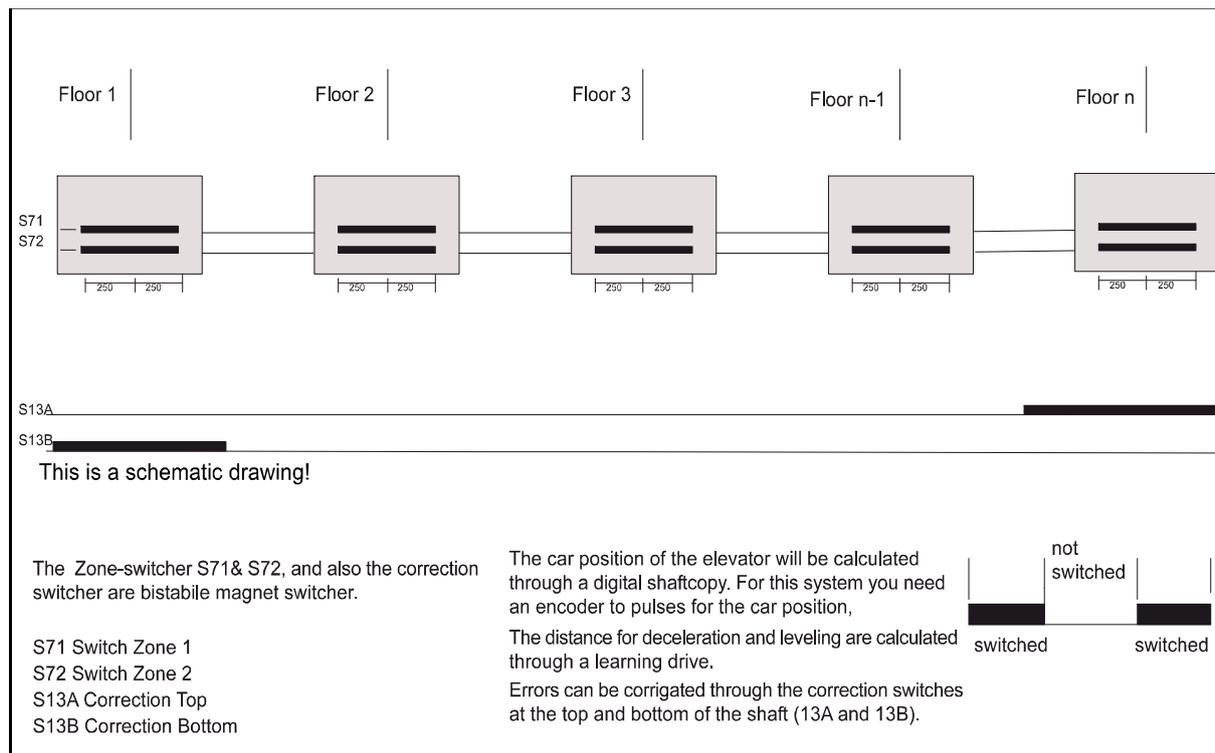
B44 – Motor-Copy

1.0 General

The motor-copy is a digital shaft-copy method, which only needs three switches in the shaft.

- S72 Zone 1**
- S72 Zone 2 (Only necessity with releveling or entry with open door)**
- S13A Correctionswitch Top**
- S13B Correctionswitch Bottom**

All magnet-switches are bipoosition-switches with the corresponding round-magnet. For the pinning of the magnets you must use the elevator-rail. The pulses for the shaft-copy are coming from the resolver of the motor.



2.0 Releveling

After the learn-drive the middle of the zone-way is the value of the floor-level. This can be corrected by the parameter “Leveling” for each floor. A change of the position of the zone-magnets is forbidden. A very precise description is in chapter **I01-Activation of the digital shaft presentation**.

3.0 Deceleration and Correction switches

The deceleration for the drive into the destination-floor will be managed by the digital shaft-copy. The correction switches are only used to synchronize the shaft-copy-system and for a safe deceleration in the end-floors in an emergency-situation, like a failure in the digital shaft-copy. A change of the position of the correction switches-magnets is forbidden. A very precise description is in chapter **I01- Activation of the digital shaft presentation**.

5.0 Shaftcopy System with UCM Zone

HSK-90 / HSK46 System

The shaft copy system HSK-90 consists of the shaft and the shaft ESF16 flags SFH16 holders of the respective magnets and mounting hardware.

On the flag, the north magnets are always on top! Each 4 round magnets of a track-form an exterior and an interior zone. The outer zone is responsible for the driveway with the door open, the interior area for catching up / UCM detection. The shaft resolution approximation HSK-90 panel is mounted on the cab roof using the mounting bracket.



At the **HSK46-System** the magnets are mounted directly on the rail.



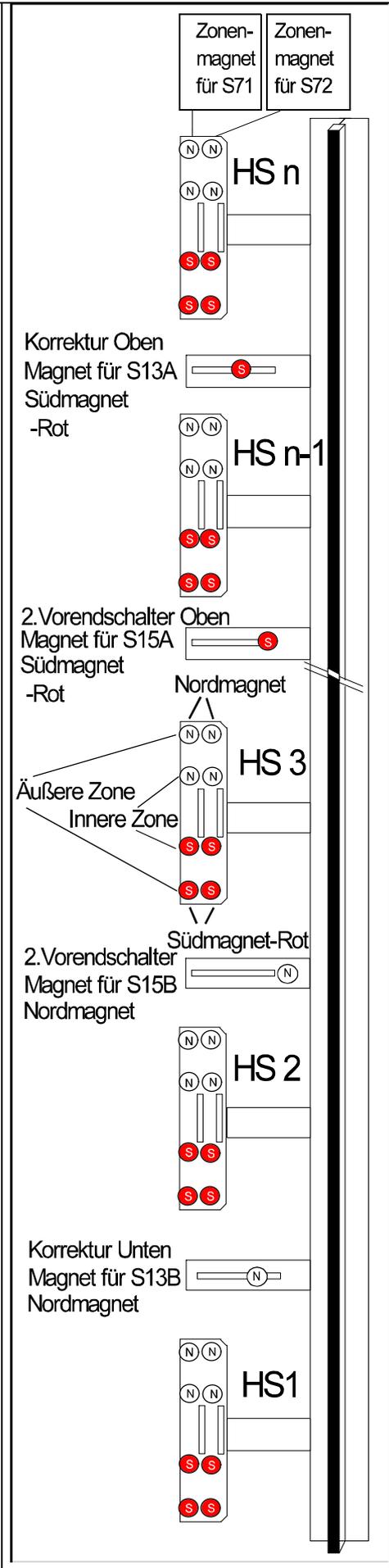
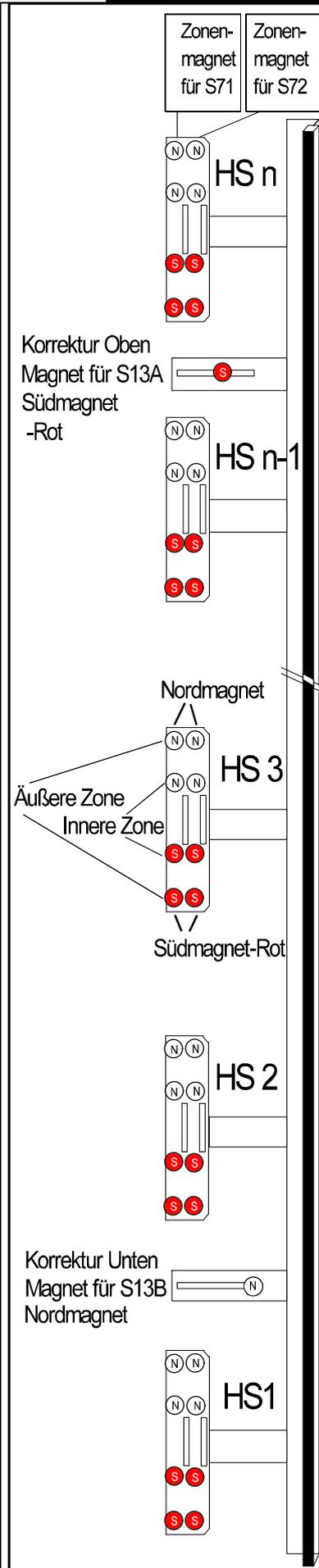
The pre-limit up / top S13A correction is turned on by a magnet south. The magnet must be between the penultimate and last floor!

The pre-limit down / bottom correction S13A is turned on a north magnet. The magnet must be between the 2 - and are lowest floor!

At a higher speed than 2.0 m/s, or short travel stops, respectively, a second pre-limit switch is necessary.

The second pre-limit up / top S15A turned off-a South magnet. The magnet must be located between the pre-penultimate and penultimate floor.

The second pre-limit down / bottom S15B is turned on a north magnet. The magnet must be between the 3rd and 2nd Floor there.



Parameter: Pulse Buffer Delay

There is a pulse buffer-delay-time between 2 and 150ms. It depends on the type of magnets, you are using. The KW-magnets only needs a delay-time of 2ms.

PARAMETER: CORRECT TRAVEL

If it comes in the shaft copying to false counting a correction trip starts. The time of execution can take place "after call input" or immediately in "automatic" mode.

PARAMETER: 2.PRE-END-SWITCH BOTTOM

There is a golden rule that the pre-end switch bottom must be between 1. and 2. stop. If the 2. stop is a short trip stop, then the distance pre-end switch would not be sufficient down to the zone of the 1. stop with a faulty measurement to brake the car concisely.

PARAMETER: 2.PRE-END-SWITCH TOP

There is a golden rule that the pre-end switch bottom must be between last and pre-last stop. If the pre-last stop is a short trip stop, then the distance pre-end switch would not be sufficient down to the zone of the last stop with a faulty measurement to brake the car concisely. In this situation the 2. pre-end-switch can be placed between the pre-last- and pre-pre-last-floor.

PARAMETER: SHORT TRAVELS

With extreme short trip stops are appropriate for two stops within a zone. This parameter is adjusted if this is the case and if like many of these short trip stops happen.

PARAMETER: DISTANCE PRE-END-SWITCH-ZONE BOTTOM

In this parameter the distance center magnet pre-end switch is registered down to the highest magnet of the lowest zone in mm. This value must be determined absolutely accurately. It is important for the optimal functioning of the digital shaft copying.

Attention! With hydraulic, unsetteled rope and variable voltage rope plants the input the delay way of both direction takes place. (UP and DOWN-Direction)! With hydraulic and there however only V0 and V-fast are unsetteled rope plants to stop!

PARAMETER: DECELERATION SPEED V0

This parameter is the brake-way from the drive-in speed V0 to the stop (0). The value comes automatically by the learn drive. Nevertheless the value can be changed per hand.

PARAMETER: DECELERATION SPEED V1

This parameter is the brake-way from the speed V1 to the drive-in speed V0. This value depends on the speed V1 and the deceleration in the inverter. The standard value is 500 mm.

PARAMETER: DECELERATION SPEED V2

This parameter is the brake-way from the speed V2 to the drive-in speed V0. This value depends on the speed V2 and the deceleration in the inverter. The standard value is 1000 mm.

PARAMETER: DECELERATION SPEED V3

This parameter is the brake-way from the speed V3 to the drive-in speed V0. This value depends on the speed V3 and the deceleration in the inverter. The standard value is 1500 mm.

PARAMETER: LEARN DRIVE WITH

For the learn drive you can choose three speeds like, V1, V2, and V3. If you have a drive with a short distance, you should choose speed V1. The standard value is speed V1.

PARAMETER: ENCODER INPUT

The encoder for the shaft copying can be attached to the Car (FKR) or the machine room (ZR). The location is to be registered in this parameter. As default value ZR is deposited.

PARAMETER: LERN DRIVE ACTIVE

If the electrical installation is fine and the software-parameters like the number of floors,... is put in, the learn-drive can be started. The car should be in a position between the first and second floor, but it must stand above the correctionswitch bottom. Then the learn-drive should be started. A very precise description is in chapter **I01-Activation of the digital shaft presentation**.

PARAMETER : SWITCH HYSTERES OVERLAPPING

After a successful learning trip the value of the hysteresis was determined for the shaft switches.

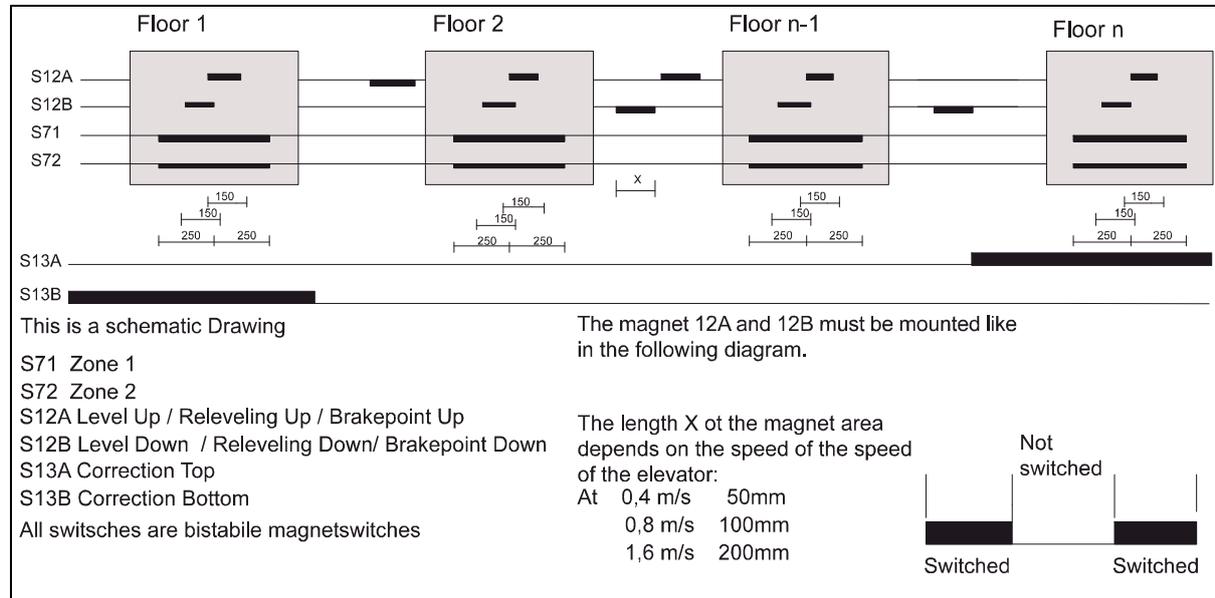
PARAMETER: LEVELING-FLOOR-XX

After a learn-drive, you must put in this parameter in the level-values for each floor. Here you can correct unlevels for every floor.

B45 – Minimum-Copy

General

In principle 6 magnet counters requiring minimum copying are necessary. If the plant does not have the releveling function or no entry with open doors, a magnet counter can be omitted i.e. S72. The precise position takes place in regard to the direction. All magnet counters are bistabile block switches with the appropriate round magnets. As an attachment for the magnets the guide rail, as well as the pit flag system can be used ESK04.



1.0 Leveling

The leveling depends on the direction. With rope-elevators without pre-opening the door stopping going up is connected to the magnet-switch 12B and going down to the magnet-switch 12A.

ATTENTION!

There may be a partial overlap of the consice magnet fields with precise position. From bottom to top magnet 12B is always seen before 12A. The control recognizes the direction, however if not executed correctly, floors will be counted falsely by the control.

On hydraulic lifts and cable systems with entrance, doors are opened or readjustment is maintained by the stopping of the counter-aligned.

As long as both precise signals overlap themselves, no post-correction is necessary.

As soon as car sinks further or rises higher the precise signal is lost and so is the car after being adjusted into the opposite direction.

2.0 Brakepoints and Correction

The magnet switches 12A and 12B are also the brake-switches to drive into the destination floor. If you are driving from the second floor to the first floor you do not need a brake magnet! You are braking with the correction switch 13B.

This is also the case for the drive to the last floor. You are braking with the correction switch 13B.

Nevertheless if the delay impulses are set this leads to copying work errors.

PARAMETER: PULSE BUFFER DELAY

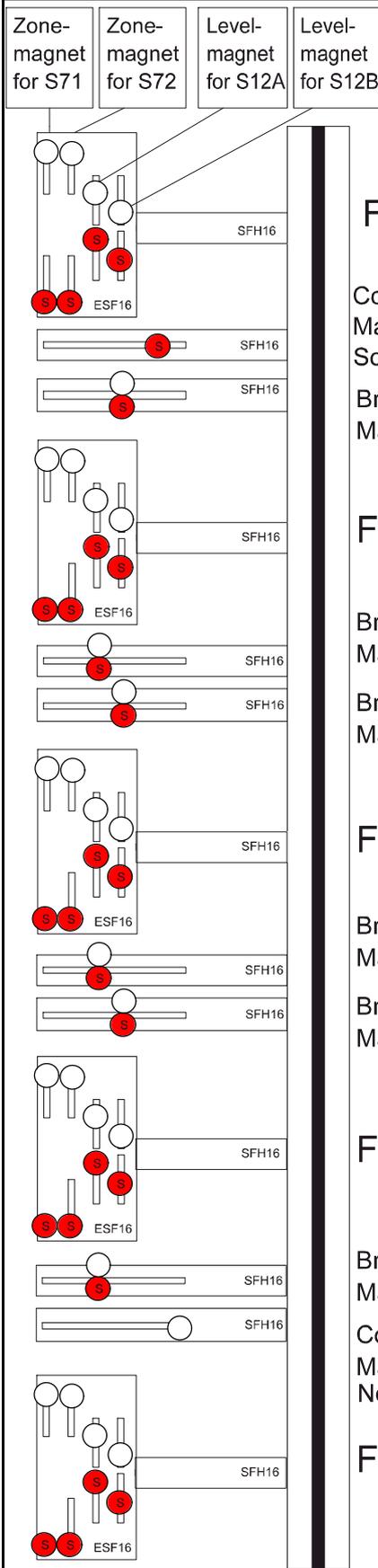
There is a pulse buffer-delay-time between 2 and 150 ms. It depends on the type of magnets you are using. The KW-magnets only need a delay-time of 2 ms.

PARAMETER: CORRECTION TRAVEL

If there are false countings in the shaft copying, a correction trip starts. The time of execution can take place "after call input" or immediately in "automatic" mode.

Unit shaft copying system

Shaftcopysystem ESK04 & 02



The minimum shaftcopy can be realized with the shaft flags SFH60 and the shaft flag carrier SFH16, or you handle the mounting by fixing the magnets onto the rail of the elevator.

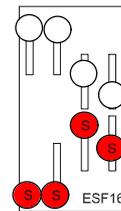
Floor n

Correction Top
Magnet for S13A
South magnet

Brakepoint Down
Magnet for S12B

Very important is the direction of the flag and the right positioning of the magnets!

The north magnet is on the top of the shaft flag!



Floor n-1

Brakepoint Up
Magnet for S12A

Brakepoint Down
Magnet for S12B

The south magnet is red coloured.

Floor 3

Brakepoint Up
Magnet for S12A

Brakepoint Down
Magnet for S12B

The magnets will switch the magnet switches on the pcb-boards ESK04 and ESK02.

The pcb-board are fixed with a mounting metal plate. It would be mounted on the car roof.

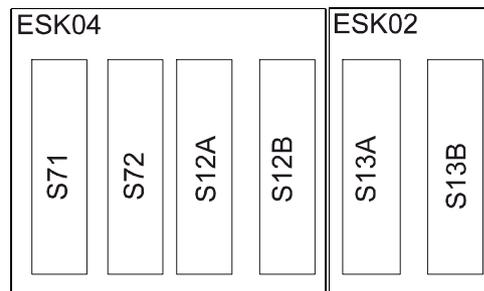
The switch distance between the magnet and the magnet switch is regulary 7 - 9 mm!

Is the switch distance to short it can be happen that there are a lot of error switchings!

Floor 2

Brakepoint Up
Magnet for S12A

Correction Bottom
Magnet for S13B
North magnet



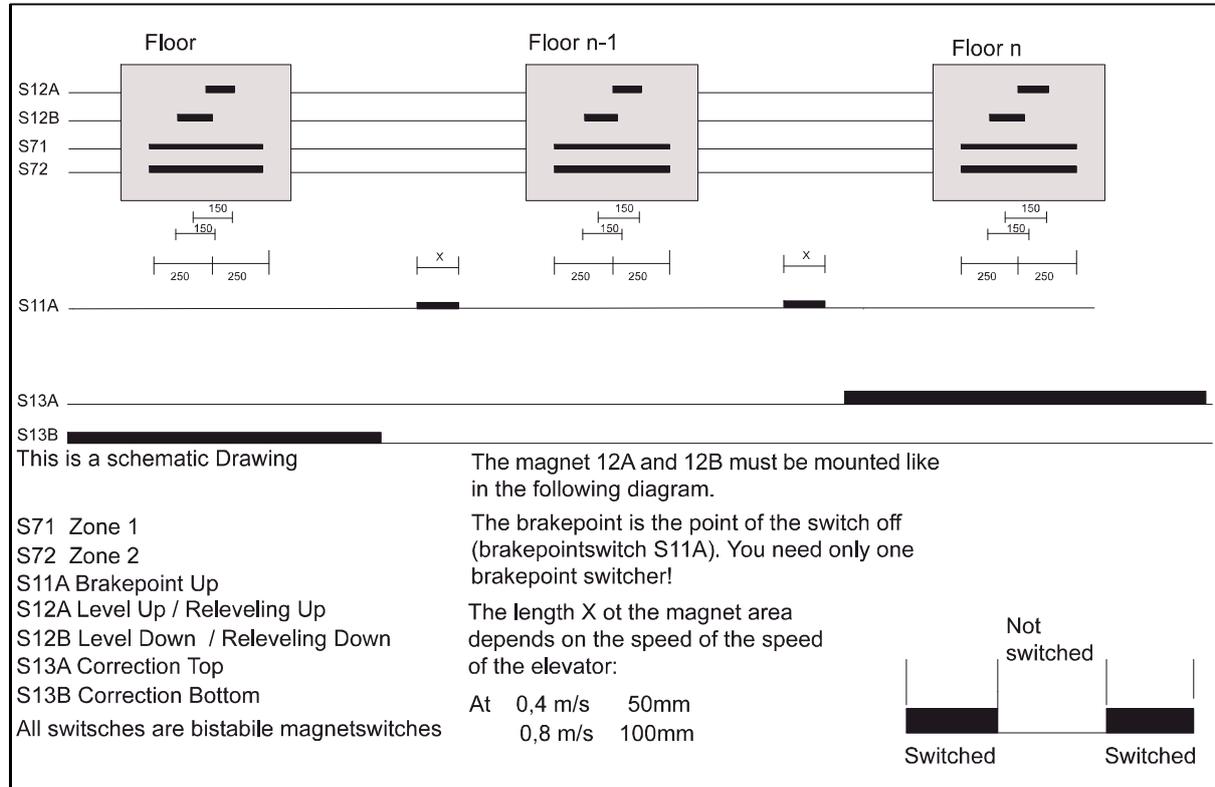
Floor 1

The electrical connection is made by a PVC-wire with terminal.

B 46-R&S-Copy

1.0 General

For R&S copying 5 magnet switchers are needed. If the elevator does not have a releveing function or an entry with open doors the magnet counters S71 and S72 can be omitted. The precise position takes place in regard to the direction. All magnet counters are instable block switches with the appropriate round magnets. As an attachment for the magnets the guide rail as well as the shaft flag system can be used ESK16.



4.0 Consice Position

The consice position is dependent on the direction. The rope elevator system, when not entering an open door or readjusting the stop, is connected to magnetic switch S12B in the upward direction and to magnetic switch S12A in the downward direction.

ATTENTION!

There may be a partial overlap of the consice magnet fields with precise position. From bottom to top magnet 12B is always seen before 12A. The control recognizes the direction, however if not executed correctly, floors will be counted falsely by the control.

On hydraulic lifts and cable systems with entrance, doors are opened or readjustment is maintained by the stopping of the counter-aligned.

As long as both precise signals overlap themselves, no post-correction is necessary.

As soon as car sinks further or rises higher the precise signal is lost and so is the car after being adjusted into the opposite direction.

5.0 Brakepoints and Correction

The magnet switches 12A and 12B are also the brake-switches to drive to the destination floor. If you are driving from the second floor to the first floor you do not need a brake magnet! You are braking with the correction switch 13B. The same goes for ride from penultimate to the last stop (S13A). Switching behavior of S11A is falling edge (turn-off). This way only one switch is necessary in shaft. The speed of this method is a limit to the deceleration. Half of distance of the floor is the smallest stopping distance possible.

B5 Indicate

B501- Car Indicators

General

The car-position of the elevator has two output-devices, namely ZR and ITR. In both of the following parameters you can choose the output of the car-position:

Parameter Car Indicate ZR - Parameter Car Indicate EIT - Description Remote Station ER

There are always 8 output-channels on both of the two units. You can choose the following codes to show the car-position: 1 of N-Code, Binary-Code, Graycode, Digits-Indicator and User-defined character set.

1 of N Code

The 1 of N code always has one output-channel for one floor indicator. When the car is in the first floor channel 21 h is active (+24V DC).

All other outputs have 0V DC. Lift systems with 1 until 8 stops can be represented in this way.

If there are more stops used, it must be converted into an encoded representation.

Binary Code

In the binary code, the floors are a combination of some output channels. Active channels have a "1".

This means that there is a +24V DC level.

Stop	25h	24h	23h	22h	21h
1.Floor	0	0	0	0	1
2.Floor	0	0	0	1	0
3.Floor	0	0	0	1	1
4.Floor	0	0	1	0	0
5.Floor	0	0	1	0	1
6.Floor	0	0	1	1	0
7.Floor	0	0	1	1	1
8.Floor	0	1	0	0	0
9.Floor	0	1	0	0	1
10.Floor	0	1	0	1	0
11.Floor	0	1	0	1	1
12.Floor	0	1	1	0	0
13.Floor	0	1	1	0	1
14.Floor	0	1	1	1	0
15.Floor	0	1	1	1	1
16.Floor	1	0	0	0	0
17.Floor	1	0	0	0	1

Gray Code

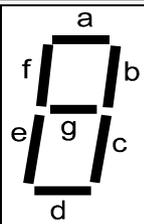
In the gray code, the floors are a combination of some output channels. Active channels have a "1".

This means that there is a +24V DC level.

Stop	25h	24h	23h	22h	21h
1.Floor	0	0	0	0	1
2.Floor	0	0	0	1	1
3.Floor	0	0	0	1	0
4. Floor	0	0	1	1	0
5.Floor	0	0	1	1	1
6.Floor	0	0	1	0	1
7.Floor	0	0	1	0	0
8.Floor	0	1	1	0	0
9.Floor	0	1	1	0	1
10.Floor	0	1	1	1	1
11.Floor	0	1	1	1	0
12.Floor	0	1	0	1	0
13.Floor	0	1	0	1	1
14.Floor	0	1	0	0	1
15.Floor	0	1	0	0	0
16.Floor	1	1	0	0	0
17.Floor	1	1	0	0	1

7-Digits-Indicator

In the 7-Digits-code, the floors are a combination of some output channels. Active channels have a "1". This means that there is a +24V DC level.

Output		
21h	Segment a	
22h	Segment b	
23h	Segment c	
24h	Segment d	
25h	Segment e	
26h	Segment f	
27h	Segment g	

For each floor you can choose the signs of the floor. **The size of the characters and numbers is limited: -> A, b, c, d, E, F, H, U, 0, 1, 2, 3, 4, 5, 6, 7, 8, 9**

Programmable character set

On the output channels 21h to 28h with ZR and ITR the active output channels can be determined freely.

Indication of the car position in special drivers

With the modes of operation **inspection**, **releveling**, **special trip** and **case of error**, it can decide whether the car permanent spends all or nothing.

B502- Car Arrows

PARAMETER ARROWS

The output-channel of the car-arrows are at the carpanel-unit ITR. Here you can choose the following type of arrows:

- a) Only direction arrows
- b) Direction arrow and move-on arrow
- c) Only move-on arrows

DISCONNECTION OF THE MOVE ON ARROWS

You can switch off the driving on arrows on two ways.

- A) Disconnection by expiration of an adjusted time
- B) Disconnection by closing the doors

B503- Floor Indicators

ZR: PARAMETER ARROWS

The output-channel of the car-arrows are at the car panel-unit ITR. Here you can choose the following type of arrows:

- a) Only direction arrows
- b) Direction arrow and move-on arrow
- c) Only move-on arrows

ZR: SWITCHING OFF THE ARROWS

You can switch off the driving on arrows on two ways.

- A) Disconnection by expiration of an adjusted time
- B) Disconnection by closing the doors

ER: PARAMETER ARROWS

The output-channel of the car-arrows are at the car panel-unit ITR. Here you can choose the following type of arrows:

- a) Only direction arrows
- b) Direction arrow and move-on arrow
- c) Only move-on arrows

ER: SWITCHING OFF THE ARROWS

You can switch off the driving on arrows on two ways.

- A) Disconnection by expiration of an adjusted time
- B) Disconnection by closing the doors

ARROW-VIEW BY CLOSED DOOR

You can choose if the arrows are switched on by closed doors.

B504- Gong at the Car

In the first parameter of this menu you can activate the car gong function. You can attach a miniature speaker with an impedance of 8 ohms at the clamps 330 and 331 for the door side 1, as well as at the clamps 332 and 333 for the door side 2 of the FKR unit. You can select between accord, two-sound and triad gong. Additionally you can select a different sound function for the up- and downwards. The following trip modes can be switched on:

- A) Car calls
- B) Landing calls
- C) Priority calls
- D) Fire fighter service
- E) Special trips

Gong Function

Here, you can select whether the floor gong is active.

Car Call UP

Here, it can be selected whether the floor gong is active on an internal call with direction of travel UP, and the amount of gongs. The choice is balance, double and triangle.

Car Call DOWN

Here, you can choose whether the floor gong is activated for an internal call with direction AB, and the amount of gongs. The choice is balance, double and triangle.

Landing Call UP

Here, you can choose whether the floor garnish is activated on an outside call with direction of travel UP, and the amount of gongs. The choice is balance, double and triangle.

Landing Call DOWN

Here, it can be selected whether the floor garnish is active on an exit call with direction AB, and the amount of gongs. The choice is balance, double and triangle.

Priority Call UP

Here, it can be selected whether the floor garnish is active on a priority call with direction of travel UP, and the amount of gongs. The choice is balance, double and triangle.

Priority Call DOWN

Here, it can be selected whether the floor garnish is activated by a priority call with direction AB, and the amount of gongs. The choice is balance, double and triangle.

Fire Fighter Service

Here, you can choose whether the floor gong is active on a fire fighter trip, and the amount of gongs. The choice is balance, double and triangle.

Special Trip

Here, you can choose whether the floor gong is active on a special trip, and the amount of gongs. The choice is balance, double and triangle.

Gong function – volume

Here, the volume of the gong can be adjusted to the environment. The value range is from 1% to 100%. The factory setting is 50%.

Gong function – pitch

Here, the pitch of the gong can be adjusted to the environment. The value range is from 1% to 100%. The factory setting is 50%.

B505- Gong at the Floor

Like the car controller unit FKR, also the remote station ER 2005 offers the possibility of activating the gong function. You can attach a miniature speaker with an impedance of 8 ohms at the clamps 330 and 331 for the door side 1, as well as at the clamps 332 and 333 for the door side 2 of the FKR unit. You can select between accord, two-sound and triad gong. Additionally, you can select a different sound function for the up and downwards. The following trip modes can be switched on:

- A) Car calls
- B) Landing calls
- C) Priority calls
- D) Fire Fighter Service
- E) Special trip

Gong Function

Here, you can select whether the floor gong is active.

Car Call UP

Here, it can be selected whether the floor gong is active on an internal call with direction of travel UP, and the amount of gongs. The choice is balanced, double and triangle.

Car Call DOWN

Here, you can choose whether the floor gong is activated for an internal call with direction AB, and the amount of gongs. The choice is balanced, double and triangle.

Landing Call UP

Here, you can choose whether the floor garnish is activated on an outside call with direction of travel UP, and the amount of gongs. The choice is balanced, double and triangle.

Landing Call DOWN

Here, it can be selected whether the floor garnish is active on an exit call with direction AB, and the amount of gongs. The choice is balanced, double and triangle.

Priority Call UP

Here, it can be selected whether the floor garnish is active on a priority call with direction of travel UP, and the amount of gongs. The choice is balanced, double and triangle.

Priority Call DOWN

Here, it can be selected whether the floor garnish is activated by a priority call with direction AB, and the amount of gongs. The choice is balanced, double and triangle.

Fire Fighter Service

Here, you can choose whether the floor gong is active on a fire fighter trip, and the amount of gongs. The choice is balanced, double and triangle.

Special Trip

Here, you can choose whether the floor gong is active on a special trip, and the amount of gongs. The choice is balanced, double and triangle.

Gong function – volume

Here the volume of the gong can be adjusted to the environment. The value range is from 1% to 100%. The factory setting is 50%.

Gong function – pitch

Here the pitch of the gong can be adjusted to the environment. The value range is from 1% to 100%. The factory setting is 50%.

OUTPUT ER GONG PULSE

Pulse length for gong impulse on ER adjustable: pulse, 1...10 seconds.

B506- LED-Matrix

The car panel pcb EIT and remote station ER-2007 have RJ-12 (10-pole socket strips) sockets for the control of the matrix displays ANZ-22,-32, -33, -52 and 53.

FLOOR DISPLAY CAR & REMOTE STATION ER

For each stop a designation can be selected. The range of the letters and numbers is limited.

ERROR DISPLAY CAR

You can choose between:

- No (No expenditure for arrow)
- Yes (Standing arrow)
- Scroll (Current arrow)

SEGMENTS CAR

Depending on the selected matrix unit it can be selected whether a 2 or 3 segment matrix display is going to be used.

ERROR DISPLAY REMOTE STATION

You can choose between:

- No (No expenditure for arrow)
- Yes (Standing arrow)
- Scroll (Current arrow)

INDICATOR FIELD REMOTE STATION

Depending on the selected matrix unit an indicator field is present, which can be assigned for a type-output.

SEGEMENTS REMOTE STATION

Depending upon selected matrix unit it can be selected whether a 2 or 3 segment matrix display is to be headed for.

CENTRAL UNIT DISPLAY

You can choose between:

- Display 1 to 64
- Display as it is in the car

B507- Floor Displays

In this menu are the names of the individual floors, registered by the first up to the 64th floor. There are up to 3 points and the entire bandwidth of the ASCII character propositions for each stop are available.

The setting begins at the first stop with the two yellow editing keys. Right red button the three digits of the display are to be approached, and then jumped on the next floor. This ends in the 64th floor. The left red key (Escape), the process can be left and jumped back to the first floor.

This setting is binding on all bus displays, like the matrix LCD and TFT displays.

	<h3>B507 Floor Displays-Menue</h3> <table border="1"> <tr> <td colspan="3">B507 floor display</td> </tr> <tr> <td colspan="3">Floor-01 display: -2</td> </tr> <tr> <td colspan="3" style="text-align: center;">^</td> </tr> <tr> <td>Esc</td> <td>Enter</td> <td>Value</td> </tr> </table> <p>For each floor an up to three-digit name can be entered.</p>	B507 floor display			Floor-01 display: -2			^			Esc	Enter	Value
B507 floor display													
Floor-01 display: -2													
^													
Esc	Enter	Value											

B508- Messages

When KW adds protocol, up to 16 special messages can be transmitted serially. This menu can be set for each message whether it is visualized in the display booth or on the floor indicator.

	<h3>B508 Message-Menue</h3> <table border="1"> <tr> <td colspan="2">B508 Overload:</td> </tr> <tr> <td>Car:*</td> <td>floor:-</td> </tr> <tr> <td>Menue</td> <td>Value</td> </tr> </table> <p>This menu can be selected for the cabin display and the floor indicator, whether the special message is displayed. (* Display ON, - Display OFF)</p>	B508 Overload:		Car:*	floor:-	Menue	Value	<h3>Messages:</h3> <ul style="list-style-type: none"> -> Overload -> Evacuation -> Fire Evacuation -> Emergency Power Evac. -> Fire Fighter Travel -> Special Travel -> Bed Travel -> Guide Mode -> Out Of Order -> Maintenance -> Loadingtime Active -> Door Opening -> Door Closing -> Please Leave Car -> Please Wait -> Please Speak
B508 Overload:								
Car:*	floor:-							
Menue	Value							

B509- TFT/LCD - Car

This menu is made for the settings for the TFT-car indicator.

Background picture

In the "fixed" setting the background image for all floors is the same. "Switch" setting, each floor its own wallpaper.

Persons in Car

Here, the number of persons for the labeling in the inner panel of the cabin is determined.

Loadweight

Here, the indication of the load on the labeling in the inner panel of the cabin is determined.

Text-1 Manufacture

Here, the indication of the manufacture for the labeling in the inner panel of the cabin is determined.

Text-2 Factory-No.

Here, the specification of the serial number on the labeling in the inner panel of the cabin is determined.

Text-3 Build Year

Here, the year of manufacture on the labeling in the inner panel of the cabin is determined.

Text-4 CE-Sign

Here, the specification of the CE-No., or the rebuilding year for the labeling in the inner panel of the cabin is determined.

Floor Indicator

There are three visualization modes: fixed, rolling and as an animation.

Arrow Indicator

There are three visualization modes: fixed, rolling and as an animation.

Display String-1

Here, it is determined whether the string-1 is displayed on the TFT display.

Display String -2

Here, it is determined whether the string-2 is displayed on the TFT display.

Display String -3

Here, it is determined whether the string-3 is displayed on the TFT display.

Display String -4

Here, it is determined whether the string-4 is displayed on the TFT display.

Display Persons

Here, it is determined whether the number of persons indication is displayed on the TFT display.

Display Load

Here, it is determined whether the load indication is displayed on the TFT display.

Emergency Light

Here, it is determined whether the TFT display serves as an emergency light source. Physically required the TFT display, the 12V DC power supply (terminals 100 & 500).

Message Overload ... Please Speak

When KW display protocol up to 16 special messages can be transmitted serially. In this menu the following settings can be defined for each message:

	<p>B509 Displaytext</p> <div style="border: 1px solid black; padding: 5px; margin: 5px 0;"> <p>Overload: Imaging: **-*---* Dis- playtext-^ Esc Enter Wert</p> </div> <p>Here, the display text is activated by the star, it will appear on the TFT display of the special text.</p> <p>(* Display ON, - Display OFF)</p>	<p>Messages:</p> <ul style="list-style-type: none"> -> Overload -> Evacuation -> Fire Evacuation -> Emergency Power Evac. -> Fire Fighter Travel -> Special Travel -> Bed Travel -> Guide Mode -> Out Of Order -> Maintenance -> Loadingtime Active -> Door Opening -> Door Closing -> Please Leave Car -> Please Wait -> Please Speak
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	<p>B509 Symbol</p> <table border="1" style="width: 100%;"> <tr> <td>Overload: Imaging: **-*---*</td> </tr> <tr> <td>Symbol-^</td> </tr> <tr> <td>Esc Enter Value</td> </tr> </table> <p>Here, the symbol activated by the star, so the logo will appear on the TFT display.</p> <p>(* Display ON, - Display OFF)</p>	Overload: Imaging: **-*---*	Symbol-^	Esc Enter Value	<p>Messages:</p> <ul style="list-style-type: none"> -> Overload -> Evacuation -> Fire Evacuation -> Emergency Power Evac. -> Fire Fighter Travel -> Special Travel -> Bed Travel -> Guide Mode -> Out Of Order -> Maintenance -> Loadingtime Active -> Door Opening -> Door Closing -> Please Leave Car -> Please Wait -> Please Speak
Overload: Imaging: **-*---*					
Symbol-^					
Esc Enter Value					
	<p>B509 Fixed / blink</p> <table border="1" style="width: 100%;"> <tr> <td>Overload: Imaging: **-*---*</td> </tr> <tr> <td>...fixed/blink-^</td> </tr> <tr> <td>Esc Enter Value</td> </tr> </table> <p>Here, the "fixed" by the star is activated, appears on the TFT screen of the special text as a fixed bar. The other option is to flash the message.</p> <p>(* Display ON, - Display OFF)</p>	Overload: Imaging: **-*---*	...fixed/blink-^	Esc Enter Value	<p>Messages:</p> <ul style="list-style-type: none"> -> Overload -> Evacuation -> Fire Evacuation -> Emergency Power Evac. -> Fire Fighter Travel -> Special Travel -> Bed Travel -> Guide Mode -> Out Of Order -> Maintenance -> Loadingtime Active -> Door Opening -> Door Closing -> Please Leave Car -> Please Wait -> Please Speak
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Esc Enter Value					
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Overload: Imaging: **-*---*					
.....Buzzer short-^					
Esc Enter Value					
	<p>B509 Buzzer Long</p> <table border="1" style="width: 100%;"> <tr> <td>Overload: Imaging: **-*---*</td> </tr> <tr> <td>.....Buzzer long-^</td> </tr> <tr> <td>Esc Enter Value</td> </tr> </table> <p>Here, the Buzzer Long option activated by the star, as heard in the TFT display, the buzzer as long or lasting momentum.</p> <p>(* Display ON, - Display OFF)</p>	Overload: Imaging: **-*---*Buzzer long-^	Esc Enter Value	<p>Messages:</p> <ul style="list-style-type: none"> -> Overload -> Evacuation -> Fire Evacuation -> Emergency Power Evac. -> Fire Fighter Travel -> Special Travel -> Bed Travel -> Guide Mode -> Out Of Order -> Maintenance -> Loadingtime Active -> Door Opening -> Door Closing -> Please Leave Car -> Please Wait -> Please Speak
Overload: Imaging: **-*---*					
.....Buzzer long-^					
Esc Enter Value					

	<p>B509 Gong</p> <div style="border: 1px solid black; padding: 5px;"> <p>Overload: Imaging: **-*---* Gong-^ Esc Enter Wert</p> </div> <p>Here, the "Gong" option is enabled by the star, as heard in the TFT display of Gong pulse.</p> <p>(* Display ON, - Display OFF)</p>	<p>Messages:</p> <ul style="list-style-type: none"> -> Overload -> Evacuation -> Fire Evacuation -> Emergency Power Evac. -> Fire Fighter Travel -> Special Travel -> Bed Travel -> Guide Mode -> Out Of Order -> Maintenance -> Loadingtime Active -> Door Opening -> Door Closing -> Please Leave Car -> Please Wait -> Please Speak
	<p>B509 Voice Announcer</p> <div style="border: 1px solid black; padding: 5px;"> <p>Overload: Imaging: **-*---* ... Voice Announcer-^ Esc Enter Wert</p> </div> <p>Here, the "voice announcement" by the star is activated, sounds the TFT display of the voice message text for the message.</p> <p>(* Display ON, - Display OFF)</p>	<p>Messages:</p> <ul style="list-style-type: none"> -> Overload -> Evacuation -> Fire Evacuation -> Emergency Power Evac. -> Fire Fighter Travel -> Special Travel -> Bed Travel -> Guide Mode -> Out Of Order -> Maintenance -> Loadingtime Active -> Door Opening -> Door Closing -> Please Leave Car -> Please Wait -> Please Speak

Buzzer Short

Here, the pulse duration of the summer-short signal is determined. The value is adjustable from 2 to 255 milliseconds. The factory setting is 100 ms. The factory setting is 1 second.

Buzzer Long

Here, the pulse duration of the summer-long signal is set. The value is adjustable between 1, 2, 3 seconds, and permanently. The factory setting is 1 second.

Gong-Signal

Here the number of Gong signals is determined. The value is adjustable between 1, 2 and 3x Gong pulse. The factory setting is 1x Gong pulse.

Display- Format

Here, the orientation of the display is set:

- Automatic (by tilt sensor of the TFTs)
- Vertical
- cross

Display-Brightness

Here, the brightness of the display can be adapted to the environment. The range extends from 1% to 100%. The factory setting is 90%.

Volume Speech

Here, the volume of the display can be adapted to the environment. The range extends from 1% to 100%. The factory setting is 50%.

Tone Pitch Speech

Here, the pitch of the display can be adapted to the environment. The range extends from 1% to 100%. The factory setting is 50%.

Volume Music

Here, the volume of the background music of the display can be adapted to the environment. The range extends from 1% to 100%. The factory setting is 50%.

Backgroundmusic

Here, you can choose whether the background music is played. A prerequisite is that the desired music loaded in the TFT module.

Floor Message

Here, you can choose whether a voice message for each floor will be played. A prerequisite is that the voice message texts were loaded for each floor in the TFT module.

Time

Here, you can set whether the time is displayed to the TFT module.

Date

Here, you can set whether the date is displayed to the TFT module.

Time in Line

Here, you can set whether and in which text line (1 to 4) the time is displayed.

B510- TFT/LCD – Floor

This menu is made for the settings on the TFT display floor.

Text-1 Manufacture

Here, the indication of the manufacture for the labeling in the inner panel of the cabin is determined.

Text-2 Factory-No.

Here, the specification of the serial number on the labeling in the inner panel of the cabin is determined.

Text-3 Build Year

Here, the year of manufacture on the labeling in the inner panel of the cabin is determined.

Text-4 CE-Sign

Here, the specification of the CE-No., or the rebuilding year for the labeling in the inner panel of the cabin is determined.

Floor Indicator

There are three visualization modes: fixed, rolling and as an animation.

Arrow Indicator

There are three visualization modes: fixed, rolling and as an animation.

Display String-1

Here, it is determined whether the string-1 is displayed on the TFT display.

Display String -2

Here, it is determined whether the string-2 is displayed on the TFT display.

Display String -3

Here, it is determined whether the string-3 is displayed on the TFT display.

Display String -4

Here, it is determined whether the string-4 is displayed on the TFT display.

Message Overload ... Please Speak

When KW display protocol up to 16 special messages can be transmitted serially. In this menu the following settings can be defined for each message:

	<p>B509 Displaytext</p> <table border="1"> <tr> <td>Overload:</td> <td></td> </tr> <tr> <td> Imaging: **-*--*</td> <td>Dis-</td> </tr> <tr> <td> playtext-^</td> <td></td> </tr> <tr> <td>Esc</td> <td>Enter Wert</td> </tr> </table>	Overload:		Imaging: **-*--*	Dis-	playtext-^		Esc	Enter Wert	<p>Messages:</p> <ul style="list-style-type: none"> -> Overload -> Evacuation -> Fire Evacuation -> Emergency Power Evac. -> Fire Fighter Travel -> Special Travel -> Bed Travel -> Guide Mode -> Out Of Order -> Maintenance -> Loadingtime Active -> Door Opening -> Door Closing -> Please Leave Car -> Please Wait -> Please Speak
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playtext-^										
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.....Buzzer long-^					
Esc Enter Value					

	<p>B509 Gong</p> <pre> Overload: Imaging: **-*---*Gong-^ Esc Enter Value </pre> <p>Here, the "Gong" option is enabled by the star, as heard in the TFT display of Gong pulse.</p> <p>(* Display ON, - Display OFF)</p>	<p>Messages:</p> <ul style="list-style-type: none"> -> Overload -> Evacuation -> Fire Evacuation -> Emergency Power Evac. -> Fire Fighter Travel -> Special Travel -> Bed Travel -> Guide Mode -> Out Of Order -> Maintenance -> Loadingtime Active -> Door Opening -> Door Closing -> Please Leave Car -> Please Wait -> Please Speak
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Buzzer Short

Here, the pulse duration of the summer-short signal is determined. The value is adjustable from 2 to 255 milliseconds. The factory setting is 100 ms. The factory setting is 1 second.

Buzzer Long

Here, the pulse duration of the summer-long signal is set. The value is adjustable between 1, 2, 3 seconds, and permanently. The factory setting is 1 second.

Gong-Signal

Here the number of Gong signals is determined. The value is adjustable between 1, 2 and 3x Gong pulse. The factory setting is 1x Gong pulse.

Display- Format

Here, the orientation of the display is set:
 - Automatic (by tilt sensor of the TFTs) – Vertical - cross

Display-Brightness

Here, the brightness of the display can be adapted to the environment. The range extends from 1% to 100%. The factory setting is 90%.

Volume Speech

Here, the volume of the display can be adapted to the environment. The range extends from 1% to 100%. The factory setting is 50%.

Tone Pitch Speech

Here, the pitch of the display can be adapted to the environment. The range extends from 1% to 100%. The factory setting is 50%.

Volume Music

Here, the volume of the background music of the display can be adapted to the environment. The range extends from 1% to 100%. The factory setting is 50%.

Background Music

Here, you can choose whether the background music is played. A prerequisite is that the desired music loaded in the TFT module.

Time

Here, you can set whether the time is displayed to the TFT module.

Date

Here, you can set whether the date is displayed to the TFT module.

B6 Special Functions

B600 Monitor Functions

PARAMETER: CONTACTOR MONITOR

Is the contactor-monitor active, the main- and brake contactors will be controlled in two ways:

a) At the start of the travel, after a call, the main- and brake contactors will be controlled, if they switch on. If they do not switch on after a delay-time, which is in the parameter „**Start Time Monitor**“, this means input-channel has a high-level, the car stops immediately.

b) After a travel, the main- and brake contactors will be also controlled, if they have switched off. If they do not switch off, the car is blocked for the next travel. This is available between 500 and 4000 ms.

Once the travel is over, i.e. the contactor pilot control is disabled, but the main and brake contactors are not dropped, it is stopped after the elapse of a specified grace period, the system immediately.

If the system is blocked, you can only turn on the system, when you switch off / on the central unit ZR or activate the parameter **C00 „Controller-RESET“**.

PARAMETER: MONITOR INSPECTION

If the special-mode “inspection-drive” or “re-send-drive” active, the monitor functions are not active.

PARAMETER: MONITOR REACTION

Select between emergency stop & locking or emergency stop & calls.

PARAMETER: CONTACTOR MONITOR CHAIN

Select between version with opener chain or the extended version with opener and normally open contact chain. In addition altogether needs two opener entrance monitoring functions (E14 & E356) as well as a normally open contact input function (E474).

PARAMETER: CAR LIGHT MONITOR

Setting Off: There is no car light monitor.

Setting Current Sensor: If the fuse of the carlight is falling out or the light of the car is going out, this means the electrical power is sinking under 40W at 230V AC, there is a failure in the car light.

Setting Input E525: A light sensor which is connected at the input with the function E525, detects the failure of the cabin illumination.

Reaction:

A rope elevator stops in the next floor and it will be blocked with open doors, until the light is going on. If the special-mode “inspection-drive” or “re-send-drive” active, the monitor functions are not active.

With a hydraulic elevator an emergency sinking takes place into the lowest stop and the car stay with open doors until the error condition not change.

If the special trip modes “inspection trip” or “return trip” are active then **cab light monitoring** is deactivated.

PARAMETER: START TIME MONITOR

At the start of the travel, after a call, the main- and brake contactors will be controlled, if they switch on.

If they do not switch on after a delay-time, which is in the parameter „**Start Time Monitor**“, the car stopped immediately. If the special-mode “inspection-drive” or “re-send-drive” active, the monitor functions are not active.

PARAMETER: JOURNEY TIME MONITOR

If in the time, which you can put in in this parameter, no pulses are coming from the digital shaft-copy or there is no calculate brake-point of the floors on the way, the system will be blocked. If the special-mode “inspection-drive” or “re-send-drive” active, the monitor functions are not active.

PARAMETER: DECELERATION TIME MONITOR

If in the time, which you can put in in this parameter, no zone-switch is coming from the destination-floor, the system will be blocked. If the special-mode “inspection-drive” or “re-send-drive” active, the monitor functions are not active.

PARAMETER: STOP TIME MONITOR

If in the time, which you can put in in this parameter, no stopping is coming after the zone-switch of the destination-floor, the system will be blocked. If the special-mode “inspection-drive” or “re-send-drive” active, the monitor functions are not active.

PARAMETER: FAULT HANDLING

In this parameter there are two possibilities for the fault handling:

- a) **“Stop and block”** – This means, if the system is blocked, you can only turn on the system, when you switch off / on the central unit ZR or activate the parameter **C1 „Controller-RESET“**.
- b) **“Stop and delete calls”** – this means, after stopping and clear the calls, you can give new calls and system tries to start.

PARAMETER: TEMPERATUR MONITOR MOTOR

If the input-motor PTC becomes active, an entry is made into the next stop. The car remains in this stop until the motor PTC is deactivated. With a hydraulic elevator an emergency sinking takes place in the lowest stop and following bolting device of plant, until the input-motor PTC is deactivated. If the special trip modes are active “inspection trip” or “resent drive” then the drive break and stay in this condition, until the input-motor PTC is deactivated.

PARAMETER: BRAKESHOE MONITOR

If the processor-input for a brake-shoe-monitor becomes active, an entry is made into the next stop with a rope lift. The car remains in this stop until the error condition is repaired. If the special trip modes are active “inspection trip” or “resent drive”, then the drive clear and remain in this condition, until the error condition is repaired.

PARAMETER: BRAKE MONITOR

For the protection of unintended car movement away from the landing with the landing door not in the locked position and the car door not in the closed position according to the new standard EN 81-1:1998 + A3: 2009 resp. EN 81-2:1998 + A3: 2009 is done by the security circuit SIS16-101. The security circuit SIS16-101 causes the interruption of the safety circuit and thus acts directly on the drive contactors.

Based on the Position paper of the NB-L (CO-ORDINATION OF NOTIFIED BODIES LIFTS DIRECTIVE 95/16/EC) from 20.07.2011, Version 07, can be omitted in the external monitoring device of the brake control elements on a SIL 3 level. The monitoring is done by independent input channels of brake control elements monitoring of the control unit, or the regulation unit.

The operation of the brake release can be monitored by a processor input. It is expected for a closed brake a +24 V DC level. Now, if the brake contactor is activated, is expected to set a tolerance time that the processor has a 0V input DC level. Likewise, the applying the brake is monitored. Each brake element is a processor input required.

At hydraulic lifts of the company ALGI and the types AZRS and AZFR, according to the new standard EN 81-2:1998 + A3: 2009, the Down Travel is initiated with two series-connected hydraulic valves, which have a monitoring of the open and closed position. The monitoring is done by independent input channels of brake control elements monitoring of the control unit, or the regulation unit.

With traction elevator systems to EN81-1 with certified braking devices to the new standard EN 81-1:1998 + A3: 2009, by the monitoring is done by independent input channels of brake control elements monitoring of the control unit, or the regulation unit.

If the elevator system shut down, they can only reset the parameter C00 "RESET CONTROL" of the control systems DAVID D613 / D2005 / D912 be activated again.

PARAMETER: BRAKE MONITOR REACTION

The reaction is adjustable, an immediate emergency stop with following barriers of the elevator or only one emergency stop with deletion of the calls.

PARAMETER: BRAKE MONITOR INPUT

The Input of the brake open monitor is switchable between the function not inverted (highly active) or the inverted (low active).

PARAMETER: BRAKE SHOE MONITOR DELAY

The time for the procedure of the brake open can be supervised maximally 6000 milliseconds.

PARAMETER: BRAKE MONITOR SYNCHRONISM

The time for the procedure of the brake open can be supervised maximally 6000 milliseconds.

PARAMETER: SWITCH CABINET T-MAX

The central unit ZR has an electronic circuit for the collection of the temperature. The temperaure threshold for the blocking the elevator can be placed between 30 degrees Celsius and 100 degrees Celsius. The standard value is 60 degrees Celsius. Stopping the plant means an entry with a rope elevator into the next stop. With a hydraulic elevator the execution of an emergency sinking in the lowest stop and refusal of call acceptance to the switchgear cabinet temperature below the limit value threshold sinks.

PARAMETER: SWITCH CABINET T-MIN

Also the minimum temperature can be evaluated with the threshold value.

PARAMETER: MOTOR TEMPERATURE

The entrance for the input-monitor PTC resistor can be adjusted as follows:

- 1) OFF
- 2) Input 1 active
- 3) Input 2 active
- 4) Input 1 + 2 active

PARAMETER: Monitoring Door-Engine-PTC

When the function is activated, the PTC thermistor of the door motor is evaluated. The two inputs are located on the D613-FKR and have the designation 151 and 152.

PARAMETER: DSK-IMPULSE

The impulses of the digital shaft copying are supervised in normal operation, i.e. with missing impulses of A or B-trace the lift is stopped and locked. This impuls monitoring is disconnectable.

PARAMETER: ROPE Stretching

In this menu it is possible to evaluate the input functions E475 elongation of the error message from Henning to Loadmeasure system.

PARAMETER: BATTERYMONITOR

In this menu it is possible to monitor the input functions or E507 / E508 and the battery-OK messages from Wittur EOS system or over Local emergency systems.

PARAMETER: Monitoring A3-Case

In this parameter it is possible to switch ON / OFF the EN-81 A3-case monitoring. The default value is ON.

PARAMETER: AW60-Monitoring

In this parameter the monitoring of the release buttons of the AW-60 elevator release terminal is activated.

PARAMETER: Monitoring U10 Shaftdoor

According to EN81-20 / 50, it is necessary to detect whether the safety circuit is still closed, even though the shaft door has been opened (monitoring for falsely bridge).

If this is the case, the error message F34 "U10 shaft door" appears for a bridge in the area of the shaft doors.

PARAMETER: Monitoring-DSK-Direction

On the basis of the EM81-20 / 50, the actual direction of travel of the hoisting cabin with respect to the selected direction of the elevator control is monitored. The tolerance range is 100mm. This is necessary in order to prevent an erroneous switch-off due to the turning of the area during the starting process of a suboptimal control setting. In the event of a fault, the error message F83 "DSK direction" is output.

PARAMETER: Monitoring Nominal Speed

Due to the requirement of the EN81-20 / 50, the elevator system is monitored for compliance with the nominal speed. Exceeding the nominal speed by 15% leads to the shutdown of the take-off system and the output of the error message F255 "Over-speed".

Prerequisite is the correct entry of the nominal speed of the elevator system in parameter A3.6.

The factory setting must be adapted before LOCATION!

PARAMETER: Monitoring Door-End-Switch Close

When the function is activated, the door limit switch is evaluated to the door drive or the car doors, regardless of the door drive set. A drive with the bypass function according to EN81-20 / 50 is only possible when the car door is closed with the door limit switch closed and the function activated.

PARAMETER: Monitoring U11 Cabin-door

According to EN81-20 / 50, it is necessary to detect whether the safety circuit is still closed, even though the cabin door has been opened (monitoring for falsely bridge). If this is the case, the error message F35 "U11-Cabin door" appears for a bridge in the area of the car door.

Parameter: Monitoring U12 Bolt

According to EN81-20 / 50, it is necessary to detect whether the safety circuit is still closed, even though the Bolt contacts has been opened (monitoring for falsely bridge).

If this is the case, the error message F50 „U12-Bolt“ appears for a bridge in the area of the bolt contacts.

Parameter: Monitoring UPS

In the case of UPS devices with a power good output, this can be monitored by the STG. In the event of an error, F82 UPS is issued out of order.

Parameter: LOCK E06 U5 Speed Limiter

In the case of Error E06 Overspeed you can set a lock by the software.

B601- Inspection Travel

Description Inputs and Outputs of the inspection control

Terminal	Hardware	Function
60	24V DC Input	Inspection control On/Off - This entrance serves for recognizing whether the inspection control is switched on. In normal operations it rests against this input in +24V. If the inspection control turns on then there is a 0V DC.
60A	24V DC Input	It means inspection trip UP +24V DC at this entrance that the trip desire UP lies on. This entrance is locked mutually to hardware and software with the entrance 60B. If both entrances are activated, this trip desire and/or immediate cancelling of the driving or door instructions does not have to the consequence.
60B	24V DC Input	It means inspection trip DOWN +24V DC at this entrance that the trip desire UP lies on. This entrance is locked mutually to hardware and software with the entrance 60A. If both entrances are activated, this trip desire and/or immediate cancelling of the driving or door instructions does not have to the consequence.
60C	24V DC Input	Hurry button- only with hydraulic elevators- with hurry button with hydraulic elevators the high-speed valve (on or off) is activated with inspection enterprise, if we do not drive on a pre-end switcher into final stop direction. Key can be considered only in connection with inspection of the processor.
60D	24V DC	Signal to the activation of the inspection contactor K60.

Description Inputs and Outputs of the resend control

Terminal	Hardware	Function
61	24V DC Input	Return motion control On/Off - This entrance serves for recognizing whether the return motion control switched on. In normal operation rests against this entrance +24V. If the inspection control turns on then there is a 0V DC.
61A	24V DC Input	It means return motion trip UP +24V DC at this entrance that the trip desire UP lies on. This entrance is locked mutually to hardware and software with the entrance 61B. If both entrances are activated, this trip desire and/or immediate cancelling of the driving or door instructions does not have consequences.
61B	24V DC Input	It means return motion trip DOWN +24V DC at this entrance that the trip desire UP lies on. This entrance is locked mutually to hardware and software with the entrance 61A. If both entrances are activated, this trip desire and/or immediate cancelling of the driving or door instructions does not have consequences.
61D	24V DC	Signal for activating the inspection contactor K60.

PARAMETER: RESTART LOCKING

If this parameter is activated, then the lift stops and the inspection control is off. A start-up of the control can take place either via activation of the back getting control or via RESET of the controller.

PARAMETER: RESTART LOCKING DOOR

Is this parameter active, then the lift move in normal operation only, when the switching doors are opened before the inspection control is switched off.

PARAMETER: SPEED BUTTON

If this parameter is activated, then the speed-push-button in the inspection case can be used.

PARAMETER: Inspectionsstop TOP

This parameter defines the shut-off point for the inspection speed in the shaft head. In early software revisions, the cut-off point was determined by the position of the upper magnet of the zone of the uppermost stop. In the version for the EN81-20 / 50, the cut-off point can be defined in millimeters. The factory value is - 20mm, i.e. 20mm below the level of the top stop.

For shortened shaft heads, a factory setting of - 500mm is selected, which must be adjusted on site!

Attention! With a SAFE shaft copying system and a reduced shaft head, the inspection stop is set automatically!

PARAMETER: Inspections-Deceleration TOP

In order to ensure a clearance of the stand area of 2 m in the head and pit, a software-technical forced retardation of the inspection speed into the final stops from 0.3 m / s to the creep speed V0 has to be carried out. The factory setting is - 500mm before the flush value of the uppermost reverberation point. For shortened shaft heads, a minimum value of - 1000mm must be stated, which must be adjusted on site!

PARAMETER: Inspectionsstop BOTTOM

This parameter defines the shut-off point for the inspection speed in the shaft head. In early software revisions, the cut-off point was determined by the position of the lowest magnet of the zone of the lowest stop. In the version for the EN81-20 / 50, the cut-off point can be defined in millimeters. The factory value is + 20mm, that is, 20mm above the level of the lowest stop.

For shortened shaft pits, a factory preset of + 500mm is selected, which must be adjusted on site!

PARAMETER: Inspection-Deceleration BOTTOM

In order to ensure a clearance of the stand area of 2 m in the head and pit, a software-technical forced retardation of the inspection speed into the final stops from 0.3 m / s to the creep speed V0 has to be carried out. The factory setting is + 500mm before the flush value of the lowest reverberation point. If the shaft pit is shortened, a minimum value of + 1000mm must be specified, which must be adjusted on site!

PARAMETER: Inspectionsbulb Pit

Is used an inspection controlling the pit, as in the EN 81-20 / 50 required, it must be activated in this parameter. The input functions E528, E529, E530 & E531 can be routed to free input channels at the central unit. If both inspection controls are turned on, it can only be driven when S60A & S68a or S68b & S60B are operated together.

Function	Hardware	Function - Description
E528 -> 68	24V DC Input	Inspection control pit On/Off - This entrance serves for recognizing whether the Inspection control in the pit is switched on. In normal operation rests against this entrance +24V. If the inspection control turns on then there is a 0V DC.
E529 -> 68A	24V DC Input	It means inspection trip UP +24V DC at this entrance that the trip desire UP lies on. This entrance is locked mutually to hardware and software with the entrance 68A. If both entrances are activated, this trip desire and/or immediate cancelling of the driving or door instructions does not have consequences.
E530 -> 68B	24V DC Input	It means inspection trip DOWN +24V DC at this entrance that the trip desire UP lies on. This entrance is locked mutually to hardware and software with the entrance 68A. If both entrances are activated, this trip desire and/or immediate cancelling of the driving or door instructions does not have consequences.
E531 -> 68C	24V DC Input	Hurry button- only with hydraulic elevators- with hurry button with hydraulic elevators the high-speed valve (on or off) is activated with inspection enterprise, if we do not drive on a pre-end switcher into final stop direction. Key can be considered only in connection with inspection of the processor.

PARAMETER: Inspection bulb pit Reset

Comes in the pit, an inspection control is used, as in the EN81-20, so pit (A68) after switching off the inspection pear passed only in normal operation, when a reset button has been operated in the controller. The reset function inspection pit E532 is a free input function and can be routed to an available input channel to the central unit.

PARAMETER: Pit Reset by 5-Times Door-Lock unlatch

Another possibility for resetting is the possibility of activating the emergency release 5 times in a row after checking the shaft pit and closing the bottom shaft door with a special tool (triangle).

PARAMETER: Inspection Call

This parameter is activated by entering a lowering value of the cabin. The procedure for retrieving the cabin for inspection is as follows:

- 1.) Lift the elevator cabin by call.
- 2.) In the cabin, the DOOR-UP button, the INTERIOR button on the current floor, and the INTERIOR buttons on the floor below are simultaneously pressed for 2 seconds until a piezotone sounds for the active quotation.
- 3.) Now the cabin has to be left. After completion of the piezotone, the lift control closes the cabin & shaft doors and lowers the cabin.
- 4.) After completion of the lowering process, the piezotone rings again for 30 seconds and the operator has the possibility to unlock the door and initiate the inspection drive.
- 5.) If the 30-second duration is not used, or if a passenger is placed in the cab using an indoor command, the cabin flushes again, opens the door and goes into normal operation.

PARAMETER: Monitoring Manual Speed according EN81-20/50

According to EN81-20 / 50 the return speed of max. 0.63 m / s to 0.3 m / s and must not be exceeded. By setting the monitoring threshold to 0.3 m / s on the factory side, travel is interrupted if the distance is exceeded, but no blocking occurs. The error message F253 "Over speed return travel" appears.

Prerequisite is the correct entry of the nominal speed of the elevator system in parameter A3.6. The factory setting must be adapted before LOCATION!

PARAMETER: Monitoring Inspection Speed according EN81-20/50

According to EN81-20 / 50 the inspection speed must be monitored. Normal inspection speed is set to 0.3 m / s. The inspection speed can be increased to 0.5 m / s by pressing the rapid button on the inspection bobbin. In this way the factory setting of the monitoring threshold must be corrected on site. If the threshold is exceeded, the trip is interrupted, but no blocking occurs. The error message F254 "Over-speed inspection travel" appears.

Prerequisite is the correct entry of the nominal speed of the elevator system in parameter A3.6. The factory setting must be adapted in the elevator!

Parameter: pit module ERG

If a pit module, e.g. an ERG-2018 exists, this parameter must be activated. If the pit module fails, the inspection mode is automatically activated.

B602- EMERGENCY LIGHT SYSTEM

General

The emergency power equipment is integrated in that central unit controller makes with 12V a maximum power available of 1,2A. This power serves 1.1 AH Batteries, as well as for the supply of the intercom, for the supply of the 12V the alert tracer, the alert horn, the concise announcement and the emergency light.

PARAMETER: ALERT PUSH BUTTON DELAY

The alarm tracer activation can be retarded in the menu option delay alarm from one to five seconds, so that abuse and erroneous manipulation can be mostly prevented. If an error enters the lift, then the alarm delay becomes ineffective, and the notification of emergency imparted.

PARAMETER: ALERT PUSH BUTTON MISUSE PROTECTION

If **Off**: Alarm is released after deceleration time

If **On**: Alarm is not released under the following conditions:

- Elevator is located concisely in floor
- Door is open
- Elevator stands on " normal operation" (no inspection/ resend drive enterprise)
- There is no error

If one of these conditions is not full filled, the alarm is released.

B603- CAR FAN

Description of the In- & Output channels

terminal	Hardware	Function
A24	Relay common	Phase L5, to supply the car fan
E24	24V DC Input	Input push-button car fan; A level of +24V DC means that the car fan is started.
A24	24V DC output	If there is a level of +24V DC, is this the indicator for the running car fan.

PARAMETER: START OF FAN

To activate the car fan, there are two possibilities:

- A) „**Push-button**“ – If you use the push-button of the car fan, the relay switch off and the car fan will be started. The car fan is running, until the delay time is over, or there is a second push on the button of the car fan.
- B) „**Travel**“ – If you choose this value, the car fan starts automatically at the start of a travel. The fan switch off after the delay time.

PARAMETER: CAR FAN DELAY

This parameter determines the length of the hunting time of the car fan. Response time up to max. 240 seconds.

B604- LOAD MEASUREMENT

General

In principle you can select between two load transmitter systems. On the one hand the load sensor of the company KW can be used, on the other hand is present free- provable entrances, at which other makes can be attached by load measuring sensors.

PARAMETER: OVERLOAD IMPUT

The entrances of the overload message are switchable between the function of not inverted (highly actively) or inverted (low actively).

Load Measur. Laodsensor FKR

The KW load measuring sensor has a red ousing and has three coloured marked connection. The lines are to be presented as follows:

Color of the connecting cable	Terminal at Car-controller
Connecting cable green	Terminal 350
Connecting cable red	Terminal 351
Conneciting cable yellow	Terminal 352

The parameter Input FKR must be activated. Load conditions are learned over two load points. On the one hand the condition sized with empty car by activation of the menu option zero-load store. On the other hand the load point full load activated by the activation of the menu option full load store. In addition however the car must be loaded with test weights at height of the full load. The two load points 0% and 100% are now fixed. In the menu options overload, full load and less load can be individually stopped now from 0% to 150%.

FREE ENTRANCES FOR LOAD MEASURING SENSORS

Are used other load measuring sensors must the parameter entrance FKR be placed off. On the car controller FKR now the free entrance FE0 can be occupied as overload entrance and the other entrances then as full load entrance, and/ or less load entrance.

Switching attitude (normally open contact or opener) was specified in the first menu option.

OVERLOAD INPUT BIS-80

When using the BIS80, the overload input E63 must either be set to NPN (0V switching) or PNP (+ 24V switching).

LESS LOAD EVALUATION

If this parameter is activated a call threshold can be adjusted from 1 to 4 calls, during whose excess the car calls are deleted an / ignored. An activation of this parameter is naturally only reasonable, if a less vice identification is attached.

FULL LOAD EVALUATION

If this parameter is activated, landing calls are ignored (deletion or storage). An activation of this parameter is naturally only reasonable, if a full vice identification is attached.

B605- STANDBY TRAVEL

PARAMETER: STANDBY TRAVEL

In this parameter, you can activate the standby travel. To use the standby-travel, you must put a +24V DC voltage at the input channel.

Takes place during the rest ride a ride reversing, the door remains closed in the standby floor.

PARAMETER: STANDBY TRAVEL 1 FLOOR

One quiescent level can select at rope lifts. The standard value is regulating the **next level**.

That is the fact that if while driving the +24V DC entrance for the control and light disconnection becomes active. The cab continues and opens the doors and switches after a certain time the light off at the next stop. The door position is selectable. If the cab is not in full speed, then it remains in the stop and implements the functions described a while ago. Naturally also a certain quiescent level can be indicated. Hydraulic lifts always lower into the lowest level.

Parameter: Standby Travel 1 - Offset

You have the possibility to move up (+) or down (-) the car with xxx mm in the floor. The speed is the V0.

PARAMETER: STANDBY TRAVEL 2 FLOOR

Like the function before, you choose a second floor.

Parameter: Standby Travel 2 - Offset

You have the possibility to move up (+) or down (-) the car with xxx mm in the floor. The speed is the V0.

PARAMETER: DOOR

Here you can choose, if the doors are open or closed in the standby travel floor.

- 1.) Door 1-2 open
- 2.) Door 1+2 open/close
- 3.) Door 1 open
- 4.) Door 2 open
- 5.) Door 1 open/close
- 6.) Door 2 open/close
- 7.) Door 1+2 always close

Parameter: Standby Travel – Floor Indicator

Here you have the possibility to switch ON or OFF the floor indicator.

Parameter: Standby Travel – Car Indicator

Here you have the possibility to switch ON or OFF the car indicator.

B606 – PARKING TRAVEL

General

The mechanism of park levels at a lift serves to position or the cab / cabs to locally or temporally it can be better reacted changed flow of traffic and so the mechanical handling capacity increase. A position of cabs can be made on two ways:

1) Temporal definition of park levels

During the mechanism of a general park level is met the following parameter attitudes.

- | | |
|-----------------------------------|----------------------------------------------------------------|
| - Parameter: Park Trip | -> Yes |
| - Parameter: Floor | -> 1 up to max. number of stops |
| - Parameter: Park after | -> Adjustable from 1 to 15 minutes, up to the departure |
| - Parameter: Door position | -> Open/Close |

2) Definition of the park levels by input signals

In the menu B72 of inputs can be specified on the free-provales entrances park stop functions for certain levels. On an input with this function tension is applied, then this even is started as park stop, as long as the input is active.

- **Parameter: Park Trip** -> **Dynamic**
- **Parameter: Parks after** -> **Adjustable from 1 to 15 minutes, up to the departure**
- **Parameter: Door position** -> **Open /Close**

PARAMETER: DOOR POSITION PARKING

In the parameter B606 if the park trip was activated, then the door position can be put in the park level in this parameter. The attitudes "open" and "closed" are present, whereby "open" represents the standard value.

Temporal blockage of floors takes place with the timers from the menu B615

B607 – FLOOR BLOCKING

General

In order to regulate the flow of traffic to ensure and/or an access control it is possible to close certain levels.

BLOCKAGE OF FLOORS BY PARAMENTER ATTITUDE

The permanent blockage of levels can be met by the parameter attitudes. Landing- and car calls are erased for these floors.

PARAMETER: FLOOR BLOCKING

This parameter activated through to set the indication „*“ on certain floors. These floors are closed in the further enterprise, in those determined floors are closed.

PARAMETER: DYNAMIC BLOCKING

If this parameter is activated, the normal landing call handling must take place over the remote station ER. Then the call entrances at the ZR can be used for the floor blockade. The following attitudes exist:

- **Only car calls**
- **Only landing calls**
- **Car calls and landing calls**

PARAMETER: DYNAMIC BLOCKAGE ENTRANCE

You can choose between:

- 1) Normally with plants of a +24V of level the floor is closed
- 2) Inverted with plants of a 0V of level the floor is closed

Temporal blockage of floors takes place with the timers from the menu B615.

PARAMETER: CAR LIGHT AUTOMATIC OFF

Car light can be off if car stands at rest in the stop place without calls or the car is in park stop. This can be deactivated in the parameter **automatic off**.

PARAMETER: CARLIGHT DELAY

In order to avoid unnecessary in and turn-off processes of the car light one time interval should be selected in the parameter which it can be proceeded that no more calls are present. One time interval is adjustable from 0 to 6500 seconds. Default value is **60 seconds**.

PARAMETER: CAR INDICATOR AUTOMATIC OFF

Car indicator can be off if car stands at rest in the stop place without calls or the car is in park stop. This can be deactivated in the parameter **automatic off**.

PARAMETER: CAR INDICATER DELAY

Time interval from 0 to 6500 seconds is adjustable. As default value is **120 seconds** selected.

PARAMETER: FLOOR INDICATER AUTOMATIC OFF

Floor indicator can be off if car stands at rest in the stop place without calls or the car is in park stop. This can be deactivated in the parameter **automatic off**.

PARAMETER: FLOOR INDICATER DELAY

Time interval from 0 to 6500 seconds is adjustable. As default value is **300 seconds** selected.

PARAMETER: FREQUENCY INVERTER STANDBY

Frequency inverter can be in standby modus if the car stands inoperative in stop place. The electronics boards are shifted into sleep modus and intermediate circuit are unloaded. This can be activated in the parameter **Automatic off**.

PARAMETER: FREQUENCY INVERTER STANDBY DELAY

Time interval from 0 to 6500 seconds is adjustable. As default value is **600 seconds** selected.

PARAMETER: FREQUENCY INVERTER SWICH OFF

To the standby mode the frequency inverter becomes additionally completely without tension. The procedure is introduced over the elevator bus. This can be deactivated in the parameter **automatic off**.

PARAMETER: FREQUENCY INVERTER SWITCH OFF DELAY

Time interval from 0 to 6500 seconds is adjustable. As default value is **900 seconds** selected.

PARAMETER: DOOR DRIVE TRAIN AUTOMATIC OFF

Door Drive Train can be off if car stands at rest in the stop place without calls or the car is in park stop. This can be deactivated in the parameter **automatic off**.

PARAMETER: DOOR DRIVE TRAIN DELAY

Time interval from 0 to 6500 seconds is adjustable. As default value is **60 seconds** selected.

PARAMETER: MODUS S1

Operation mode S1(sleep mode) is here activatable for the processor system.

PARAMETER: MODUS S2

Operation mode S2(deep sleep mode) is here activatable for the processor system.

B609-614 – SPECIAL FUNCTIONS

Titel	Rang	Function	Description
B611	1	Fire-brigade control	The fire-brigade control is divided into two functional moduls: a) Fire-brigade priority in the 1 st , 2 nd or 3 nd fire-brigade level. b) Fire-brigade trip in the cab with dead man door control
B609	2	Emergency power evacuation	The emergency evacuation is structured in: a) Emergency power evacuation for individual systems without sequential control b) emergency power evacuation in a system network with consequence c) evacuation with emergency diesel generators d) Evacuation with battery packs e) Evacuation with temporary brake opening f) Evacuation with EVA90
B612	3	Rescue Travel	On the floor, the rescue entrance is set active. The elevator car drives to the stop immediately. The car is occupied by the VIPs and the journey to the special level (s) takes place. Thereafter, the car returns to the departure level, or to the level with the next outside call back.
B610	4	Fire drop evacuations	With the case of the elevators evacuating at the same time. The fire drop evacuation is divided philosophy conditionally into two rages: a) Until three fire drop levels with different priority. Start to the levels dependently of the active alarms. b) Dynamic fire drop avacuations, which do not drive through the fire source and the car over/ under the fire level position.
	6	Landing control OFF	In the car the advantages entrance is set actively. (term-low) The landing and car calls are deleted and all acknowledgements of the car call faster flash up to the call input.(no time limit) After effected call input; start for this stop; afterwards again flash the acknowledgement up to the call input on switch off the code switch.
B613	7	Leader operation	In the car the entrance for the leader enterprise is set actively (duration High). The landing and car calls are deleted, new set landing calls let the acknowledgements of the car calling faster flash up to the call input. After effected call input, start for this stop; delete acknowledgement.
B23	8	Car Priority	In the car the advantages entrance is set actively (Impuls) The landing calls are stored and car calls deleted; all acknowledgements of the car calls aster to flash and a call input within 20 seconds are expected. After effected call input, start for this stop; afterwards the plant is again in normal operation.
B24	9	Landing Priority	In the floor the landing priority input is set actively. The car immediately starts the stop. The landing calls are stored; all car calls deleted; all acknowledgements of the car calls faster to flash and a call input within 20 seconds are expected. After effected call input; start for this stop; afterwards the plant is again in normal operation.
B614	10	Obligation Stop/ hotel function	There is one main entrance level with obligation stop with passage (selectable in Up, Down & Up direction , Down direction)
	11	Normal Operation	Interior and exterior actively, no special trips.

B609 – EMERGENCY POWER SERVICE

Emergency evacuation in case of individual drivers

Is the emergency evacuation activated for a single driver, only the 230V AC signal at input 401 is evaluated. 230V AC means normal operating level, 0V is the AC means failure, the car moves to the preset emergency level and set the door of the door opening side.

Exterior and interior control are disabled. More actions only after ranking. Come on the 230V AC level again to the input 401, the system automatically returns to normal operation.

The input 401 has been assigned before-standard input function with the E01-emergency operation. You can also program any other input to this function.

Emergency evacuation of sequential circuit

The emergency evacuation is activated with sequential circuit, so only the 230V AC signal at input 401 and evaluated at the entrance to 402nd Input. Input 401 is again the message line. Input 402 is the entrance for the beginning of the emergency trip.

The level at 230V AC input 401 means normal operation. 0V is the AC means failure and only then is the input evaluated 402nd

The 230V AC level at input 402 is the start of the emergency drive. This means when the input 401 is energized. 0V AC means waiting for the emergency trip. The emergency operation begins when input 401 is energized.

Lies on a 230V AC input 402 then level at, so the car goes into the emergency level set and opens the door to the set side door. Exterior and interior control is disabled.

After reaching the emergency level, the relay 403, the voltage 402 continues to the next elevator, so that it can reach the evacuation level.

Did our elevator, receive the signal 402 at the beginning of the emergency trip, but as any errors the door do not close, then after a set time the relay is activated 403, to give other elevators the chance to evacuate.

More actions only after ranking. Come on the 230V AC level at the input 401 again, the system automatically returns to normal operation.

The input 401 "A08-emergency level reached" standard with the input function "E01-emergency mode", the input 402 with the "E02-emergency travel" and the output relay K307 with the preset function. You can also program any other input and output of these functions.

PARAMETER: EMERGENCY POWER SERVICE

In this parameter you can activate the function of the emergency power service. The options are:

- 1.) Power generator (with emergency diesel generators, UPS or onsite).
- 2.) Battery Power (With an evacuation unit specifically for the elevator system)
- 3.) With brake open (UPS opens and closes the brakes again when they reach the zone area by car)

4.) EVA90 drive with speed Ve, up to the zone, then switch to speed V0.

PARAMETER: FLOOR

The floor of the emergency power service is freely chosen. The standard value is the first floor.

PARAMETER: ENTRANCE OPEN

In this parameter the door open can be adjusted after arrival at the evacuation level. With only one side of the door basically the door is always open. On two sides of existing door can be decided whether only the door-side or only one side of the door-2 or both doors are open.

PARAMETER: FOLLOW-CIRCUIT

If this parameter is enabled, it waits before starting the evacuation trip to the input function E02-emergency travel.

PARAMETER: PIEZO BUZZER

If you activate this parameter the piezo buzzer of the carpanel-unit ITR can switch on, if there is an emergency power service travel.

PARAMETER: FOLLOW-CIRCUIT-DEADTIME

The set time is available to the elevator to reach the emergency level. If it is not him, it is locked and the output 403 (A08-output function emergency level reached), the voltage switches to the input 402 of the next lift.

B610 – EMERGENCY FIRE SERVICE

Emergency Fire Service

There are the following modes:

- A) Fire drop evacuation with one fire evacuation floor (Priority-1)
- B) Fire drop evacuation with two fire evacuation floor (Priority-2)
- C) Fire drop evacuation with three fire evacuation floor (Priority-3)
- D) Dynamic fire drop evacuation with passage of the fire source
- E) Dynamic fire drop evacuation without passage of the fire source

UNTIL THREE FIRE DROP LEVELS WITH DIFFERENT PRIORITY

With fire drop evacuations it turned out that 3 fire drop floors with different priority meet the requirements with plants up to 16 stops. If the first drop entrance is active (+24V DC level) then the cab drives into the adjusted 1 fire evacuation floor and the door of the adjusted door side opens. Outside and interior control is deactivated. Further actions only after order of rank. If the +24V DC level leaves at all fire drop entrances then the plant returns automatically to normal operation. If the second fire drop entrance is active, or first and second fire drop entrance actively then into the second fire drop floor one drives. After with all fire drop entrances the + 24V DC level leaves, the plant returns automatically to normal operation. During the 3 Fire evacuation entrance equivalent is acted. All entrances for the fire drop evacuation know High actively (normally open contacts or as Low actively (openers) are adjusted.

DYNAMIC FIRE DROP EVACUATION

During the dynamic fire drop evacuation floor fire alarms are present in each stop. It is present a main evacuation floor, into which in principle one evacuates. The exceptions consist of the fact that it burns in the main evacuation floor or on the trip to the main evacuation floor the fire source to be driven. In the software two are present dynamic fire drop evacuations. Those can driven through the fire source the other one stops above the fire source.

Fire evacuation under emergency conditions

In case of a fire evacuation, if the case comes to the emergency, the fire-evacuation levels are approached, in accordance to the priorities. For a composite of several plants, can be disposed of power capacity of emergency diesel to be evacuated as a rule only in succession.

A special case is the emergency evacuation with UPS dar. On hydraulic elevators with single-phase UPS can take place only in the downward direction of evacuation. There is no evacuation level in the lowest level, education levels should be avoided in the evacuation level by using a One-Way-Blocked-Valve. As an example of a 4-stop hydraulic system may be the response of the system in case of fire emergency condition shown below:

Floor	FLOOR FUNCTION	Actual Car-position	Active Evacuation-alert	Reaction
2		2	Main Evacuation floor	Drive to the main floor(0)
			Second Evacuation floor	Drive to Second Evacuation floor (1)
1	Second Evacuation floor	1	Main Evacuation floor	Drive to the main floor (0)
			Second Evacuation floor	Blocked in Second Evacuation floor (1)
0	Main Evacuation floor	0	Main Evacuation floor	Blocked in the main floor(0)
			Second Evacuation floor	Blocked in the main floor(0)
- 1		- 1	Main Evacuation floor	Blocked in the floor -1
			Second Evacuation floor	Blocked in the floor -1

PARAMETER: OPEN DOORSIDE

In this parameter the door position is adjustable after arrival in the evacuation level. With only door side in principle the door is opened always. With two existing door sides it can be decided whether only the door side 1 or only the door side 2 or both doors are open.

PARAMETER: PIECO BUZZER

If you activate this parameter the piezo buzzer of the carpanel-unit ITR can switch on, if there is an emergency fire service travel.

Parameter: Emergency Fire Service blocked

The piezo buzzer in the shaft can be activated here. If the fire trap evacuation is blocked via active modes such as inspection or recall control or maintenance, the piezo buzzer sounds as a warning.

PARAMETER: INPUT

The entrances of the evacuation levels and/ or the floor fire alarm are switchable between the function of a normally closer(high actively) or the opener (low actively).

Parameter: Emergency Fire Service Swiss version

The Swiss version of the fire evacuation can be activated here.

Parameter: Emergency Fire Service Door Condition

For the door position in the fire trap level after successful evacuation, the following settings are possible:

- Always open
- Closes after 1.0 to 60 seconds (adjustable).

Parameter: Fire trap evacuation Schindler ID

The signal characteristics can be defined for the evaluation of the fire alarm messages and transmission to the Schindler ID speed dial control

- - normal
- - Inverted

Parameter: RWA-Shaft smoke extraction

Activation of RWA shaft smoke extraction and determination of the evacuation stop. The input function E983 "RWA shaft smoke extraction" gives the control of the RWA system the message for the evacuation operation. This function is active at 0V DC (-> normally closed operation & line break monitored). The output function A624 "Shaft smoke extraction active" can be used to control an output message

B611 FIRE FIGHTER SERVICE

PARAMETER: FIREFIGHTER TRAVEL

In this parameter you can activate the function of the firefighter travel.

MAIN ENTRANCE PLACE

Pressing of the FW-code switch into on position the FW-elevator is called immediately into the main entrance place. The fire-brigade level is freely selectable in the software.

The elevator is located in a floor in stand-by (with closed doors) a direct trip to the main entrance place is automatically introduced.

If the elevator stands on a floor with open doors and the doors close immediately (Door-reverse devices are ineffective with exception of the closing force limiter) and the elevator drives into direct trip to the main entrance place.

If the elevator is in full speed the trip is continued directly to the main entrance place. If a drive direction change is necessary this takes place via stopping in the next possible floor without door opening. The door open racer is ineffective.

After arrival in the main entrance place the elevator open door and switches on driving basket light remains blocked.

After engagement of the FW code switch the announcement for "EVACUATION REQUEST ELEVATOR LEAVING" lights up at the same time a buzzer rings in the car. With reaching the buzzer grows silent to the main entrance place.

FIRE BRIGADE PRICE INCREASE IN THE CAR

The manipulation of the fire brigade code switch in the cab in on position causes:

- A) The announcement " EVACUATION-REQUEST ELEVATOR LEAVING" expires
- B) The announcement " FIRE BRIGADE TRIP" lights up
- C) An unhindered input of driving instructions is possible.
- D) The tracers "DOOR OPEN" and "DOOR CLOSE" are again activated.

A trip can be introduced by the input of a driving instruction. After input of a driving instruction the driving direction is determined. The door closes automatically and the trip is implemented.

Only one driving instruction is accepted and implemented. An incorrect driving instruction input can be erased through OFF/ON-switching on of the FW code switch.

After the arrival into the goal floor the door remains closed. The arrival gong sounds on the car. The door opening takes place after continuing pressing to the door up tracer. When releasing the tracer the door stops in its momentary position.

The door closes as long as the door tracer is operated. During input of a driving instruction the door closes automatically. The reversal of the automatically closing door is possible for registered driving instructions due to only pressing the door open tracer, whereby the registered driving instruction is deleted.

In the car adjusts that FW key into on position i.e. the car can leave and enter in the goal stop by the FW investigation trip. The car cannot be affected from the outside e.g. the main entrance place. During the resetting of FW code switch into the position "OUT" the car drives automatically into the main entrance place.

BRITISH FIRE BRIGADE MODEL

Deviating to the German model the British model has only in use the door button "OPEN". Into the goal floor the door can be driven only pressing of "DOOR OPEN BUTTON". If the the push button "door open" is released off during the door opening, then the door drives automatically close. This is always the case, until the door drove open completely. The car door close by car call.

AUSTRALIAN FIRE BRIGADE MODEL

The Australian model has a fire brigade lock with three positions in the elevator car. The third position of the lock must be connected with an entrance which is occupied with the function E21 "fire brigade instruction"

EN81-72:2003 FIRE BRIGADE MODEL

According European-Law EN81-72:2003.

Same functionality as English model, but the following modifications:

If a new call is pressed during the firefighting run, it is accepted and the old one is deleted. The elevator drives to the new call. If the door is open, the door closes as long as door CLOSE button is pressed or as long as call button is pressed. If the button is released before the door is closed, the door opens again.

EN 81-72:2003 Frankfurt/Main FIRE BRIGADE MODEL

Modified by the Feuerwehr Frankfurt/Main, Stand 06 / 2011.

In the interior of the car call control with the door open is stored. By changing the internal call while driving, new car call is stored until the destination floor is reached. If FW-interior-OFF, but FW calling still active, no elevator moves away from Anholung FW → + must be turned on.

Falls from car call for set-power source, the car call is stored, and remains supply reset.

FIRE BRIGADE MODEL – Light Version

Like EN81-72 Frankfurt, but the door runs automatically with internal call as in the "German model".

EN 81-72:2003 Düsseldorf FIRE BRIGADE MODEL

Modified by the Feuerwehr Düsseldorf, Stand 09 / 2011.

- 1.) Blocking of the elevator by interrupting the light barrier must be prevented by acoustic signal in the cab.
- 2.) In fire brigade mode, door control is only possible in dead man's mode (by pressing the door CLOSE or door OPEN keys).
- 3.) Call input in fire brigade mode takes place only after the door is completely closed.
- 4.) Activation of fire brigade operation in the cabin must only be possible when the firefighting external panel is activated.
- 5.) The operation commands must be possible by pressing the "Clear" pushbutton.
- 6.) If fire brigade operation is OFF in the interior panel, but fire brigade pickup is still active, elevator does not move away

EN 81-72: Frankfurt/Main FIRE BRIGADE MODEL - 2

Like EN81-72 Frankfurt, but the door in moving close automatically, like in the "German Model".

- When doors become open, doors are closed automatically by interior call and ride starts (like German model)

New as of Nov.2021:

- Activation of fire brigade operation in the ca (inside) must only be possible when the fire brigade outside panel is activated. (i.e. without fire brigade external panel, fire brigade internal panel does not work).

EN 81-72: Airport Stuttgart FIRE BRIGADE MODEL

Door closes according to call and 1x push button TürZu. Automatic door opening.

- 1.) The door controls should be automatic (currently only the door-close control is automatic. Door should also open and open automatically without door-open button in the drawing floor).
- 2.) If the fire brigade interior panel is active, then several interior calls can be issued. (The calls are stored and processed).

EN 81-72: Munich FIRE BRIGADE MODEL

Like EN81-72 but:

- 1.) Activation of the fire brigade operation in the cab must only be possible with the fire brigade control panel activated.
- 2.) If fire brigade operation in the cab is OFF, but fire brigade pickup remains active, the elevator will not move away.

EN 81-72: Netherlands

As EN81-72 Frankfurt-2 but without key switch inside:

There is a triangular switch in one (evacuation) floor, for activation from fire brigade operation. There is no extra switch in the cab to activate fire brigade in the inside.

Activation of fire brigade control:

When the triangular key is activated in the floor, the car is brought to the set fire brigade floor and remains with the door open. The acoustic signal is only emitted when the booth is retrieved. After reaching the fire brigade level, the acoustic signal goes out. The cab is picked up regardless of whether there is currently a fire alarm or not. The light barrier (photocell) is bridged.

Deactivation of fire brigade control:

When the fire brigade control is activated via the triangular key, the fire brigade function can only be deactivated on the fire brigade level. Even if the cab is in fire brigade mode on another floor and the triangular key has been deactivated (switched off) on the fire brigade level, the control system remains in fire brigade mode until the fire brigade level is approached via the cab call.

Inside call control in fire brigade mode:

When the controller is in fire brigade mode, only one internal call can be made. If another call is made, the existing call is overwritten. If the call is not in the current direction of travel, the cab stops at the next possible stop and then changes the direction of travel.

Door control in fire brigade mode:

The door is opened via the door-open button when the destination floor is reached via the internal call in fire brigade mode. The door open button must remain pressed until the door has been fully opened, then the door remains open until another internal call is made. If the door open button is released before the door is completely opened, the door closes automatically and remains closed until the door open button is pressed again.

The door closes automatically after a cab call is activated. The light barriers remain bridged during fire brigade operation.

EN 81-72: Heidelberg

Same as EN81-72 Frankfurt, terminate only if elevator is in fire brigade access level.

Phase 1 - Preferential call for the elevator (outside the elevator cab)

In the level which is intended to be the fire department access level, outside of the elevator cab, a key switch with Heidelberg fire brigade lock must be provided.

Phase 1 is initiated by actuating the switch (360° rotation of the key):

- An elevator standing in a landing shall close the doors and travel to the fire brigade access level without interruption.
- An elevator moving away from the fire brigade access level shall, without opening its doors, make a normal stop at the next available landing, reverse its direction of travel, and return to the fire brigade access level and return to the fire brigade access level.
- Upon arrival at the fire brigade access level, the fire brigade elevator must remain there with the cab and hoistway doors open.

Phase 2 Priority operation (inside the elevator cab)

A key switch with "Heidelberg fire brigade closure" must be provided in the elevator cab.

Phase 2 is initiated by actuating the switch (position "1"):

- It must not be possible to accept several cab interior calls at the same time.
- It must be possible to accept a new command from the cab at any time.
- Continuous actuation of a run command transmitter or the "DOOR CLOSED" pushbutton must result in the closing of the doors. A release for to the reservation.
- If the cab is at a stop, it must only be possible to open the doors by continuously pressing the "DOOR OPEN" button. A release for to close again.
- It must only be possible to remove the key in position "0".
- Even if the key is removed, the elevator must remain at the destination stop until another call is accepted. further call has been accepted.

Ending priority control

To deactivate the priority control, the elevator must first be moved to the fire brigade access level and the switch position access level and set the switch position "0" in the elevator cab. The priority control must then be deactivated outside the elevator car by turning the key (360°).

Parameter: Piezo at flush

When activated, a piezo buzzer message is given when the flush level is reached.

Parameter: Piezo at pickup

When activated, a beeper buzzer message is given when the fire brigade elevator is picked up.

Floor- / Inside call blocking deactivated for FW-Operation

For the FW-Operation it could be necessary to remove the existing Floor and Inside Call blockings.

B612 Rescue Travel

This function is used, among other things, to rescue people with disabilities in the event of a fire. In principle, this function can also be used to evacuate people in buildings.



There are two variants available:

- A) The elevator is made available in a fixed collecting level for a certain length of stay and then moves to the rescue level with the people to be evacuated. After emptying the car on the rescue level, the elevator returns to the collective level. This process can be repeated up to 10 times, depending on the setting.
- B) In the second variant, evacuation takes place without a fixed collection level, but the rescue trips are dependent on the existing external calls. With this setting, the landing calls are saved and approached individually, i.e. after each landing call, the rescue level is approached and then the level of the next landing call is approached. The rescue trip is carried out starting with the furthest outside calls in relation to the rescue level to the next outside calls. It is also possible to name **one to three collective levels with different priorities**. This means that floors with people with disabilities can be evacuated preferentially. The rescue operation is ended by:
- 1.) Active smoke detector on the rescue level
 - 2.) Active smoke detector in the elevator control

Parameter Rescue Travel

In this parameter you can activate the rescue drive.

Parameter Collective Floor

The connection floor is in the software free chooseable. At this level, the saving of people the opportunity to enter the elevator car. In addition, the "Outside Call" setting is possible. With this setting, the outside calls are stored and started individually, i.e. after each called out call, the rescue level is approached and then treated the next outcry.

Parameter Collective Floor Wait Time

This time period allows the boarding of persons to be rescued in the elevator car. The dwell time is adjustable between 1 and up to 15 minutes. Five seconds before closing the door will sound the buzzer on the inner panel computer EIT. The photocell is not observed, only the reverse-contact of the door.

Parameter Rescue Floor

The rescue floor is mainly the main floor. There should be a barrier-free and rapid evacuation of persons guaranteed.

Parameter Rescue Floor Wait Time

This time period allows the outboarding of persons to be rescued in the elevator car. The dwell time is adjustable between 1 and up to 15 minutes. Five seconds before closing the door will sound the buzzer on the inner panel computer EIT. The photocell is not observed, only the reverse-contact of the door.

Parameter Rescue Travel Repeat Travel

By entering a number between 1 and 10 in this parameter, it is possible to repeat the process of recovery journey.

Parameter: Open Doorside

The door position after arriving at the rescue level can be set in this parameter. If there is only one side of the door, the door is always open. If there are two door sides, a decision can be made as to whether door side 1 or door side 2 or door side 3 are open.

Parameter: Collective Level Prio 1

The collective level with priority 1 is determined in this parameter.

Parameter: Collective Level Prio 2

The collective level with priority 2 is determined in this parameter.

Parameter: Collective Level Prio 3

The collective level with priority 3 is determined in this parameter.

B613 GUIDE MODE

Guide mode operation is activated by permanently applying a signal to input function E23. At the same time, the feedback "Operator operation active" is output to output function A37.

Parameter Guide mode

Guide mode can be activated in this parameter.

Parameter Guide mode - door control

This parameter can also be used to set whether the door control should take place automatically or manually. With automatic door control, the door closes automatically after entering an internal call, with manual door control, after entering an internal call, the door CLOSE button must be pressed until the door closes completely. The light barrier is not evaluated here. If the door CLOSE button is released before the door is completely closed, the door opens again.

Parameter Guide mode - delete landing calls after

In this menu it can be set whether the external calls are deleted after a certain time (1-60 minutes) if they have not been started during this time.

Parameter Guide mode - call reques

If the guide mode is active, the outside call requests are displayed flashing on the outside call acknowledgment and on the corresponding inside call acknowledgment. The flashing mode, differentiated between inside and outside, can be set here.

B614 HOTEL OBLIGATION STOP

PARAMETER: HOTEL-OBLIGATION STOP

You can choose between:

- **Upward**
During all upward trips which were started below the main entrance level an obligation stop is operated in the main entrance level. At expiration of the driving on time on car call the trip continues to goal floor.
- **Downward**
During all downward trips which were started below the main entrance level an obligation stop is operated in the main entrance level. At expiration of the driving on time on car call the trip continues to goal floor.
- **Upward and Downward**
Functions like by upward and downward

The interior advantages code switch is operated in the car ist the function hotel obligation stop despite activation out of operation.

615 TIME REALY

PARAMETER: TIME RELAY 1

By attitude of the operating kind **Time relay 1** and definition of the activation entrance **Entrance time relay-1** and switching exit **Exit time relay-1** in the easily programmable entrances and exits of the menu B7) it is possible to solve further auxiliary functions at elevators.

You can choose between:

- **Suit-retarded**
The switch-on delay is adjustable in its time.
- **Waste-retarded**
The switch-off delay is adjustable in its time.
- **Suit-retarded with impulse**
The switch-on delay and the length of the impulse are adjustable
- **Waste-retarded with impulse**
The switch-off delay and the length of the impulse are adjustable.

DECELERATION TIME RELAY- 1

In this parameter the deceleration time can be stopped the suit and/or the waste of the time relay 1. The range of adjustment extends from 0,5 to 600 sec.

IMPULSE TIME RELAY-1

In this parameter can be positioned the temporal pulse time delay relay 1. The range of adjustment extends from 05, to 600 sec.

PARAMETER TIME RELAY-2

Equivalent one to the function under the time relay-1.

DECELERATION TIME RELAY- 1

Equivalent one to the function under the time relay-1.

IMPULSE TIME RELAY-2

Equivalent one to the function under the time relay-1.

SPEEDLIMIT Vx

You can put a speedlimit Vx at which an output function goes active.

TIMER 1-10

You can choose up to 10 timers.

Timer-1: Switch-on time-1 **Start-1 at xx:xx h**
Switch-off time-1 **Stop-1 at xx:xx h**
Switch-on time-2 **Start-2 at xx:xx h**
Switch-off time-2 **Stop-2 at xx:xx h**
Weekdays: **Mo Tu We Thu Fr Sa Su**

The timers are assigned in with the appropriate functions / e.g. park trip; base functions)

MENU A1 SUMMER/WINTER TIME

In the menu A1 it can be adjusted whether the summer and winter time are to be set automatically.

The following rules are valid for the time conversion:

For the summer time is valid:

The time conversion takes place on last Sunday in March. Around 2:00 AM the clock is introduced around one hour. That means: " The night is more briefly one hour".

For the winter time (standard time) is valid:

The time conversion takes place on last Sunday in October. Around 3:00 AM is reset the clock around one hour.

That means: " The night is longer one hour"

B616 ELEVATOR CHECK

PARAMETER: EXECUTION

In this parameter it can be adjusted whether the elevator attendant examination is activated and when it is accomplished.

- **Immediately** -The elevator attendant examination is accomplished immediately.
- **Every week** -The elevator attendant examination is accomplished each week.
- **Every 2 weeks** -The elevator attendant examination is accomplished every 2 weeks.
- **Every 3 weeks** -The elevator attendant examination is accomplished every 3 weeks.
- **Every 4 weeks** -The elevator attendant examination is accomplished every 4 weeks.

PARAMETER: WEEKDAY

In this parameter the weekday of execution can be positioned.

PARAMETER: TIME

In this parameter the time of the start of execution can be positioned.

PARAMETER: ACTION

You can choose between:

- 1. Test trip** Elevator drives first into the lowest floor. Afterwards all car calls are released upward.
 - If the elevator reached the highest floor all car calls is released downward.
 - If the elevator achieved the lowest floor, the AW is terminated. Elevator opens the doors in lowest floor.
- 2. Alarm button test** Control electro magnets of the alarm raser in expectation of the notification of emergency.
 - All doors remain fundamental closed during the AW
 - It does not ring
 - AW indicated as special trip

PARAMETER: REACTION

In this parameter with an incorrect result of the elevator attendant examination the following reaction is determined. To the selection stand:

- 1) Only message - The incorrect elevator attendant examination is noted in the error memory.
- 2) Message & Blocking

PARAMETER: FLOOR BLOCKADE

During the elevator attendant examination all floors are started and checked for if it is not fine. In this parameter it can be determined whether closed floors are also started.

PARAMETER: RESULT

In this parameter you can see the result of the last car locking.

	<p>B616 Ergebnis: AW-RESULT</p> <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <p>B616 Result: AW-Control: ----</p> </div> <p>The result of the AW-Control is now displayed: „----“, or „O.K.“ or „BLNT“: B=flash, L=Cab Light, N=Emergency call, T=Door open Button -> faulty!</p>
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B617 BOLT**PARAMETER: BOLT**

You can choose between:

- A) Statically- i.e. the pin bolting device is installed in the shaft and when activation can certain stops below the pin bolting device not to be started.
- B) Mobil- i.e. the pin bolting device is appropriate at the car.

PARAMETER: BOLT STATIC

In the parameter pin bolting device is deposited statically the stop in which the pin bolting device is effective.

PARAMETER : BOLT MOBIL

In the parameter pin bolting device mobility the stops places registered the pin bolting device is active.

PARAMETER: BOLT RETRIEVING

In this parameter you can decide, the releaving is active (static).

PARAMETER: BOLT WAKE LOWERING

In this parameter you can adjust the wake. Worth 1000ms.

PARAMETER: BOLT PRESSING WAKE

In this parameter you can adjust the pressing wake. Worth 4000ms.

PARAMETER: BOLT SINKING TRIP

In this parameter you can choose the sinking trip.

The following functions must be programmed:**Input options:**

- E328: If "1" then pin bolting device actively
- E329: Feedback " pins driven out"
- E330: Feedback " pins driven in"
- E364: Button- pins bring in manually (only by Resend/ Inspection and mobile mode)
- E365: Button- pins manually drive out (only by Resend/ Inspection and mobile mode)
- E366: Negative pressure (If the value is „0“, the pump must be started in order to generate pressure)
- E367: Pressure switch off by lowering onto the bolts (mobile), at low level „0“ switch off

Output options:

- A286: If „1“ then pin drive out
- A287: If "1" then pin drive in
- A313: Pins move: if A286 or A287 = "1"
- A314: Pin feedback driven out (= limit switch E329)
- A315: Pin feedback driven in (= limit switch E330)

1. Statically

The bolting device pins are in a firm floor in the shaft. This floor is specified in the menu. If the bolt is activated as the first it is examined whether the elevator is located in a floor above the pins. Otherwise a trip is released there and waited until elevator is located in this floor. Now no further calls are accepted. The bolts drive out. Afterwards the calls are accepted again. All floor underneath the bolts are not any longer started is valid also for the sinking trip. With inspection and back getting enterprise the driving commends in driving direction STARTING FROM with reaching the zone switches in the bolt floor are switched off as long as the bolt is active. The bolting device can be activated or deactivated only in the image mode.

2. Mobil**Conditions:**

- 1) Only with DSK absolute shaft copying.
- 2) The zone S71 must be present

Characteristics:

1. If pit holding device actively then none „bringing in with open Door” + no releveling
2. If actively and pins bolts given out then no sinking trip except in the case of error.

With the parameter B617- wake lowering knows the disconnection after lowering retarded become. By the fact it is possible that the rope is easily eased if the cab touches down on the bolts.

The bolting device bolts are at the car and can be driven out in each floor. If the elevator brings in from downside (putting up) into the floor the elevator holds above concise at the end of the zone. Then the bolts are driven out and the elevator lower with retrieving speed into the floor.

If the elevator comes from above (Down direction) in into the floor, it holds above concise at the beginning of the zone. Then the bolt are driven out and the elevator lower with retrieving speed into the floor. With hydraulic elevator the sinking trip is terminated if the point of concise is reached and run off the time. If the pressing switching off entrance becomes “LOW” (negative pressure) then also switches off, too. If the pressing switching off entrance is used then the follow-up time should be adjusted on approx 1-2 seconds (functions then only as watchdog time).

With each start the elevator with retrieving speed drives to zone-ends upward. It is all the same whether the goal stop is above or below the floor. The elevator stops there and the bolts drive in. Afterwards the trip is started into the goal floor.

Elevator stands and there are calls in the system:

- 1) If bolt is outside then the door and DSK shift-ON -> Elevator drives 50mm high
- 2) Bolt is brought in
- 3) If BZ-ON, then DSK shift-ON and trip to next floor
- 4) If BZ-OFF the DSK shift –OFF and trip to next door
- 5) If bolts brought in and BZ-ON, then DSK shift and start

Elevator drives into floor and the bolts are into the shelter:

- 1) The elevator stops about the floor in a 50 mm distance, the door remains closed
- 2) The bolts drive out
 1. 3) DSK Shift-OFF, elevator drives concisely, door opens

Safety notice – Disclaimer

If the car is in "Return Control" or "Inspection Control" operating modes, the bolts can be manually retracted and retracted using the two E364 and E365 programmable input functions (see buttons on the return control).

If the bolts have been extended manually and not retracted completely, it may happen that after switching back to normal operating mode, the bolt limit switches are checked by extending and retracting. However, as long as the bolt is not fully retracted, the car can not move.

B618 CODELOCK CALLS

Car Calls: In every Floor you can enter only four Number
(0-1-2-3-4-5-6-7-8-9)

The code is entered with programable input function E334-E344. For the input of the code as the latter “#”-button is pressed. If the code was entered correctly an interior call is released to the appropriate and one time pieco buzzer. If the wrong code was entered, so it beeps 3 times. By pressing the key the place counter is increased. If longer than 5 seconds no pressing the key takes place or if the input is pressed then the place counter is put back.

PARAMETER: CAR CALLS

With activated parameter can be specified for how much floors a coding is necessary.

PARAMETER: CODE INPUT FLOORS 01 UP TO MAX

With activated parameter a numeric code (with four digits) for the car call can be deposited for each floor.

The following Inputfunctions are needed:

E334 Code-key Car Call 1	Code- Push-button-1
E335 Code-key Car Call 2	Code- Push-button-2
E336 Code-key Car Call 3	Code- Push-button-3
E337 Code-key Car Call 4	Code- Push-button-4
E338 Code-key Car Call 5	Code- Push-button-5
E339 Code-key Car Call 6	Code- Push-button-6
E340 Code-key Car Call 7	Code- Push-button-7
E341 Code-key Car Call 8	Code- Push-button-8
E342 Code-key Car Call 9	Code- Push-button-9
E343 Code-key Car Call 0	Code- Push-button-0
E344 Code-key Call #	Enter Command

B619 ATTENDANT MODE

In the menu B619 you can activate the Attendant Mode (C&A) and the activation-time. With a pulse at the input-function E463 (Attendant Mode ON) the attendant mode will be activated.

With a pulse at the input-function E464 (Attendant Mode OFF) the attendant mode will be switched off and all car calls will be erased. Another way to switch off the attendant mode is the ending time in menu B619 (time parameter).

If the attendant mode is active, the output function A371 is high and the photocells are passive.

All floor blocking is switched off. All calls are indicated. They are saved but not in work.

When the input-function E465 (**Attendant Mode UP**) or E466 (**Attendant Mode DOWN**) is going high, then the door is closing, until the push-button of the input-function is activated.

The elevator begins his travel in this direction, if there is a call. When the push-button is switch off, before the door is closed, then the door opens again.

With a pulse at the input-function E467 (**Attendant Mode Landing calls OFF**), all landing calls will be erased and the landing control is switched off. The indicator "OUT OF ORDER" is activated.

With a second pulse at the input-function E467 the landing-control is switched on. Until the landing-control is not active, there is a back-message to the output-function A372 (**Attendant Mode Landing calls OFF**).

B620 DEADMAN MODE

In general you must activate the Deadman Mode in the menu **A2.2 controller type** with the parameter „**1K-Deadman**“.

In the menu **B620 Deadman Mode** you can switch on the Deadman Mode on two ways, namely there is used a „One-Hand-Operation“ or a „Two-Hand-Operation“.

If the **parameter input „Switch on over car calls“** is chosen, you have the „One-Hand-Operation-Mode“, because the car-priority-key is active and the car-call push-button must switch on, until the destination floor is arrived. If the car call is switched off during the travel, the elevator stops and the call is erased.

If the **parameter input „Switch on over E327“** is chosen, you have the „Two-Hand-Operation-Mode“ activated. If you want to begin a travel, you must switch on the key for car –priority.

After that you can push a car call and in the same time, the input-channel E327 (**Ready for travel**) must be switched on. The indicators of the car-call are switched off (no output-function).

If the input-function E327 is switched off during the travel, the elevator stops and the call is erased.

If the car-priority active at the end of the travel, it will be determined with a time delay of 10 seconds. When the hand-shaft-door will be opened, then the time-delay will be soon stopped. You can avoid with this method that the elevator will be started with a landing call.

In the menu **B620 Photocell monitoring** you can switch on or off the work with the photocells. If the parameter is active, there is only a reaction, if the car priority is active (travel with car calls).

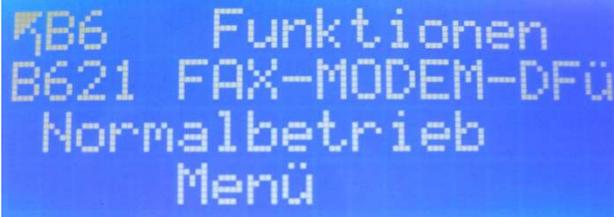
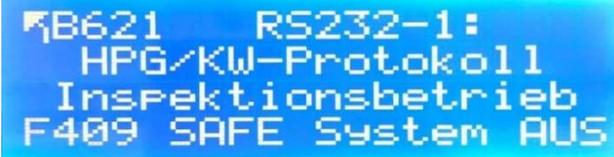
If the light of the photocell is broken, the travel will be stopped, or the travel will not be started. The input-functions are „**E345 Photocell Door 1**“ and „**E349 Photocell Door 2**“. The input-functions are at the input-channels FE0 and FE4 of the FKR.

In the menu on B620 Landing Calls over car call, the external calls via the car call functions are handled -> platform lifts with landing call-dead man.

In Menu mode, the B620 deadman fire escape special function is activated for fire service lifts. -> Landing call-dead man with temporary activation, depending on the position of the cabin.

B621 Fax-Modem-DUN

In this menu you have the possibility of determining the kind of the monitoring and of specifying the most important attitudes.

<p>Control menu B621 B621 Settings for unit type The following attitudes are possible: 1.) OFF 2.) REIMANN LTP 3.) FAX 4.) MODEM 5.) FAX + MODEM 6.) GSM-MODEM 7.) SAFELINE SL6 8.) TELEGÄRTNER GSM11 9.) LEITRONIC EA GSM 10.) AMPHITECH GSM AS0300 11.) MS-AG 4104 12.) GSM-MODEM CT63 -NG 13.) KW-Gateway 14.) BASE GSM-13</p>	
<p>Settings MODEM or FAX-MODEM The following attitudes are possible: 1.) Settings: MODEM 2.) Please register tepephone number locally. 3.) First telefon number of fax which should be informed. 4.) Second telefon number of fax which should be informed. 5.) First telefon number of modem which should be informed. 6.) Second telefon number of modem which should be informed. The second number serves in each case as alternative number, if first connection cannot be developed.</p>	 <p>Finally assign a code word from the modem access. Only with valid codeword a telecommunications access from the distance can take place.</p>
<p>Settings GSM-MODEM CT63-NG 1.) Please register tepephone number locally. 2.) Telefon number of SMS which should be informed. 3.) Telefon number of fax which should be informed. 4.) First telefon number of modem which should be informed. 5.) Second telefon number of modem which should be informed. The second number serves in each case as alternative number, if first connection cannot be developed</p>	 <p>Finally assign a code word from the modem access. Only with valid codeword a telecommunications access from the distance can take place.</p>
<p>B621 Settings for RS 232-1 1.) HPG/PC 2.) HPG/PC & REIMANN LTP 3.) REIMANN LTP 4.) HPG/KW-Protokoll</p>	
<p>B621 Error Message: 1.) OFF 2.) Modem-No.1-> Error message above the modem 3.) SMS-No.1 -> Error message with SMS (Only with GSM-Modem CT-63-NG).</p>	

B622 UCM MONITORING

B622 UCM Monitoring is based on the standard EN 81 1/ 2 –A3 which controlling unintentional movement of the car with open doors in stop.

<p>UCM-Device The following settings are possible:</p> <ol style="list-style-type: none"> 1.) OFF 2.) KW-UCM-Circuit 3.) WITTUR EOS 4.) Speed Limiter with Anti-Creep 5.) Dynatech-Vega Speed Limiter 	
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WITTUR EOS-UCM

Signal	Input	Output	Menu
ACD-Feedback	E495 UCM State-3	--	
Batterymonitor	E507 Batterymonitor	--	→ Menu B600

Response: If the ACD reporting and feedback comes in the safety circuit interrupts U5 (speed Limiter), the case of Motion of the car with the door open is provided from the bus stop. It depends on the error message "F60 A3-case".
Does the battery monitoring of the EOS system counts, if the error message "F42 battery monitoring." A rope elevator keeps the next stop, a hydraulic elevator drives to the bottom floor.

Speed Limiter with Anti-Creep (Type Bode Componentes, Jungblutt, Dyntec Star, Liftequipe-ThyssenK)

Signal	Input	Output	Menu
Message contact	E495 UCM State-3	--	

Response: If after the expiration of the trip the coil does not fall off, this is reported via the read-back contact and prevent the next ride. It depends on the error message "F60 A3-case".

Speed Limiter with Anti-Creep – Dynatech-Vega

Signal	Input	Output	Menu
Message contact	E495 UCM State-3	A638 UCM-Coil	

Response: The solenoid coil is controlled via output function A638. During the start process, the correct position of the rocker is monitored via a proximity switch (input E495). Up to 7 start attempts are possible. If the end position of the rocker is then not reached, the error message "F60 A3-case" appears.

<p>UCM-Monitoring The following attitudes with A3 are possible:</p> <ol style="list-style-type: none"> 1.) NO MONITORING 2.) OILDYNAMIC NGV A3 3.) BUCHER iValve 	
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GMV-Oildynamic: Safety Valve NGV-A3

Signal	Input	Output	Menu
READY	E493 UCM Staus-1	--	
RUN	E494 UCM Staus-2	--	

Reaction: If the sequence is wrong, the case of the traveling motion of the car with the door open. It depends on the error message "F30 UCM check valve".

BUCHER iValve – Integrated Emergency Stop – Down- Valve

Signal	Input	Output	Menu
+SMA	E493 UCM Staus-1	--	

Reaktion: If the sequence is wrong, the case of the traveling motion of the car with the door open. It depends on the error message "F30 UCM check valve".

Three different ways to Reset of the error “F60 A3-Case”:

- 1.) In the menu C0 Controller Reset
- 2.) Simultaneously press the three buttons maintenance call top-down call on the central unit ZR.
- 3.) De-energizing the FKR in the inspection box.

B623 OSKAR INTERFACE

Safety related parts interface OSKAR was developed on the defaults of the FRAPORT AG for elevators at airport Frankfurt/Main.

Interface supply four input functions and a connection to a LON-net.

PARAMETER OSKAR INTERFACE ON/OFF

Parameter to switch on and off the interface Oskar.

PARAMETER OSKAR CALL DEAD TIME

Parameter are adjustable for allowable time for call input.

B624 PARKING GARAGE

This parking garage funktion allows rationally enterprice for a parking garage of several lifts.

Filling enterprice or empty enterprice can assigned to individual lifts. The call algorithm is based on FIFO principle.

PARAMETER PARKING GARAGE FUNCTION

By switching on the parking garage funktion the existing call algorithm will be disabled.

Modes filling enterprice and empty enterprice are seleactable about the entry functions E502 and E503.

- 1.) Filling Mode: active, if the input funktion E502 is active.
- 2.) Empty Mode: active, if the input funktion E503 is active
- 3.) Filling- and Empty Mode together, if E502+E503 are active

Parameter Filling Mode

The call on the door side-1 is the main access level triggered by landing call door side-1 on the ER. The destination call is made by the driver on the keypad to input funktionen E334 ..E341.

Upon arrival of the car and then opened the door and break the light barrier car (E440.. E442) of the dialed destination floor as a car call side of the door 2 is passed.

After completion of the auto-positioning (E442 active photocells, E440 + E441 is not active) the door will be closed after a waiting time of 5 seconds, and start the ride.

At the end of the ride when the car left the cabin, is automatically started up again, the main access level.

Parameter Empty Mode

If the call is on the door side-2 is given, is raised in the appropriate parking levels of the landing call door side-2. The car moves to the appropriate floor and opens door-2.

If the car is positioned, the journey is automatically triggered in the exit floor (main entrance level). After leaving the car the next landing call is served. The order of operation of the landing calls is determined by a FIFO funktion, i.e. triggered the first landing call is served first.

Filling- and Empty Mode:

If empty and filling mode are enabled at the same time, the filling operation is carried out only if all the empty mode runs were completed.

Funktion Special Drive:

If at least 5 seconds, there is no empty or filling mode request (no outside calls empty or filling operations, elevator waiting), then brought over the entrances outside preferred side of the door-1 (E250) or door-2 (E251) for the elevator to the appropriate floor be. Subsequently, a car call can be performed. During this process, the parking garage funktion empty or filling mode is disabled. At the end of the voyage of the special parking operation is resumed.

B625 TRAFFIC CAPTURE

The traffic capture function offer the energy-save-mode on an elevator.

Parameter Traffic capture function

In this parameter you can activate the traffic capture function.

Parameter Calm traffic ON after

If a traffic calming in elevator operation is detected, can be transferred in a traffic mode. The adjustable tolerance-time is up to 60 minutes. The factory setting is 10 minutes.

Parameter Calm traffic OFF after

If an increased requirement for call detected in the calm traffic mode, the calm traffic mode is abandoned and transferred to normal operation. In this parameter, the number of calls that serve as limit is adjustable.

Parameter Calm traffic slow drive

In response to the calm traffic time, a slower travel speed can be selected.

Parameter Calm traffic door slow

In response to the calm traffic time, a slower door speed can be selected.

B626 WLAN

The D613 allows the connection of an access point for WLAN use.

Parameter ON / OFF

The access point can be activated in this parameter.

Parameter Access Point Password

The code word for the access point is entered here. There are 10 digits for a code word.

Parameter Access Point SSID

The SSID is defined in this menu item.

Parameter Access Point Channel

Setting the AP channel between 01 and 14. Factory setting is channel 01.

Attention! The WLAN access point code is assigned once in the test field and must be changed on site, so that no unauthorized third party has the opportunity to change the parameterization of the lift system!

B627 SABBAT CONTROL

The D613 allows switching to Sabbath operation. There are two input functions, "Sabbat Control" and "Sabbat Clock", for activating the Sabbath control. Both input functions are controlled externally.

When the "Sabbat Control" input is activated, the existing calls are still processed. However, no new calls are accepted. The cabin moves into the main access area and remains open with open doors when there are no calls.

After setting the "Sabbat Clock", the sabbath journey is started. The output function for the Sabbath operation is activated when both input functions are set.

Parameter ON / OFF

In this parameter the usage Sabbath control can be activated.

Parameter Time of travel Main Floor

The continuation time for the main plane can be entered separately from the other levels. The default value is 60 seconds.

Parameter Time of travel Floors

The continuation time for the floors can be entered separately from the main entrance level. The default value is 30 seconds.

Parameter Stops Floors UP 1 to 16

In this parameter, the stops can be defined, namely for the upward travel in the region of the stops 1 to 16.

Parameter Stops Floors UP 17 to 32

In this parameter, the stops can be defined, namely for the upward travel in the region of the stops 17 to 32.

Parameter Stops Floors DOWN 1 to 16

In this parameter, the stops can be defined, namely for the downward travel in the region of the stops 1 to 16.

Parameter Stops Floors DOWN 17 to 32

In this parameter, the stops can be defined, namely for the downward travel in the region of the stops 17 to 32.

B628 Penthouse Control

General:

The penthouse control unit in development 03-2017 serves 8 penthouse residential units. All announcements for penthouse control are evaluated with the central computer D613 in the machine room. The interior calls for the penthouse floor are encrypted (e.g., via a card reader or 10-key keyboard).

Car-Call Penthouse-Apartment:

In general, the car call of the penthouse floor via the input function E368 ... E431, E765 ... E956 (call blocking in-car call, setting B606: Dynam. Lockout: only intercom calls) is blocked and is released by the penthouse resident via a key switch or access control (eg RFID) if he wants to drive to his apartment.

Visitor-Control:

The cabin will only be sent in the floor if it is empty -(E437 = 1).

Priority-Call in the Apartment:

The cabin will only be sent in the floor if it is empty -(E437 = 1)

In the menu "B628 penthouse control" all settings of the penthouse control are made. At present, a maximum of 8 penthouse apartments are planned (Penthouse-X: 18). For each penthouse apartment the following settings are available:

B628 Penthouse-X: -OFF- / Floor: XY

B628 Penthouse-X: Doorside-1/2/3

B628 Penthouse-X: Visitor: Calls / automatic

For each of the existing penthouse apartment first the corresponding floor and the door side must be set. Furthermore, there is the choice of whether in the visitor attention of the car call in the penthouse floor manually (released floor flashes) or automatically (by interrupting the light barrier, the interior call is set to the penthouse) is triggered.

The car calls to the corresponding penthouse floors must be coded using the input functions "Call Barring Internal Calls TX HSxy" (input functions E368 - E399, E765 - E860).

The corresponding car calls can be released via a key-operated switch or a reader (when the visitor picks up, the internal call is released by the control in the main access level).

In the menu "B607 car call release feedback: off / flashing" it can be selected whether the enabled internal call to the identification flashes.

In general, the controller must be in normal operation. By activating a pent-up call described below, the landing calls are blocked, the car calls are canceled (if available) and then the selected penthouse call is carried out. After completion of the recovery either another penthouse recovery is carried out (if it was triggered in another penthouse apartment) or switched back to normal operation. There is an internal FIFO memory which internally stores all penthouse requirements (currently 10 penthouse apartments) and processes them in sequence.

The following penthouse modes are provided:

1. Penthouse-Priority-call of the penthouse apartment

A. The apartment owner presses the call for recovery of the cabin in his apartment:

Inputfunction E742 – Priority-call Penthouse -1

Inputfunction E745 – Priority-call Penthouse -2

Inputfunction E748 – Priority-call Penthouse -3

Inputfunction E751 – Priority-call Penthouse -4

Inputfunction E754 – Priority-call Penthouse -5

Inputfunction E757 – Priority-call Penthouse -6

Inputfunction E760 – Priority-call Penthouse -7

Inputfunction E763 – Priority-call Penthouse -8

Inputfunction E990 – Priority-call Penthouse -9

Inputfunction E993 – Priority-call Penthouse -10

B. The call in indicated over:

Outputfunction A575 Indication Penthouse-1

Outputfunction A577 Indication Penthouse-2

Outputfunction A579 Indication Penthouse-3

Outputfunction A581 Indication Penthouse-4

Outputfunction A583 Indication Penthouse-5
Outputfunction A585 Indication Penthouse-6
Outputfunction A587 Indication Penthouse-7
Outputfunction A589 Indication Penthouse-8
Outputfunction A628 Indication Penthouse-9
Outputfunction A630 Indication Penthouse-10

No further calls are accepted. The stored landing calls are deleted and the stored car calls are processed.

C. When the cabin is empty, the elevator is sent to the penthouse floor.

D. After reaching the penthouse floor the door opens (B628 Penthouse-X: door side-Y).

E. The owner now has the opportunity to give an exclusive call and drives the finish floor without stopping. After reaching the destination floor, the elevator returns to normal operation. If no call is made within the set time (factory setting 30 seconds), the elevator returns to normal operation.

2. Penthouse visitor control from the penthouse apartment

A. The visitor contacts the property owner by phone call or via the interphone.

B. The home owner sends the elevator to the main access level, but this is only possible when the cabin is empty. Here all car- and landing calls are blocked. The stored outside calls are deleted and the stored intercom calls are processed before the car moves to the main level. For this purpose, the home owner presses the call for visitors:

Inputfunction E741 – Visitor Priority-call Penthouse -1
Inputfunction E744 – Visitor Priority-call Penthouse -2
Inputfunction E747 – Visitor Priority-call Penthouse -3
Inputfunction E750 – Visitor Priority-call Penthouse -4
Inputfunction E753 – Visitor Priority-call Penthouse -5
Inputfunction E756 – Visitor Priority-call Penthouse -6
Inputfunction E759 – Visitor Priority-call Penthouse -7
Inputfunction E762 – Visitor Priority-call Penthouse -8
Inputfunction E989 – Visitor Priority-call Penthouse -9
Inputfunction E992 – Visitor Priority-call Penthouse -10

C. The call is indicated over:

Outputfunction A575 Indication Penthouse-1
Outputfunction A577 Indication Penthouse-2
Outputfunction A579 Indication Penthouse-3
Outputfunction A581 Indication Penthouse-4
Outputfunction A583 Indication Penthouse-5
Outputfunction A585 Indication Penthouse-6
Outputfunction A587 Indication Penthouse-7
Outputfunction A589 Indication Penthouse-8
Outputfunction A627 Indication Penthouse-9
Outputfunction A629 Indication Penthouse-10

No further calls are accepted. The stored landing calls are deleted and the stored car calls are processed.

D. When the cabin is empty, the elevator is sent to the penthouse floor.

E. After reaching the penthouse floor the door opens (B628 Penthouse-X: door side-Y).

F. The owner now has the opportunity to give an exclusive call and drives the finish floor without stopping. After reaching the destination floor, the elevator returns to normal operation. If no call is made within the set time (factory setting 30 seconds), the elevator returns to normal operation.

B629 Remote diagnostics

Parameter FUNCTION DB / OFF

In this parameter, the function of the remote diagnosis DB is activated.

Parameter Reference run ON / OFF

A reference travel can be made to determine the sensor data.

Parameter Start Reference run

The start time for the reference travel can be entered here (Every day – every week – 2x week).

B630 Evacuation Liquid Pit

Parameter: Evacuation Liquid Pit

By activating the parameter Liquid-Pit, an evacuation drive can be initiated by interrupting the + 24V DC at the input with the input function E974 on the processor system. A water sensor or float switch is recommended as a sensor for triggering. The output function A635 reports the status of the sensor and the evacuation "liquid pit" is active.

This means that a corresponding text can be switched on the TFT. When the evacuation floor is reached, the error "F258 flood pit" is triggered as long as the error persists. The message "LIQUID PIT" is output via the LED matrix on the FKR (V00.030) and on the ER2013 / 14 with the new software version 00.010.

Parameter: Evacuation Liquid Pit – Floor

The evacuation level is freely selectable. The second level is selected as the standard value. This must be adapted to the conditions on site.

Parameter: Evacuation Liquid Pit – Entrance Open

The door position after arriving at the evacuation level can be set in this parameter. If there is only one side of the door, the door is always open. If there are two door sides, it can be decided whether only door side 1 or only door side 2 or both doors are open.

B630 Evacuation Gas

Parameter: Evacuation Gas

By activating the evacuation gas parameter, an evacuation drive can be initiated by interrupting the + 24V DC at the input with the input function E997 on the processor system. A special gas sensor or a central trigger is recommended for triggering. The output function A636 reports the state that the gas evacuation drive is active.

This message is available as scrolling text "Evacuation gas" from FKR613 (V00.030) and on the ER2013 / 14 from V00.010.

Parameter: Evacuation Gas – Floor

The evacuation level is freely selectable. The second level is selected as the standard value. This must be adapted to the conditions on site. The output function A637 reports the state that the gas evacuation level has been reached.

Parameter: Evacuation Gas – Entrance Open

The door position after arriving at the evacuation level can be set in this parameter. If there is only one side of the door, the door is always open. If there are two door sides, it can be decided whether only door side 1 or only door side 2 or both doors are open.

B632 Earthquake evacuation

Parameter: Earthquake evacuation

By activating the parameter Evacuation earthquake an evacuation drive can be initiated by interrupting the +24V DC at the input with the input function E999 at the processor system. The output function A640 reports the status that the earthquake evacuation drive is active.

Parameter: Earthquake evacuation – Floor

The evacuation level can be freely selected. The second level is selected as the default value here. The option "Stop at next level" can also be selected. This must be adapted to the conditions on site. The output function A641 reports the state that the earthquake evacuation level has been reached.

Parameter: Evacuation earthquake - Open door side

In this parameter, the door position after arrival at the evacuation level can be set. With only one door side, the door is always open. If two door sides are present, it can be decided whether only door side 1 or only door side 2 or both doors are open.

Parameter: Evacuation earthquake - RESET

There are two ways to return to normal operation:

By selecting the parameter setting "No", an automatic return to normal operation takes place by omitting the trigger signal of the earthquake evacuation.

With the setting "Yes", a reset of the earthquake evacuation must take place via the input function E1000, e.g. by operating a RESET key switch.

B7 Input/ Output

General

In- and Output-channels at the control system DAVID-613 are easily programmable, i. e. the entrances are exits of the computer units ZR, ZG, FKR, EIT and ITR can be occupied freely with the most different in and base functions. In order to not occupy this control system with also over 350 input- and output functions each channel separately, preemption frameworks were introduced which make a preemption possible of the channels. Nevertheless each free-programmable entrance and exit with another function can be occupied. In the menu B73 I/O preemption, preemption frameworks are to you at the disposal. A fundamental proceed is to be planned as follows:

1. In menu **B73 I/O preemption** selects after the needs fitting preemption-frame.
2. Afterwards the entrances and exits are adapted after the control needs. This happens in the menus B71 preemption Outputs and B72 preemption Inputs.

B71 Allocation Outputs

The outputs ZR-, ZG-, FKR-, and ITR-unit can be occupied in principle with the functions specified down.

No.	Display representation	Function
A0	A00- no function	No function is assigned to the exit/relay.
A1	A01-Door movement	The relay tightens during a door movement.
A2	A02-Nudging	The relay tightens active function nudging with door latches.
A3	A03-EVACUATION	The relay energizes emergency power evacuation or fire drop evacuation.
A4	A04-CASE OF FIRE-EVACUATION	The relay energizes the case of fire evacuation.
A5	A05-EMERGENCY POWER	The relay energizes the emergency power.
A6	A06-FIRE-BRIGADE PRIORITY	The relay energizes the fire- brigade priority.
A7	A07-CASE OF FIRE LEVEL	The relay energizes if the case of fire level is reached.
A8	A08-EMERGENCY POWER LEVEL	The relay energizes if the emergency power level is reached.
A9	A09-FIRE-BRIGADE LEVEL	The relay energizes if the fire brigade level is reached.
A10	A10-DOOR FAULT	The relay falls if door fault is present.
A11	A11-OUT OF OPERATION	The relay falls if out of operation is present.
A12	A12-COLLECTIVE FAULT	The relay falls if motor temperature fault is present.
A13	A13-MOTOR TEMPERATURE	The relay falls if the motor temperature is present.
A14	A14-INSPECTION	Output if inspection service is on.
A15	A15-RESENT	Output if resent service is on.
A16	A16-NORMAL OPERATION	Output if normal operation service is on.
A17	A17-FULL LOAD	Output if full load is on.
A18	A18-OVERLOAD	Output if overload is on.
A19	A19-LESS LOAD	Output if less load is on.
A20	A20-PREFERENCE INSIDE	Output if preference inside is on.
A21	A21-PREFERENCE OUTSIDE	Output if preference outside is on.
A22	A22-PREFERENCE TOTAL	Output if preference total is on.
A23	A23-MOTOR FAN	Output at activated motor fan function.
A24	A24-CAR FAN	Output at activated car fan function.
A25	A25-CABINET FAN	Output at activated cabinet fan function.
A26	A26-ARROW UP	Arrow output upward.
A27	A27-ARROW DOWN	Arrow output downward.
A28	A28-HOLD INDICATOR	Output hold indicator.
A29	A29-ENTRY SIGNAL	Output entry signal (Impuls 500ms).
A30	A30-LOCKED	Output locked.
A31	A31-DOOR CONTROL 1 OPEN	Output door control door 1 open.
A32	A32-DOOR CONTROL 1 CLOSE	Output door control door 1 close.
A33	A33-DOOR CONTROL 2 OPEN	Output door control door 2 open.
A34	A34-DOOR CONTROL 2 CLOSE	Output door control door 2 close.
A35	A35-SPECIAL TRIP	Output of the message special trip.
A36	A36-RESCUE TRIP	Output of the message rescue trip.
A37	A37-LEADER ENTERPRISE	Output of the message leader enterprise.
A38	A38-LOBBY MONITORING	The relay energizes with expiration of the adjusted time in the parameter B12.
A39	A39- Shaft door close	The relay energizes if at U 10 tension lies on. (shaft door close)
A40	A40- Car door close	The relay energizes if at U 11 tension lies on. (car door close)
A41	A41-out of operation invers	Output if the elevator is out of operation.
A42	A42-collective fault invers	Expenditure, if the plant shows a collecting fault signal.
A43	A43-releveling	Expenditure to control of the protection circuit.
A44	A44-parking level reach	Expenditure if the parking level is reached.
A45	A45 call messaging car fan	Expenditure call messaging at active car fan

A46	A46 nudging door 1	Expenditure of the nudging command for door 1 under ignoring photoelectric cell
A47	A47 nudging door 2	Expenditure of the nudging command for door 2 under ignoring photoelectric cell
A48	A48 Car Light	Expenditure for heading for the cab light
A49	A49 Car Position Indicator ZR1	Expenditure of the cab conditions at the central unit ZR channel 1
A50	A50 Car Position Indicator ZR2	Expenditure of the cab conditions at the central unit ZR channel 2
A51	A51 Car Position Indicator ZR3	Expenditure of the cab conditions at the central unit ZR channel 3
A52	A52 Car Position Indicator ZR4	Expenditure of the cab conditions at the central unit ZR channel 4
A53	A53 Car Position Indicator ZR5	Expenditure of the cab conditions at the central unit ZR channel 5
A54	A54 Car Position Indicator ZR6	Expenditure of the cab conditions at the central unit ZR channel 6
A55	A55 Car Position Indicator ZR7	Expenditure of the cab conditions at the central unit ZR channel 7
A56	A56 Car Position Indicator ZR8	Expenditure of the cab conditions at the central unit ZR channel 8
A57	A57 Car Position Indicator ITR1	Expenditure of the car position at the car calling controller ITR channel 1
A58	A58 Car Position Indicator ITR2	Expenditure of the car position at the car calling controller ITR channel 2
A59	A59 Car Position Indicator ITR3	Expenditure of the car position at the car calling controller ITR channel 3
A60	A60 Car Position Indicator ITR4	Expenditure of the car position at the car calling controller ITR channel 4
A61	A61 Car Position Indicator ITR5	Expenditure of the car position at the car calling controller ITR channel 5
A62	A62 Car Position Indicator ITR6	Expenditure of the car position at the car calling controller ITR channel 6
A63	A63 Car Position Indicator ITR7	Expenditure of the car position at the car calling controller ITR channel 7
A64	A64 Car Position Indicator ITR8	Expenditure of the car position at the car calling controller ITR channel 8
A65	A65 Drive Arrow Ind. Up Stop01	Output of the Journey-Arrow-Up for the Stop 01
A66	A66 Drive Arrow Ind. Up Stop02	Output of the Journey-Arrow-Up for the Stop 02
A67	A67 Drive Arrow Ind. Up Stop03	Output of the Journey-Arrow-Up for the Stop 03
A68	A68 Drive Arrow Ind. Up Stop04	Output of the Journey-Arrow-Up for the Stop 04
A69	A69 Drive Arrow Ind. Up Stop05	Output of the Journey-Arrow-Up for the Stop 05
A70	A70 Drive Arrow Ind. Up Stop06	Output of the Journey-Arrow-Up for the Stop 06
A71	A71 Drive Arrow Ind. Up Stop07	Output of the Journey-Arrow-Up for the Stop 07
A72	A72 Drive Arrow Ind. Up Stop08	Output of the Journey-Arrow-Up for the Stop 08
A73	A73 Drive Arrow Ind. Up Stop09	Output of the Journey-Arrow-Up for the Stop 09
A74	A74 Drive Arrow Ind. Up Stop10	Output of the Journey-Arrow-Up for the Stop 10
A75	A75 Drive Arrow Ind. Up Stop11	Output of the Journey-Arrow-Up for the Stop 11
A76	A76 Drive Arrow Ind. Up Stop12	Output of the Journey-Arrow-Up for the Stop 12
A77	A77 Drive Arrow Ind. Up Stop13	Output of the Journey-Arrow-Up for the Stop 13
A78	A78 Drive Arrow Ind. Up Stop14	Output of the Journey-Arrow-Up for the Stop 14
A79	A79 Drive Arrow Ind. Up Stop15	Output of the Journey-Arrow-Up for the Stop 15
A80	A80 Drive Arrow Ind. Down St.02	Output of the Journey-Arrow-Up for the Stop 02
A81	A81 Drive Arrow Ind. Down St.03	Output of the Journey-Arrow-Up for the Stop 03
A82	A82 Drive Arrow Ind. Down St.04	Output of the Journey-Arrow-Up for the Stop 04
A83	A83 Drive Arrow Ind. Down St.05	Output of the Journey-Arrow-Up for the Stop 05
A84	A84 Drive Arrow Ind. Down St.06	Output of the Journey-Arrow-Up for the Stop 06
A85	A85 Drive Arrow Ind. Down St.07	Output of the Journey-Arrow-Up for the Stop 07
A86	A86 Drive Arrow Ind. Down St.08	Output of the Journey-Arrow-Up for the Stop 08
A87	A87 Drive Arrow Ind. Down St.09	Output of the Journey-Arrow-Up for the Stop 09
A88	A88 Drive Arrow Ind. Down St.10	Output of the Journey-Arrow-Up for the Stop 10
A89	A89 Drive Arrow Ind. Down St.11	Output of the Journey-Arrow-Up for the Stop 11
A90	A90 Drive Arrow Ind. Down St.12	Output of the Journey-Arrow-Up for the Stop 12
A91	A91 Drive Arrow Ind. Down St.13	Output of the Journey-Arrow-Up for the Stop 13
A92	A92 Drive Arrow Ind. Down St.14	Output of the Journey-Arrow-Up for the Stop 14
A93	A93 Drive Arrow Ind. Down St.15	Output of the Journey-Arrow-Up for the Stop 15
A94	A94 Drive Arrow Ind. Down St.16	Output of the Journey-Arrow-Up for the Stop 16
A95	A95 Call Messaging Up St01	Expenditure of the receipt for the landing call up for Stop 01
A96	A96 Call Messaging Up St.02	Expenditure of the receipt for the landing call up for Stop 02
A97	A97 Call Messaging Up St.03	Expenditure of the receipt for the landing call up for Stop 03
A98	A98 Call Messaging Up St.04	Expenditure of the receipt for the landing call up for Stop 04
A99	A99 Call Messaging Up St.05	Expenditure of the receipt for the landing call up for Stop 05
A100	A100 Call Messaging Up St.06	Expenditure of the receipt for the landing call up for Stop 06
A101	A101 Call Messaging Up St.07	Expenditure of the receipt for the landing call up for Stop 07
A102	A102 Call Messaging Up St.08	Expenditure of the receipt for the landing call up for Stop 08
A103	A103 Call Messaging Up St.09	Expenditure of the receipt for the landing call up for Stop 09
A104	A104 Call Messaging Up St.10	Expenditure of the receipt for the landing call up for Stop 10
A105	A105 Call Messaging Up St.11	Expenditure of the receipt for the landing call up for Stop 11
A106	A106 Call Messaging Up St.12	Expenditure of the receipt for the landing call up for Stop 12
A107	A107 Call Messaging Up St.13	Expenditure of the receipt for the landing call up for Stop 13
A108	A108 Call Messaging Up St.14	Expenditure of the receipt for the landing call up for Stop 14
A109	A109 Call Messaging Up St.15	Expenditure of the receipt for the landing call up for Stop 15
A110	A110 Call Messaging Down St.01	Expenditure of the receipt for the landing call down for Stop 01
A111	A111 Call Messaging Down St.02	Expenditure of the receipt for the landing call down for Stop 02

A112	A112 Call Messaging Down St.03	Expenditure of the receipt for the landing call down for Stop 03
A113	A113 Call Messaging Down St.04	Expenditure of the receipt for the landing call down for Stop 04
A114	A114 Call Messaging Down St.05	Expenditure of the receipt for the landing call down for Stop 05
A115	A115 Call Messaging Down St.06	Expenditure of the receipt for the landing call down for Stop 06
A116	A116 Call Messaging Down St.07	Expenditure of the receipt for the landing call down for Stop 07
A117	A117 Call Messaging Down St.08	Expenditure of the receipt for the landing call down for Stop 08
A118	A118 Call Messaging Down St.09	Expenditure of the receipt for the landing call down for Stop 09
A119	A119 Call Messaging Down St.10	Expenditure of the receipt for the landing call down for Stop 10
A120	A120 Call Messaging Down St.11	Expenditure of the receipt for the landing call down for Stop 11
A121	A121 Call Messaging Down St.12	Expenditure of the receipt for the landing call down for Stop 12
A122	A122 Call Messaging Down St.13	Expenditure of the receipt for the landing call down for Stop 13
A123	A123 Call Messaging Down St.14	Expenditure of the receipt for the landing call down for Stop 14
A124	A124 Call Messaging Down St.15	Expenditure of the receipt for the landing call down for Stop 15
A125	A125 Call Messaging Down St.16	Expenditure of the receipt for the landing call down for Stop 16
A126	A126 maintenance doors	Output function for message maintenance doors
A127	A127 car arrow up	Output function for car arrows up
A128	A128 car arrow down	Output function for car arrows up
A129	A129 Fire brigade evacuation	Output function until the fire brigade evacuation floor is reached
A130	A130 Call Messaging D2 Up F01	Receipt of the landing call Up for the selective door side 2 the Stop 01
A131	A131 Call Messaging D2 Up F02	Receipt of the landing call Up for the selective door side 2 the Stop 02
A132	A132 Call Messaging D2 Up F03	Receipt of the landing call Up for the selective door side 2 the Stop 03
A133	A133 Call Messaging D2 Up F04	Receipt of the landing call Up for the selective door side 2 the Stop 04
A134	A134 Call Messaging D2 Up F05	Receipt of the landing call Up for the selective door side 2 the Stop 05
A135	A135 Call Messaging D2 Up F06	Receipt of the landing call Up for the selective door side 2 the Stop 06
A136	A136 Call Messaging D2 Up F07	Receipt of the landing call Up for the selective door side 2 the Stop 07
A137	A137 Call Messaging D2 Up F08	Receipt of the landing call Up for the selective door side 2 the Stop 08
A138	A138 Call Messaging D2 Up F09	Receipt of the landing call Up for the selective door side 2 the Stop 09
A139	A139 Call Messaging D2 Up F10	Receipt of the landing call Up for the selective door side 2 the Stop 10
A140	A140 Call Messaging D2 Up F11	Receipt of the landing call Up for the selective door side 2 the Stop 11
A141	A141 Call Messaging D2 Up F12	Receipt of the landing call Up for the selective door side 2 the Stop 12
A142	A142 Call Messaging D2 Up F13	Receipt of the landing call Up for the selective door side 2 the Stop 13
A143	A143 Call Messaging D2 Up F14	Receipt of the landing call Up for the selective door side 2 the Stop 14
A144	A144 Call Messaging D2 Up F15	Receipt of the landing call Up for the selective door side 2 the Stop 15
A145	A145 Call Messaging D2 Dn F01	Receipt of the landing call Down for the selective door side 2 the Stop 01
A146	A146 Call Messaging D2 Dn F02	Receipt of the landing call Down for the selective door side 2 the Stop 02
A147	A147 Call Messaging D2 Dn F03	Receipt of the landing call Down for the selective door side 2 the Stop 03
A148	A148 Call Messaging D2 Dn F04	Receipt of the landing call Down for the selective door side 2 the Stop 04
A149	A149 Call Messaging D2 Dn F05	Receipt of the landing call Down for the selective door side 2 the Stop 05
A150	A150 Call Messaging D2 Dn F06	Receipt of the landing call Down for the selective door side 2 the Stop 06
A151	A151 Call Messaging D2 Dn F07	Receipt of the landing call Down for the selective door side 2 the Stop 07
A152	A152 Call Messaging D2 Dn F08	Receipt of the landing call Down for the selective door side 2 the Stop 08
A153	A153 Call Messaging D2 Dn F09	Receipt of the landing call Down for the selective door side 2 the Stop 09
A154	A154 Call Messaging D2 Dn F10	Receipt of the landing call Down for the selective door side 2 the Stop 10
A155	A155 Call Messaging D2 Dn F11	Receipt of the landing call Down for the selective door side 2 the Stop 11
A156	A156 Call Messaging D2 Dn F12	Receipt of the landing call Down for the selective door side 2 the Stop 12
A157	A157 Call Messaging D2 Dn F13	Receipt of the landing call Down for the selective door side 2 the Stop 13
A158	A158 Call Messaging D2 Dn F14	Receipt of the landing call Down for the selective door side 2 the Stop 14
A159	A159 Call Messaging D2 Dn F15	Receipt of the landing call Down for the selective door side 2 the Stop 15
A160	A160 Call Messaging D2 Dn F16	Receipt of the landing call Down for the selective door side 2 the Stop 16
A161	A161 Universal Output-1	Exit of the universal channel 1
A162	A162 Universal Output -2	Exit of the universal channel 2
A163	A163 Universal Output -3	Exit of the universal channel 3
A164	A164 Universal Output -4	Exit of the universal channel 4
A165	A165 Output time relay-1	Switching exit of the time relay-1
A166	A166 Output time relay-2	Switching exit of the time relay-2
A167	A167 messaging loadtime button1	Receipt load time tracers 1 during the active phase
A168	A168 messaging loadtime button2	Receipt load time tracers 2 during the active phase
A169	A169 pre-control K31	The exit for the pre-end relay K31 UP is set
A170	A170 pre-control K32	The exit for the pre-end relay K32 DOWN is set
A171	A171 pre-control K33	The exit for the pre-end relay K33 Quick / Main is set
A172	A172 pre-control K34	The exit for the pre-end relay K34 Brake/Slow/S-D is set
A173	A173 V03 from car	Expenditure signal of the V<V03 (entry with open door)
A174	A174 V08 from car	Expenditure signal of the V<V08 (entry with open door)
A175	A175 Drive Commands Down	Expenditure of the driving command DOWN
A176	A176 Drive Commands Up	Expenditure of the driving command UP
A177	A177 Drive Commands Vi	Expenditure of the driving command speed of Vi
A178	A178 Drive Commands Vn	Expenditure of the driving command speed of Vn
A179	A179 Drive Commands V0	Expenditure of the driving command speed of V0

A180	A180 Drive Commands V1	Expenditure of the driving command speed of V1
A181	A181 Drive Commands V2	Expenditure of the driving command speed of V2
A182	A182 Drive Commands V3	Expenditure of the driving command speed of V3
A183	A183 normal operation inverts	Expenditure of the status message normal operation inverts = out of operation
A184	A 184 Pre-end switcher Up	Expenditure of the entrance pre-end switcher UP active.
A185	A185 Pre-end switcher Down	Expenditure of the entrance pre-end switcher DOWN active.
A186	A186 Door closes	Expenditure of the message that the door closes
A187	A187 Door opens	Expenditure of the message that the door opens
A188	A188 car driving Up	Expenditure of the message that the car move UP
A189	A189 car driving Down	Expenditure of the message that the car move DOWN
A190	A190 trip counter impulse	Expenditure of an impulse for the trip counter
A191	A191 Drive	Expenditure of the message that the elevator is in full swing.
A192	A192 Nudging Door 1	Expenditure of the door instruction to obligation latches of the door 1
A193	A193 Nudging Door 2	Expenditure of the door instruction to obligation latches of the door 2
A194	A194 ready for use	Ready for use it means that no blockade is present.
A195	A195 Calls lie close	Car or landing calls are worked
A196	A196 Trip without Door opening	Correction or park trip is present
A197	A197 Door & Block contacts active	The safety circuit contacts Shaft-& Car Door, Block (U10,11&12) are closed
A198	A198 Safety circuit activate	The safety circuit contacts (U2 bis U9) are closed
A199	A199 landing call Up D2	Expenditure on the remote station; Acknowledgement of the external call UP at D2
A200	A199 landing call Down Door 2	Expenditure on the remote station; Acknowledgement of the external call DOWN at D2
A201	A201 ER Arrow Up Door 1	Expenditure of the Up-arrow on the remote station for door side 1
A202	A202 ER Arrow Down Door 1	Expenditure of the Down-arrow on the remote station for door side 1
A203	A203 ER Arrow Up Door 2	Expenditure of the Up-arrow on the remote station for door side 2
A204	A203 ER Arrow Down Door 2	Expenditure of the Down-arrow on the remote station for door side 2
A205	A205 light barrier blocks	Expenditure of the message that the light barrier is blocked
A206	A206 test SI light lattice	Base function to the test of the Cedes left safety light lattice
A207	A207 safety photo cell interrupt	Base function for the expenditure of a break with the cedes left safety light lattice
A208	A208DSK overspeed	Base function for the overspeed (only functional during digital shaft copying)
A209	A209 DSK V> 0,2m/s	Base function for the speed threshold V=0,2 m/s (only functional during digital shaft copying)
A210	A210 DSK V<Vx (m/s)	Base function for the speed threshold Vx (only functional during digital shaft copying)
A211	A211 elevator attendant: Tracer Door Up	Base function for the activation of the electro magnet in the alarm tracer
A212	A212 elevator attendant: Tracer Alarm	Base functions to the activation of the electro magnet in the door-Up-Tracer
A213	A213 elevator attendant: Control OK	Base function elevator attendant examination in order
A214	A214 elevator attendant: Monitor error	Base function elevator attendant examination incorrectly
A215	A215 Remote switcher Car	Base function for the remote release of the car
A216	A216 Reset speed limiter	Base functions for the resetting release of the car
A217	A217 Remote switcher Counterbalance	Base functions for the release of the remote release of the counterweight
A218	A218 Reset speed limiter counterbalance	Base functions for the resetting release of the remote release of the counterweight
A219	A219 Car-Call-M.Door.1 St.01	Base function acknowledgement car call door side 1 Stop 1
A220	A220 Car-Call-M.Door.1 St.02	Base function acknowledgement car call door side 1 Stop 2
A221	A221 Car-Call-M.Door.1 St.03	Base function acknowledgement car call door side 1 Stop 3
A222	A222 Car-Call-M.Door.1 St.04	Base function acknowledgement car call door side 1 Stop 4
A223	A223 Car-Call-M.Door.1 St.05	Base function acknowledgement car call door side 1 Stop 5
A224	A224 Car-Call-M.Door.1 St.06	Base function acknowledgement car call door side 1 Stop 6
A225	A225 Car-Call-M.Door.1 St.07	Base function acknowledgement car call door side 1 Stop 7
A226	A226 Car-Call-M.Door.1 St.08	Base function acknowledgement car call door side 1 Stop 8
A227	A227 Car-Call-M.Door.1 St.09	Base function acknowledgement car call door side 1 Stop 9
A228	A228 Car-Call-M.Door.1 St.10	Base function acknowledgement car call door side 1 Stop 10
A229	A229 Car-Call-M.Door.1 St.11	Base function acknowledgement car call door side 1 Stop 11
A230	A230 Car-Call-M.Door.1 St.12	Base function acknowledgement car call door side 1 Stop 12
A231	A231 Car-Call-M.Door.1 St.13	Base function acknowledgement car call door side 1 Stop 13
A232	A232 Car-Call-M.Door.1 St.14	Base function acknowledgement car call door side 1 Stop 14
A233	A233 Car-Call-M.Door.1 St.15	Base function acknowledgement car call door side 1 Stop 15
A234	A234 Car-Call-M.Door.1 St.16	Base function acknowledgement car call door side 1 Stop 16
A235	A235 Car-Call-M.Door.1 St.17	Base function acknowledgement car call door side 1 Stop 17
A236	A236 Car-Call-M.Door.1 St.18	Base function acknowledgement car call door side 1 Stop 18
A237	A237 Car-Call-M.Door.1 St.19	Base function acknowledgement car call door side 1 Stop 19

A238	A238 Car-Call-M.Door.1 St.20	Base function acknowledgement car call door side 1 Stop 20
A239	A239 Car-Call-M.Door.1 St.21	Base function acknowledgement car call door side 1 Stop 21
A240	A240 Car-Call-M.Door.1 St.22	Base function acknowledgement car call door side 1 Stop 22
A241	A241 Car-Call-M.Door.1 St.23	Base function acknowledgement car call door side 1 Stop 23
A242	A242 Car-Call-M.Door.1 St.24	Base function acknowledgement car call door side 1 Stop 24
A243	A243 Car-Call-M.Door.1 St.25	Base function acknowledgement car call door side 1 Stop 25
A244	A244 Car-Call-M.Door.1 St.26	Base function acknowledgement car call door side 1 Stop 26
A245	A245 Car-Call-M.Door.1 St.27	Base function acknowledgement car call door side 1 Stop 27
A246	A246 Car-Call-M.Door.1 St.28	Base function acknowledgement car call door side 1 Stop 28
A247	A247 Car-Call-M.Door.1 St.29	Base function acknowledgement car call door side 1 Stop 29
A248	A248 Car-Call-M.Door.1 St.30	Base function acknowledgement car call door side 1 Stop 30
A249	A249 Car-Call-M.Door.1 St.31	Base function acknowledgement car call door side 1 Stop 31
A250	A250 Car-Call-M.Door.1 St.32	Base function acknowledgement car call door side 1 Stop 32
A251	A251 Car-Call-M.Door.2 St.01	Base function acknowledgement car call door side 2 Stop 1
A252	A252 Car-Call-M.Door.2 St.02	Base function acknowledgement car call door side 2 Stop 2
A253	A253 Car-Call-M.Door.2 St.03	Base function acknowledgement car call door side 2 Stop 3
A254	A254 Car-Call-M.Door.2 St.04	Base function acknowledgement car call door side 2 Stop 4
A255	A255 Car-Call-M.Door.2 St.05	Base function acknowledgement car call door side 2 Stop 5
A256	A256 Car-Call-M.Door.2 St.06	Base function acknowledgement car call door side 2 Stop 6
A257	A257 Car-Call-M.Door.2 St.07	Base function acknowledgement car call door side 2 Stop 7
A258	A258 Car-Call-M.Door.2 St.08	Base function acknowledgement car call door side 2 Stop 8
A259	A259 Car-Call-M.Door.2 St.09	Base function acknowledgement car call door side 2 Stop 9
A260	A260 Car-Call-M.Door.2 St.10	Base function acknowledgement car call door side 2 Stop 10
A261	A261 Car-Call-M.Door.2 St.11	Base function acknowledgement car call door side 2 Stop 11
A262	A262 Car-Call-M.Door.2 St.12	Base function acknowledgement car call door side 2 Stop 12
A263	A263 Car-Call-M.Door.2 St.13	Base function acknowledgement car call door side 2 Stop 13
A264	A264 Car-Call-M.Door.2 St.14	Base function acknowledgement car call door side 2 Stop 14
A265	A265 Car-Call-M.Door.2 St.15	Base function acknowledgement car call door side 2 Stop 15
A266	A266 Car-Call-M.Door.2 St.16	Base function acknowledgement car call door side 2 Stop 16
A267	A267 Car-Call-M.Door.2 St.17	Base function acknowledgement car call door side 2 Stop 17
A268	A268 Car-Call-M.Door.2 St.18	Base function acknowledgement car call door side 2 Stop 18
A269	A269 Car-Call-M.Door.2 St.19	Base function acknowledgement car call door side 2 Stop 19
A270	A270 Car-Call-M.Door.2 St.20	Base function acknowledgement car call door side 2 Stop 20
A271	A271 Car-Call-M.Door.2 St.21	Base function acknowledgement car call door side 2 Stop 21
A272	A272 Car-Call-M.Door.2 St.22	Base function acknowledgement car call door side 2 Stop 22
A273	A273 Car-Call-M.Door.2 St.23	Base function acknowledgement car call door side 2 Stop 23
A274	A274 Car-Call-M.Door.2 St.24	Base function acknowledgement car call door side 2 Stop 24
A275	A275 Car-Call-M.Door.2 St.25	Base function acknowledgement car call door side 2 Stop 25
A276	A276 Car-Call-M.Door.2 St.26	Base function acknowledgement car call door side 2 Stop 26
A277	A277 Car-Call-M.Door.2 St.27	Base function acknowledgement car call door side 2 Stop 27
A278	A278 Car-Call-M.Door.2 St.28	Base function acknowledgement car call door side 2 Stop 28
A279	A279 Car-Call-M.Door.2 St.29	Base function acknowledgement car call door side 2 Stop 29
A280	A280 Car-Call-M.Door.2 St.30	Base function acknowledgement car call door side 2 Stop 30
A281	A281 Car-Call-M.Door.2 St.31	Base function acknowledgement car call door side 2 Stop 31
A282	A282 Car-Call-M.Door.2 St.32	Base function acknowledgement car call door side 2 Stop 32
A283	A283 Fine releveling Up	To the control of a fine retrieving aggregate driving direction Up
A284	A284 Fine releveling Up	To the control of a fine retrieving aggregate driving direction down
A285	A285 Brake monitor	Active of error lies close
A286	A286 Bolt drive out	Pit bolting device
A287	A287 Bolt drive out	Pit bolting device
A288	A288 Elevator at the lowest stop	Active if the elevator is in the lowest stop
A289	A289 elevator drive in the lowest stop	Active by driving in the lowest drive
A290	A290 Time to go Down	Output channel is high (+24V), if the car is lowering.
A291	A291 Door 2 Closes	OTIS-REM 5.0
A292	A292 Door 2 Opens	OTIS-REM 5.0
A293	A293 Car Position Indicator ZR9	Exediture for driving car condition Stop 9 for 1 of N
A294	A294 Car Position Indicator ZR10	Exediture for driving car condition Stop 10 for 1 of N
A295	A295 Car Position Indicator ZR11	Exediture for driving car condition Stop 11 for 1 of N
A296	A296 Car Position Indicator ZR12	Exediture for driving car condition Stop 12 for 1 of N
A297	A297 Position motor close drive (Hyd-OTIS)	Exit is deleted set if on high speed away and if E355= "1"
A298	A298 level is OK	if concise then „1“
A299	A299 Trafic light inside D1	Green= if the door open
A300	A300 Trafic light inside D2	Green= if the door open
A301	A301 Trafic light outside E01 D1	Green= if the door open + Car empty
A302	A301 Trafic light outside E01 D2	Green= if the door open + Car empty
A303	A301 Trafic light outside E02 D1	Green= if the door open + Car empty

A304	A301 Trafic light outside E02 D2	Green= if the door open + Car empty
A305	A301 Trafic light outside E03 D1	Green= if the door open + Car empty
A306	A301 Trafic light outside E03 D2	Green= if the door open + Car empty
A307	A301 Trafic light outside E04 D1	Green= if the door open + Car empty
A308	A301 Trafic light outside E04 D2	Green= if the door open + Car empty
A309	⊙ A309 Door 1 closes IMPULS	voice output
A310	⊙ A310 Door 1 opens IMPULS	voice output
A311	⊙ A311 Door 2 closes IMPULS	voice output
A312	⊙ A312 Door 2 opens IMPULS	voice output
A313	A313 Bolt move	To control the contactor of the hydraulic motor
A314	A314 bolt drive out	Feedback
A315	A315 Bolt drive in	Feedback
A316	A316 Timer-1	Time switch clock with 2 thresholds
A317	A317 Timer-2	Time switch clock with 2 thresholds
A318	A318 Timer-3	Time switch clock with 2 thresholds
A319	A319 Timer-4	Time switch clock with 2 thresholds
A320	A320 Timer-5	Time switch clock with 2 thresholds
A321	A321 Timer-6	Time switch clock with 2 thresholds
A322	A322 Timer-7	Time switch clock with 2 thresholds
A323	A323 Timer-8	Time switch clock with 2 thresholds
A324	A324 Timer-9	Time switch clock with 2 thresholds
A325	A325 Timer-10	Time switch clock with 2 thresholds
A326	A326 Catch rescue	
A327	A327 Car Indication 1 of N	Floor 13
A328	A328 Car Indication 1 of N	Floor 14
A329	A329 Car Indication 1 of N	Floor 15
A330	A330 Car Indication 1 of N	Floor 16
A331	A331 Car Indication 1 of N	Floor 17
A332	A332 Car Indication 1 of N	Floor 18
A333	A333 Car Indication 1 of N	Floor 19
A334	A334 Car Indication 1 of N	Floor 20
A335	A335 Car Indication 1 of N	Floor 21
A336	A336 Car Indication 1 of N	Floor 22
A337	A337 Car Indication 1 of N	Floor 23
A338	A338 Car Indication 1 of N	Floor 24
A339	A339 Car Indication 1 of N	Floor 25
A340	A340 Car Indication 1 of N	Floor 26
A341	A341 Car Indication 1 of N	Floor 27
A342	A342 Car Indication 1 of N	Floor 28
A343	A343 Car Indication 1 of N	Floor 29
A344	A344 Car Indication 1 of N	Floor 30
A345	A345 Car Indication 1 of N	Floor 31
A346	A346 Car Indication 1 of N	Floor 32
A347	A347 Watchdog timing	Expenditure of the message in the case of active error watching timing
A348	A348 Emergency Stop U9	Expenditure of the message in the case of active emergency stop.
A349	A349 NBS	Drive signale to control the NBS-TSBrake with 1 Sec. delaytime
A350	A350 Door Open Button	Expenditure of the active door up tracer during the door play.
A351	A351 2 Seconds pulse Codekey	
A352	A352 Door-Closed and Drive	
A353	A353 Hydr.Insp.-Down	Inspection-Down at ALGI AZFR
A354	A354 Missbrauch aktiv	Back-message abuse protection active
A355	A355 Car Elevator D1 AHEAD	Indicator Ahead Doorside 1
A356	A356 Car Elevator D1 STOP	Indicator Stop Doorside 1
A357	A357 Car Elevator D1 RETURN	Indicator Return Doorside 1
A358	A358 Car Elevator D2 AHEAD	Indicator Ahead Doorside 2
A359	A359 Car Elevator D2 STOP	Indicator Stop Doorside 2
A360	A360 Car Elevator D1 RETURN	Indicator Return Doorside 2
A361	A361 Sink Avoiding	Speedlimiter on the car, Always "1", without testing
A362	A362 Controler Cabinet	Controller cabin Light E459, E460
A363	A363 Traffic Light F05 Door-1	Green=1, if the door is open and the car is empty
A364	A364 Traffic Light F05 Door-2	Green=1, if the door is open and the car is empty
A365	A365 Traffic Light F06 Door-1	Green=1, if the door is open and the car is empty
A366	A366 Traffic Light F06 Door-2	Green=1, if the door is open and the car is empty
A367	A367 Traffic Light F07 Door-1	Green=1, if the door is open and the car is empty
A368	A368 Traffic Light F07 Door-2	Green=1, if the door is open and the car is empty
A369	A369 Traffic Light F08 Door-1	Cabin Door closed (U10+U11), Green=1, if the door is open and the car is empty
A370	A370 Traffic Light F08 Door-2	Green=1, if the door is open and the car is empty

A371	A371 Attendant Mode ON	High, if the Attendant Mode is switched on
A372	A372 Attendant Mode Landing Control OFF	High, if the Attendant Mode for landing control is switched off
A373	A373 Attendant Mode Landing UP Call UP	High, if there are car calls above the car
A374	A374 Attendant Mode Landing Call DOWN	High, if there are car calls below the car
A375	A375 Preparing Bolt	Back-message: next action: bolts are driving out
A376	A376 Lift deceleration	Message about the braking elevator
A377	A377 Flash Output	Blinking through the input-function E471
A378	A378 Carlight OFF	Message about the Car light -> off
A379	A379 Flap COP	Output for the bolt magnet of the car-panel
A380	A380 DSC V < Vy (m/s)	Second speed-limit
A381	A381 Standby: Frequency. OFF	Switch off the frequency inverter and door engine after time x
A382	A382 Door Drive OFF	Energy saving mode for Switch Off the Door Drive
A383	A383 Universal-Output -5	Is driven by unallocated input
A384	A384 Universal- Output -6	Is driven by unallocated input
A385	A385 Universal- Output -7	Is driven by unallocated input
A386	A386 Universal- Output -8	Is driven by unallocated input
A387	A387 Universal- Output -9	Is driven by unallocated input
A388	A388 Universal- Output -10	Is driven by unallocated input
A389	A389 Universal- Output -11	Is driven by unallocated input
A390	A390 Universal- Output -12	Is driven by unallocated input
A391	A391 Universal- Output -13	Is driven by unallocated input
A392	A392 Universal- Output -14	Is driven by unallocated input
A393	A393 Universal- Output -15	Is driven by unallocated input
A394	A394 Photocell Door 1	Message Photocell Door 1 is active
A395	A395 Photocell Door 2	Message Photocell Door 2 is active
A396	A396 Reverse Contact 1	Message Reverse Contact Door 1 is active
A397	A397 Reverse Contact 2	Message Reverse Contact Door 2 is active
A398	A398 Drive Lock	Output function for EN81-A3 Function
A399	A399 S2 FKR OFF	Energy saving mode S2 to cut off the FKR
A400	A400 Door-2 is opening	Function for the position indicator, active already in drive into the floor
A401	A401 Quickstart Door	Function for the quickstart of the lift
A402	A402 A.F.cl-D1 UP Floor 16	Attendant Function: Visualisation Landing Call UP Door-1 Floor 16
A403	A403 A.F.cl-D1 UP Floor 17	Attendant Function: Visualisation Landing Call UP Door-1 Floor 17
A404	A404 A.F.cl-D1 UP Floor 18	Attendant Function: Visualisation Landing Call UP Door-1 Floor 18
A405	A405 A.F.cl-D1 UP Floor 19	Attendant Function: Visualisation Landing Call UP Door-1 Floor 19
A406	A406 A.F.cl-D1 UP Floor 20	Attendant Function: Visualisation Landing Call UP Door-1 Floor 20
A407	A407 A.F.cl-D1 UP Floor 21	Attendant Function: Visualisation Landing Call UP Door-1 Floor 21
A408	A408 A.F.cl-D1 UP Floor 22	Attendant Function: Visualisation Landing Call UP Door-1 Floor 22
A409	A409 A.F.cl-D1 UP Floor 23	Attendant Function: Visualisation Landing Call UP Door-1 Floor 23
A410	A410 A.F.cl-D1 UP Floor 24	Attendant Function: Visualisation Landing Call UP Door-1 Floor 24
A411	A411 A.F.cl-D1 UP Floor 25	Attendant Function: Visualisation Landing Call UP Door-1 Floor 25
A412	A412 A.F.cl-D1 UP Floor 26	Attendant Function: Visualisation Landing Call UP Door-1 Floor 26
A413	A413 A.F.cl-D1 UP Floor 27	Attendant Function: Visualisation Landing Call UP Door-1 Floor 27
A414	A414 A.F.cl-D1 UP Floor 28	Attendant Function: Visualisation Landing Call UP Door-1 Floor 28
A415	A415 A.F.cl-D1 UP Floor 29	Attendant Function: Visualisation Landing Call UP Door-1 Floor 29
A416	A416 A.F.cl-D1 UP Floor 30	Attendant Function: Visualisation Landing Call UP Door-1 Floor 30
A417	A417 A.F.cl-D1 UP Floor 31	Attendant Function: Visualisation Landing Call UP Door-1 Floor 31
A418	A418 A.F.cl-D1 DOWN Floor 17	Attendant Function: Visualisation Landing Call DOWN Door-1 Floor 17
A419	A419 A.F.cl-D1 DOWN Floor 18	Attendant Function: Visualisation Landing Call DOWN Door-1 Floor 18
A420	A420 A.F.cl-D1 DOWN Floor 19	Attendant Function: Visualisation Landing Call DOWN Door-1 Floor 19
A421	A421 A.F.cl-D1 DOWN Floor 20	Attendant Function: Visualisation Landing Call DOWN Door-1 Floor 20
A422	A422 A.F.cl-D1 DOWN Floor 21	Attendant Function: Visualisation Landing Call DOWN Door-1 Floor 21
A423	A423 A.F.cl-D1 DOWN Floor 22	Attendant Function: Visualisation Landing Call DOWN Door-1 Floor 22
A424	A424 A.F.cl-D1 DOWN Floor 23	Attendant Function: Visualisation Landing Call DOWN Door-1 Floor 23
A425	A425 A.F.cl-D1 DOWN Floor 24	Attendant Function: Visualisation Landing Call DOWN Door-1 Floor 24
A426	A426 A.F.cl-D1 DOWN Floor 25	Attendant Function: Visualisation Landing Call DOWN Door-1 Floor 25
A427	A427 A.F.cl-D1 DOWN Floor 26	Attendant Function: Visualisation Landing Call DOWN Door-1 Floor 26
A428	A428 A.F.cl-D1 DOWN Floor 27	Attendant Function: Visualisation Landing Call DOWN Door-1 Floor 27
A429	A429 A.F.cl-D1 DOWN Floor 28	Attendant Function: Visualisation Landing Call DOWN Door-1 Floor 28
A430	A430 A.F.cl-D1 DOWN Floor 29	Attendant Function: Visualisation Landing Call DOWN Door-1 Floor 29
A431	A431 A.F.cl-D1 DOWN Floor 30	Attendant Function: Visualisation Landing Call DOWN Door-1 Floor 30
A432	A432 A.F.cl-D1 DOWN Floor 31	Attendant Function: Visualisation Landing Call DOWN Door-1 Floor 31
A433	A433 A.F.cl-D1 DOWN Floor 32	Attendant Function: Visualisation Landing Call DOWN Door-1 Floor 32
A434	A434 A.F.cl-D2 UP Floor 16	Attendant Function: Visualisation Landing Call UP Door-2 Floor 16
A435	A435 A.F.cl-D2 UP Floor 17	Attendant Function: Visualisation Landing Call UP Door-2 Floor 17

A436	A436 A.F.cl-D2 UP Floor 18	Attendant Function: Visualisation Landing Call UP Door-2 Floor 18
A437	A437 A.F.cl-D2 UP Floor 19	Attendant Function: Visualisation Landing Call UP Door-2 Floor 19
A438	A438 A.F.cl-D2 UP Floor 20	Attendant Function: Visualisation Landing Call UP Door-2 Floor 20
A439	A439 A.F.cl-D2 UP Floor 21	Attendant Function: Visualisation Landing Call UP Door-2 Floor 21
A440	A440 A.F.cl-D2 UP Floor 22	Attendant Function: Visualisation Landing Call UP Door-2 Floor 22
A441	A441 A.F.cl-D2 UP Floor 23	Attendant Function: Visualisation Landing Call UP Door-2 Floor 23
A442	A442 A.F.cl-D2 UP Floor 24	Attendant Function: Visualisation Landing Call UP Door-2 Floor 24
A443	A443 A.F.cl-D2 UP Floor 25	Attendant Function: Visualisation Landing Call UP Door-2 Floor 25
A444	A444 A.F.cl-D2 UP Floor 26	Attendant Function: Visualisation Landing Call UP Door-2 Floor 26
A445	A445 A.F.cl-D2 UP Floor 27	Attendant Function: Visualisation Landing Call UP Door-2 Floor 27
A446	A446 A.F.cl-D2 UP Floor 28	Attendant Function: Visualisation Landing Call UP Door-2 Floor 28
A447	A447 A.F.cl-D2 UP Floor 29	Attendant Function: Visualisation Landing Call UP Door-2 Floor 29
A448	A448 A.F.cl-D2 UP Floor 30	Attendant Function: Visualisation Landing Call UP Door-2 Floor 30
A449	A449 A.F.cl-D2 UP Floor 31	Attendant Function: Visualisation Landing Call UP Door-2 Floor 31
A450	A450 A.F.cl-D2 DOWN Floor 17	Attendant Function: Visualisation Landing Call DOWN Door-2 Floor 17
A451	A451 A.F.cl-D2 DOWN Floor 18	Attendant Function: Visualisation Landing Call DOWN Door-2 Floor 18
A452	A452 A.F.cl-D2 DOWN Floor 19	Attendant Function: Visualisation Landing Call DOWN Door-2 Floor 19
A453	A453 A.F.cl-D2 DOWN Floor 20	Attendant Function: Visualisation Landing Call DOWN Door-2 Floor 20
A454	A454 A.F.cl-D2 DOWN Floor 21	Attendant Function: Visualisation Landing Call DOWN Door-2 Floor 21
A455	A455 A.F.cl-D2 DOWN Floor 22	Attendant Function: Visualisation Landing Call DOWN Door-2 Floor 22
A456	A456 A.F.cl-D2 DOWN Floor 23	Attendant Function: Visualisation Landing Call DOWN Door-2 Floor 23
A457	A457 A.F.cl-D2 DOWN Floor 24	Attendant Function: Visualisation Landing Call DOWN Door-2 Floor 24
A458	A458 A.F.cl-D2 DOWN Floor 25	Attendant Function: Visualisation Landing Call DOWN Door-2 Floor 25
A459	A459 A.F.cl-D2 DOWN Floor 26	Attendant Function: Visualisation Landing Call DOWN Door-2 Floor 26
A460	A460 A.F.cl-D2 DOWN Floor 27	Attendant Function: Visualisation Landing Call DOWN Door-2 Floor 27
A461	A461 A.F.cl-D2 DOWN Floor 28	Attendant Function: Visualisation Landing Call DOWN Door-2 Floor 28
A462	A462 A.F.cl-D2 DOWN Floor 29	Attendant Function: Visualisation Landing Call DOWN Door-2 Floor 29
A463	A463 A.F.cl-D2 DOWN Floor 30	Attendant Function: Visualisation Landing Call DOWN Door-2 Floor 30
A464	A464 A.F.cl-D2 DOWN Floor 31	Attendant Function: Visualisation Landing Call DOWN Door-2 Floor 31
A465	A4653 A.F.cl-D2 DOWN Floor 32	Attendant Function: Visualisation Landing Call DOWN Door-2 Floor 32
A466	A466 Traffic Light Flash	Function for Car-Elevators
A467	A467 A3-Case Active	If you have an A3-Case (Error F60) it is active
A468	A468 Piezo Buzzer	Active at FirefighterFunction or Inspection or Door blocking after 2 minutes
A469	A469 OSCAR activ	If Level = „1“, than active
A470	A470 Brake Open	If Level = „1“, than brake open (Depends on E25 invert.).
A471	A471 Error Shaft-Door-Heating	Error Shaft-Door Floor-Heating
A472	A472 Impuls Main-Hour-Counter	Impulse lenght 1 Sec.
A473	A473 Impuls Operation-Counter	Impulse lenght 1 Sec
A474	A474 Impuls Door-Counter-1	Impulse lenght 1 Sec
A475	A475 Impuls Door-Counter-2	Impulse lenght 1 Sec
A476	A476 Error Car-Fan-Monitoring	
A477	A477 Error Car-Light-Monitoring	
A478	A478 Error Endswitch Top	
A479	A479 Error Endswitch Bottom	
A480	A480 Error Leveling	
A481	A481 Error Electric Socket	
A482	A482 Stand-by	If Level = „1“, than Stand-by-Operation (Message)
A483	A483 Maintenance	If Level = „1“, than E258 active (Message)
A484	A484 Calmed Operation	If Level = „1“, than Calm traffic (Message)
A485	A485 A.C.cl-D1 Floor 33	Visualisation of the Car call – Door-1
A486	A486 A.C.cl-D1 Floor 34	Visualisation of the Car call – Door-1
A487	A487 A.C.cl-D1 Floor 35	Visualisation of the Car call – Door-1
A488	A488 A.C.cl-D1 Floor 36	Visualisation of the Car call – Door-1
A489	A489 A.C.cl-D1 Floor 37	Visualisation of the Car call – Door-1
A490	A490 A.C.cl-D1 Floor 38	Visualisation of the Car call – Door-1
A491	A491 A.C.cl-D1 Floor 39	Visualisation of the Car call – Door-1
A492	A492 A.C.cl-D1 Floor 40	Visualisation of the Car call – Door-1
A493	A493 A.C.cl-D1 Floor 41	Visualisation of the Car call – Door-1
A494	A494 A.C.cl-D1 Floor 42	Visualisation of the Car call – Door-1
A495	A495 A.C.cl-D1 Floor 43	Visualisation of the Car call – Door-1
A496	A496 A.C.cl-D1 Floor 44	Visualisation of the Car call – Door-1
A497	A497 A.C.cl-D1 Floor 45	Visualisation of the Car call – Door-1
A498	A498 A.C.cl-D1 Floor 46	Visualisation of the Car call – Door-1
A499	A499 A.C.cl-D1 Floor 47	Visualisation of the Car call – Door-1
A500	A500 A.C.cl-D1 Floor 48	Visualisation of the Car call – Door-1
A501	A501 A.C.cl-D1 Floor 49	Visualisation of the Car call – Door-1
A502	A502 A.C.cl-D1 Floor 50	Visualisation of the Car call – Door-1
A503	A503 A.C.cl-D1 Floor 51	Visualisation of the Car call – Door-1

A504	A504 A.C.cl-D1 Floor 52	Visualisation of the Car call – Door-1
A505	A505 A.C.cl-D1 Floor 53	Visualisation of the Car call – Door-1
A506	A506 A.C.cl-D1 Floor 54	Visualisation of the Car call – Door-1
A507	A507 A.C.cl-D1 Floor 55	Visualisation of the Car call – Door-1
A508	A508 A.C.cl-D1 Floor 56	Visualisation of the Car call – Door-1
A509	A509 A.C.cl-D1 Floor 57	Visualisation of the Car call – Door-1
A510	A510 A.C.cl-D1 Floor 58	Visualisation of the Car call – Door-1
A511	A511 A.C.cl-D1 Floor 59	Visualisation of the Car call – Door-1
A512	A512 A.C.cl-D1 Floor 60	Visualisation of the Car call – Door-1
A513	A513 A.C.cl-D1 Floor 61	Visualisation of the Car call – Door-1
A514	A514 A.C.cl-D1 Floor 62	Visualisation of the Car call – Door-1
A515	A515 A.C.cl-D1 Floor 63	Visualisation of the Car call – Door-1
A516	A516 A.C.cl-D1 Floor 64	Visualisation of the Car call – Door-1
A517	A517 A.C.cl-D2 Floor 33	Visualisation of the Car call – Door-2
A518	A518 A.C.cl-D2 Floor 34	Visualisation of the Car call – Door-2
A519	A519 A.C.cl-D2 Floor 35	Visualisation of the Car call – Door-2
A520	A520 A.C.cl-D2 Floor 36	Visualisation of the Car call – Door-2
A521	A521 A.C.cl-D2 Floor 37	Visualisation of the Car call – Door-2
A522	A522 A.C.cl-D2 Floor 38	Visualisation of the Car call – Door-2
A523	A523 A.C.cl-D2 Floor 39	Visualisation of the Car call – Door-2
A524	A524 A.C.cl-D2 Floor 40	Visualisation of the Car call – Door-2
A525	A525 A.C.cl-D2 Floor 41	Visualisation of the Car call – Door-2
A526	A526 A.C.cl-D2 Floor 42	Visualisation of the Car call – Door-2
A527	A527 A.C.cl-D2 Floor 43	Visualisation of the Car call – Door-2
A528	A528 A.C.cl-D2 Floor 44	Visualisation of the Car call – Door-2
A529	A529 A.C.cl-D2 Floor 45	Visualisation of the Car call – Door-2
A530	A530 A.C.cl-D2 Floor 46	Visualisation of the Car call – Door-2
A531	A531 A.C.cl-D2 Floor 47	Visualisation of the Car call – Door-2
A532	A532 A.C.cl-D2 Floor 48	Visualisation of the Car call – Door-2
A533	A533 A.C.cl-D2 Floor 49	Visualisation of the Car call – Door-2
A534	A534 A.C.cl-D2 Floor 50	Visualisation of the Car call – Door-2
A535	A535 A.C.cl-D2 Floor 51	Visualisation of the Car call – Door-2
A536	A536 A.C.cl-D2 Floor 52	Visualisation of the Car call – Door-2
A537	A537 A.C.cl-D2 Floor 53	Visualisation of the Car call – Door-2
A538	A538 A.C.cl-D2 Floor 54	Visualisation of the Car call – Door-2
A539	A539 A.C.cl-D2 Floor 55	Visualisation of the Car call – Door-2
A540	A540 A.C.cl-D2 Floor 56	Visualisation of the Car call – Door-2
A541	A541 A.C.cl-D2 Floor 57	Visualisation of the Car call – Door-2
A542	A542 A.C.cl-D2 Floor 58	Visualisation of the Car call – Door-2
A543	A543 A.C.cl-D2 Floor 59	Visualisation of the Car call – Door-2
A544	A544 A.C.cl-D2 Floor 60	Visualisation of the Car call – Door-2
A545	A545 A.C.cl-D2 Floor 61	Visualisation of the Car call – Door-2
A546	A546 A.C.cl-D2 Floor 62	Visualisation of the Car call – Door-2
A547	A547 A.C.cl-D2 Floor 63	Visualisation of the Car call – Door-2
A548	A548 A.C.cl-D2 Floor 64	Visualisation of the Car call – Door-2
A549	A549 FireFighter Level in Floor	Level-Indicator for FireFighter-Operation in the Car
A550	A550 Bypass aktive	
A551	A551 Zone-72	Simulation of the Zone, only at ABS-Shaft Copying
A552	A552 Start SIS16	
A553	A553 Sabbatsteuerung aktiv	„1“ if Input E720 + E721 (Timer) active
A554	A554 Ramp opening	Scan climber
A555	A555 Ramp closing	Scan climber
A556	A556 Ramp Overflow Valve	Scan climber
A557	A557 Ramp open	Scan climber
A558	A558 Ramp closed	Scan climber
A559	A559 Motorprotection active	Scan climber
A560	A560 Piezo Firefighter Operation	Active if Piezo active
A561	A561 Oiler controlling	For Scan climber
A562	A562 Blinking output 2	0,41 Hz, if input 471 „1“than blinking output
A563	A563 Door Control Door-3 openin.	Door command Open
A564	A564 Door Control Door-3 closing	Door command Close
A565	A565 Thrusting Door-3	
A566	A566 Indication Loading Time D-3	
A567	A567 Door-3 closing	State message
A568	A568 Door-3 opening	State message
A569	A569 Door-3 closing pulse	
A570	A570 Door-3 opening pulse	
A571	A571 Light Monitor Door-3 active	

A572	A572 Reversierkontakt Door-3	
A573	A573 Pulse Doorcounter-3	
A574	A574-Penthouse-1 Visitor	Penthouse -No.1 Calling for visitor (Indication)
A575	A575-Penthouse-1 Residents	Penthouse -No.1 Calling for Residents (Indication)
A576	A576-Penthouse-2 Visitor	Penthouse -No.2 Calling for visitor (Indication)
A577	A577-Penthouse-2 Residents	Penthouse -No.2 Calling for Residents (Indication)
A578	A578-Penthouse-3 Visitor	Penthouse -No.3 Calling for visitor (Indication)
A579	A579-Penthouse-3 Residents	Penthouse -No.3 Calling for Residents (Indication)
A580	A580-Penthouse-4 Visitor	Penthouse -No.4 Calling for visitor (Indication)
A581	A581-Penthouse-4 Residents	Penthouse -No.4 Calling for Residents (Indication)
A582	A582-Penthouse-5 Visitor	Penthouse -No.5 Calling for visitor (Indication)
A583	A583-Penthouse-5 Residents	Penthouse -No.5 Calling for Residents (Indication)
A584	A584-Penthouse-6 Visitor	Penthouse -No.6 Calling for visitor (Indication)
A585	A585-Penthouse-6 Residents	Penthouse -No.6 Calling for Residents (Indication)
A586	A586-Penthouse-7 Visitor	Penthouse -No.7 Calling for visitor (Indication)
A587	A587-Penthouse-7 Residents	Penthouse -No.7 Calling for Residents (Indication)
A588	A588-Penthouse-8 Visitor	Penthouse -No.8 Calling for visitor (Indication)
A589	A589-Penthouse-8 Residents	Penthouse -No.8 Calling for Residents (Indication)
A590	A590-Door blockes	Active, if externally called & turning door or light barrier
A591	A591-Controller OFF	Indication, if Controller & Light OFF
A592	A592 Portallight Floor 01	Active when lift enters Fl. 01 or door open in Fl.01
A593	A593 Portallight Floor HS02	Active when lift enters Fl. 02 or door open in Fl.02
A594	A594 Portallight Floor HS03	Active when lift enters Fl. 03 or door open in Fl.03
A595	A595 Portallight Floor HS04	Active when lift enters Fl. 04 or door open in Fl.04
A596	A596 Portallight Floor HS05	Active when lift enters Fl. 05 or door open in Fl.05
A597	A597 Portallight Floor HS06	Active when lift enters Fl. 06 or door open in Fl.06
A598	A598 Portallight Floor HS07	Active when lift enters Fl. 07 or door open in Fl.07
A599	A599 Portallight Floor HS08	Active when lift enters Fl. 08 or door open in Fl.08
A600	A600 Portallight Floor HS09	Active when lift enters Fl. 09 or door open in Fl.09
A601	A601 Portallight Floor HS10	Active when lift enters Fl. 10 or door open in Fl.10
A602	A602 Portallight Floor HS11	Active when lift enters Fl. 11 or door open in Fl.11
A603	A603 Portallight Floor HS12	Active when lift enters Fl. 12 or door open in Fl.12
A604	A604 Portallight Floor HS13	Active when lift enters Fl. 13 or door open in Fl.13
A605	A605 Portallight Floor HS14	Active when lift enters Fl. 14 or door open in Fl.14
A606	A606 Portallight Floor HS15	Active when lift enters Fl. 15 or door open in Fl.15
A607	A607 Portallight Floor HS16	Active when lift enters Fl. 16 or door open in Fl.16
A608	A608 Magnet Door-1	Is active when door-1 opens, door command door-1-up is delayed for 1 sec
A609	A609 Magnet Door-2	Is active when door-2 opens, door command door-2-up is delayed for 1 sec
A610	A610 Magnet Door-3	Is active when door-3 opens, door command door-3-up is delayed for 1 sec
A611	A611 Reset Safe Shaftcopy	Function high, then the powersupply is OFF
A612	A612 Door-1 open	Function high, then endswitch is open or open without endswitch
A613	A613 Door-2 open	Function high, then endswitch is open or open without endswitch
A614	A614 Door-3 open	Function high, then endswitch is open or open without endswitch
A615	A615 Door-1 close	Function high, then endswitch is closed or closed without endswitch
A616	A616 Door-2 close	Function high, then endswitch is closed or closed without endswitch
A617	A617 Door-3 close	Function high, then endswitch is closed or closed without endswitch
A618	A618 Puls Drive - Up	Puls for 2 Sec for Speech-Output
A619	A619 Puls Drive - Down	Puls for 2 Sec for Speech-Output
A620	A620 Pushbutton Door Open-afer Drive Down	Signal is ON, until the door is closed
A621	A621 Call at floor lock	„1“ if interior call pressed but floor lock in this floor
A622	A622 Break release-2	Active if there is an error
A623	A623 Shaft ½	„0“=Shaft-1, „1“=Shaft-2
A624	A624 Shaft smoke extraction active	If „1“ then is the shafts smoke extraction active
A625	A625 Transport of dangerous goods	If „1“ the dangerous goods transport is active
A626	A626 Reset GB preschutdown	For GB with pre-shutdown contact, these can be set with the output Be reset
A627	A627-Penthaus-9 calling visitors	Indication
A628	A628 Penthaus-9 calling Penthouse	Indication
A629	A629-Penthaus-10 calling visitors	Indication
A630	A630 Penthaus-10 calling Penthouse	Indication
A631	A631 Traffic Light Red Car Protectionroom	Switching the Traffic Light red for Car Protectionroom
A632	A631 Traffic Light Green Car Protectionroom	Switching the Traffic Light green for Car Protectionroom
A633	A633 Shaft Light	Outputfunction is active, if the shaft light is ON

A634	A634 Fire Evacuation-Call Buzzer	Active if Fire Evacuation is ON but INSPECTION/Recall/Maintenance are active
A635	A635 Liquid Pit	Active if there is an evacuation travel
A636	A636 Evacuation Gas	Active if there is an evacuation travel
A637	A637 Evacuation Gas Floor	Outputfunction is active, if the evacuation-floor is reached.
A638	A638 UCM-Coil	Outputfunction for activate the coil of der speed limiter
A639	A639 Cabin door closed	The cabin door is closed if the SiKr-taps U10 and U11 are high
A640	A640 Earthquake evacuation	Output of the message earthquake evacuation
A641	A641 Earthquake evac. - Level reached	Output of the message Earthquake evacuation - Target level reached

B72 Allocation Inputs

The Inputs ZR-, ZG-, FKR-, and ITR-unit can be occupied in principle with the functions specified down.

No.	Display Representation	Function
E0	E00- NO FUNCTION	No function is assigned to the entrance.
E1	E01- EMERGENCY POWER OPERATION	Entrance for the message of the emergency power operation
E2	E02- EMERGENCY POWER DRIVE	Entrance for the beginning of the emergency power trip
E3	E03- START LOCKING	Entrance for the barrier of the restart
E4	E04-AGAIN IN ENTERPRISE	Entrance for the restarting operation of the system
E5	E05- CAB LIGHT OFF	Entrance for the disconnection of the cab light
E6	E06-Release regulation	Entrance for the automatic controller message release
E7	E07-Stop regulation	Entrance for the automatic controller message stop
E8	E08-Disturbance regulation	Entrance for the automatic controller message disturbance.
E9	E09-Si-circuit zone	Entrance for the message of the protection circuit - the zone is active
E10	E10-Si-Circuit status	Entrance for the message of the protection circuit over your status
E11	E11-Overload	Entrance for the overload message
E12	E12-Full load	Entrance for the full load message
E13	E13-Less load	Entrance for the less message
E14	E14- Contact monitoring	Entrance for the contactor feedback
E15	E15- External control off	Entrance for switching the external control off
E16	E16-/control & Light off/	Entrance for switching the control and the cab light off
E17	E17-Fire brigade outside 1 Priorität	Entrance for the FW lock for landing call 1th floor
E18	E18-Fire brigade outside 2 Priorität	Entrance for the FW lock for landing call 2nd floor
E19	E19-Fire brigade outside 3 Priorität	Entrance for the FW lock for landing call 3rd floor
E20	E20-Fire-brigade inside	Entrance for the FW lock in the cab
E21	E21-Fire-brigade instruction	Entrance for the KW control after Australian model
E22	E22-Ramp trip	Entrance for the ramp trip
E23	E23- Leader enterprise	Entrance for the switch for the leader enterprise
E24	E24- Traser ventilator	Entrance for the tracer for the activation of the cab exhaust
E25	E25- Brake ventilating monitoring	Entrance for the brake ventilation monitoring opening & Latches brake
E26	E26-Brake wear monitoring	Entrance for the monitoring of the brake lining
E27	E27-maintenance doors close	Entrance for the activation of the catch of the doors for 15 minutes
E28	E-28 Call lowest HS	Entrance for the call of the lowest floor
E29	E29- Call highest HS	Entrance for the call of the highest floor
E30	E30-Rescue trip	Entrance for teh rescue trip
E31	E31-Lobby control D1	Entrance of the lobby monitor of the door 1
E32	E32-Lobby control D1	Entrance of the lobby monitor of the door 2
E33	E33-Button Door 1 Open	Entrance for the tracer door 1 open
E34	E34-Button Door 1 Close	Entrance for the tracer door 1 close
E35	E35-Button Door 2 Open	Entrance for the tracer door 2 open
E36	E36-Button Door 2 Close	Entrance for the tracer door 2 close
E37	E37-Load time tracer door 1	Entrance for the load time tracer door 1
E38	E38Load time tracer door 2	Entrance for the load time tracer door 2
E39	E39- Disconnection group	Entrance for extracting an elevator from the group > own landing calls
E40	E40- Fire drop level Prioritat 1	Entrance for the fire drop evaclation into the first evacuation level
E41	E41- Fire drop level Prioritat 2	Entrance for the fire drop evaclation into the second evacuation level
E42	E42- Fire drop level Prioritat 3	Entrance for the fire drop evaclation into the third evacuation level
E43	E43- Fire Detector St.01	Entrance for floor fire alarms of the Stop 01
E44	E44- Fire Detector St.02	Entrance for floor fire alarms of the Stop 02
E45	E45- Fire Detector St.03	Entrance for floor fire alarms of the Stop 03
E46	E46- Fire Detector St.04	Entrance for floor fire alarms of the Stop 04
E47	E47- Fire Detector St.05	Entrance for floor fire alarms of the Stop 05
E48	E48- Fire Detector St.06	Entrance for floor fire alarms of the Stop 06
E49	E49- Fire Detector St.07	Entrance for floor fire alarms of the Stop 07
E50	E50- Fire Detector St.08	Entrance for floor fire alarms of the Stop 08
E51	E51- Fire Detector St.09	Entrance for floor fire alarms of the Stop 09
E52	E52- Fire Detector St.10	Entrance for floor fire alarms of the Stop 10
E53	E53- Fire Detector St.11	Entrance for floor fire alarms of the Stop 11
E54	E54- Fire Detector St.12	Entrance for floor fire alarms of the Stop 12
E55	E55- Fire Detector St.13	Entrance for floor fire alarms of the Stop 13
E56	E56- Fire Detector St.14	Entrance for floor fire alarms of the Stop 14
E57	E57- Fire Detector St.15	Entrance for floor fire alarms of the Stop 15
E58	E58- Fire Detector St.16	Entrance for floor fire alarms of the Stop 16
E59	E59- Fire Detector St.17	Entrance for floor fire alarms of the Stop 17
E60	E60- Fire Detector St.18	Entrance for floor fire alarms of the Stop 18

E61	E61- Fire Detector St.19	Entrance for floor fire alarms of the Stop 19
E62	E62- Fire Detector St.20	Entrance for floor fire alarms of the Stop 20
E63	E63- Fire Detector St.21	Entrance for floor fire alarms of the Stop 21
E64	E64- Fire Detector St.22	Entrance for floor fire alarms of the Stop 22
E65	E65- Fire Detector St.23	Entrance for floor fire alarms of the Stop 23
E66	E66- Fire Detector St.24	Entrance for floor fire alarms of the Stop 24
E67	E67- Fire Detector St.25	Entrance for floor fire alarms of the Stop 25
E68	E68- Fire Detector St.26	Entrance for floor fire alarms of the Stop 26
E69	E69- Fire Detector St.27	Entrance for floor fire alarms of the Stop 27
E70	E70- Fire Detector St.28	Entrance for floor fire alarms of the Stop 028
E71	E71- Fire Detector St.29	Entrance for floor fire alarms of the Stop 29
E72	E72- Fire Detector St.30	Entrance for floor fire alarms of the Stop 30
E73	E73- Fire Detector St.31	Entrance for floor fire alarms of the Stop 31
E74	E74- Fire Detector St.32	Entrance for floor fire alarms of the Stop 32
E75	E75- Floor Blockade St.01	Entrance for the floor blockade of the Stop 01
E76	E76- Floor Blockade St.02	Entrance for the floor blockade of the Stop 02
E77	E77- Floor Blockade St.03	Entrance for the floor blockade of the Stop 03
E78	E78- Floor Blockade St.04	Entrance for the floor blockade of the Stop 04
E79	E79- Floor Blockade St.05	Entrance for the floor blockade of the Stop 05
E80	E80- Floor Blockade St.06	Entrance for the floor blockade of the Stop 06
E81	E81- Floor Blockade St.07	Entrance for the floor blockade of the Stop 07
E82	E82- Floor Blockade St.08	Entrance for the floor blockade of the Stop 08
E83	E83- Floor Blockade St.09	Entrance for the floor blockade of the Stop 09
E84	E84- Floor Blockade St.10	Entrance for the floor blockade of the Stop 10
E85	E85- Floor Blockade St.11	Entrance for the floor blockade of the Stop 11
E86	E86- Floor Blockade St.12	Entrance for the floor blockade of the Stop 12
E87	E87- Floor Blockade St.13	Entrance for the floor blockade of the Stop 13
E88	E88- Floor Blockade St.14	Entrance for the floor blockade of the Stop 14
E89	E89- Floor Blockade St.15	Entrance for the floor blockade of the Stop 15
E90	E90- Floor Blockade St.16	Entrance for the floor blockade of the Stop 16
E91	E91- Floor Blockade St.17	Entrance for the floor blockade of the Stop 17
E92	E92- Floor Blockade St.18	Entrance for the floor blockade of the Stop 18
E93	E93- Floor Blockade St.19	Entrance for the floor blockade of the Stop 19
E94	E94- Floor Blockade St.20	Entrance for the floor blockade of the Stop 20
E95	E95- Floor Blockade St.21	Entrance for the floor blockade of the Stop 21
E96	E96- Floor Blockade St.22	Entrance for the floor blockade of the Stop 22
E97	E97- Floor Blockade St.23	Entrance for the floor blockade of the Stop 23
E98	E98- Floor Blockade St.24	Entrance for the floor blockade of the Stop 24
E99	E99- Floor Blockade St.25	Entrance for the floor blockade of the Stop 25
E100	E100- Floor Blockade St.26	Entrance for the floor blockade of the Stop 26
E101	E101- Floor Blockade St.27	Entrance for the floor blockade of the Stop 27
E102	E102- Floor Blockade St.28	Entrance for the floor blockade of the Stop 28
E103	E103- Floor Blockade St.29	Entrance for the floor blockade of the Stop 29
E104	E104- Floor Blockade St.30	Entrance for the floor blockade of the Stop 30
E105	E105- Floor Blockade St.31	Entrance for the floor blockade of the Stop 31
E106	E106- Floor Blockade St.32	Entrance for the floor blockade of the Stop 32
E107	E107- Parking Floor St.01	Entrance for start to the park Stop 01
E108	E108- Parking Floor St.02	Entrance for start to the park Stop 02
E109	E109- Parking Floor St.03	Entrance for start to the park Stop 03
E110	E110- Parking Floor St.04	Entrance for start to the park Stop 04
E111	E111- Parking Floor St.05	Entrance for start to the park Stop 05
E112	E112- Parking Floor St.06	Entrance for start to the park Stop 06
E113	E113- Parking Floor St.07	Entrance for start to the park Stop 07
E114	E114- Parking Floor St.08	Entrance for start to the park Stop 08
E115	E115- Parking Floor St.09	Entrance for start to the park Stop 09
E116	E116- Parking Floor St.10	Entrance for start to the park Stop 01
E117	E117- Parking Floor St.11	Entrance for start to the park Stop 11
E118	E118- Parking Floor St.12	Entrance for start to the park Stop 12
E119	E119- Parking Floor St.13	Entrance for start to the park Stop 13
E120	E120- Parking Floor St.14	Entrance for start to the park Stop 14
E121	E121- Parking Floor St.15	Entrance for start to the park Stop 15
E122	E122- Parking Floor St.16	Entrance for start to the park Stop 16
E123	E123- Parking Floor St.17	Entrance for start to the park Stop 17
E124	E124- Parking Floor St.18	Entrance for start to the park Stop 18
E125	E125- Parking Floor St.19	Entrance for start to the park Stop 19
E126	E126- Parking Floor St.20	Entrance for start to the park Stop 20
E127	E127- Parking Floor St.21	Entrance for start to the park Stop 21
E128	E128- Parking Floor St.22	Entrance for start to the park Stop 22

E129	E129- Parking Floor St.23	Entrance for start to the park Stop 23
E130	E130- Parking Floor St.24	Entrance for start to the park Stop 24
E131	E131- Parking Floor St.25	Entrance for start to the park Stop 25
E132	E132- Parking Floor St.26	Entrance for start to the park Stop 26
E133	E133- Parking Floor St.27	Entrance for start to the park Stop 27
E134	E134- Parking Floor St.28	Entrance for start to the park Stop 28
E135	E135- Parking Floor St.29	Entrance for start to the park Stop 29
E136	E136- Parking Floor St.30	Entrance for start to the park Stop 30
E137	E137- Parking Floor St.31	Entrance for start to the park Stop 31
E138	E138- Parking Floor St.32	Entrance for start to the park Stop 32
E139	E139- Landing Priority St.01	Entrance for the landing priority in the Stop 01
E140	E140- Landing Priority St.02	Entrance for the landing priority in the Stop 02
E141	E141- Landing Priority St.03	Entrance for the landing priority in the Stop 03
E142	E142- Landing Priority St.04	Entrance for the landing priority in the Stop 04
E143	E143- Landing Priority St.05	Entrance for the landing priority in the Stop 05
E144	E144- Landing Priority St.06	Entrance for the landing priority in the Stop 06
E145	E145- Landing Priority St.07	Entrance for the landing priority in the Stop 07
E146	E146- Landing Priority St.08	Entrance for the landing priority in the Stop 08
E147	E147- Landing Priority St.09	Entrance for the landing priority in the Stop 09
E148	E148- Landing Priority St.10	Entrance for the landing priority in the Stop 10
E149	E149- Landing Priority St.11	Entrance for the landing priority in the Stop 11
E150	E150- Landing Priority St.12	Entrance for the landing priority in the Stop 12
E151	E151- Landing Priority St.13	Entrance for the landing priority in the Stop 13
E152	E152- Landing Priority St.14	Entrance for the landing priority in the Stop 14
E153	E153- Landing Priority St.15	Entrance for the landing priority in the Stop 15
E154	E154- Landing Priority St.16	Entrance for the landing priority in the Stop 16
E155	E155- Landing Call Up St.01	Input for the landing call Up in the Stop 1
E156	E156- Landing Call Up St.02	Input for the landing call Up in the Stop 2
E157	E157- Landing Call Up St.03	Input for the landing call Up in the Stop 3
E158	E158- Landing Call Up St.04	Input for the landing call Up in the Stop 4
E159	E159- Landing Call Up St.05	Input for the landing call Up in the Stop 5
E160	E160- Landing Call Up St.06	Input for the landing call Up in the Stop 6
E161	E161- Landing Call Up St.07	Input for the landing call Up in the Stop 7
E162	E162- Landing Call Up St.08	Input for the landing call Up in the Stop 8
E163	E163- Landing Call Up St.09	Input for the landing call Up in the Stop 9
E164	E164- Landing Call Up St.10	Input for the landing call Up in the Stop 10
E165	E165- Landing Call Up St.11	Input for the landing call Up in the Stop 11
E166	E166- Landing Call Up St.12	Input for the landing call Up in the Stop 12
E167	E167- Landing Call Up St.13	Input for the landing call Up in the Stop 13
E168	E168- Landing Call Up St.14	Input for the landing call Up in the Stop 14
E169	E169- Landing Call Up St.15	Input for the landing call Up in the Stop 15
E170	E170- Landing Call Down St.01	Input for the landing call Down in the Stop 1
E171	E171- Landing Call Down St.02	Input for the landing call Down in the Stop 2
E172	E172- Landing Call Down St.03	Input for the landing call Down in the Stop 3
E173	E173- Landing Call Down St.04	Input for the landing call Down in the Stop 4
E174	E174- Landing Call Down St.05	Input for the landing call Down in the Stop 5
E175	E175- Landing Call Down St.06	Input for the landing call Down in the Stop 6
E176	E176- Landing Call Down St.07	Input for the landing call Down in the Stop 7
E177	E177- Landing Call Down St.08	Input for the landing call Down in the Stop 8
E178	E178- Landing Call Down St.09	Input for the landing call Down in the Stop 9
E179	E179- Landing Call Down St.10	Input for the landing call Down in the Stop 10
E180	E180- Landing Call Down St.11	Input for the landing call Down in the Stop 11
E181	E181- Landing Call Down St.12	Input for the landing call Down in the Stop 12
E182	E182- Landing Call Down St.13	Input for the landing call Down in the Stop 13
E183	E183- Landing Call Down St.14	Input for the landing call Down in the Stop 14
E184	E184- Landing Call Down St.15	Input for the landing call Down in the Stop 15
E185	E185- Landing Call Down St.16	Input for the landing call Down in the Stop 16
E186	E186 /Car priority/	Input function for the car priority
E187	E187 Safety photo cell	Input function for safety photo cell with special switching
E188	E188 - Landing Priority D.2 St.01	Entrance landing priority the selective door 2 in the stop 01
E189	E189 - Landing Priority D.2 St.02	Entrance landing priority the selective door 2 in the stop 02
E190	E190 - Landing Priority D.2 St.03	Entrance landing priority the selective door 2 in the stop 03
E191	E191 - Landing Priority D.2 St.04	Entrance landing priority the selective door 2 in the stop 04
E192	E192 - Landing Priority D.2 St.05	Entrance landing priority the selective door 2 in the stop 05
E193	E193 - Landing Priority D.2 St.06	Entrance landing priority the selective door 2 in the stop 06
E194	E194 - Landing Priority D.2 St.07	Entrance landing priority the selective door 2 in the stop 07
E195	E195 - Landing Priority D.2 St.08	Entrance landing priority the selective door 2 in the stop 08
E196	E196 - Landing Priority D.2 St.09	Entrance landing priority the selective door 2 in the stop 09

E197	E197 - Landing Priority D.2 St.10	Entrance landing priority the selective door 2 in the stop 10
E198	E198 - Landing Priority D.2 St.11	Entrance landing priority the selective door 2 in the stop 11
E199	E199 - Landing Priority D.2 St.12	Entrance landing priority the selective door 2 in the stop 12
E200	E200 - Landing Priority D.2 St.13	Entrance landing priority the selective door 2 in the stop 13
E201	E201 - Landing Priority D.2 St.14	Entrance landing priority the selective door 2 in the stop 14
E202	E202 - Landing Priority D.2 St.15	Entrance landing priority the selective door 2 in the stop 15
E203	E203 - Landing Priority D.2 St.16	Entrance landing priority the selective door 2 in the stop 16
E204	E204 - Landing Call D.2 Open St.01	Entrance car call up at the selective door 2 in the stop 01
E205	E205 - Landing Call D.2 Open St.02	Entrance car call up at the selective door 2 in the stop 02
E206	E206 - Landing Call D.2 Open St.03	Entrance car call up at the selective door 2 in the stop 03
E207	E207 - Landing Call D.2 Open St.04	Entrance car call up at the selective door 2 in the stop 04
E208	E208 - Landing Call D.2 Open St.05	Entrance car call up at the selective door 2 in the stop 05
E209	E209 - Landing Call D.2 Open St.06	Entrance car call up at the selective door 2 in the stop 06
E210	E210 - Landing Call D.2 Open St.07	Entrance car call up at the selective door 2 in the stop 07
E211	E211 - Landing Call D.2 Open St.08	Entrance car call up at the selective door 2 in the stop 08
E212	E212 - Landing Call D.2 Open St.09	Entrance car call up at the selective door 2 in the stop 09
E213	E213 - Landing Call D.2 Open St.10	Entrance car call up at the selective door 2 in the stop 10
E214	E214 - Landing Call D.2 Open St.11	Entrance car call up at the selective door 2 in the stop 11
E215	E215 - Landing Call D.2 Open St.12	Entrance car call up at the selective door 2 in the stop 12
E216	E216 - Landing Call D.2 Open St.13	Entrance car call up at the selective door 2 in the stop 13
E217	E217 - Landing Call D.2 Open St.14	Entrance car call up at the selective door 2 in the stop 14
E218	E218 - Landing Call D.2 Open St.15	Entrance car call up at the selective door 2 in the stop 15
E219	E219 - Landing Call D.2 Open St.01	Entrance landing call down at the selective door 2 in the stop 01
E220	E220 - Landing Call D.2 Open St.02	Entrance landing call down at the selective door 2 in the stop 02
E221	E221 - Landing Call D.2 Open St.03	Entrance landing call down at the selective door 2 in the stop 03
E222	E222 - Landing Call D.2 Open St.04	Entrance landing call down at the selective door 2 in the stop 04
E223	E223 - Landing Call D.2 Open St.05	Entrance landing call down at the selective door 2 in the stop 05
E224	E224 - Landing Call D.2 Open St.06	Entrance landing call down at the selective door 2 in the stop 06
E225	E225 - Landing Call D.2 Open St.07	Entrance landing call down at the selective door 2 in the stop 07
E226	E226 - Landing Call D.2 Open St.08	Entrance landing call down at the selective door 2 in the stop 08
E227	E227 - Landing Call D.2 Open St.09	Entrance landing call down at the selective door 2 in the stop 09
E228	E228 - Landing Call D.2 Open St.10	Entrance landing call down at the selective door 2 in the stop 10
E229	E229 - Landing Call D.2 Open St.11	Entrance landing call down at the selective door 2 in the stop 11
E230	E230 - Landing Call D.2 Open St.12	Entrance landing call down at the selective door 2 in the stop 12
E231	E231 - Landing Call D.2 Open St.13	Entrance landing call down at the selective door 2 in the stop 13
E232	E232 - Landing Call D.2 Open St.14	Entrance landing call down at the selective door 2 in the stop 14
E233	E233 - Landing Call D.2 Open St.15	Entrance landing call down at the selective door 2 in the stop 15
E234	E234 - Landing Call D.2 Open St.16	Entrance landing call down at the selective door 2 in the stop 16
E235	E235 Universal Input-1	Entrance of the universal channel 1
E236	E236 Universal Input-2	Entrance of the universal channel 2
E237	E237 Universal Input-3	Entrance of the universal channel 3
E238	E238 Universal Input-4	Entrance of the universal channel 4
E239	E239 Entrance delay relay 1	Activation entrance the time delay relay1
E240	E239 Entrance delay relay 2	Activation entrance the time delay relay1
E241	E241-Obligation Delay V1 up	Opener contact interrupted, speed of V1 up taken away
E242	E242-Obligation Delay V1 up	Opener contact interrupted, speed of V2 up taken away
E243	E243-Obligation Delay V1 up	Opener contact interrupted, speed of V3 up taken away
E244	E244-Obligation Delay V1 down	Opener contact interrupted, speed of V4 down taken away
E245	E245-Obligation Delay V1 down	Opener contact interrupted, speed of V5 down taken away
E246	E246-Obligation Delay V1 down	Opener contact interrupted, speed of V6 down taken away
E247	E247-Selection Door	If the opener-contact is interrupted, Stop at the next floor
E248	E248-ER landing call up D2	Input function at the remote station; Landing call Up Door 2
E249	E249-ER landing call down D2	Input function at the remote station; Landing call Down Door 2
E250	E250-Priority Call D1	Input function at the remote station ER: Priority call at doorside 1
E251	E251- Priority Call D1	Input function at the remote station ER: Priority call at doorside 2
E252	E252 Blockade Door side 1	In the case of activation of the entrance-> Door side 1 not opened. (fire drop gate)
E253	E253 Blockade Door side 2	In the case of activation of the entrance-> Door side 2 not opened. (fire drop gate)
E254	E254 Reset Safety Photo Cell	Input function for the Reset-button for CEDES LI-Safety photocell
E255	E255 Monitor Safety Photo Cell	Input function for the contactor monitor for CEDES LI-Safety photocell
E256	E256 HYD Top of the ramp	If there is a high level (+24V) the input channel is activated. If there is no input channel, the output begins after 7 seconds.
E257	AW emergency call function	Input function for the activation of the alarm horn
E258	E258 Service Button	Output messages will be deleted
E259	E259 Swing apron	If the swing apron is closed, the level is „1“
E260	E260 Button Remote Switcher	If „1“ and appropriate inspector function actively then appropriate exit actively.

E261	E261 Car Call Aera	Splitting der calls in two areas
E262	E262 Car Call Door 1 St.01	Input Functions Car Call Door Side 1 Stop1
E263	E263 Car Call Door 1 St.02	Input Functions Car Call Door Side 1 Stop2
E264	E264 Car Call Door 1 St.03	Input Functions Car Call Door Side 1 Stop3
E265	E265 Car Call Door 1 St.04	Input Functions Car Call Door Side 1 Stop4
E266	E266 Car Call Door 1 St.05	Input Functions Car Call Door Side 1 Stop5
E267	E267 Car Call Door 1 St.06	Input Functions Car Call Door Side 1 Stop6
E268	E268 Car Call Door 1 St.07	Input Functions Car Call Door Side 1 Stop7
E269	E269 Car Call Door 1 St.08	Input Functions Car Call Door Side 1 Stop8
E270	E270 Car Call Door 1 St.09	Input Functions Car Call Door Side 1 Stop9
E271	E271 Car Call Door 1 St.10	Input Functions Car Call Door Side 1 Stop10
E272	E272 Car Call Door 1 St.11	Input Functions Car Call Door Side 1 Stop11
E273	E273 Car Call Door 1 St.12	Input Functions Car Call Door Side 1 Stop12
E274	E274 Car Call Door 1 St.13	Input Functions Car Call Door Side 1 Stop13
E275	E275 Car Call Door 1 St.14	Input Functions Car Call Door Side 1 Stop14
E276	E276 Car Call Door 1 St.15	Input Functions Car Call Door Side 1 Stop15
E277	E277 Car Call Door 1 St.16	Input Functions Car Call Door Side 1 Stop16
E278	E278 Car Call Door 1 St.17	Input Functions Car Call Door Side 1 Stop17
E279	E279 Car Call Door 1 St.18	Input Functions Car Call Door Side 1 Stop18
E280	E280 Car Call Door 1 St.19	Input Functions Car Call Door Side 1 Stop19
E281	E281 Car Call Door 1 St.20	Input Functions Car Call Door Side 1 Stop20
E282	E282 Car Call Door 1 St.21	Input Functions Car Call Door Side 1 Stop21
E283	E283 Car Call Door 1 St.22	Input Functions Car Call Door Side 1 Stop22
E284	E284 Car Call Door 1 St.23	Input Functions Car Call Door Side 1 Stop23
E285	E285 Car Call Door 1 St.24	Input Functions Car Call Door Side 1 Stop24
E286	E286 Car Call Door 1 St.25	Input Functions Car Call Door Side 1 Stop25
E287	E287 Car Call Door 1 St.26	Input Functions Car Call Door Side 1 Stop26
E288	E288 Car Call Door 1 St.27	Input Functions Car Call Door Side 1 Stop27
E289	E289 Car Call Door 1 St.28	Input Functions Car Call Door Side 1 Stop28
E290	E290 Car Call Door 1 St.29	Input Functions Car Call Door Side 1 Stop29
E291	E291 Car Call Door 1 St.30	Input Functions Car Call Door Side 1 Stop30
E292	E292 Car Call Door 1 St.31	Input Functions Car Call Door Side 1 Stop31
E293	E293 Car Call Door 1 St.32	Input Functions Car Call Door Side 1 Stop32
E294	E294 Car Call Door 2 St.01	Input Functions Car Call Door Side 2 Stop1
E295	E295 Car Call Door 2 St.02	Input Functions Car Call Door Side 2 Stop2
E296	E296 Car Call Door 2 St.03	Input Functions Car Call Door Side 2 Stop3
E297	E297 Car Call Door 2 St.04	Input Functions Car Call Door Side 2 Stop4
E298	E298 Car Call Door 2 St.05	Input Functions Car Call Door Side 2 Stop5
E299	E299 Car Call Door 2 St.06	Input Functions Car Call Door Side 2 Stop6
E300	E300 Car Call Door 2 St.07	Input Functions Car Call Door Side 2 Stop7
E301	E301 Car Call Door 2 St.08	Input Functions Car Call Door Side 2 Stop8
E302	E302 Car Call Door 2 St.09	Input Functions Car Call Door Side 2 Stop9
E303	E303 Car Call Door 2 St.10	Input Functions Car Call Door Side 2 Stop10
E304	E304 Car Call Door 2 St.11	Input Functions Car Call Door Side 2 Stop11
E305	E305 Car Call Door 2 St.12	Input Functions Car Call Door Side 2 Stop12
E306	E306 Car Call Door 2 St.13	Input Functions Car Call Door Side 2 Stop13
E307	E307 Car Call Door 2 St.14	Input Functions Car Call Door Side 2 Stop14
E308	E308 Car Call Door 2 St.15	Input Functions Car Call Door Side 2 Stop15
E309	E309 Car Call Door 2 St.16	Input Functions Car Call Door Side 2 Stop16
E310	E310 Car Call Door 2 St.17	Input Functions Car Call Door Side 2 Stop17
E311	E311 Car Call Door 2 St.18	Input Functions Car Call Door Side 2 Stop18
E312	E312 Car Call Door 2 St.19	Input Functions Car Call Door Side 2 Stop19
E313	E313 Car Call Door 2 St.20	Input Functions Car Call Door Side 2 Stop20
E314	E314 Car Call Door 2 St.21	Input Functions Car Call Door Side 2 Stop21
E315	E315 Car Call Door 2 St.22	Input Functions Car Call Door Side 2 Stop22
E316	E316 Car Call Door 2 St.23	Input Functions Car Call Door Side 2 Stop23
E317	E317 Car Call Door 2 St.24	Input Functions Car Call Door Side 2 Stop24
E318	E318 Car Call Door 2 St.25	Input Functions Car Call Door Side 2 Stop25
E319	E319 Car Call Door 2 St.26	Input Functions Car Call Door Side 2 Stop26
E320	E320 Car Call Door 2 St.27	Input Functions Car Call Door Side 2 Stop27
E321	E321 Car Call Door 2 St.28	Input Functions Car Call Door Side 2 Stop28
E322	E322 Car Call Door 2 St.29	Input Functions Car Call Door Side 2 Stop29
E323	E323 Car Call Door 2 St.30	Input Functions Car Call Door Side 2 Stop30
E324	E324 Car Call Door 2 St.31	Input Functions Car Call Door Side 2 Stop31
E325	E325 Car Call Door 2 St.32	Input Functions Car Call Door Side 2 Stop32
E326	E326 Floor blockage waive	Input function for the abolition of the floor blockage
E327	E327 Totman Car call ON	Input function for activation the car calls of a Totman controlling
E328	E328 bolt device activate	Entrance for pin bolting device

E329	E329 Bolt driven out	Feedback that the bolts drive out
E330	E330 Bolt drive in	Feedback that the bolts drive in
E331	E331 Resend control E/A	If „ 0 „ then resend operation
E332	E332 Resend control UP	If „ 1“ then UP
E333	E333 Resend control Down	If „1“ then DOWN
E334	Code key of car call 1	Code- button-1
E335	Code key of car call 2	Code- button-2
E336	Code key of car call 3	Code- button-3
E337	Code key of car call 4	Code- button-4
E338	Code key of car call 5	Code- button-5
E339	Code key of car call 6	Code- button-6
E340	Code key of car call 7	Code- button-7
E341	Code key of car call 8	Code- button-8
E342	Code key of car call 9	Code- button-9
E343	Code key of car call 0	Code- button-0
E344	E344 Code lock of car calls #	Input confirming
E345	E345 Light barrier Door 1	Entrance function light barrier Door 1
E346	E346 Reversing contact Door 1	Entrance function reversing Door 1
E347	E347 Limit switch open Door 1	Entrance function limit switch open Door 1
E348	E348 Limit switch close Door 1	Entrance function limit switch close Door 1
E349	E349 Light barrier Door 2	Entrance function limit barrier Door 2
E350	E350 Reversing contact Door 2	Entrance function reversing contact Door 2
E351	E351 Limit switch open Door 2	Entrance function limit switch open Door 2
E352	E352 Limit switch close Door 2	Entrance function limit switch close Door 2
E353	E353 Case of fire reset	Function of the Swiss fire drop evacuation, BF-> normal operation
E354	E354 floor gong off	Function for external switching of the floor gong, high gong off
E355	E355 position motor off (Hydr OTIS)	Switch off for position motors of OTIS hydraulic
E356	E356-Contactor Monitor No.2	Is a AND connection with Input E13
E357	E357 Group off	
E358	E358 Engine temperature rise	If „1“ then OK
E359	E359 Door 1 open	If „1“ then the door opens (Auxiliary entrance for traffic light circuit)
E360	E360 Door 2 open	If „1“ then the door opens (Auxiliary entrance for traffic light circuit)
E361	E361 slowly drive V1	If „1“ then drives elevator only with V1
E362	E362-Control & Light off #2	Rest-Driven, like E16
E363	E363 Gas trip	If „ but wait 1“ then gas trip, like interior preference/ advantage to light barrier
E364	E364 Bolt manually drive in	Only with Insp/ releveing+ mobile bolting device
E365	E365 Bolt manually drive out	Only with Insp/ releveing+ mobile bolting device
E366	E366 Bolt Under pressure	If „ 0 „ then negative pressure
E367	E367 Bolt pressure swich off	If „0 „ then negative pressure
E368	E368 Call Blockade Inside D1 St.01	
E369	E369 Call Blockade Inside D1 St.01	
E370	E370 Call Blockade Inside D1 St.01	
E371	E371Call Blockade Inside D1 St.01	
E372	E372Call Blockade Inside D1 St.01	
E373	E373Call Blockade Inside D1 St.01	
E374	E374Call Blockade Inside D1 St.01	
E375	E375Call Blockade Inside D1 St.01	
E376	E376Call Blockade Inside D1 St.01	
E377	E377Call Blockade Inside D1 St.01	
E378	E378Call Blockade Inside D1 St.01	
E379	E379Call Blockade Inside D1 St.01	
E380	E380Call Blockade Inside D1 St.01	
E381	E381Call Blockade Inside D1 St.01	
E382	E382Call Blockade Inside D1 St.01	
E383	E383Call Blockade Inside D1 St.01	
E384	E384Call Blockade Inside D2 St.01	
E385	E385Call Blockade Inside D2 St.02	
E386	E386Call Blockade Inside D2 St.03	
E387	E387Call Blockade Inside D2 St.04	
E388	E388Call Blockade Inside D2 St.05	
E389	E389Call Blockade Inside D2 St.06	
E390	E390Call Blockade Inside D2 St.07	
E391	E391Call Blockade Inside D2 St.08	
E392	E392Call Blockade Inside D2 St.09	
E393	E393Call Blockade Inside D2 St.10	
E394	E394Call Blockade Inside D2 St.11	
E395	E395Call Blockade Inside D2 St.12	

E396	E396Call Blockade Inside D2 St.13	
E397	E397Call Blockade Inside D2 St.14	
E398	E398Call Blockade Inside D2 St.15	
E399	E399Call Blockade Inside D2 St.16	
E400	E400Call Blockade Outside D1St.01	
E401	E401Call Blockade Outside D1 St.02	
E402	E400Call Blockade Outside D1 St.03	
E403	E403Call Blockade Outside D1 St.04	
E404	E404Call Blockade Outside D1 St.05	
E405	E405Call Blockade Outside D1 St.06	
E406	E406Call Blockade Outside D1 St.07	
E407	E407Call Blockade Outside D1 St.08	
E408	E408Call Blockade Outside D1 St.09	
E409	E409Call Blockade Outside D1 St.10	
E410	E410Call Blockade Outside D1 St.11	
E411	E411Call Blockade Outside D1 St.12	
E412	E412Call Blockade Outside D1 St.13	
E413	E413Call Blockade Outside D1 St.14	
E414	E414Call Blockade Outside D1 St.15	
E415	E415Call Blockade Outside D1 St.16	
E416	E416Call Blockade Outside D2 St.01	
E417	E417Call Blockade Outside D2 St.02	
E418	E418Call Blockade Outside D2 St.03	
E419	E419Call Blockade Outside D2 St.04	
E420	E420Call Blockade Outside D2 St.05	
E421	E421Call Blockade Outside D2 St.06	
E422	E422Call Blockade Outside D2 St.07	
E423	E423Call Blockade Outside D2 St.08	
E424	E424Call Blockade Outside D2 St.09	
E425	E425Call Blockade Outside D2 St.10	
E426	E426Call Blockade Outside D2 St.11	
E427	E427Call Blockade Outside D2 St.12	
E428	E428Call Blockade Outside D2 St.13	
E429	E429Call Blockade Outside D2 St.14	
E430	E430Call Blockade Outside D2 St.15	
E431	E431Call Blockade Outside D2 St.16	
E432	E432 Phase reversal monitoring	If „1“ ok, if “0” then errors
E433	E433 Brake- & Blockvoltage	If „1“ ok, if “0” then errors
E434	E433 Less pressure	If „1“ ok, if “0” then errors
E435	E435 Landing call off	During active entrance to ER is switched off external control
E436	E436 LED matrix out of operation	During active entrance LED matrix becomes to ER power down
E437	E437 Car Person Sensor	
E438	E438 Brake open monitor 2. coil	
E439	E439 Brake open monitor 3. coil	
E440	E440 Car Elevator Photocell D1	Car Elevator Photocell in the car for Car position
E441	E441 Car Elevator Photocell D2	Car Elevator Photocell in the car for Car position
E442	E442 Car Elevator Photocell Middle	Car Elevator Photocell in the car for Car position
E443	E443- Lobbymonitor D1-F 01	
E444	E444- Lobbymonitor D1-F 02	
E445	E445- Lobbymonitor D1-F 03	
E446	E446- Lobbymonitor D1-F 04	
E447	E447- Lobbymonitor D1-F 05	
E448	E448- Lobbymonitor D1-F 06	
E449	E449- Lobbymonitor D1-F 07	
E450	E450- Lobbymonitor D1-F 08	
E451	E451- Lobbymonitor D2-F 01	
E452	E452- Lobbymonitor D2-F 02	
E453	E453- Lobbymonitor D2-F 03	
E454	E454- Lobbymonitor D2-F 04	
E455	E455- Lobbymonitor D2-F 05	
E456	E456- Lobbymonitor D2-F 06	
E457	E457- Lobbymonitor D2-F 07	
E458	E458- Lobbymonitor D2-F08	
E459	E459-Controlercabinet Door Open	High signal, if the door is open
E460	E460 Controlercabinet Door Open Invers	Low signal, if the door is open
E461	E461 Startdelay UP	High signal for Waiting (Door Open Command)
E462	E462 Battery-evacuation	Normal Travel with Battery / USV are possible
E463	E463 Attendant Mode ON	If there is a pulse, then switch ON

E464	E464 Attendant Mode OFF	If there is a pulse, then switch OFF
E465	E465 Attendant Mode UP	During the high signal, the door is closing and after that it starts up.
E466	E466 Attendant Mode DOWN	During the high signal, the door is closing and after that it starts down.
E467	E467 Attendant Mode Land.Con.Off	Toggle-Input for switching off the landing Control
E468	E468 Send Controller	When the input is high, then Send-Controlling
E469	E469 Reset all calls	When "1" then all adjacent calls cleared
E470	E470 Door Slice-OFF	When "1" then the door lock function is turned off, if active
E471	E471 Flash Output	Highsignal for the Blink Output
E472	E472 Release Door	
E473	E473 Flap COP	
E474	E474 Main Contactor No.	Additional contactor monitoring chain via normally open contacts
E475	E 475 Rope Stretching	By using the Weight Watcher Henning load-measure-systems the error rope stretching can be evaluated by the controller.
E476	E 476 Startdelay UP & Down	Function for the Acceleration
E477	E 477 Deadman Mode	If the input is active the controller is transferred to the dead man mode.
E478	E478 Universal-input -5	Input for Universal-Output-5
E479	E479 Universal-input -6	Input for Universal-Output -6
E480	E480 Universal-input -7	Input for Universal-Output -7
E481	E481 Universal-input -8	Input for Universal-Output -8
E482	E482 Universal-input -9	Input for Universal-Output -9
E483	E483 Universal-input -10	Input for Universal-Output -10
E484	E484 Universal-input -11	Input for Universal-Output -11
E485	E485 Universal-input -12	Input for Universal-Output -12
E486	E486 Universal-input -13	Input for Universal-Output -13
E487	E487 Universal-input -14	Input for Universal-Output -14
E488	E488 Universal-input -15	Input for Universal-Output -15
E489	E489 Timer relay 1 Reset	Input for Reset the time relay 1
E490	E490 Timer relay 2 Reset	Input for Reset the time relay 2
E491	E491 Floorcalls OFF	Landing calls are not accepted
E492	E492 Temperature Heat Travel	Thermostat input for the heating function
E493	E493 UCM Status 1	Input channel for the EN81-A3 Function for UCM-Status 1
E494	E494 UCM Status 2	Input channel for the EN81-A3 Function for UCM-Status 2
E495	E495 UCM Status 3	Input channel for the EN81-A3 Function for UCM-Status 3
E496	E496 TV60-1	Synchronous monitoring channel 1 of the TV60-1
E497	E497 TV60-2	Synchronous monitoring channel 2 of the TV60-1
E498	E498 OSKAR Release	FRAPORT – Safety system OSKAR
E499	E498 OSKAR Wait	FRAPORT – Safety system OSKAR
E500	E500 OSKAR Block	FRAPORT – Safety system OSKAR
E501	E501 OSKAR OFF	FRAPORT – Safety system OSKAR
E502	E502 Parking Fill	When the level is „1“ then the fill-operation is active.
E503	E503 Parking Empty	When the level is „1“ then the empty-operation is active.
E504	E504 TV60-3	Synchronous monitoring channel 1 of the TV60-2
E505	E505 TV60-4	Synchronous monitoring channel 2 of the TV60-2
E506	E506 RESET Brake monitoring	Possibility of external reset during braking control elements and A3 case.
E507	E507 Battery monitoring 1	Monitoring of the battery of EOS or other units
E508	E508 Battery monitoring 2	Monitoring of the battery of EOS or other units
E509	E509 Rubber Skirt	Function for Monitoring the rubber skirt
E510	E510 Fire Sensor Floor 01 Door 2	Input for Fire Evacuation - Fire Sensor Floor 01 Door 2
E511	E511 Fire Sensor Floor 02 Door 2	Input for Fire Evacuation - Fire Sensor Floor 02 Door 2
E512	E512 Fire Sensor Floor 03 Door 2	Input for Fire Evacuation - Fire Sensor Floor 03 Door 2
E513	E513 Fire Sensor Floor 04 Door 2	Input for Fire Evacuation - Fire Sensor Floor 04 Door 2
E514	E514 Fire Sensor Floor 05 Door 2	Input for Fire Evacuation - Fire Sensor Floor 05 Door 2
E515	E515 Fire Sensor Floor 06 Door 2	Input for Fire Evacuation - Fire Sensor Floor 06 Door 2
E516	E516 Fire Sensor Floor 07 Door 2	Input for Fire Evacuation - Fire Sensor Floor 07 Door 2
E517	E517 Fire Sensor Floor 08 Door 2	Input for Fire Evacuation - Fire Sensor Floor 08 Door 2
E518	E518 Door 1 Manual Opening	Input channel for Door 1 Manual Opening
E519	E519 Door 1 Manual Closing	Input channel for Door 1 Manual Closing
E520	E520 Door 2 Manual Opening	Input channel for Door 2 Manual Opening
E521	E521 Door 2 Manual Closing	Input channel for Door 2 Manual Closing
E522	E522 Hazardous Transport Off	Input function to switch off the Hazardous Transport
E523	E523 Reset Door is Ready	Input channel for Reset function Door is Ready
E524	E524 Quickstart Monitor	Input channel for monitoring the relay function of K69
E525	E525 Car Light Sensor	Input channel for the car light sensor to monitor the car light
E526	E526 Car Preference Call Pulse	
E527	E527 Car Preference Call Release	
E528	E528 Inspection E-A 68	Inspection ON / OFF in the pit, „0“=ON / „1“ = OFF

E529	E529 Inspection UP 68A	Inspection UP in the pit, „1“ = UP
E530	E531 Inspection DOWN 68B	Inspection DOWN in the pit, „1“ = DOWN
E531	E532 Inspection FAST 68C	Inspection fast-switch in the pit, „1“ = FAST
E532	E532 Inspection Pit: Reset	Reset for the Shaft-Door Bottom (EN81-20/50) „1“ = Reset
E533	E533 Automatic Car-Call	If the level is „1“, then the automatic Car-Call is OFF in menu B21
E534	E534 Puls Energy	Counter level Energy-Counter is increasing for 1 KWh
E535	E535 Puls Recover Energy	Counter level Recover Energy-Counter is increasing for 1 KWh
E536	E536 Overvoltage Monitor	If the level is „1“, then there is Message Overvoltage of the Monitoring
E537	E537 Fan Monitor	If the level is „0“, then error message of the Cabinet-fan
E538	E538 Light Monitor	If the level is „0“, then error message of the Carlight (One Light is Out-of-order)
E539	E539 Doorstep-Heating-1	If the level is „0“, then error
E540	E540 Doorstep-Heating -2	If the level is „0“, then error
E541	E541 Doorstep-Heating -3	If the level is „0“, then error
E542	E542 Doorstep-Heating -4	If the level is „0“, then error
E543	E543 Electric Socket Monitoring	If the level is „0“, then error
E544	E444 Fan Monitoring Active	If the level is „1“,then Monitoring-function E537 is active
E545	E545 Car fan Monitoring	If the level is „0“, then error
E546	E546 Car fan Monitoring Active	If the level is „1“, then Monitoring-function E545 is active
E547	E547-Controler & Light OFF-3	Like Standby travel E16, but with error message
E548	E548- Controler & Light OFF-4	Like Standby travel E362, but with error message
E549	E549-USV-System	If the level is „1“, then ok
E550	E550-USV Battery	If the level is „1“, then ok
E551	E551 FF Car Call Reset	FireFighter: Erase the Carcalls (FW-Düsseldorf)
E552	E552 Car call D1-HS33	
E553	E553 Car call D1-HS34	
E554	E554 Car call D1-HS35	
E555	E555 Car call D1-HS36	
E556	E556 Car call D1-HS37	
E557	E557 Car call D1-HS38	
E558	E558 Car call D1-HS39	
E559	E559 Car call D1-HS40	
E560	E560 Car call D1-HS41	
E561	E561 Car call D1-HS42	
E562	E562 Car call D1-HS43	
E563	E563 Car call D1-HS44	
E564	E564 Car call D1-HS45	
E565	E565 Car call D1-HS46	
E566	E566 Car call D1-HS47	
E567	E567 Car call D1-HS48	
E568	E568 Car call D1-HS49	
E569	E569 Car call D1-HS50	
E570	E570 Car call D1-HS51	
E571	E571 Car call D1-HS52	
E572	E572 Car call D1-HS53	
E573	E573 Car call D1-HS54	
E574	E574 Car call D1-HS55	
E575	E575 Car call D1-HS56	
E576	E576 Car call D1-HS57	
E577	E577 Car call D1-HS58	
E578	E578 Car call D1-HS59	
E579	E579 Car call D1-HS60	
E580	E580 Car call D1-HS61	
E581	E581 Car call D1-HS62	
E582	E582 Car call D1-HS63	
E583	E583 Car call D1-HS64	
E584	E584 Car call D2-HS33	
E585	E585 Car call D2-HS34	
E586	E586 Car call D2-HS35	
E587	E587 Car call D2-HS36	
E588	E588 Car call D2-HS37	
E589	E589 Car call D2-HS38	
E590	E590 Car call D2-HS39	
E591	E591 Car call D2-HS40	
E592	E592 Car call D2-HS41	
E593	E593 Car call D2-HS42	
E594	E594 Car call D2-HS43	
E595	E595 Car call D2-HS44	

E596	E596 Car call D2-HS45	
E597	E597 Car call D2-HS46	
E598	E598 Car call D2-HS47	
E599	E599 Car call D2-HS48	
E600	E560 Car call D2-HS49	
E601	E601 Car call D2-HS50	
E602	E602 Car call D2-HS51	
E603	E603 Car call D2-HS52	
E604	E604 Car call D2-HS53	
E605	E605 Car call D2-HS54	
E606	E606 Car call D2-HS55	
E607	E607 Car call D2-HS56	
E608	E608 Car call D2-HS57	
E609	E609 Car call D2-HS58	
E610	E610 Car call D2-HS59	
E611	E611 Car call D2-HS60	
E612	E612 Car call D2-HS61	
E613	E613 Car call D2-HS62	
E614	E614 Car call D2-HS63	
E615	E615 Car call D2-HS64	
E615	E583 Car call D2-HS64	
E616	E616 Fire Detector HS33	
E617	E617 Fire Detector HS34	
E618	E618 Fire Detector HS35	
E619	E619 Fire Detector HS36	
E620	E620 Fire Detector HS37	
E621	E621 Fire Detector HS38	
E622	E622 Fire Detector HS39	
E623	E623 Fire Detector HS40	
E624	E624 Fire Detector HS41	
E625	E625 Fire Detector HS42	
E626	E626 Fire Detector HS43	
E627	E627 Fire Detector HS44	
E628	E628 Fire Detector HS45	
E629	E629 Fire Detector HS46	
E630	E630 Fire Detector HS47	
E631	E631 Fire Detector HS48	
E632	E632 Fire Detector HS49	
E633	E633 Fire Detector HS50	
E634	E634 Fire Detector HS51	
E635	E635 Fire Detector HS52	
E636	E636 Fire Detector HS53	
E637	E637 Fire Detector HS54	
E638	E638 Fire Detector HS55	
E639	E639 Fire Detector HS56	
E640	E640 Fire Detector HS57	
E641	E641 Fire Detector HS58	
E642	E642 Fire Detector HS59	
E643	E643 Fire Detector HS60	
E644	E644 Fire Detector HS61	
E645	E645 Fire Detector HS62	
E646	E646 Fire Detector HS63	
E647	E647 Fire Detector HS64	
E648	E648 Floor Blockade HS33	
E649	E649 Floor Blockade HS34	
E650	E650 Floor Blockade HS35	
E651	E651 Floor Blockade HS36	
E652	E652 Floor Blockade HS37	
E653	E653 Floor Blockade HS38	
E654	E654 Floor Blockade HS39	
E655	E655 Floor Blockade HS40	
E656	E656 Floor Blockade HS41	
E657	E657 Floor Blockade HS42	
E658	E658 Floor Blockade HS43	
E659	E659 Floor Blockade HS44	
E660	E660 Floor Blockade HS45	
E661	E661 Etagensperrung HS46	
E662	E662 Floor Blockade HS47	

E663	E663 Floor Blockade HS48	
E664	E664 Floor Blockade HS49	
E665	E665 Floor Blockade HS50	
E666	E666 Floor Blockade HS51	
E667	E667 Floor Blockade HS52	
E668	E668 Floor Blockade HS53	
E669	E669 Floor Blockade HS54	
E670	E677 Floor Blockade HS55	
E671	E671 Floor Blockade HS56	
E672	E672 Floor Blockade HS57	
E673	E673 Floor Blockade HS58	
E674	E674 Floor Blockade HS59	
E675	E675 Floor Blockade HS60	
E676	E676 Floor Blockade HS61	
E677	E677 Floor Blockade HS62	
E678	E678 Floor Blockade HS63	
E679	E679 Floor Blockade HS64	
E680	E680 Parking Floor HS33	
E681	E681 Parking Floor HS34	
E682	E682 Parking Floor HS35	
E683	E683 Parking Floor HS36	
E684	E684 Parking Floor HS37	
E685	E685 Parking Floor HS38	
E686	E686 Parking Floor HS39	
E687	E687 Parking Floor HS40	
E688	E688 Parking Floor HS41	
E689	E689 Parking Floor HS42	
E690	E690 Parking Floor HS43	
E691	E691 Parking Floor HS44	
E692	E692 Parking Floor HS45	
E693	E693 Parking Floor HS46	
E694	E694 Parking Floor HS47	
E695	E695 Parking Floor HS48	
E696	E696 Parking Floor HS49	
E697	E697 Parking Floor HS50	
E698	E698 Parking Floor HS51	
E699	E699 Parking Floor HS52	
E700	E700 Parking Floor HS53	
E701	E701 Parking Floor HS54	
E702	E702 Parking Floor HS55	
E703	E703 Parking Floor HS56	
E704	E704 Parking Floor HS57	
E705	E705 Parking Floor HS58	
E706	E706 Parking Floor HS59	
E707	E707 Parking Floor HS60	
E708	E708 Parking Floor HS61	
E709	E709 Parking Floor HS62	
E710	E710 Parking Floor HS63	
E711	E711 Parking Floor HS64	
E712	E712 Vmax-UP = V1	If the bit is „0“ then the speed will reduce to V1
E713	E713 Vmax-Down = V1	If the bit is „0“ then the speed will reduce to V1
E714	E714 Hotel Stop	If „1“ then the function Hotelstop is not active
E715	E715 AW60-Monitoring	If „0“ then error
E716	E716 S69 Bypass active	If „0“ then active
E717	E717 Overpressure	If „0“ then error
E718	E718 Emergency Monitoring	If „0“ then error
E719	E719 Bed-travel	If "1" then output message "bed travel" instead of "special trip" with inner advantage. Active, as long as the internal advantage is active, even if E719 is no longer present.
E720	E720 Sabbat control	If „1“ then preparing the Sabbat-control
E721	E721 Sabbat timer	If „1“ then Sabbat-control active
E722	E722 Ramp 30° open	Scanclimber
E723	E723 Ramp open	Scanclimber
E724	E724 Ramp closed	Scanclimber
E725	E725 Ramp manual Operation	Scanclimber
E726	E726 Ramp manually Open	Scanclimber
E727	E727 Ramp manually Closing	Scanclimber
E728	E728 Stop next Floor	Scanclimber

E729	E729 Motorprotection	Scanclimber
E730	E730 Inspection Message	There is the possibility to initiate a ramp drive -0 during the interruption of the inspection trip.
E731	E731 Lobby Monitoring Door-3	Entrance Lobby Monitorinh Door 3 through car door
E732	E732 Switch Door 3 OFF	Entrance for switch OPEN Door 3
E733	E733 Switch Door 3 CLOSED	Entrance for switch CLOSED Door 3
E734	E734 Load Time Switch Door 3	Entrance for switch load time Door 3
E735	E735 Light Barrier Door 3	Entrance for light barrier Door 3
E736	E736 Reverse Contact Door 3	Entrance for Reverse Contact Door 3
E737	E737 End Switch OPEN Door 3	Entrance for End Switch OPEN Door 3
E738	E738 End Switch CLOSED Door 3	Entrance for End Switch CLOSED Door 3
E739	E739-Door 3 manual OPEN	Entrance for switch Door OPEN manual Door 3
E740	E740-ZU Door 3 manual CLOSED	Entrance for switch Door CLOSED manual Door 3
E741	E741-Penthouse-1 Getting Visitors	
E742	E742-Penthouse-1 Getting Penthouse	
E743	E743-Penthouse-1 Getting Outside	
E744	E744-Penthouse-2 Getting Visitors	
E745	E745-Penthouse-2 Getting Penthouse	
E746	E746-Penthouse-2 Getting Outside	
E747	E747-Penthouse-3 Getting Visitors	
E748	E748-Penthouse-3 Getting Penthouse	
E749	E749-Penthouse-3 Getting Outside	
E750	E750-Penthouse-4 Getting Visitors	
E751	E751-Penthouse-4 Getting Penthouse	
E752	E752-Penthouse-4 Getting Outside	
E753	E753-Penthouse-5 Getting Visitors	
E754	E754-Penthouse-5 Getting Penthouse	
E755	E755-Penthouse-5 Getting Outside	
E756	E756-Penthouse-6 Getting Visitors	
E757	E757-Penthouse-6 Getting Penthouse	
E758	E758-Penthouse-6 Getting Outside	
E759	E759-Penthouse-7 Getting Visitors	
E760	E760-Penthouse-7 Getting Penthouse	
E761	E761-Penthouse-7 Getting Outside	
E762	E762-Penthouse-8 Getting Visitors	
E763	E763-Penthouse-8 Getting Penthouse	
E764	E764-Penthouse-8 Getting Outside	
E765	E765-Call Blocking Inside Call T1 HS17	Blocking of door call-1 inside call - bus stop 17
E766	E766-Call Blocking Inside Call T1 HS18	Blocking of door call-1 inside call - bus stop 18
E767	E767-Call Blocking Inside Call T1 HS19	Blocking of door call-1 inside call - bus stop 19
E768	E768-Call Blocking Inside Call T1 HS20	Blocking of door call-1 inside call - bus stop 20
E769	E769-Call Blocking Inside Call T1 HS21	Blocking of door call-1 inside call - bus stop 21
E770	E770-Call Blocking Inside Call T1 HS22	Blocking of door call-1 inside call - bus stop 22
E771	E771-Call Blocking Inside Call T1 HS23	Blocking of door call-1 inside call - bus stop 23
E772	E772-Call Blocking Inside Call T1 HS24	Blocking of door call-1 inside call - bus stop 24
E773	E773-Call Blocking Inside Call T1 HS25	Blocking of door call-1 inside call - bus stop 25
E774	E774-Call Blocking Inside Call T1 HS26	Blocking of door call-1 inside call - bus stop 26
E775	E775-Call Blocking Inside Call T1 HS27	Blocking of door call-1 inside call - bus stop 27
E776	E776-Call Blocking Inside Call T1 HS28	Blocking of door call-1 inside call - bus stop 28
E777	E777-Call Blocking Inside Call T1 HS29	Blocking of door call-1 inside call - bus stop 29
E778	E778-Call Blocking Inside Call T1 HS30	Blocking of door call-1 inside call - bus stop 30
E779	E779- Call Blocking Inside Call T1 HS31	Blocking of door call-1 inside call - bus stop 31
E780	E780- Call Blocking Inside Call T1 HS32	Blocking of door call-1 inside call - bus stop 32
E781	E781- Call Blocking Inside Call T1 HS33	Blocking of door call-1 inside call - bus stop 33
E782	E782- Call Blocking Inside Call T1 HS34	Blocking of door call-1 inside call - bus stop 34
E783	E783- Call Blocking Inside Call T1 HS35	Blocking of door call-1 inside call - bus stop 35
E784	E784- Call Blocking Inside Call T1 HS36	Blocking of door call-1 inside call - bus stop 36
E785	E785- Call Blocking Inside Call T1 HS37	Blocking of door call-1 inside call - bus stop 37
E786	E786- Call Blocking Inside Call T1 HS38	Blocking of door call-1 inside call - bus stop 38
E787	E787- Call Blocking Inside Call T1 HS39	Blocking of door call-1 inside call - bus stop 39
E788	E788- Call Blocking Inside Call T1 HS40	Blocking of door call-1 inside call - bus stop 40
E789	E789- Call Blocking Inside Call T1 HS41	Blocking of door call-1 inside call - bus stop 41
E790	E790- Call Blocking Inside Call T1 HS42	Blocking of door call-1 inside call - bus stop 42
E791	E791- Call Blocking Inside Call T1 HS43	Blocking of door call-1 inside call - bus stop 43
E792	E792- Call Blocking Inside Call T1 HS44	Blocking of door call-1 inside call - bus stop 44
E793	E793- Call Blocking Inside Call T1 HS45	Blocking of door call-1 inside call - bus stop 45
E794	E794- Call Blocking Inside Call T1 HS46	Blocking of door call-1 inside call - bus stop 46
E795	E795- Call Blocking Inside Call T1 HS47	Blocking of door call-1 inside call - bus stop 47

E932	E932- Block landing call D2 Fl.40	Blocking of door call-2 outside call - bus stop 40
E933	E933- Block landing call D2 Fl.41	Blocking of door call-2 outside call - bus stop 41
E934	E934- Block landing call D2 Fl.42	Blocking of door call-2 outside call - bus stop 42
E935	E935- Block landing call D2 Fl.43	Blocking of door call-2 outside call - bus stop 43
E936	E936- Block landing call D2 Fl.44	Blocking of door call-2 outside call - bus stop 44
E937	E937- Block landing call D2 Fl.45	Blocking of door call-2 outside call - bus stop 45
E938	E938- Block landing call D2 Fl.46	Blocking of door call-2 outside call - bus stop 46
E939	E939- Block landing call D2 Fl.47	Blocking of door call-2 outside call - bus stop 47
E940	E940- Block landing call D2 Fl.48	Blocking of door call-2 outside call - bus stop 48
E941	E941- Block landing call D2 Fl.49	Blocking of door call-2 outside call - bus stop 49
E942	E942- Block landing call D2 Fl.50	Blocking of door call-2 outside call - bus stop 50
E943	E943- Block landing call D2 Fl.51	Blocking of door call-2 outside call - bus stop 51
E944	E944- Block landing call D2 Fl.52	Blocking of door call-2 outside call - bus stop 52
E945	E945- Block landing call D2 Fl.53	Blocking of door call-2 outside call - bus stop 53
E946	E946- Block landing call D2 Fl. 54	Blocking of door call-2 outside call - bus stop 54
E947	E947- Block landing call D2 Fl. 55	Blocking of door call-2 outside call - bus stop 55
E948	E948- Block landing call D2 Fl. 56	Blocking of door call-2 outside call - bus stop 56
E949	E949- Block landing call D2 Fl. 57	Blocking of door call-2 outside call - bus stop 57
E950	E950- Block landing call D2 Fl. 58	Blocking of door call-2 outside call - bus stop 58
E951	E951- Block landing call D2 Fl. 59	Blocking of door call-2 outside call - bus stop 59
E952	E952- Block landing call D2 Fl. 60	Blocking of door call-2 outside call - bus stop 60
E953	E953- Block landing call D2 Fl. 61	Blocking of door call-2 outside call - bus stop 61
E954	E954- Block landing call D2 Fl. 62	Blocking of door call-2 outside call - bus stop 62
E955	E955- Block landing call D2 Fl. 63	Blocking of door call-2 outside call - bus stop 63
E956	E956- Block landing call D2 Fl. 64	Blocking of door call-2 outside call - bus stop 64
E957	E957- Monitoring Light curtain-1	Monitoring of the Light curtain Doorside-1
E958	E958- Monitoring Light curtain-2	Monitoring of the Light curtain Doorside-2
E959	E959- Monitoring Light curtain-3	Monitoring of the Light curtain Doorside-3
E960	E960- Brake testing Brake 1	Inputfunction for brake-coil 1 at the TÜV-Brake test
E961	E961- Brake testing Brake 2	Inputfunction for brake-coil 2 at the TÜV-Brake test
E962	E962- Brake testing Brake 3	Inputfunction for brake-coil 3 at the TÜV-Brake test
E963	E963-Controller & Light OFF	Pulse operation for shutt-off the controller & light
E964	E964 UCM-Zone-1	Monitoring UCM-relais Zone-71
E965	E965 UCM-Zone-2	Monitoring UCM-relais Zone-72
E966	E966 Reset Travel counter	Reset function for the Travel counter
E967	E967 Reset Direction counter Up	Reset function for the Direction counter Up
E968	E968 Reset Direction counter Down	Reset function for the Direction counter Down
E969	E969 Reset Direction counter	Reset function for the Direction counter
E970	E970 Reset Line counter	Reset function for the Line counter
E971	E971 Reset Out Of Order Counter	Reset function for the Out Of Order Counter
E972	E972 Reset Door Movement counter	Reset function for the Movement counter
E973	E973 Reset Energy counter	Reset function for the Energy counter
E974	E974 Flood evacuation	Active if „0-level“. If active then drive to level-02. Thereafter door-up & error message-F258
E975	E975 Call forbidden TOP	If the function is high, then there is no call above the floors
E976	E976 Car priority with call forbidden	Like E186, but there is no car call possible
E977	E977-Brake fan monitoring-E1	Inputs for 2nd aggregate with brake elements monitoring E1
E978	E978-Brake fan monitoring-E2	Inputs for 2nd aggregate with brake elements monitoring E2
E979	E979-Brake fan monitoring-E3	Inputs for 2nd aggregate with brake elements monitoring E3
E980	E980 USV-Monitoring	If „1“ then no mistake, if „0“ then error F82 USV defect
E981	E981 Glass breakage sensor Cabin	If „0“ then error
E982	E982 Glass breakage sensor Shaft	If „0“ then error
E983	E983 RWA-shaft smoke extraction	If „0“ then active => evacuation journey
E984	E984 External call encryption OFF	By applying a control voltage of + 24V DC to an input with input function E984 "External call encryption OFF", the external call encryption can be cancelled.
E985	E985 Hazardous goods transport	If the Fkt.=„1“, the Fkt. „Hazardous goods transport“ becomes active
E986	E986 Door-1 emergency stop	If the Fkt.=„1“, then takes a removal of all door commands Door1
E987	E987 Door-2 emergency stop	If the Fkt.=„1“, then takes a removal of all door commands Door2
E988	E988 Door-3 emergency stop	If the Fkt.=„1“, then takes a removal of all door commands Door3
E989	E989-Penthouse-9 visitors	Elevator then moves to HZ level then in Penthouse level
E990	E990 Penthouse-9 calling Penthouse	Elevator goes to the penthouse level
E991	E991 Penthouse-9 calling outside	Elevator moves to HZ level, then call release to penthouse level
E992	E992-Penthouse-10 calling visitors	Elevator goes to the penthouse level then in Penthouse level
E993	E993 Penthouse-10 calling Penthouse	Elevator goes to the penthouse level
E994	E994 Penthouse-10 calling landing	Elevator moves to HZ level, then call release to penthouse level
E995	E995 Railing Carroof	Monitoring of the railing of the car roof
E996	E996 Evacuation Liquid Pit	If the Input is active, an evacuation travel will be done
E997	E997 Evacuation Gas	If the Input is active, an evacuation travel will be done

E998	E998 Priority Car Call Target Floor	Input of the target Floor
E999	E999 Earthquake evacuation	If the input is "0", the evacuation travel to the target level is performed.
E1000	E1000 Reset Earthquake evac.	The RESET of the earthquake evacuation takes place by high level at the input.
E1001	E1001 Dangerous goods transport- I2 on	High level at the input causes toggle operation
E1002	E1002 Dangerous goods transport - Start	By High level at the input & light grid interruption the start occurs

B73- Assignment ER - EAx

In this menu area, various functions can be assigned to the two inputs EA1 and EA2 of the floor computer ER-2014, as well as to the serial external display computers SAT601 and SAT602. The assignment of the functions only works in the configuration as a single driver.

The following functions are available:

Function	Description
Landing call preference Door1 or/& 2	The forced recovery modes described and set in menu item B24, such as single, collective, single soft and single draining are available.
Call encryption	Call encryption, i.e. by pressing the outside call button, no external call is made, but only by additional activation of the key switch. By applying a control voltage of + 24V DC to an input with input function E984 "External call encryption OFF", the external call encryption can be canceled.
Control & Light OFF	By activating the parameter quiet motion in menu B608 and selecting the corresponding settings, the car can be moved to a rest plane and the control and the driving light can be switched off by actuating the key switch at input EAx.
RESET Shaft pit	After leaving the shaft pit and closing the lower shaft door, a reset of the controller can be reset by operating the reset key button. Normal operation is possible again.

B74- PULSE BUFFER DELAY

Times for debouncing of entrances can be changed by this menu range. Following four ranges are available:

1. Times for debouncing ZR. Default value for central processing unit amounts to 30 ms.
2. Times for debouncing FKR. Default value for car controller amounts to 30 ms.
3. Times for debouncing ER. Default value for remote station amounts to 30 ms.
4. Times for debouncing ZG. Default value for expansion unit amounts to 30 ms.

5.0 Actual value menu, Diagnosis and fault handling

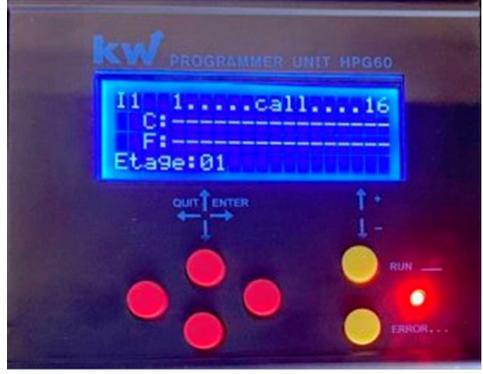
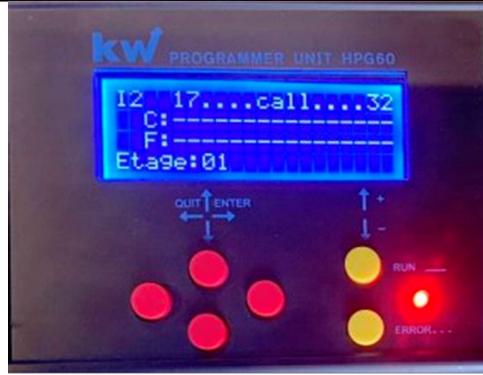
Actual value menu

The new actual menu is the fastest possibility to get informations about lift system “in motion”.

Seven several menus give a comprehensive overview.

The menu switching from normal menu to actual menu takes place via **keypress the left key (QUIT-RED) longer than 1,0 seconds. For navigation please use the Yellow BUTTONS + & -.**

The **return** into the normal menu takes place via a short **keypress the left key (QUIT- RED).**

	<h4>I1-Actual value menu Calls for floors 1 to 16</h4> <table border="1"> <tr> <td>I1</td> <td>1.....Calls....16</td> </tr> <tr> <td>I:</td> <td>-----</td> </tr> <tr> <td>A:</td> <td>-----</td> </tr> <tr> <td>Floor:</td> <td>01 ^ ^ZZ</td> </tr> </table> <p>In this actual menu car calls and priority calls for the floors 1 to 16 are indicated. In the 4th line are indicated the current Stop, the driving direction and information for concisely Up/Down and two zones.</p>	I1	1.....Calls....16	I:	-----	A:	-----	Floor:	01 ^ ^ZZ
I1	1.....Calls....16								
I:	-----								
A:	-----								
Floor:	01 ^ ^ZZ								
	<h4>I2-Actual value menu Calls for floors 17 to 32</h4> <table border="1"> <tr> <td>I1</td> <td>17....Calls... 32</td> </tr> <tr> <td>I:</td> <td>-----</td> </tr> <tr> <td>A:</td> <td>-----</td> </tr> <tr> <td>Floor:</td> <td>01 ^ ^ZZ</td> </tr> </table> <p>In this actual menu car calls and priority calls for the floors 17 to 32 are indicated. In the 4th line are indicated the current Stop, the driving direction and information for concisely Up/Down and two zones.</p>	I1	17....Calls... 32	I:	-----	A:	-----	Floor:	01 ^ ^ZZ
I1	17....Calls... 32								
I:	-----								
A:	-----								
Floor:	01 ^ ^ZZ								
	<h4>I3-Actual value menu Calls for floors 33 to 48</h4> <table border="1"> <tr> <td>I1</td> <td>33....Calls....48</td> </tr> <tr> <td>I:</td> <td>-----</td> </tr> <tr> <td>A:</td> <td>-----</td> </tr> <tr> <td>Floor:</td> <td>01 ^ ^ZZ</td> </tr> </table> <p>In this actual menu car calls and priority calls for the floors 33 to 48 are indicated. In the 4th line are indicated the current Stop, the driving direction and information for concisely Up/Down and two zones.</p>	I1	33....Calls....48	I:	-----	A:	-----	Floor:	01 ^ ^ZZ
I1	33....Calls....48								
I:	-----								
A:	-----								
Floor:	01 ^ ^ZZ								
	<h4>I4-Actual value menu Calls for floors 49 to 64</h4> <table border="1"> <tr> <td>I1</td> <td>49....Calls... 64</td> </tr> <tr> <td>I:</td> <td>-----</td> </tr> <tr> <td>A:</td> <td>-----</td> </tr> <tr> <td>Floor:</td> <td>01 ^ ^ZZ</td> </tr> </table> <p>In this actual menu car calls and priority calls for the floors 49 to 64 are indicated. In the 4th line are indicated the current Stop, the driving direction and information for concisely Up/Down and two zones.</p>	I1	49....Calls... 64	I:	-----	A:	-----	Floor:	01 ^ ^ZZ
I1	49....Calls... 64								
I:	-----								
A:	-----								
Floor:	01 ^ ^ZZ								



I5-Actual value menu Car Position

```
I5 car: +xxxxxxmm
level: +xxxxxxmm
<I>
```

```
Floor:01 Drive:V
```

In this actual value menu the current cab position is indicated in mm. The second value indicates the learned concise value in mm.

In the 4th line are indicated the current Stop and the driving direction up and down.



I6-Actual value menu doors & Safety Circuit

```
I6 Door1:<> LRV AZ az
Door2:>< LRV AZ az
U10:* U11:* U12:*
Etage:01
```

```
Floor:01
```

- 1./2.line : L: safety photocell Door1/2
R: reverse contact Door 1/2
V: entrance monitor Door 1/2
A: door command-Open Door 1/2
Z: door command ZU Door 1/2
a: end switcher open Door 1/2
z: end switch close Door 1/2
- 3.line : safety circuit Doors: U10/U11/U12



I7-Actual value menu safety circuit

```
I7 Safety circuit
U1.....U12
-----
```

```
Floor:01
```

In this actual value menu the current cab position is indicated in mm. The second value indicates the learned concise value in mm.

In the 4th line are indicated the current Stop and the driving direction up and down.



I8-Actual value menu car command

```
I8 Commands
VAin01234
K31 K32 K33 K34
```

```
Floor:01
```

- 2.line: Drive commands
- 3.line: pilot control K31..K34



I9- Actual value menu Modem; active, available, standby, communication..

```
I9 Modem: ready
Sig:050% T-Mobile D
```

```
Floor:01
```

- 1.line: Condition Modem (off/ready/search/online/connection clearing)
- 2.line (only GSM-Modem): Reception intensity – network provider run command

	<p>I9- Actual value menu Gateway; aktive, Card online, Signal-level.</p> <table border="1"> <tr> <td>I9 Gateway:</td> <td>active</td> </tr> <tr> <td>Online:*</td> <td>Signal:022%</td> </tr> </table> <p>Etag:01</p> <ol style="list-style-type: none"> 1. Line: Gateway state: (off/active) 2. Line card is online:* Signal strength - network provider 	I9 Gateway:	active	Online:*	Signal:022%						
I9 Gateway:	active										
Online:*	Signal:022%										
	<p>I10-Istwert-Menü Group A1 – A4</p> <table border="1"> <tr> <td>I10 Group</td> <td>A1</td> <td>A2</td> <td>A3</td> <td>A4</td> </tr> <tr> <td>----</td> <td>----</td> <td>----</td> <td>----</td> <td>----</td> </tr> </table> <p>Etag:01</p> <ol style="list-style-type: none"> 1. Line: Heading group members 2. Line: A1 A2 A3 A4 3. Line: Each floor stand -door movement/direction of travel 	I10 Group	A1	A2	A3	A4	----	----	----	----	----
I10 Group	A1	A2	A3	A4							
----	----	----	----	----							
	<p>I11-Istwert-Menü Group A5 – A8</p> <table border="1"> <tr> <td>I11 Group</td> <td>A5</td> <td>A6</td> <td>A7</td> <td>A8</td> </tr> <tr> <td>----</td> <td>----</td> <td>----</td> <td>----</td> <td>----</td> </tr> </table> <p>Etag:01</p> <ol style="list-style-type: none"> 1. Line: Heading group members 2. Line: A5 A6 A7 A8 3. Line: Each floor stand -door movement/direction of travel 	I11 Group	A5	A6	A7	A8	----	----	----	----	----
I11 Group	A5	A6	A7	A8							
----	----	----	----	----							

C0 Controller reset

In sub-menu **CO RESET** it is possible to put back the controller unit. If during the assembly, enterprise or error tracing come to a condition so that the controller is locked, a control reset can be released by the HPG60.

For example it is possible to set car calls to move car again.

C1 Give calls

In **submenu C1 give** calls are possible to call C10 car calls. Car calls can be set with the help of the two right keys and enter key. Car calls are processed by control.

Because the HPG60 can be put in central computer, car computer and car calling controller. So one has the possibility to admit car calls from different places.

Menu option **C11 priority calls** are not activatable now.

In menu **C12 random calls inside** the random number generator can be activated for car calls. The function can be scheduled temporally by input of a temporal upper limit of up to 48 hours.

In menu **C13 random calls car** the random number generator can be activated for priority calls. The function can be scheduled temporally by input of a temporal upper limit of up to 48 hours.

C2 In / Output Signals

In the submenu C2 of In/Out Signals it is possible to regard lining up signals to recognize as well as the programmed output and input functions on this clamp!



The desired plugin can be selected by upper and lower red-key.
The bits can be selected with two right yellow keys.

In alternating representation the bit and deposited output and input function are represented.
For example terminal ZA0 has no output function but a input function. "Safety Circuit off". Terminal ZA0 has no tension.

Plug	Device	Bit 0 to 7	legend: „- „ no tension on terminal „* “ tension +24V on terminal
ZA	ZR	ZA0 to ZA7	
ZB	ZR	ZB0 to ZB7	
ZC	ZR	ZC0 to ZC7	
ZD	ZR	ZD0 to ZD7	
FE	FKR	FE0 to FE7	
FF	FKR	FF0 to FF7	
IC	EIT	IC0 to IC7	
ID	EIT	ID0 to ID7	
IE	EIT	IE0 to IE7	

C3 FAULT LOG

Error memory is accommodated in **submenu C3** in C 31. Error memory possesses a depth of 100 possible error registrations. The most current entry always stands on position one and shifts all following entries on a deeper position. After return the highest error position, the error memory can be cleared by menu C30. Error memory is stored in battery RAM of the clock component and is secured against power failure.

Following additional information for error situations can be called up through **push of a yellow key upward**:

Line top	Floor and drive direction	Shaft switch (Top & Bottom, concise Top & Down, Zone 1 & Zone 2)
Line bottom	Issuing off the commands (Auf, Ab, Vi, Vn,V0,V1,V2,V3)	Output of contactor control (Up, Down, K5, K7)

C4 MOT-Approval

This chapter describes briefly all individual Mot functions. A specification and execution of the function find in the chapter: „**I04 - COMMISSIONING THE INSPECTOR FUNCTIONS C40 to C418** “. In **submenu C40 run time test** it is possible to limit all running times for the next trip on 1.0 seconds.

In the **submenu C41 buffer trip** it is possible to drive with the back getting control downward (without obligation delay by the before-final-switched 13B on the cab buffers). But only if the limit switch down at the strip of passing is pressed by technical personal.

In the **submenu C42 seat sample** it is possible to drive with the back getting control downward (without obligation delay by the before-final switched 13B on the counterweight buffers). But only if the limit switch down at the strip of passing is pressed by technical personal. The speed for this trip is to be positioned in the regulation.

In the **submenu C43 catch sample** it is possible to deactivate the short-circuit protection and the monitoring function $V < 0,2 \text{ m/s}$.

In the submenu **C44 driving ability** will spend the speed of the car as well as the number of revolutions of drive.

In the **submenu C45 break test** it is possible to deactivate the processor system DAVID-613 during switched reset control the short-circuit protection and the monitoring function $V < 0,2 \text{ m/s}$. Security of the monitoring function becomes $V > V$, then activates which brake is the one with exceeding of the nominal speed terminated (both brake coils come without tension).

In the submenu **C46 remote trigger** of the processor system DAVID-613 it is possible to switch on the function remote release for the cab over the tracer the S50 on operates. After release in tracer the S50 deactivates the function again.

In the submenu **C47 reset remote trigger** of the processor system DAVID-613 it is possible to put back by switching on of the function on with remote remote releases for the cab with resetting coil over the tracer S50 for these.

In the submenu **C48 remote trigger counterweight** of the processor system DAVID-613 it is possible by switching on of the function remote to release for the counterweight over the tracer the S50 on to operation. After releasing the tracer the S50 deactivates the function again.

In the submenu **C49 reset remote trigger** of the processor system DAVID-613 it is possible to put back by switching on of the function with remote remote releases for the counterweight. With resetting the tracer the S50 deactivates the function again.

In the **submenu C410 limit switch trip up** of the processor system DAVID-613 it is possible to over-drive by switching on of the function on for the upper concise and drive in such a way on the upper limit switch.

The **submenu C411 limit switch trip down** of the processor system DAVID-613 it is possible to over-drive by switching on the function for the lower concise and drive in such a way on the lower limit switch.

In **submenu C412 switch gear cabinet temperature test** of the processor system DAVID-613 it is possible to lower the threshold value of the temperature monitoring through contactors of the function in such a way that error registration takes place immediately.

In the **submenu C414 DSK encoder test** of the processor system DAVID-613 it is possible to switch off the encoder of the shaft copy for one travel. The shaft copying software technically produces an error response. A condition is natural so that in the menu B600 monitoring functions the DSK monitoring is activated.

In the **submenu C415 Test Sink Prevention** of the processor system DAVID-613 it is possible to activate the function Test Sink Prevention over the Switch S50 on the operating panel of the controller cabinet in order to switch off the coil of the speedlimiter. After turning off the switch S50 the function is switched off.

In the **submenu C416 Test UCM-drive** of the processor system DAVID-613 it is possible to activate the function to test by turning on the emergency operation function and the UCM-zone trip. The area leaving the door with the door open to EN 81-1/2 A3 - 9.13.2 is simulated.

In the **submenu C417 Test braking element brake-1** of the DAVID-613 processor system, it is possible to switch off the monitoring of the braking element of drive 1 for software purposes in order to generate an error response. This corresponds to a physical interruption of the line of the respective brake element. This is required for brake components requiring monitoring, in order to simulate a failure of a brake element according to EN 81-20.

In the **submenu C418 Test brake test** of the DAVID-613 processor system, it is possible to activate the brake test for one trip. After pressing the corresponding key switch S82A or S82B, the stopping distance in mm is displayed after stopping the elevator car. This function can only be used in conjunction with a GOLIATH-90 inverter.

In the submenu C419 Test direction change counter, it is possible to simulate a triggering of the direction change counter for the suspension cables / carrying straps by test activation.

In the submenu C420 Test rope wear counter, a triggering of the rope wear counter for the suspension ropes / straps can be simulated by test activation.

In the submenu C421 Test brake element brake-2 of the DAVID-613 processor system, it is possible to switch off the monitoring of the braking element of drive 2 for software purposes in order to generate an error response. This corresponds to a physical interruption of the line of the respective brake element. This is required for brake components requiring monitoring, in order to simulate a failure of a brake element according to EN 81-20.

In submenu C422 Test Reset GB pre-shutdown of the DAVID-613 processor system, it is possible to reset this by activating the function in the case of a lockable pre-shutdown of the GB for the car with reset coil via pushbutton S50. After releasing the button S50, the function is deactivated again.



SAFE shaft copy system:

When using SAFE shaft copying, the settings can be viewed in menu D9.

In submenu C423 Hydraulic Testdrive – Broken-Pipe-Valve of the DAVID-613 processor system, it is possible to output the fast speed (V2) by switching on the function for the next run with the return control in the downward direction. This enables the functionality of the pipe rupture valve to be tested. The error message “overspeed” is ignored and travel is not aborted.

C5 Leveling control



In the submenu **C5 Leveling control** is spent the current position of the car in mm. If the car is located concisely in the stop additionally a second numerical value provided with a sign is spent. A minus means that the car is located too low in purchase to the measured position. A plus means that it stands too high.

C6 Modul Monitor



In the menu **C60 equipment control** is spent in the subitem ER 00 to 16 and ER16 to 32 the condition of all devices at the pit bus i.e. all floor computers and auxiliary's groups.

Legend:

- “-“ it is not missing a remote station at this address
- “*“ remote station at this address is correct
- “?“ remote station at this adress has a defect

In addition the **pulse conditions** can be monitored during **digital shaft copying**. For normal counting it is necessary that the impulse conditions increase in the one direction and decrease in the other direction.

In addition the **revision number** of the individual operating system of blocks can be found there.

For the programming of the ER-2007 remote station serves **the parameter remote station address program**.

The remote station ER-2007 which can be programmed is connected to the RJ-45 cable with the central unit. All other floor computers may not be connected. Those program-bends at the ER-2007 must be set. By the choice of the floor number (01 to 32) ER-2007 gets its address. Afterwards the ER-2007 is installed into the appropriate floor.

C7 ASSEMBLING TRAVEL



In the **submenu C7 point C70** assembly travel can be activated during active resend control of these parameters.

When the assembling of a lift switches off, the safety circuit is not yet set at the beginning. This function makes the safety entrances U3 to U12 tension movement possible with the resend control. A condition is that against U1 and U2 clamping rests.

This reaches automatically the use of a KW assembly pear. If the resend control break this parameter it is automatically deactivated.

C8 EVENT LOG



In the **submenu C8, point C81 Event Log**

Event Log with the last 30 Events messages:

- Message -00: Power -ON
- Message -10: Emergency Evacuation ON
- Message -11: Emergency Evacuation Floor
- Message -12: Emergency Evacuation OFF

	Event Messages		M55 Shaft light ON
	M00 power on		M56 Shaft light OFF
	M01 inspection on		M57 Earthquake evacuation on
	M02 inspection off		M58 Earthquake Evacuation Level
	M03 manual drive ON		M59 Earthquake evacuation off
	M04 manual drive OFF		
	M05 standby travel ON		
	M06 standby travel OFF		
	M07 emergency power ON		
	M08 emergency pow.floor		
	M09 emergency power OFF		
	M10 fire evacuation ON		
	M11 fire evac. floor		
	M12 fire evacuation OFF		
	M13 firefighter ON		
	M14 firefighter car		
	M15 firefighter OFF		
	M16 rescue travel ON		
	M17 rescue floor		
	M18 rescue travel OFF		
	M19 elevator check ON		
	M20 elevator check OFF		
	M21 attendant mode ON		
	M22 attendant mode OFF		
	M23 deadman mode ON		
	M24 deadman mode OFF		
	M25 WLAN-connection ON		
	M26 WLAN-connection OFF		
	M27 sabbath mode ON		
	M28 sabbath mode OFF		
	M29 preference car ON		
	M30 preference car OFF		
	M31 preference floor ON		
	M32 preference floor OFF		
	M33 lock floorcall ON		
	M34 lock floorcall OFF		
	M35 revision-door ON		
	M36 revision door OFF		
	M37 guide mode ON		
	M38 guide mode OFF		
	M39 erase error log		
	M40 maintenance switch ON		
	M41 maintenance switch OFF		
	M42 flood travel ON		
	M43 flood travel OFF		
	M44 directional change counter ON		
	M45 directional change counter OFF		
	M46 directional change counter warning		M95 modem ext. call
	M47 directional change counter reset		M96 safecopy relaytest
	M48 rope wear counter ON		
	M49 rope wear counter OFF		
	M50 rope wear counter warning		
	M51 rope weasr counter reset		
	M52 Evacuation Gas-ON		
	M53 Evacuation Gas-Floor		
	M54 Evacuation Gas-OFF		

C9 Doorcontrol manuel

	<p>In the menu C9, Point C90 Door 1 OPEN / CLOSE</p> <p>The doors can be controlled manually only in the inspection operation with the two yellow button P-UP (door 1 - OPEN) and P-DOWN (Door 1 CLOSED).</p>
	<p>In the menu C9, Point C91 Door 2 OPEN / CLOSE</p> <p>The doors can be controlled manually only in the inspection operation with the two yellow button P-UP (door 2 - OPEN) and P-DOWN (Door 2 CLOSED).</p>
	<p>In the menu C9, Point C92 Door 3 OPEN / CLOSE</p> <p>The doors can be controlled manually only in the inspection operation with the two yellow button P-UP (door 3 - OPEN) and P-DOWN (Door 3 CLOSED).</p>

F01 Error messages - description Controller

Code-No.	Error entry	Description
F00	Phase Emergency Unit	The power line for the cabin light resp. the emergency power supply is missing. Either circuit breaker F5 is activated or L2 of the main power connection is missing.
F02	Security Circuit U1	Safety Circuit power is missing. Either circuit breaker F7 is activated or L1 of the main power connection is missing.
F03	Security Circuit U2	The emergency stop has been activated and thus the safety circuit was opened.
F04	Security Circuit U3	The shaft door has been opened or the contact of the control strain weight was activated, which opens the safety circuit.
F05	Security Circuit U4	The maintenance door has been opened or the contact of the rope loose switch was activated, which opens the safety circuit.
F06	Security Circuit U5	The contact of the speed limiter has been activated, which opens the safety circuit.
F07	Security Circuit U6	The emergency stop switch Top or Bottom has been activated, which opens the safety circuit.
F08	Security Circuit U7	One of the buffer contacts has been activated and opened the safety circuit.
F09	Security Circuit U8	The catch contact on the cabin has been activated, which opens the safety circuit.
F10	Security Circuit U9	The contact of the rope loose contact cabin, the hatchway contact or the emergency stop cabin has been activated and opened the safety circuit.
F11	Security Circuit U10	One of the shaft doors has been opened during travel, which opens the safety circuit.
F12	Security Circuit U11	One of the cabin doors has been opened during the travel, which opens the safety loop.
F13	Security Circuit U12	One locking device contact has opened during travel and opened the safety circuit.
F14	Voltage 24V ZR	The ZKR's +24V DC power supply is in overload conditions, resp. shorted in the system.
F16	Voltage 24V FKR	The FKR's +24V DC power supply is in overload conditions, resp. shorted in the system.
F18	Carlight defect	The carlight in the cabin is out of order
F20	Correction switch Top and Bottom activated - locking	Both pre-end switches are activated. Either one of both switches is defect or one is mounted incorrectly. The installation is locked.
F21	Correction switch Up defect	The top pre-end-switch S13A is not switching, although the car has reached the top floor.
F22	Correction switch Down defect	The bottom pre-end-switch S13B is not switching, although the car has reached the lowest floor.
F23	Correction switch Up and Down defect	The top pre-end-switch S13A and the bottom pre-end-switch S13B are not switching, although the car is driven to both end floors.
F24	2. Correction switch Up and Down aktive-Blockade	Both second pre-end switches are activated. Either one of both switches is defect or one is mounted incorrectly. The installation is locked.
F25	2. Correction switch Up and Down defect	The second top pre-end-switch S15A is not switching, although the car has reached the top floor.
F26	2.Pre-end switch Down defect	The second bottom pre-end-switch S15B is not switching, although the car has reached the lowest floor.
F27	2. Correction switch Down and Up defect	The second bottom pre-end-switch S15A is not switching, although the car has reached the highest floor.
F28	Bolt – End switch OFF	The bolt loader is expected to deactivate the limit switch (s)
F29	Bolt – End switch ON	The bolt loader is expected to activate the limit switch (s)
F30	UCM Error Block Valve	Error Message of Bucher ivalve or Oildynamic NGV-A3
F31	UCM - KW	When leaving the inner zone with open door> A3 case -> blocking the system.

F32	UCM - Monitoring	When leaving the inner zone with open door> A3 case -> blocking the system.
F33	UCM – SL-Sink Protection	When leaving the inner zone with open door> A3 case speed limiter -> blocking the system.
F34	U10 - Shaftdoor	The error message F34 "U10 shaft door" indicates a selected bridge in the area of the shaft doors. Check at the clamping list X6 pit pit and X1 shaft cabinet, as well as the shaft door contacts on bridges!
F35	U11 - Cardoors	The error message F35 "U11-Cardoors" indicates a limited bridge in the area of the cabin doors. Check the X11 inspection box and the X1 manhole cupboard, as well as the cabinet door contacts on bridges!
F36	Releveling distance	With the releveling the releveling area was left.
F37	Releveling- time	With the releveling the maximum releveling time was exceeded.
F38	Releveling Attempts	With the releveling the maximum number of attempts was exceeded.
F39	Quick Start	This message is entered, if the Quick Launch the feedback E524 is not right. Only fault entry, no interruption of movement. The journey starts in case of error without quick start.
F41	Regulation Fault	The regulation (inverter) has a problem
F42	Battery monitor	The Battery of EOS or other external Units is too low
F43	Temperature Switch cabinet 1	The switchcabinet temperature is too cold -> limit 1
F44	Temperature Switch cabinet 2	The switchcabinet temperature is too hot -> limit 2
F45	Motor temperature	The PTC of the engine is activated. Reaction according to configuration.
F46	Journey Time Start	The configured delay for the Start Time Monitor has elapsed. After a configured number of trials, the installation is locked.
F47	Journey Time Travel	The configured delay for the Journey Time Monitor has elapsed. Reaction according configuration.
F48	Journey Time Deceleration	The configured delay for the Deceleration Time Monitor has elapsed. Reaction according to configuration.
F49	Journey Time Stop	The configured delay for the Stop Time Monitor has elapsed. Reaction according configuration.
F50	U12-bar	An error has occurred at tap U12 of the SiKr - erroneous bridging of the blocking means circuit
F51	Brake opening monitor	There is no expected signal levels at the monitoring braking inputs of the control DAVID-613
F52	Brake shoe monitor	The monitor for the brake wear has been activated. Reaction according configuration.
F53	Contactor Stop	The monitor for the main and brake relay has been activated. Reaction according configuration.
F54	Brake opening synchronization	The monitoring of the braking elements has been activated. One of the monitor inputs is out of order or it is slower than the other (s) channel. Please check it.
F55	Contactor Travel	The monitor for the main and brake relay has been activated. Reaction according configuration.
F56	Phase Change	The ranking of the phases U,V,W is wrong
F57	Brake & Bolt Voltage	The voltage monitor of the brake & bolt has sent an error
F58	Low Pressure	The pressure of the hydraulic is too low
F59	Rope Stretching	Error message loadmeasurement-systemes about an uneven stretching of a rope.
F60	A3 - Case	The car has left the floor with the door open and the lift was blocked. (Even in Simulation!) Three different ways to reset of the error "F60 A3-Case": 1.) In the menu C0 Controller Reset 2.) Simultaneously pressing the three buttons maintenance call top-down call on the central unit ZR. 3.) De-energizing the FKR in the inspection box.
F61	Door Close	The door could not be closed within the configured time.
F62	Separation Door	The door could not be opened within the configured time.
F63	Flap Apron	The folding apron does not drive although the lowest stop left.
F65	Push-Button landing call up	Tracer landing call up wedges

F66	Push-Button landing call down	Tracer landing call down wedges
F67	Push-Button Door open	An entry takes place if the tracer is operated longer than 45 seconds in the stop and/ or in normal operation.
F68	Photocell blocked	An entry takes place if the light barrier is operated longer than 45 seconds in the stop and/ or in normal operation.
F69	Revers Contact blocked	An entry takes place if the contact is operated longer than 45 seconds in the stop and/or in normal operation
F70	Blocked – End switch	The hydraulic elevator is driven into the top end-switch. After leaving the top-end-switch the elevator has lowered and blocked in the lowest stop.
F71	Blocked Journey time	The hydraulic elevator lowered after the occurrence of a run time error
F72	Blocked- TV60-1	Two inputs channels of the TV60-1 are monitored for synchronization.
F73	Blocked- TV60-2	Two inputs channels of the TV60-2 are monitored for synchronization.
F78	DSC 2. Pre-switch Bottom	The digital shaft copying have started that the counted impulse conditions do not agree with the impulse conditions at the pre-end switcher down. A correction was implemented.
F79	DSC 2. Pre-switch Top	The digital shaft copying have started that the counted impulse conditions do not agree with the impulse conditions at the pre-end switcher up. A correction was implemented.
F80	Communication I/O CPU	The central unit and logic unit is internally disturbed. Ask customer service- reasonable.
F81	Communication I/O FKR	Communication to the car controller is disturbed. That is 15 pole. D-Subkabel correctly put or damages?
F82	USV Defect / empty	The UPS for emergency rescue is defective, or the charge status is empty.
F83	DSC Change Puls	The encoder pulses of the shaft encoder must be exchanged. (Input 81 and 82)
F84	DSC No pulses	From the pulse generator of the digital pit copying no impulses come. Are the giver and impulse entry correct?
F85	DSC Floornumber	The floor number determined by the learning trip does not agree with the registered. Please examine the entry in the software and zone switch for switching gap and function.
F86	Correction ZONE	Correction trip released by counter deviation for the zone.
F87	Correction Pre-Switch Down	Correction trip released by counter deviation Pre-end-switch down
F88	Correction Pre-Switch Top	There is a difference between the counter of the digital shaft-copy and the position of the Pre-switch top. The counter was adapted.
F90	Watchdog-Reset	Internal reset – damage in the hardware
F91	Reset-Groupbus	Internal reset due to error in the group bus
F92	Security circuit	The security circuit has sent an error. A cause a missing or retarded zone.
F93	Liftbus Communication	On the Liftbus (communication regulation STG) an error was sent.
F94	Test Safety Photocell	An error was announced of the safety photocell which was determined by the self check.
F95	Interrupt Safety Photocell	An error was announced of the safety photocell which was determined during the travel.
F97	Zone Switches	The contacts of the zone switches have a lot of switching acts
F98	Prelevel-Switch-UP	The contact of the Prelevel-switch UP has a lot of switching acts.
F99	Prelevel-Switch-DOWN	The contact of the Prelevel-switch Down has a lot of switching acts

<p>F101</p>	<p>IPM -Overcurrent</p> <ul style="list-style-type: none"> - Error message caused through wrong motor datas (Nominal speed – Motor datas)! - Error message caused through wrong motor datas (Nominal current – Motor datas)! - Old machines: Please switch off the position regulator! Or change the settings! - Gearless: Is the motorwire correctly installed (U – V – W)? - Overcurrent because there is a shortcut in the motorwire? - Is the encoder wire connected correctly? Perhaps you must change the channels A and B? <p>- Is the car easily running? Have the fixing shoes enough oil? Is the half-load OK?</p>
<p>F102</p>	<p>Overcurrent U - Overcurrent because there are wrong motor datas or oscillations of the car</p> <ul style="list-style-type: none"> - Error message caused through wrong motor datas (Nominal speed – Motor datas)! - Error message caused through wrong motor datas (Nominal current – Motor datas)! - Old machines: Please switch off the position regulator! Or change the settings! - Gearless: Is the motorwire correctly installed (U – V – W)? - Overcurrent because there is a shortcut in the motorwire? - Is the encoder wire connected correctly? Perhaps you must change the channels A and B? <p>- Is the car easily running? Have the fixing shoes enough oil? Is the half-load OK?</p>
<p>F103</p>	<p>Overcurrent V - Overcurrent because there are wrong motor datas or oscillations of the car –</p> <ul style="list-style-type: none"> - Error message caused through wrong motor datas (Nominal speed – Motor datas)! - Error message caused through wrong motor datas (Nominal current – Motor datas)! - Old machines: Please switch off the position regulator! Or change the settings! - Gearless: Is the motorwire correctly installed (U – V – W)? - Overcurrent because there is a shortcut in the motorwire? - Is the encoder wire connected correctly? Perhaps you must change the channels A and B? <p>- Is the car easily running? Have the fixing shoes enough oil? Is the half-load OK?</p>
<p>F104</p>	<p>Overcurrent W - Overcurrent because there are wrong motor datas or oscillations of the car</p> <ul style="list-style-type: none"> - Error message caused through wrong motor datas (Nominal speed – Motor datas)! - Error message caused through wrong motor datas (Nominal current – Motor datas)! - Old machines: Please switch off the position regulator! Or change the settings! - Gearless: Is the motorwire correctly installed (U – V – W)? - Overcurrent because there is a shortcut in the motorwire? - Is the encoder wire connected correctly? Perhaps you must change the channels A and B? <p>- Is the car easily running? Have the fixing shoes enough oil? Is the half-load OK?</p>
<p>F105</p>	<p>Dissipator Temperature: Temperature Dissipator too high –</p> <ul style="list-style-type: none"> - The inverter is overloaded or the controller casing is too hot. Is the power class of the inverter according to the motor? - Has the controller cabinet an air ventilation? Is above the inverter casing enough air room? - Are the fans of the inverter OK? <p>- Is there any dirt on the pcb-board or in the heat sink?</p>
<p>F106</p>	<p>DC-Overvoltage:</p> <ul style="list-style-type: none"> - There is no brake resistor connected or the type is incorrect -> Please measure the Ohm-value! - Main supply voltage too high -> Please check it – you must have a voltage of 400V AC! - There are voltage peaks on the main supply? <p>- Is the frequency inverter connected to the ground?</p>
<p>F107</p>	<p>DC-Undervoltage:–The supply voltage is too low or the main contactor is switched off during the travel:</p> <ul style="list-style-type: none"> - The DC voltage is too low -> Please control the supply voltage! - The maincontactors are switched off during the travel -> A phase of the supply voltage is missing! <p>- The power class of the inverter is too low for the motor!</p>
<p>F108</p>	<p>Main Contactor-Start:</p> <ul style="list-style-type: none"> - At the start, the main contactors do not switch ON -> The power supply is too low? - At the start, the main contactors do not switch ON -> The safety circuit is interrupted (Doorcontacts) <p>- At the start, the main contactors do not switch ON -> The Fuse is switched OFF?</p>
<p>F109</p>	<p>Main-Contactor-Travel:</p> <ul style="list-style-type: none"> - During the travel, the main contactors switch OFF -> The power supply is too low? - During the travel, the main contactors switch OFF -> The safety circuit is interrupted (Doorcontacts) <p>During the travel, the main contactors switch OFF -> The fuse is switched OFF?</p>

<p>F110</p>	<p>No Release:</p> <ul style="list-style-type: none"> - Drive direction UP or DOWN is missing at the end of the travel <ul style="list-style-type: none"> o Controller: Delay for switch off the direction! - Drive direction UP or DOWN is missing at the end of the travel <ul style="list-style-type: none"> o Safety circuit, check the door management! - Drive direction UP or DOWN is missing at the end of the travel <p>-> Delay time for switching off the contactors to 1500 ms.</p>
<p>F111</p>	<p>Release UP + DOWN</p> <p>You must only have one direction of travel -> In case of a certain controller, which works only with one direction, please change the parameter setting in the inverter!</p>
<p>F112</p>	<p>Wrong Direction</p> <ul style="list-style-type: none"> - Please change the encoder channels A/B, because the machine rotates in the wrong direction! - Perhaps it is the wrong type of encoder? -> Menu A4 Motor/Gearbox -> Encoder system - The number of pulses are wrong? -> Menu A4 Motor/Gearbox -> Encoder Pulses - The encoder wire is out of order or too long (>30m)! -> Please increase the encoder voltage! - The encoder-shield is not connected to both sides -> Change it immediately! - The encoder wire is parallel to the motor wire -> Change it immediately! <p>- The encoder coupling or the encoder is not mechanically fixed with the motor wave -> Please check it!</p>
<p>F113</p>	<p>Speed Variance</p> <ul style="list-style-type: none"> - The motor works, but the encoder is out of order or connected incorrectly. -> Control the pinning! - Perhaps it is the wrong type of encoder? -> Menu A4 Motor/Gearbox -> Encoder system - The number of pulses are wrong? -> Menu A4 Motor/Gearbox -> Encoder Pulses - The encoder wire is out of order or too long (>30m)! -> Please increase the encoder voltage! - The encoder-shield is not connected to both sides -> Change it immediately! - The encoder wire is parallel to the motor wire -> Change it immediately! - The motor and his metal socket are grounded very poorly -> Change it immediately! - The frequency inverter is not connected to the ground -> Change it immediately! - The motorwire-shield is not connected to both sides -> Change it immediately! - The brake resistor wire-shield is not connected on both sides -> Change it immediately! - The encoder coupling or the encoder is not mechanical fixed with the motor wave -> Please check it! - The frequency inverter has a current limit (full power) -> Power class too low <p>- Is the car easily running? Have the fixing shoes enough oil? Is the half-load OK?</p>
<p>F114</p>	<p>No Encoder Pulse</p> <ul style="list-style-type: none"> - The motor works, but the encoder is out of order or incorrectly connected. -> Control the pinning! - Perhaps it is the wrong type of encoder? -> Menu A4 Motor/Gearbox -> Encoder system - The number of pulses are wrong? -> Menu A4 Motor/Gearbox -> Encoder Pulses - The encoder wire is out of order or too long (>30m)! -> Please increase the encoder voltage! - The encoder-shield is not connected to both sides -> Change it immediately! - The encoder wire is parallel to the motor wire -> Change it immediately! - The motor and his metal socket are grounded very poorly -> Change it immediately! - The frequency inverter is not connected to the ground-> Change it immediately! - The motorwire-shield is not connected to both sides -> Change it immediately! - The brake resistor wire-shield is not connected to both sides -> Change it immediately! <p>- The encoder coupling or the encoder is not mechanical fixed with the motor wave -> Please check it</p>
<p>F115</p>	<p>DC Precharge:</p> <ul style="list-style-type: none"> - After switching ON the inverter, the DC-voltage is too low -> Ground connection of the brake resistor wire - After switching ON the inverter, the DC-voltage is too low -> Ground connection of the brake resistor wire <p>- After switchinf ON the inverter, the DC-voltage is too low -> The little two fuses into the inverter are out of order !</p>
<p>F116</p>	<p>Release Change during the travel – Lift controller error</p> <ul style="list-style-type: none"> - Error of the lift controller or wrong settings in the parameter of the controller / inverter!
<p>F117</p>	<p>Liftbus communication during the travel is out of:</p> <ul style="list-style-type: none"> - Wrong Liftbus parameter! - Wrong Liftbus cable or the shield not connected

<p>F118</p>	<p>SSI-Communication:</p> <ul style="list-style-type: none"> - Is there really SSI-encoder connected? -> Menu A4 Motor/Gearbox -> Encoder system - The encoder is out of order, e.g. after the test of the safety gear? - The encoder is falsely connected -> Please check the pinning -> Did you use the right adapter? - The encoder wire is out of order or too long (>30m) ! -> Please increase the encoder voltage! - The encoder wire is parallel to the motor wire -> Change it immediately! <p>- The encoder coupling or the encoder is not mechanically fixed with the motor wave -> Please check it!</p>
<p>F119</p>	<p>EnDat-Communication:</p> <ul style="list-style-type: none"> - Is there really EnDat-encoder connected? -> Menu A4 Motor/Gearbox -> Encoder system - The encoder is out of order, e.g. after the test of the safety gear? - The encoder is falsely connected -> Please check the pinning -> Did you use the right adapter? - The encoder wire is out of order or too long (>30m) ! -> Please increase the encoder voltage! - The encode rwire is parallel to the motorwire -> Change it immediately! <p>The encoder coupling or the encoder is not mechanically fixed with the motor wave -> Please check it!</p>
<p>F120</p>	<p>Hiperface Communication:</p> <ul style="list-style-type: none"> - Is there really Hiperface-encoder connected? ->Menu A4 Motor/Gearbox-> Encoder system - The encoder is out of order, e.g. after the test of the safety gear? - The encoder is falsely connected -> Please check the pinning -> Did you use the right adapter? - The encoder wire is out of order or too long (>30m) ! -> Please increase the encoder voltage! - The encoder wire is parallel to the motor wire -> Change it immediatly! <p>- The encoder coupling or the encoder is not mechanically fixed with the motor wave -> Please check it!</p>
<p>F121</p>	<p>Sin/Cos Communication:</p> <ul style="list-style-type: none"> - Is there really Sin/Cos-encoder connected? -> Menu A4 Motor/Gearbox -> Encodersystem - The encoder is out of order, e.g. after the test of the safety gear? - The encoder is falsely connected -> Please check the pinning -> Did you use the right adapter? - The encoder wire is out of order or too long (>30m) ! -> Please increase the encoder voltage! - The encoder wire is parallel to the motor wire -> Change it immediatly! <p>- The encoder coupling or the encoder is not mechanically fixed with the motor wave -> Please check it!</p>
<p>F122</p>	<p>Angle Variance:</p> <ul style="list-style-type: none"> - The number of pulses are wrong -> Please change the setting - The encoder channels are out of order -> Please change the encoder? <p>- The encoder is falsely connected -> Please check the pinning -> Did you use the right adapter?</p>
<p>F123</p>	<p>Encoder Voltage-too low:</p> <ul style="list-style-type: none"> - Short cut at the encoder terminal -> Please check the pinning -> Did you use the right adapter? - The encoder is out of order, e.g. after the test of the safety gear? - The encoder is falsely connected -> Please check the pinning -> Did you use the right adapter? - The encoderwire is out of order or too long (>30m) ! -> Please increase the encoder voltage! <p>- Is the correct type of encoder connected? -> Menu A4 Motor/Gearbox -> Encoder system</p>
<p>F124</p>	<p>Motor Temperature-too high:</p> <ul style="list-style-type: none"> - The temperature of the area is too high - The motor is overloaded <p>- The motor fan is out of order</p>
<p>F125</p>	<p>Command Voltage-too low: Short cut at the 24V-Terminal, 24V-Terminal is overloaded:</p> <ul style="list-style-type: none"> - Short cut at the output terminal +24V -> Please check as soon as possible ! <p>- The output channel +24V is overloaded -> please use an external power supply !</p>
<p>F126</p>	<p>24V Output Driver</p> <ul style="list-style-type: none"> - Short cut at the output terminal -> Please check the pinning <p>The output channels EA1 to EA8 are overloaded -> Perhaps there is a short cut or the current is too high -> Please check it, perhaps you must use external relays!</p>
<p>F127</p>	<p>Relay Monitor-1:</p> <p>Internal Relay-1 is out of order or the open-contact is clewing -> The switching load is too big (Inductive)! Please use a contactor to switch big loads, like the brake-magnet!</p>
<p>F128</p>	<p>Relay Monitor -2:</p> <p>Internal Relay-2 is out of order or the open-contact is clewing -> The switching load is too big (Inductive)! Please use a contactor to switch big loads, like the brake-magnet!</p>
<p>F129</p>	<p>Relay Monitor -3:</p> <p>Internal Relay-3 is out of order or the open-contact is clewing -> The switching load is too big (Inductive)! Please use a contactor to switch big loads, like the brake-magnet!</p>

<p>F130</p>	<p>Monitor Brake-1:</p> <ul style="list-style-type: none"> - Brake-circuit-1 does not open / closed during the travel -> Are the settings OK? Do you have opener or closer-contacts? 0V (NPN-Thyssen) or+24V (z.B. Ziehl-Abegg,...) - Do have connected the brake wires correctly? - Do you have observed if the brakes open ? -> Brake wires ? <p>- Are the brake-contacts OK ? -> If you have any doubts, make a measurement !</p>
<p>F131</p>	<p>Monitor Brake-2:</p> <ul style="list-style-type: none"> - Brake-circuit-2 does not open / closed during the travel -> Are the settings OK? Do you have opener or closer-contacts? 0V (NPN-Thyssen) or+24V (z.B. Ziehl-Abegg,...) - Do have connected the brake wires correctly? - Do you have observed if the brakes open ? -> Brake wires ? <p>Are the brake-contacts OK ? -> If you have any doubts, make a measurement !</p>
<p>F132</p>	<p>Monitor Brake-3:</p> <ul style="list-style-type: none"> - Brake-circuit-3 does not open / closed during the travel -> Are the settings OK? Do you have opener or closer-contacts? 0V (NPN-Thyssen) or+24V (z.B. Ziehl-Abegg,...) - Do have connected the brake wires correctly? - Do you have observed if the brakes open ? -> Brake wires ? <p>- Are the brake-contacts OK ? -> If you have any doubts, make a measurement !</p>
<p>F133</p>	<p>Monitor Brake-4:</p> <ul style="list-style-type: none"> - Brake-circuit-4 does not open / closed during the travel -> Are the settings OK? Do you have opener or closer-contacts? 0V (NPN-Thyssen) or+24V (z.B. Ziehl-Abegg,...) - Do have connected the brake wires correctly? - Do you have observed if the brakes open ? -> Brake wires ? <p>- Are the brake-contacts OK ? -> If you have any doubts, make a measurement !</p>
<p>F134</p>	<p>Monitor Main Contactor:</p> <ul style="list-style-type: none"> - One of the main contactors cannot be switched ON -> Please control the contactors! - Please check the opener-contacts, clean it or change it! <p>- Are the opener-contacts for 24V DC ? -> Please look at the data sheet!</p>
<p>F135</p>	<p>ADC1-Zero-Offset:</p> <ul style="list-style-type: none"> - The current sensor-U is out of order. It is an internal error. Please contact our hotline.
<p>F136</p>	<p>ADC2-Zero-Offset:</p> <ul style="list-style-type: none"> - The current sensor-V is out of order. It is an internal error. Please contact our hotline.
<p>F137</p>	<p>ADC1-Offset:</p> <ul style="list-style-type: none"> - The AD-Changer-V is out of order. It is an internal error. Please contact our hotline.
<p>F138</p>	<p>ADC2-Offset:</p> <ul style="list-style-type: none"> - The AD-Changer-U is out of order. It is an internal error. Please contact our hotline.
<p>F139</p>	<p>Ground Fault:</p> <ul style="list-style-type: none"> - The motor is out of order, please measure each coil of the motor and compare it! - Please check, if the motorwire or resistor wire have any connection to the ground!
<p>F140</p>	<p>IPM-Error: or Supply voltage to low:</p> <ul style="list-style-type: none"> - Overtemperature in the IGBT-Chip -> Is there any dirt on the pcb-board or in the heat sink ? - The voltage of board is too low! -> Is the main supply voltage OK ?
<p>F141</p>	<p>Position Regulation:</p> <ul style="list-style-type: none"> - The difference at the start handling is too high, wrong parameter (Nominal speed -> motor-datas,...)! - The motor works, but the encoder is out of order or falsely connected. -> Control the pinning! - Perhaps it is the wrong type of encoder? -> Menu A4 Motor/Gearbox -> Encoder system - The number of pulses are wrong? -> Menu A4 Motor/Gearbox -> Encoder Pulses - The encoder wire is out of order or too long (>30m) ! -> Please increase the encoder voltage ! - The encoder wire is parallel to the motor wire -> Change it immediately! - The encoder-shield is not connected to both sides -> Change it immediately! <p>Old machines: Please switch off the position regulator! Or change the settings!</p>
<p>F142</p>	<p>NTC-Dissipator ::</p> <ul style="list-style-type: none"> - The temperature sensor delivers the wrong value: Please check the connection! - The temperature sensor is out of order. Please contact our hotline.
<p>F143</p>	<p>DC Battery Voltage:</p> <p>At the evacuation-travel with battery, the voltage of the battery was too low. Please check the battery voltage!</p>
<p>F144</p>	<p>Watchdog-Reset</p> <p>There is an internal reset by the watch dog. Please contact our hotline.</p>
<p>F145</p>	<p>Monitor Brake wear-1:</p> <p>The input channel for the brake wear monitor is active. You need a new brake shoe or brake is not correctly adjusted!</p>

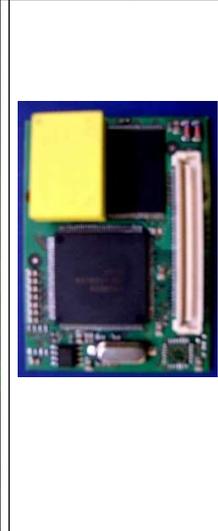
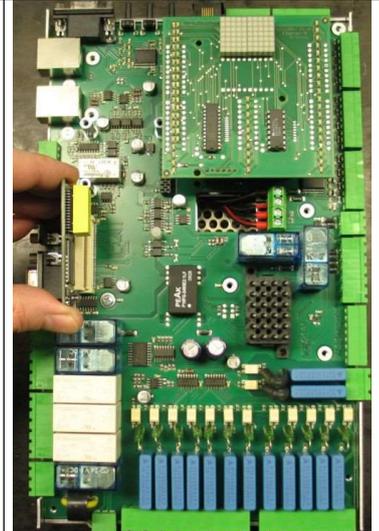
F146	Monitor Brake wear-2: The input channel for the brake wear monitor is active. You need a new brake shoe or brake is not correctly adjusted!
F147	Monitor Brake wear-3: The input channel for the brake wear monitor is active. You need a new brake shoe or brake is not correctly adjusted!
F148	Monitor Brake wear-4: The input channel for the brake wear monitor is active. You need a new brake shoe or brake is not correctly adjusted!
F149	Offset measure Pole Number: There is a difference between the parameter motor type and the actual type!
F150	Offset measur Brake: During the offset measure, the motor does not rotate – please check the brake, because it is not open!
F151	Offset measure Invalid : The measured offset angle is not valid – check electric wiring and make the offset measure a second time!
F152	Brake Resistor: There is a short cut at the brake resistor!
F153	Hydraulic – Pressure Sensor: The input channel for pressure sensor is low. Please check the wire to the pressure sensor.
F154	Hydraulic – Turbine: The input channel for turbine is low. Please check the wire to the turbine.
F155	Hydraulic – Low Pressure: If the low pressure function is active, there is an error. The pressure is too low, because there is a problem in the hydraulic system or the limit-setting of the parameter is too high.
F156	Resolver Fault: Error on resolver in drive machines with resolver
F157	SAS blocked: The SAS module of the G90 frequency inverter has been disabled.
F158	SAS Fault: The SAS module of the frequency inverter G90 gives an error. Check door contacts!
F159	V < 0,2 m/s: The speed threshold V > 0.2 at the UCM (crawl with open door in the HS) was exceeded!
F160	BISS-C Communication: The absolute encoder with the BISS-C protocol has an error. Connection and, if necessary, PIN control necessary
F161	IPM-Modulsafety: Current value is exceeded. Safety shutdown of the module.
F201	Mains Frequency: <ul style="list-style-type: none"> - The softstart unit can not synchronizice with the power supply! - Wrong Power frequency? -> Has the power supply a frequency of 50 Herz ? - If there is a power supply with 60 Hz Netz – Please change the parameter B6 to 60 Hz !
F202	Phase Failure: <ul style="list-style-type: none"> - There are not all three phases at the power input ! - One phase is missing ! -> Please check voltage and current !
F203	Phase Sequence: <ul style="list-style-type: none"> - The phase sequence at the power input is wrong ! - Right: L1 – L2 – L3 Wrong: L2 – L3 – L1 or..L3 – L1 – L2
F204	Phase Rotation: <ul style="list-style-type: none"> - The phase rotation at the power input is no right-rotation-field! Right: L1 – L2 – L3 Wrong: L2 – L1 – L3 or.. -> Please check it and make a right rotation field !
F205	Dissipator Temperature too High: <ul style="list-style-type: none"> - The softstart is overloaded, is the power class of the unit ok? - The temperature sensor delievers the wrong value: Please check the connection! The temperature sensor is out of order. Please contact our hotline.
F206	Motor Temperature - Motor and oil too hot: <ul style="list-style-type: none"> - The temperature of the area is too high ! - The motor is overloaded ! - The number of travels is too high ? -> Do you need an oil-cooling?
F207	Relay-1 Contactor: Internal Relay-1 is out of order or the open-contact is clewing -> The switching load is too big (Inductive)! Please use a contactor to switch big loads, like the valve-magnet!

F208	Relay-2 Contactor: Internal Relay-2 is out of order or the open-contact is clewing -> The switching load is too big (Inductive)! Please use a contactor to switch big loads, like the valve-magnet!
F209	Main Contactor Monitoring: - One of the main contactors cannot be switched ON -> Please control the contactors! - Please check the opener-contacts, clean it or change it! - Are the opener-contacts for 24V DC ? -> Please look at the data sheet!
F210	Liftbus Communication is interrupted: - Wrong Liftbus parameter ! - Wrong Liftbuscable or the shield not connected!
F240	Fan Monitoring Controller-Cabinet The fan of the controller-cabinet is out of order. Please check the fuse, wiring & the fan.
F241	Carlight Monitoring One of the lights of the car lights is out of order. Please check the fuse, wiring & light
F243	Monitoring Doorstep Heating – 1 The heating of the shaft-doorstep is out of order. Please check the fuse, wiring & the heating
F244	Monitoring Doorstep Heating – 2 The heating of the shaft-doorstep is out of order. Please check the fuse, wiring & the heating
F245	Monitoring Doorstep Heating – 3 The heating of the shaft-doorstep is out of order. Please check the fuse, wiring & the heating
F246	Monitoring Doorstep Heating – 4 The heating of the shaft-doorstep is out of order. Please check the fuse, wiring & the heating
F247	Carfan Monitoring The fan of the car is out of order. Please check the fuse, wiring & the fan.
F248	Electric Socket Monitoring The electric socket in the pit is out of order. Please check the fuse, wiring & the socket.
F250	Light Curtain Door-1 Door-1 light curtain outputs error message and is therefore defective.
F251	Light Curtain Door-2 Door-2 light curtain outputs error message and is therefore defective.
F252	Light Curtain Door-3 Door-3 light curtain outputs error message and is therefore defective.
F253	Overspeed – Manual Speed If the return travel of 0.3 m / s is exceeded, the journey is interrupted. Possible causes: 1.) Incorrect setting of the return speed in the control unit. 2.) Wrong setting of the nominal speed in menu A3.6. 3.) Incorrect setting of the return speed in menu B601.
F254	Overspeed – Inspection Speed If the inspection distance of 0.5 m / s is exceeded, the journey is interrupted. Possible causes: 1.) Incorrect setting of the inspection speed in the control unit. 2.) Wrong setting of the nominal speed in menu A3.6. 3.) Incorrect setting of the inspection speed in menu B601
F255	Overspeed – Nominal Speed If the nominal run of 15% is exceeded, the journey is interrupted. Possible causes: 1.) Incorrect setting of the nominal speed in the control unit. 2.) Wrong setting of the nominal speed in menu A3.6.
F256	UCM-Zone-1 Relay-contact of UCM-Zone-1 is not switching
F257	UCM-Zone-2 Relay-contact of UCM-Zone-2 is not switching
F288	Flood in pit Water sensor is active, because water is in the pit
F300	CAN1-Bus – REC Warning
F301	CAN1-Bus – TEC Warning
F302	CAN1-Bus – REC Passing
F303	CAN1-Bus – TEC Passing
F304	CAN1-Bus – Bus-Off Der CAN1-Bus is switched OFF
F305	CAN1-Bus – ID02-Heartbeat missing At the CANbus Device ID02 there is no Heartbeat-Signal
F306	CAN1-Bus – ID04-Heartbeat missing At the CANbus Device ID04 there is no Heartbeat-Signal
F307	CAN1-Bus – ID07-Heartbeat missing At the CANbus Device ID05 there is no Heartbeat-Signal
F308	CAN1-Bus – ID08-Heartbeat missing At the CANbus Device ID06 there is no Heartbeat-Signal
F309	CAN1-Bus – ID09-Heartbeat missing At the CANbus Device ID09 there is no Heartbeat-Signal
F310	CAN1-Bus – ID13-Heartbeat missing At the CANbus Device ID13 there is no Heartbeat-Signal
F311	CAN1-Bus – ID16-Heartbeat missing At the CANbus Device ID16 there is no Heartbeat-Signal
F312	CAN1-Bus – ID17-Heartbeat missing At the CANbus Device ID17 there is no Heartbeat-Signal
F313	CAN1-Bus – ID18-Heartbeat missing At the CANbus Device ID18 there is no Heartbeat-Signal
F314	CAN1-Bus – ID19-Heartbeat missing At the CANbus Device ID19 there is no Heartbeat-Signal
F315	CAN1-Bus – ID20-Heartbeat missing At the CANbus Device ID20 there is no Heartbeat-Signal
F400	F400 SAFE end switch top The position of the end switch on the top has been reached
F401	F401 SAFE end switch bottom The position of the end switch on the bottom has been reached
F402	F402 SAFE UCM SAFE shaft copy has interrupted the SiKr – the exiting of the cabin with an open door has been noticed and cancelled
F403	F403 SAFE end switch top inspection SAFE shaft copy has interrupted the SiKr – the position of the end switch on the top for the inspectional operation with shortend shaft copy has been reached. Inspectional operations only possible if going down.
F404	F404 SAFE end switch bottom inspection SAFE shaft copy has interrupted the SiKr – The position of the end switch on the bottom for the inspectional operation with shortend shaft copy has been reached. Inspectional operations only possible if going up.

F405	F405 SAFE deceleration monitor	SAFE shaft copy has interrupted the SiKr – The speed on the checkpoint for the delayed control was too high. -> Termination of the trip.
F406	F406 SAFE overspeed	SAFE shaft copy has interrupted the SiKr – the speed value of the catch-up speed.
F407	F407 SAFE inspection speed	SAFE shaft copy has interrupted the SiKr - the speed value of the catch-up speed.
F408	F408 SAFE system	SAFE shaft copy has interrupted the SiKr due to a system error.
F409	F409 SAFE system off	SAFE shaft copy has interrupted the SiKr due to a system error because the system is turned off.
F410	F410 SAFE overspeed releveling	SAFE shaft copy has interrupted the SiKr – the speed value of the catch-up speed was exceeded.
F411	F411 SAFE overspeed leveling	SAFE shaft copy has interrupted the SiKr - the speed value of the catch-up speed was exceeded.
F412	F412 SAFE Hardware	If the eSGC is active and the connection is open, i.e. the electromagnetic safety gear is not connected, the following error message is displayed

W01 Exchange of the processor map

Before you proceed to replace the CPU card, all fuses and switches are turned off. Set the car at the lowest level flush, with activated emergency operation (car doors closed).

			
<p>For the change of the CPU map the cover of the ZR-unit must be opened. The map is on the bottom left in the body.</p>	<p>Do not damage other parts on the printed circuit board. With two finers you can loosen the printed circuit board.</p>	<p>Take the new CPU map from the ESD protective plastic film.</p>	<p>Use the new CPU map carefully. Convince yourself that the map sits correctly. Close the cover again afterwards.</p>

6.0 Information

D1 IN / OUTPUT

The submenu D1 is not yet realized.

D2 Trip counter

In the submenu D2 the trip counter is realized. Two trip counters are available:

Total trip counter	Not erasable
Total trip counter erasable	Erasable for the statistics evaluation
Delete trip counter ?	No - Yes
Trip counter Up erasable	Erasable for the statistics evaluation
Trip counter Up delete ?	No - Yes
Travel counter down erasable ?	Erasable for the statistics evaluation
Trip counter down delete ?	No - Yes
Change of direction counter	See below
Rope wear counter	See below
Floor trip counter for each floor	Erasable for the statistics evaluation
Delete trip counter?	No - Yes

Menu D2 Change of direction counter

Submenu password

In order to make or change outputs in the direction of the change counter, a password entry is necessary.

Submenu change of direction OFF / ON“

Here the direction change counter can be switched on or off.

Submenu change direction value: NO / YES

Due to the importance of the counter, another request is implemented, setting a new value.

Submenu reset value

Based on the documentation of the rope manufacturer, the final value can be entered in rides.

Submenu warning threshold

In order to have the possibility to react, a pre-warning threshold can be established. It should be sized so that the plant does not come to a standstill.

Menu D2 Rope wear counter

Submenu password

In order to make or change outputs on the rope wear counter, a password entry is necessary.

Submenu rope wear counter OFF / ON

Here the rope welding counter can be switched on or off.

Set the rope wear submenu value: NO / YES

Due to the importance of the counter, another request is implemented, setting a new value.

Submenu residual value

Based on the documentation of the rope manufacturer, the final value can be entered in journeys.

Submenu warning threshold

In order to have the possibility of reaction, a pre-warning threshold can be established. It should be sized so that the plant does not come to a standstill.

D3 Run time counter

In the submenu D3 the hour meter is realized. Two hour meters are available:

Network hour meter
Operating-hours meter
Operating-hours meter erasable
Operating-hour meter clear?
Length hour erasable
Length hours clear?
Fault counter erasable
Fault counter clear?
Operation time
Delete operation time
Failure hour counter
Delete failure hour counter
Normal running time
Delete normal travel time
Special driving time
Delete special driving time
Rest time
Delete rest time

D4 Door motion counter

In the submenu D4 the door transaction counter is realized. Two door transaction counters are available for 2 door sides:

Indicate the door movements door 1	Activity count, erasable
Indicate the door movements door 2	Activity count, erasable
Indicate the door movements door 3	Activity count, erasable
Delete door transaction counters	Erasable, for the statistics evaluation
Indicate door maintenance	Adjust the number of the door movements, starting from one
	Message takes place. Range of adjustment from 100 to 100.000

D5 Energy counter

The energy counter is implemented in submenu D5. There are two energy meters available for the supply of energy as well as for energy recovery:

Display of the energy purchase	Erasable, display of the related energy
Display of energy recovery	Erasable, display of the supplied energy
Delete energy meter?	No - Yes
Energy reference number of pulse per kWh	000x pulses / kWh
Energy recovery pulse number per kWh	000x pulses / kWh

D6 Environmental conditions

In the submenu D6 parameters of the environmental conditions are displayed:

Temperature ZR currently	Temperature in degrees celsius
Temperature ZR max	Temperature in degrees celsius
Temperature ZR min	Temperature in degrees celsius
Temperature FKR currently	Temperature in degrees celsius
Temperature FKR max	Temperature in degrees celsius
Temperature FKRf min	Temperature in degrees celsius
Temperature control cabinet currently	Temperature in degrees celsius
Temperature control cabinet max	Temperature in degrees celsius
Temperature control cabinet min	Temperature in degrees celsius
Temperature pit-brow currently	Temperature in degrees celsius
Temperature pit-brow max	Temperature in degrees celsius
Temperature pit-brow min	Temperature in degrees celsius
Temperature shaft pit currently	Temperature in degrees celsius
Temperature shaft pit max	Temperature in degrees celsius
Temperature shaft pit min	Temperature in degrees celsius
Humidity control cabinet currenlyt	From 20% to 80%
Humidity control cabinet max	From 20% to 80%
Humidity control cabinet min	From 20% to 80%
Humidity pit-brow currently	From 20% to 80%
Humidity pit-brow max	From 20% to 80%
Humidity pit-brow min	From 20% to 80%
Humidity shaft pit currently	From 20% to 80%
Humidity shaft pit max	From 20% to 80%
Humidity shaft pit min	From 20% to 80%

For resetting with a button of the resettable counter functions there are input functions:

- Exxx - Reset journey counter
- Exxx - Reset journey counter up
- Exxx - Reset journey counter down
- Exxx - Reset Floor crossing counter
- Exxx - Reset operating- hours meter
- Exxx - Reset Failure hour counter
- Exxx - Reset malfunction counter
- Exxx - Reset motor hour meter
- Exxx - Reset Door movement counters
- Exxx - Reset Energy meters

Maintenance menu D7

General

The elevator control system determines the time of maintenance for the elevator installation in order to ensure preventive maintenance. On the basis of the statistical maintenance interval calculation, the wear of the system components, which is detected by the sensors, is compared to the statistical value in order to generate the optimum maintenance time.

Parameter: Maintenance counter

The generation of the maintenance interval is activated in the parameter maintenance counter.

By calculating the frequency of use of an elevator installation according to EN 13015, TRBS1312 & VDI3810, a use category (NK) was determined, which serves for the theoretical calculation of the annual maintenance intervals.

Use category NK = A + B + C + D + E

Parameter: Maintenance after xxx days

In this parameter, the result of the utilization type is converted using a matrix to obtain the annual maintenance interval. The output of the maintenance time is in days.

Priorities NK	1	2	3	4
NK 1 – 2	4	3	2	1
NK 3 – 4	6	4	3	2
NK 5 – 6	8	6	4	-
NK > 6	12	8	-	-

Parameter: Delete maintenance counter

A reset of the maintenance counter after maintenance is carried out in this menu.

Parameter: Number of trips per month

The start value is an estimate of the number of trips per month of the elevator system. The value is refined during the lifetime of the plant by the data obtained.

Summand A	1	2	3	4	5
Number of trips per month	< 500	501 - 3000	3001 - 6000	6001 - 40000	> 40000
Average durations per 24 hours	< 1	1 - 2	3	5	6

Parameter: Special environmental conditions

Special environmental conditions of manhole and machine room (control), such as moisture, dust and dirt, glass shaft, machine room position increase the maintenance effort. They can be weighted in this parameter.

Summand B	0	1
Spezial environmental conditions	No	Yes

Parameter: Special conditions of use

Special conditions of use such as public transport, vandalism and problem areas increase the maintenance effort. They can be weighted in this parameter.

Summand C	0	1
Special conditions of use	No	Yes

Parameter: Availability

The availability of the lift system can be weighted in the calculation of the use category:

Summand D	0	1
Availability of the plant	Less important	Very important

Parameter: Age of the facilities

The age of the elevator system also plays an important role in the calculation of the usage category:

Summand E	0	1
Age of the facilities	< 10 years	>= 10 years

Parameter: Location

In order to be able to weight the gained use category, it is important to enter the location of the lift installation:

Priorities	1	2	3	4
Location	Hospital Nursing facility Industry	Commercial building Public area hotel > 4 HS residential building >5HS	administration <=4HS hotel <= 4 HS residential building <=5HS	Private sector, Limited user group

Parameter: Maintenance display line-01

This parameter defines the content of the first display line. The following table lists the available messages:

- Journey counter	- Min. temperature control cabinet
- Journey counter erasable	- Temperature pit-brow
- Journey counter up	- Max. temperature pit-brow
- Journey counter down	- Min. temperature pit-brow
- Change of direction counter	- Temperature shaft pit
- Power hour meter	- Max. temperature shaft pit
- Operating-hours meter	- Min. temperature shaft pit
- Operating-hours meter erasable	- Humidity control cabinet
- Failure hour counter	- Max. humidity control cabinet
- Door count T1	- Min. humidity control cabinet
- Door count T2	- Luftfeuchtigkeit Schachtkopf
- Door count T3	- Max.humidity pit-brow
- Energy reference counter	- Min. humidity pit-brow
- Energy feedback meter	- Humidity shaft pit
- Temperature D613-ZR	- Max. humidity shaft pit

- Max. temperature D613-ZR	- Min. humidity shaft pit
- Min. temperature D613-ZR	-
- Temperature D613-FKR	-
- Max. temperature D613-FKR	-
- Min. temperature D613-FKR	-
- Temperature control cabinet	-
- Max. temperature control cabinet	-

Parameter: Maintenance display – line-02

This parameter defines the content of the 2nd display line. Messages see display line-01.

Parameter: Maintenance display – line-03

This parameter defines the content of the 3rd display line. Messages see display line-01.

Parameter: Maintenance display – line-04

This parameter defines the content of the 4th display line. Messages see display line-01.

to

Parameter: Maintenance display – line-21

This parameter defines the content of the 21st display line. Messages see display line-01.

A2 Calculation of additional wear events

1. Conditions of the doors

The door guides and the door guide rails are subject to wear or contamination. With a high number of door reversals associated with high contamination, maintenance may be required prematurely, prior to reaching the door movement limit. Four criteria are available:

- Measuring the door running times and determining a tendency.
- door reversings

The door reversal leads to an increased wear of the door guide due to the forced change of direction with high braking torque (inertia through the mass of the door leaf). A drive of the elevator car generally has 4 door movements without responding to the monitoring devices (light grid, vestibule monitoring and closing force limiter). If 5 reversals occur on 10 elevator trips, this represents a limit value.

Formula for door movement OK: 1 drive <= 5 door movements observation period 30 days

- Door error

If at least one door error "door opening - time monitoring" occurs every day for an observation period of 7 days, it is time for the door to be checked, and probably for maintenance.

- Evaluation of the door movement by the accelerometer at the FKR

A continuous recording of the acceleration values (shocks) during door-to-door operation can indicate a deterioration in the door operation.

If the limit value is exceeded, the message "Maintenance doors" is output.

2. Condition of the suspension ropes

Suspension cables are subject to wear and reach the able-maturity after a number of trips x. The variable "number of trips" is defined by the carrying ropes on the change of direction of travel. An uphill journey from E to 1 and then from 1 to 2 is only possible to increase the count by 1. A subsequent change of direction, i. a journey from 2 to E leads to an additional meter reading increase.

Program technically the entry of the life cycle level of the supporting rope is to be combined with a code word query. Also, the date of the entry should be stored here. The meter itself is programmed as a down counter. When reaching level "0", drive to the main access level and shut down the system. For indirect hydraulic lifts, the lowest level must be approached! Output of the corresponding error message.

A warning message "Maintenance ropes" must be issued 30 days before the discard condition is reached.

3. Condition of the rail guide

We differentiate between roller and sliding guides for rail guides. The sliding guides are subdivided into lubricated and unlubricated versions.

We have 2 criteria available:

- Current values of the frequency converter

High friction values in the cab guidance (sliding guides) lead to "break away" the cabin during take-off and increased current values while driving.

- Evaluation of the cabin movement by the accelerometer at the FKR

A continuous recording of the acceleration values (shocks) when accelerating the cabin can indicate a worsening cab guidance.

If the limit value is exceeded, the message "Maintenance rail guidance" is output.

4. Temperature profile inside the control cabinet

An increased temperature profile in the interior of the control cabinet can have several causes.

A.) The ambient temperature in the vicinity of the control cabinet does not allow temperature

B.) The threshold temperature threshold of the control cabinet fan is set too high.

C.) The inlet filter mats of the cabinet filter are dirty and the filter passage is inhibited.

The temperature monitoring of the David central units allows for indirect temperature monitoring of the control cabinet. The limit value is 45 degrees Celcius. As a monitoring period, the rush hour is set over 7 days. If the limit value is exceeded, the message "Maintenance control cabinet" is output.

5. Temperature profile of the frequency converter

An increased temperature profile in the frequency converter can have several causes.

A.) The ambient temperature around the frequency converter leaves no temperature valley to

B.) The inverter is dimensioned too small.

C.) The fins of the heat sink are dirty and the air passage is inhibited.

The heat sink temperature monitoring of the frequency converter allows for indirect temperature monitoring. The limit value is 70 degrees Celcius. As a monitoring period, the rush hour is set over 7 days. If the limit value is exceeded, the message "Maintenance frequency inverter" is output.

6. Condition of the door contacts

In detail, this is about the shaft door-, cabin door-, and blocking agent contacts. If at least 1x of the above door contact errors occur per day, with an observation period of 7 days, it is time to check the door contacts, and probably also for maintenance. If the limit value is exceeded, the message "Maintenance door contacts" is output.

A3 Output of the system status

Conclusions:

The calculated maintenance cycle may be extended or shortened based on the actual number of trips. In addition, by occurrence of other events, the condition of the hoist can be degraded. The time to the next maintenance can therefore be shortened.

The calculated maintenance interval will be displayed visibly in the maintenance menu.

In addition, the remaining time is displayed in days until the next maintenance date. If maintenance is not carried out, the time will continue, but with a negative sign.

After maintenance, this counter is reset. It begins a new era counting down the days.

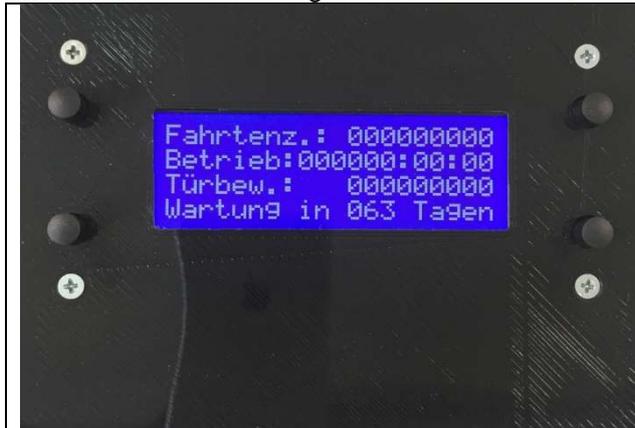
A4 Ways of visualization

1. HPG-60

In the fourth line of the HPG-display in standing mode the maintenance notification appears.

2. Maintenance display

The maintenance display in the control cabinet door / or inside the control cabinet has the following structure:



- 1. Line Number of journeys.:**
XXXXXXXXXX
- 2. Line Operating hours.:**
XXXXXX:XX:XX
- 3. Line Door movement.:**
- 4. Line Messages e.G. Maintenance in xxx Days**

3. Gateway

The parameter set is transmitted via the serial connection to the gateways.

4. Operator app

The operator app, which is being planned, makes it possible to transfer the maintenance messages to the smartphone via the WLAN gateway of the controller.

D8 speeds

Submenu D8 shows the speeds of the car and the machine.

Speed elevator car	In m/s
Speed of the drive	In U/min

D9 Safecopy

The menu D9 is used to quickly get an overview of the function and the configuration of the connected SAFE system. There can be no parameters set there.

	<p>D9 Status:</p> <div style="border: 1px solid black; padding: 5px;"> <p>D9 Status: Normal operation Normal operation</p> <p style="text-align: center;">menu</p> </div> <p>Display of the state of the safe copy. The following states are possible:</p>	<p>Normal operation: ANTSSAFE works flawlessly Wait reset: ANTSSAFE has become due to an Error locked. Reset dur. New start Setup-1: The ANTSAFE was not yet configured Setup-2: The first part of the basic configuration was carried out Setup-3: The second part of the basic configuration was carried out.</p> <p>system off: ANTSSAFE not available system ini: state during power up system start: state during power up</p>
	<p>D9 Relay</p> <div style="border: 1px solid black; padding: 5px;"> <p>D9 Relais: SiKr:* zone:* Door:- Normal operation</p> <p style="text-align: center;">menu</p> </div> <p>* =: Closed/ active - =: Open / deactive</p>	<p>Display of the switching position of the following relays SiKr, door zone & door lock.</p> <p>SiKr:*/- If "" then the safety circuit is closed, the system is ready to drive</p> <p>Zone: */- If "" then the zone area is output, the cabin is in the door zone area</p> <p>Tür: */- If "" then the safety relay for the door override has been activated</p>

	<p>D9 Status bits</p> <p>D9 Status bits: -*- - - - - - - - *-Normal operation menu</p> <p>Display of the internal communication between the SAFE copy and the D613 controller.</p>	<p>Here, the internal PSU status bits, which are transmitted from the SAFE copy to the controller using the CANopen-Lift protocol, are displayed. These are for internal documentation purposes only and may be required to be sent to our hotline.</p>																																																																																
<table border="1" style="width:100%; text-align:center;"> <tr> <td>1</td><td>2</td><td>3</td><td>4</td> <td>5</td><td>6</td><td>7</td><td>8</td> <td>9</td><td>10</td><td>11</td><td>12</td> <td>13</td><td>14</td><td>15</td><td>16</td> </tr> <tr> <td colspan="4" style="writing-mode:vertical-rl; transform:rotate(180deg);">Door Bridging active</td> <td colspan="4" style="writing-mode:vertical-rl; transform:rotate(180deg);">Inside the zone</td> <td colspan="4" style="writing-mode:vertical-rl; transform:rotate(180deg);">In Level +/- 0mm</td> <td colspan="4" style="writing-mode:vertical-rl; transform:rotate(180deg);">Bottom End Switch</td> </tr> <tr> <td colspan="4" style="writing-mode:vertical-rl; transform:rotate(180deg);">Top End Switch</td> <td colspan="4" style="writing-mode:vertical-rl; transform:rotate(180deg);">Inspection Limit in the Bottom</td> <td colspan="4" style="writing-mode:vertical-rl; transform:rotate(180deg);">Inspection Limit in the Top</td> <td colspan="4" style="writing-mode:vertical-rl; transform:rotate(180deg);">UCM - Case</td> </tr> <tr> <td colspan="4" style="writing-mode:vertical-rl; transform:rotate(180deg);">Overspeed</td> <td colspan="4" style="writing-mode:vertical-rl; transform:rotate(180deg);">Disacceleration Monitor Switch</td> <td colspan="4" style="writing-mode:vertical-rl; transform:rotate(180deg);">Inspection ON</td> <td colspan="4" style="writing-mode:vertical-rl; transform:rotate(180deg);">Relay - Test - Active</td> </tr> <tr> <td colspan="4" style="writing-mode:vertical-rl; transform:rotate(180deg);">Conformation State</td> <td colspan="4" style="writing-mode:vertical-rl; transform:rotate(180deg);">Conformation State</td> <td colspan="4" style="writing-mode:vertical-rl; transform:rotate(180deg);">Conformation State</td> <td colspan="4" style="writing-mode:vertical-rl; transform:rotate(180deg);">Error - State</td> </tr> </table>			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Door Bridging active				Inside the zone				In Level +/- 0mm				Bottom End Switch				Top End Switch				Inspection Limit in the Bottom				Inspection Limit in the Top				UCM - Case				Overspeed				Disacceleration Monitor Switch				Inspection ON				Relay - Test - Active				Conformation State				Conformation State				Conformation State				Error - State			
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Conformation State				Conformation State				Conformation State				Error - State																																																																						
	<p>D9 ANTSSAFE - zones</p> <p>D9 zone: length: 400mm Normal operation menu</p> <p>Display of the door zone length in mm.</p>	<p>Here, the zone length is shown, the during the configuration in the SAFE Copying was saved.</p>																																																																																
	<p>D9 ANTSSAFE - Inspection</p> <p>D9 inspection: Only speed monitoring Normal operation menu</p> <p>Display of the supervision of the inspection speed. The following information is possible:</p>	<p>"no monitoring": The inspection monitoring is deactivated "Only speed monitoring": In inspection mode, the max. Speed over-wacht (0,6m / s) "Limit switch up": The function "inspection limit switch-up" for the protection room monitoring in the shaft head is activated "Limit switch down": The function "inspection limit switch-down" for protection room monitoring in the shaft pit is activated "Limit switch up + down": Both guard room monitors are activated</p>																																																																																
	<p>Monitoring Nominal speed</p> <p>Monitoring Nominal speed.: 5,000m/s Normal operation Menu</p> <p>Display of the monitored rated speed in m / s.</p>	<p>Here, the speed threshold is displayed in m / s, which at the Configuration of the SAFE copy was saved.</p>																																																																																

	<p>end switch- TOP</p> <pre>end switch-TOP position: xxx,000m Normal operation menu</pre> <p>Display of the switch position top in m.</p>	<p>Position: xx, xxxm The absolute position of the upper, taught-in limit switch is displayed here.</p>
	<p>end switch-BOTTOM</p> <pre>end switch-BOTTOM position: xxx,000m Normal operation menu</pre> <p>Display of the switch position down in m.</p>	<p>Position: xx, xxxm The absolute position of the lower taught-in limit switch is displayed here.</p>
	<p>dec. monitor BOTTOM</p> <pre>Dec. monitor-BOTTOM Control above: Off/On Normal operation menu</pre> <p>Indication of whether the deceleration control was activated below.</p>	<p>Off / Position: xx, xxxm Here, you can see if the delay check below when configuring the SAFE copy disabled or enabled. If this has been activated stands there the absolute position of the monitoring point.</p>
	<p>decel. Monitor TOP</p> <pre>decel-monitor-TOP Control above: Off/On Normal operation menu</pre> <p>Indicates whether the delay control has been activated above.</p>	<p>Off / Position: xx, xxxm Here, you can see if the delay control above in the configuration of the SAFE copy disabled or enabled. If this has been activated stands there the absolute position of the monitoring point.</p>
	<p>floors - ANTSSAFE</p> <pre>floors ANTSSAFE: 04 floors D613: 04 Normal operation menu</pre> <p>Here, the number of floors of the SAFE copy and the floor number of the control D613 is displayed in comparison.</p>	<p>Here, the number of taught-in levels of the SAFE copy after the Learning trip and the specified number of floors in the shaft shown. Both floor values must have the same value after commissioning!</p>
	<p>D9 ANTSSAFE /Limax 33CP- Software</p> <pre>ANTSSAFE-Software: CRC: xxxxxxxx Normal operation menu</pre> <p>Here, the CRC sum of the safe core of the Sil-3 software is displayed.</p>	<p>Here, the CRC sum of the safe core of the Sil-3 software is displayed. This sum should match the value of the certificate of the type examination certificate. Off and On switches rewatch the CRC value. The CRC sum may vary depending on the software version.</p>

Display at Variotech ANTS Safe

```

ANTSSAFE-Software:
CRC: 7950DE2A
Normalbetrieb
Menü
    
```

The software signature ANTS-ASA2: 0x7950DE2A is in the file ASA2_ASE-EU_conformity2019_01 on page 6/12 point 2.25. This signature (CRC sum) is read by the D613 and displayed in menu D9.



TÜV-A-AT-1-18-0545-EUES-1 – Anhang 1 / Annex 1



- * 2.11 ANTS-ASE Schutzgrad / Degree of protection: IP 30
- 2.12 ANTS-ASA2 Schutzgrad / Degree of protection: IP 00 eingebaut im geschützten und geerdeten Gehäuse / Installed in a protected and grounded housing ≥IP2X
- 2.13 Spannung Stromkreis des SC1 / Voltage of the SC1 circuit: 48 – 230 V/ 50 Hz oder / or max. 24VDC
- 2.14 Spannung Stromkreis der Türüberbrückung: 48 – 230 V/ 50 Hz oder / or max. 24VDC
Voltage of the door overbriding circuit:
- 2.15 Überlast-, Kurzschlusschutz Stromkreises SC1: max. 2 A /AC oder / or 1 A / DC
Overload, short cut circuit protection of the SC1 circuit :
- 2.16 Überlast-, Kurzschlusschutz Stromkreises Türüberbrückung: max. 2 A /AC oder / or 1 A / DC
Overload, short cut circuit protection of the door overbriding circuit:
- 2.17 Türzonenemulation / Door zone emulation (X6): 24VDC / VAC, max. 100 mA
- 2.18 Betriebstemperatur / Operating temperature: -5°C bis / to 55 °C
- 2.19 Lager- und Transporttemperatur / Storage and transport temperature: -10°C bis / to 70°C
- 2.20 Relative Luftfeuchte / Relative humidity: < 90%, ohne Kondensation / without condensation
- 2.21 Luftdruck / Air pressure: 1013 hPa bis / to 800 hPa bis / up to 2000 m über / above NN
- 2.22 Identifikation der Platine ANTS-ASA2 / Identification number of PCB of ANTS-ASA2: ASAv100, UCMIFv100
- 2.23 Identifikationsnummer Platine des ANTS-ASE / Identification number of PCB of ANTS-ASE: ASERXv100, ASETXv100
- 2.24 Softwareversionsnummer / Software version number ANTS-ASA2: v200
- 2.25 Softwaresignatur / Software signature ANTS-ASA2: 0x7950DE2A

Display at KÜBLER LES02ANTS Safe

```

ANTSSAFE-Software:
CRC: CE7824DD
Normalbetrieb
F10-Sicherheitsk.U9
    
```

The software signature LES02ANTS: 0xCE7824DD is in the file LES02_ASE-EU_conformityon page 6/12 point 2.23. This signature (CRC sum) is read by the D613 and displayed in menu D9.



TÜV-A-AT-1-19-0603-EUES – Anhang 1 / Annex 1



- * 2.22 Softwareversionsnummer / Software version number PSU02: v210
- 2.23 Softwaresignatur / Software signature PSU02: 0xCE7824DD
- 2.24 Systemreaktionszeit / System reaction time: <25 ms

Display at ELGO LIMAC 33 CP	Encoder systems - delivery by OCTOBER 2020 SW2.3
	This CRC depends on the basic configuration, which is either programmed by us (in addition the configuration printout, which should be included with CRC sums) or can be configured on site.
	The file BES_ELGO_EU-ESD 030-1_20190617 file contains the new CRC total of the firmware for the current LIMAX33CP version.

Seite 2 von 2
Unsere Zeichen/Erstelldatum: IS-FTT-STG/17. Juni 2019

System Component	Identification
HW version	-LIMAX33CP.03.3 -LIMAX33CP.03.3 und LIMAX33SGC.00.0 -LIMAX33CP.03.3 und LIMAX33SGC.00.1
SW version	2.3 R5
CRC	0x0B55D094

Identifikation von LIMAX33 CP

Dieses Schreiben ergänzt die beiden EU-Baumusterprüfbescheinigungen EU-ESD 030 vom 29.01.2018 bzw. Nr. EU-ESD 030/1 vom 31.07.2018
Die übrigen Festlegungen der Bescheinigungen gelten unverändert weiter.

Mit freundlichen Grüßen

Zertifizierungsstelle
für Aufzüge und Sicherheitsbauteile

Achim Janocha

Der Sachverständige

Peter Retzbach

Display at ELGO LIMAC 33 CP	Encoder systems - delivery from November 1, 2020 SW2.4
	This CRC depends on the basic configuration, which is either programmed by us (in addition the configuration printout, which should be included with CRC sums) or can be configured on site.
	The file BES_ELGO_EU-ESD 030-1_20190617 file contains the new CRC total of the firmware for the current LIMAX33CP version.

Seite 2 von 2
Unsere Zeichen/Erstelldatum: IS-FTT-STG/06. Juli 2020

System Component	Identification
HW version	-LIMAX33CP.03.3 -LIMAX33CP.03.3 und LIMAX33SGC.00.0 -LIMAX33CP.03.3 und LIMAX33SGC.00.1
SW version	2.4 R1
CRC	0xE1E79812

Identifikation von LIMAX33 CP

Dieses Schreiben ergänzt die beiden EU-Baumusterprüfbescheinigungen EU-ESD 030 vom 29.01.2018 bzw. Nr. EU-ESD 030/1 vom 31.07.2018
Die übrigen Festlegungen der Bescheinigungen gelten unverändert weiter.

Mit freundlichen Grüßen

Zertifizierungsstelle
für Aufzüge und Sicherheitsbauteile

Achim Janocha

Der Sachverständige

Peter Retzbach

Display at ELGO LIMAC 33 CP		Encoder systems - delivery from January 2021 SW2.5
<pre> LIMAX33CP-Konfig: CRC: 744EC631 Normalbetrieb F09-Sicherheitsk.U8 </pre>	This CRC depends on the basic configuration, which is either programmed by us (in addition the configuration printout, which should be included with CRC sums) or can be configured on site.	
<pre> LIMAX33CP-Software: CRC: EAEFF74 Normalbetrieb F09-Sicherheitsk.U8 </pre>	The file BES_ELGO_EU-ESD 030-030-1_201202 file contains the new CRC total of the firmware for the current LIMAX33CP version.	

In dem „Technical Report“ mit Report No.: ER91576T Version 1.9 vom 01.12.2020 von TÜV SÜD Rail GmbH, wurden die neue SW-Version v2.5r0 geprüft und freigegeben.

Anstelle wie in den oben genannten Bescheinigungen unter Ziffern 2.4 bzw. 2.5 genannt, ist das System durch Hardware- und Software-Version wie folgt zu kennzeichnen:

System Component	Identification	
HW version	LIMAX33CP.03.3 LIMAX33SGC.00.0 LIMAX33SGC.00.1	
SW version	v2.4r1	V2.5r0
CRC	0xE1E79812	0xEAEFF74

Identifikation von LIMAX33 CP

v. 2020-11

Sitz: München
 Amtsgericht München HRB 96 869
 USt-IdNr. DE129484218
 Informationen gemäß § 2 Abs. 1 DL-InfoV
 unter www.tuvsud.com/impressum

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 Reiner Block (Vors.)
 Geschäftsführer:
 Ferdinand Neuwieser (Sprecher),
 Thomas Kainz

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 Gottlieb-Daimler-Str. 7
 70794 Filderstadt
 Deutschland

7.0 Start-up the lift

100 Assembling Travel

In the submenu C7 assembly trip can be activated during active back getting control of these parameters. At the beginning at the assembling of a lift the switches of the safety circuit are not yet set. This function makes a movement possible with the back getting control, although the safety entrances are U3 to U12 without tension. A condition is that against U1 and U2 tension rests. If the back getting control breaks this parameter is automatically deactivated.

101- Teach-In with digital relative/motor copying w. incremental encoder

1.0 General

The fundamental operational sequence of the start-up of digital copying runs off in the following steps:

-) Examination of the software attitudes and input of the ranking distance of the lower pre-end switch.
-) Examination of the electrical installations and attitude of pre-end switch.
-) Execution of the leaning trip.
-) Choice of the driving speeds by adjusting the braking distances.
-) Fairs of the level is not ok and correction off the concise values.
-) Optionally: Attitude of the releveling.

2.0 Examination off the electrical installations and attitude of the pre-end-switch

- All contact switches in the safety circuit should be attached.
- The incremental giver should be functionally installed. You can install the incremental giver at the car or at the speed limiter. The entrances are at the central unit as also at the car controller available. The lines are to be presented as follows:

Incremental encoder	Controller	Description
U _B oder U _{Ver}	Terminal 200	Voltage +24V DC
GND oder Masse	Terminal 500	GND 0V
Kanal A	Terminal 83	Channel A
Kanal B	Terminal 84	Channel B

- The zone switches S71 and S72 (for EoT & Releveling) and /or S 71 should be functionally installed. The length of the zone should be symmetrical to the concise line maximally 250 mm into both directions to extend. The more accurately the concise line is met, the smaller fails later the concise correction.
- The pre-emd-switch 13A and 13B is to be adjusted on the that braking distance of the learning trip maximally which can be expected. The function of the pre-end-switcher should be examined with the inspection trip. As approximate reference point one can take the values specified down which can naturally differ by the adjusted delay values.

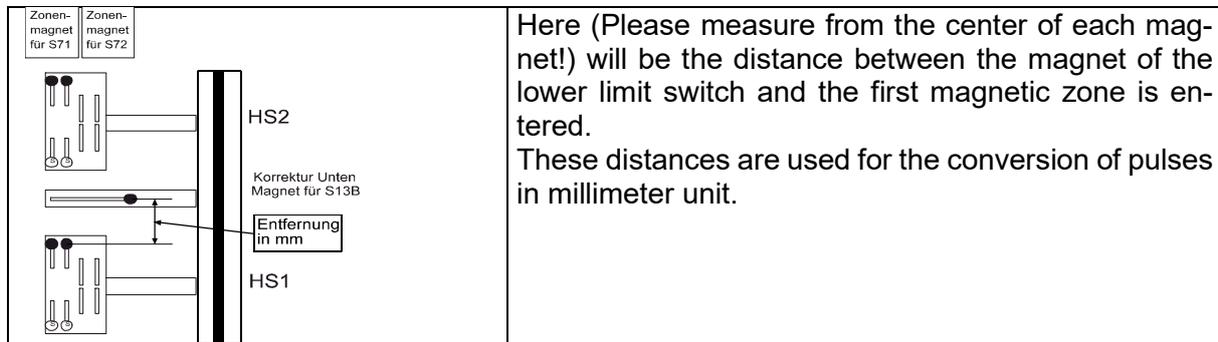
Approximate braking distance with 0,8 m/s ² delay	Maximum driving speed
1000 mm	0,63 m/s
1200 mm	1,00 m/s
1800 mm	1,20 m/s
2300 mm	1,60 m/s
3000 mm	2,00 m/s

The bringing in way may be longer than in normal operation, since the Pre-end-switch is bridged there and the brake point by digital copying is spent. The pre-end switcher is not however synchronization points for the control and may after learning trip any more not be changed. The pre-end switcher down 13B must lie however between the 1st and 2nd stop.

Equivalent one is to be placed the pre-end switcher above 13A between the next to last and last floor. This rule is to be kept also with short trip stop!

3.0 Examination of the attitudes and the braking distance of the lower pre-end switch

Before the learning trip begins you should examine the data in the plant parameters (Stop number, kind of copying,...). In addition you should again examine your regulation whether the adjusted delay values meet your braking distances. In the menu B42-relative copying you stop please the following parameter " distance pre-end zone flag down" the numeral value exactly.



4.0 Execution of the leaning trip

- 1.) As the first you position the learning speed in the menu learning trip. You can choose between three speeds of V1, V2 and V3. Remember that each driving motor for a trip with slow speed is not suitable over the complete hoisting depth. If the lift exhibits short trip stops, one should with V1 the learning trip would drive through.
- 2.) Please position the car above the lower pre-end switcher with the inspection or back getting control. You scolded afterwards in the control panel the external control out. After a switching to normal operation you activate the learning trip in the menu **learning trip activate-> Yes**.

The learning trip runs off in three phases:

- 1. Phase:** The elevator drives downwards now with slow Speed-V0 to the lower pre-end switch and brings in into the door zone of the lowest stop. With reaching the zone the elevator is electrically stopped. At the same time the necessary way for the final delay V0->0 is measured. If the counting direction of the incremental giver for the shaft copying polarized the error message appears " F83-DSK- Impulse exchanges". In this case the two impulse trades A+B of the incremental giver exchange and measures trip again with point B) start!
 - 2. Phase:** Afterwards the car drives upward and takes up all zone positions and the position of the pre-end switch Up.
 - 3. Phase:** Subsequently the car drives downward and takes up all zone positions. If deviations should be recognized with reading the switch positions in (too many or too few zones) during the learning trip the error message appears " F85-DSK floor number". In this case the zone magnets as well as their position are to be examined, if necessary with inspection speed a switching of the solenoids on and off examine (solenoids may do when over driving the magnet only 1 x scolded). Start B) the measuring trip again afterwards with point. After successful learning trip appears terminated in the display of the HPG60 " learning trip". The concise position are distributed on the center of the respective zone ranges. The delay ways V3, V2, V1 are reserved automatically with the registered distances in the menu B42. The delay V0->0 likewise reserved with a learning value. In the chess table you find all determined concise values. All values are put down in millimeters and ascending order, i.e. the stop 1 has the lowest value and the highest stop has the lowest value. A learning trip must be compellingly implemented, if the door zones or the pre-end switcher in its position were changed!
- If a new learning trip is implemented then its result is only taken over after a successful third phase. If the learning trip was broken off, then the elevator for normal operation is closed and in the 4 display zone appears invalid the message "learning trip".

5.0 Choice of the driving speeds by adjusting the braking distances

If you want to use only the speed of V3 at your lift, then you can give a pair of car calls now in order to examine the approach mode the plant. If you want to drive in addition with the V1 and/ or V2, or even short trip stops to have must enter you the delay ways for V1 and/or V2.

Please consider during the input:

braking distance V1 < Braking distance V2 < Braking Distance V3

With the choice of the braking distance you also specify, with which speed the elevator control starts the stops. If a delay way for a speed was set to the value zero then this speed is not more used also by the control. E.g. the floor distance of two floor is smaller than the entered value " B43 delay in V3" during this trip the speed of V2 is selected automatically (e.g. floor trip with fasst plants). The floor distance is smaller than the entered value " B43 delay in V2" during this trip the speed of V1 is selected

automatically (e.g. short trip stop). The floor distance is smaller than the entered value “ B42 delay in V1” during this trip the speed of V0 is selected automatically (extreme short trip stop, few cm).

The parameters delay V0-> 0 and delay V3 must always exhibit a value.

6.0 Fairs of the level is not ok and correction of the concise values.

The control was now examined i.e. the car not overdrives the stops and drive in the cab is possible. Connect your HPG60 with the car calling in the car. From there out comfortably the “level is not ok” can be measured and will enter directly into the system. Go with the car into the first stop and select the parameter concise value level 1. Retaining inaccuracies can be stopped by operation of the yellow Plus or Minus-Buttons.

If your car stands too highly then you register the millimeter value which your car stands too highly by, through manipulation of the Minus-Button.

If your car stands too low then by manipulation of the plus button the millimeter value is registered which your car stands too low by.

The determined concise value is corrected automatically.

Repeat the procedure for the other stops.

7.0 Setting the releleveling

Before you enable the releleveling, you must meet the following parameter setting in the B17-releveling:

- 1) The parameter max. Releveling Distance adjust the length of the road to catch up. The Releveling Distance should always be shorter than the half-zone area. Please also note the following facts: The zone area must be set so that it is shorter, as the door bar length.
- 2) The releleveling-tolerance parameters set the starting point for the beginning of the catch. As a default, you should not be less than 5 - 10mm go, because otherwise it lead to unnecessary Releveling Operations any cable vibrations. Have the entries made above, the parameter can be catch-activated.

102-Teach-In with digital absolute copying with zone -switch

1.0 General

The fundamental operational sequence of the start-up of absolute copying with pre-end & zone switch runs off in the following steps: Examination of the electrical installations and attitude of the pre-end switch.

-) Examination of the software attitudes and input of the raking distance of the lower pre-end switch.
-) Examination of the electrical installations and attitude of the pre-end switch.
-) Execution of the leaning trip.
-) Choice of the driving speeds by adjusting the braking distances.
-) Fairs of the level is not ok and correction of the concise values.
-) Optionally: Attitude of the releveling.

2.0 Examination of the electrical installations and attitude of the pre-end switcher

- All contact switches in the safety circuit should be attached.
- The absolute value device system should be functionally installed. This can be on the car or at the switchboard. The entrances are represented in the connection diagram.
- (Page 7).
- The zone switches S71 and S72 (for EoT & releveling) and /or S71 should be functionally. The length of the zone should be symmetrical to the concise line maximally 250 mm into both directions to extend. The more accurately the concise line is met the smaller fails later the concise correction.
- The pre-end switcher 13A and 13B is to be set to that braking distance of the learning trip maximally which can be expected. The function of the pre-end switcher should be examined with the inspection trip. As approximate value one can take the value specified down, which can naturally differ by the adjusted delay values.

Approximate braking distance with 0,8 m/s ² delay	Maximum driving speed
1000 mm	0,63 m/s
1200 mm	1,00 m/s
1800 mm	1,20 m/s
2300 mm	1,60 m/s
3000 mm	2,00 m/s

The bringing in way may be longer than in the normal operation, since the pre-end switch is bridged there and the brake point by digital copying is spent. The pre-end-switch is not however a synchronization point for the control and may after the learning trip not be changed anymore. The pre-end switcher down 13B must lie however between the 1st and 2nd stop.

Equivalent one is to be placed the pre-end-switch above 13A between the next to last and last floor. This rule is to be kept also with short trip stop!

3.0 Examination of the attitudes and the braking distance of the lower pre-end-switch

Before the learning trip begins you should examine the data in the plant parameters (Stop number, kind of copying,...). In addition you should again examine your regulation whether the adjusted delay values meet your braking distances. In the menu B42-relative copying you stop please the following parameter " distance pre-end zone flag down" the numerical value exactly.

4.0 Execution of the leaning trip

1.0 As the first you position the learning speed in the menu learning trip. You can choose between three speeds of V1, V2 and V3. Remember that each driving motor for a trip with slow speed is not suitable over the complete hoisting depth. If the lift exhibits short trip stops, one should with V1 the learning trip would drive through.

2.0 Please position the car above the lower pre-end switcher with the inspection or back getting control. You scolded afterwards in the control panel the external control out. After a switching to normal operation you activate the learning trip in the menu **learning trip activate-> Yes**.

The learning trip runs off in three phases:

1. Phase: The elevator drives downward now with slow Speed-V0 to the lower pre-end switch and brings it into the door zone of the lowest stop. With reaching the zone the elevator is electrically stopped. At the same time the necessary way for the final delay V0->0 is measured. If the counting direction of the incremental giver for the shaft copying polarized the error message appears " F83-DSK- Impulse exchanges". Please in this case the two impulse trades A+B of the incremental giver exchange and measuring trip again with point B) start!

2. Phase: Afterwards the car drives upward and takes up all zone positions and the position of the pre-end switch Up.

3. Phase: Subsequently the car drives downward and takes up all zone positions. If deviations should be recognized with reading the switch positions in (too many or too few zones) during the learning trip the error message appears " F85-DSK floor number". In this case the zone magnets as well as their position are to be examined, if necessary with inspection speed a switching of the solenoids on and off examine (solenoids may do when over driving the magnet only 1 x scolded). Start B) the measuring trip again afterwards with point. After a successful learning trip appears terminated in the display of the HPG60 " learning trip". The concise position is distributed on the center of the respective zone ranges. The delay ways V3, V2, V1 are reserved automatically with the registered distances in the menu B42. The delay V0->0 likewise reserved with a learning value. In the chess table you find all determined concise values. All values are put down in millimeters and ascending order, i.e. the stop 1 has the lowest value and the highest stop has the lowest value. A learning trip must be compellingly implemented, if the door zones or the pre-end-switcher in its position were changed!

If a new learning trip is implemented then its result is only taken over after a successful third phase. If the learning trip was broken off, then the elevator for normal operation is closed and in the 4 display zone appears invalid the message "learning trip".

5.0 Choice of the driving speeds by adjusting the braking distances

If you want to use only the speed of V3 at your lift, then you can give a pair of car calls now in order to examine the approach mode the plant. If you want to drive in addition with the V1 and/ or V2, or even short trip stops to have must enter you the delay ways for V1 and/or V2.

Please consider during the input:

braking distance V1 < Braking distance V2 < Braking Distance V3

With the choice of the braking distance you also specify, with which speed the elevator control starts the stops. If a delay way for a speed was set to the value zero then this speed is not used anymore by the control. E.g. the floor distance of two floor is smaller than the entered value " B43 delay in V3" during this trip the speed of V2 is selected automatically (e.g. floor trip with fast plants). The floor distance is smaller than the entered value " B43 delay in V2" during this trip the speed of V1 is selected automatically (e.g. short trip stop). The floor distance is smaller than the entered value " B42 delay in V1" during this trip the speed of V0 is selected automatically (extreme short trip stop, few cm).

The parameters delay V0-> 0 and delay V3 must always exhibit a value.

6.0 Measurement of the level is not ok and correction of the concise values.

The control was now examined i.e. the car does not overdrive the stops and the drive in the cab is possible. Connect the HPG60 with the car calling in the car. From there out comfortably the "level is not ok" can be measured and will enter directly into the system. Go with the car into the first stop and select the parameter concise value level 1. Retaining inaccuracies to be stopped by operation of the yellow Plus or Minus-Buttons.

If your car stands too highly then you register the millimeter value which your car stands too highly by, through manipulating the Minus-Button.

If your car stands too low then by manipulation of the plus button the millimeter value is registered which your car stands too low by.

The determined concise value is corrected automatically.

Repeat the procedure for the other stops.

7.0 Attitude of the releveling

Before you activate the releveling you must meet following parameter attitude in the menu **B17-releveling**:

1) In the parameter you stop max. retrieving the length of the retrieving way. The retrieving way should always be shorter than the half zone range. Consider the following circumstances: The zone range must be adjusted so that it is shorter than the door sword length.

2) In the parameter you stop tolerance retrieving starting point for the beginning of retrieving. As default value you should go under 5-10 mm since otherwise existing rope oscillations lead to unnecessary releveling procedures. If the inputs described above were transacted the parameter **releveling** can be activated.

103- Commissioning with digital absolute copying without shaft switches

1.0 Examination of the electrical installations and attitude of the pre-end switch

All switches in the safety circuit should be attached. The absolute value device system should be functionally installed. This can be on the car or at the switchboard. The entrances are presented in the connection diagram.

(Page S-07).

2.0 Allocation of the compactness

You scolded "conscise input" in the menu on the attitude floor height. Now you can register for each floor the value in the millimeter (e.g. HS01-0000mm, HS02-3000mm). After all floors were reserved you scold back on the attitude concise correction.

3.0 Execution of the determination of the „counter direction“

The control does not know yet the counting direction of the ABS-absolute-value-encoder. The factory setting value of the parameter counter direction is "negative". Set from there the value to "**lerning: Drive Downward**" and proceed the car with the manual control (releveling control or inspection control) a small piece more deeply until the control terminates the trip. The control learned the counting direction now.

4.0 Execution of the synchronisation in the lowest stop

Now the ABS-absolute-value-encoder with the control must be synchronized meaning the controller has to allocate the announced impulse conditions of the abs giver of the individual floors. In addition you drive the car with the manual control (releveling control or inspection control) into the lowest floor concisely and activate the menu option synchronizing HS01.

5.0 Choice of the driving speeds by adjusting the braking distances

If you want to use only the speed of V3 at your lift, then you can give a pair of car calls now in order to examine the approach mode the plant. If you want to drive in addition with the V1 and/ or V2, or even short trip stops to have must enter you the delay ways for V1 and/or V2.

Please consider during the input:

braking distance V1 < Braking distance V2 < Braking Distance V3

With the choice of the braking distance you also specify, with which speed the elevator control starts the stops. If a delay way for a speed was set to the value zero then this speed is no longer used by the control. E.g. the floor distance of two floor is smaller than the entered value " B43 delay in V3" during this trip the speed of V2 is selected automatically (e.g. floor trip with fast plants). The floor distance is smaller than the entered value "B43 delay in V2" during this trip the speed of V1 is selected automatically (e.g. short trip stop). The foor distance is smaller than the entered value " B42 delay in V1" during this trip the speed of V0 is selected automatically (extreme short trip stop, few cm).

The parameters delay V0-> 0 and delay V3 must always exhibit a value.

Braking distance at 0,8 m/s ² Deceleration	Maximum Speed
1000 mm	0,63 m/s
1200 mm	1,00 m/s
1800 mm	1,25 m/s
2300 mm	1,60 m/s
3000 mm	2,00 m/s

6.0 Measurement of the level is not ok and correction of the concise values

The control was now examined i.e. the car does not overdrive the stops and drive in the cab is possible. Connect your HPG60 with the car calling in the car. From there out comfortably the "level is not ok" can be measured and will enter directly into the system. Go with the car into the first stop and select the parameter concise value level 1. Retaining inaccuracies are stopped by operation of the yellow plus or Minus-Buttons.

If your car stands too highly then you register the millimeter value which your car stands too highly by, thorough manipulating of the Minus-Button.

If your car stands too low then by manipulation of the plus button the millimeter value is registered which your car stands too low by.

The determined concise value is corrected automatically.

Repeat the procedure for the other stops.

104- Commissioning with CANopen Shaft-Copy ANTS-SAFE

1.0 Making the mechanical / electrical installation

1 Assembly of the Variotech-ANTS System

The Variotech ANTS is an absolute measuring system for determining the position of the elevator car, consisting of the reading head, the steel band and the mounting set.

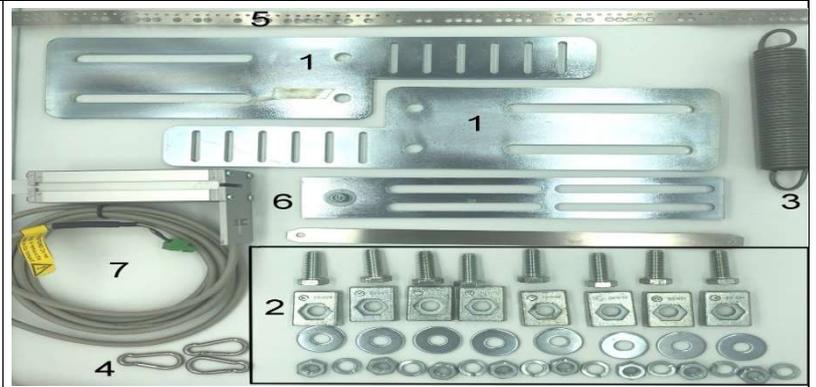
The steel strip is fixed in the upper and lower part of the shaft by means of shaft flag holders. Pay attention to the correct spring preload. The reader can be placed on the steel strip by means of a lateral opening. The position of the large & small holes in the steel strip must be observed when inserting!

Please also note the Variotech ANTS installation instructions!



Mounting kit complete:

- 1 Shaft holder straight and angled
- 2 Screws & Clamps
- 3 Tension spring mounting at the bottom
- 4 K-hook tape mounting on top
- 5 Steel tape
- 6 Holder for reader-unit with attachment
- 7 Reader-unit with cable & plug
- 8 Stainless Steel Band



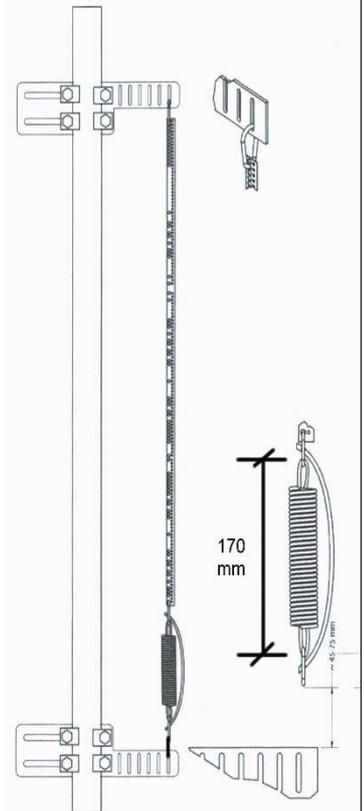
1. Mount the shaft flag holder in the shaft head in compliance with legal and company-related safety regulations. Depending on whether you are installing a central rail or backsack system, use the shaft flag holder straight or angled and fasten it with the fastening set 2.

2. Attach the upper end of the belt by inserting the carabiner hook 4 into the shaft flag holder 1. Before doing this, please check the orientation of the tape using the large & small holes!

3. Drive down with the inspection and rewind the tape directly. Please provide personal protective equipment recommended for use.

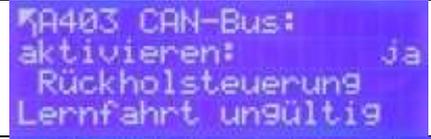
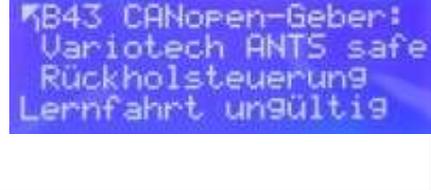
4. Further assembly takes place in the shaft pit. Before entering the pit, ensure that the car is secured against uncontrolled downward movement. For work longer than 15 minutes, the car must be supported in compliance with the safety regulations of the assembly company!

5. Equivalent to steps 1 and 2, the lower shaft flag holder 1 and the holder 2 for the magnetic tape are to be mounted. A tension spring 3 is to be installed and it must be saved with a stainless steel band! Decisive for the functionality is the spring preload. **It should be 170mm!**

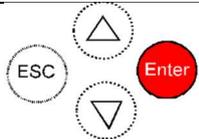
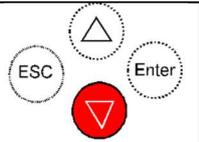
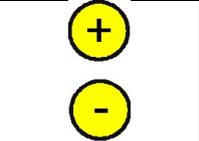
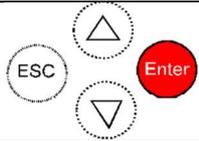
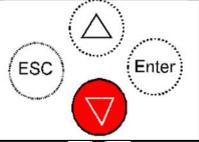
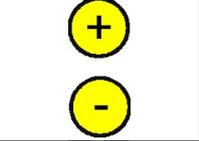
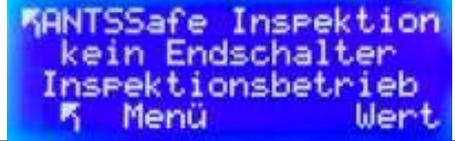
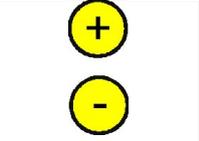
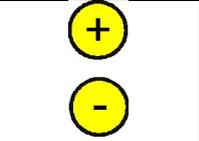
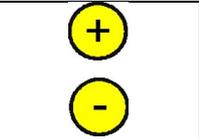
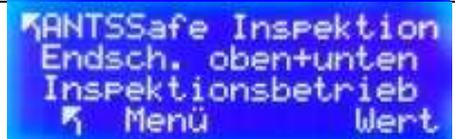


<p>6. Mount the reader-unit 7 on the holder 6 provided for this purpose.</p> <p>7. Insert the steel tape through the side opening on the reader. Use the markers on the reader to check the correct alignment of the holes.</p>		
<p>8. Push the sliding block with the notch provided for the steel strip through the opening.</p> <p>9. Insert the aluminum strip from the top downwards as far as it will go into the slot provided for this purpose.</p>		
<p>10. Mount the holder with the reading head using the 4 screws provided on the cab roof.</p> <p>11. Check the correct mounting. The tape should be mounted vertically and straight. Deviations and angular misalignment must be corrected.</p>		
<p>12. Switch the car computer off with the switch S37 FKR at the inspection box.</p> <p>13. This allows the plug of the Variotech ANTS reading head to be plugged in without voltage. Subsequently, the switch S37 can be switched on again.</p>		
<p>14.</p>	<p>For proper operation of the CANopen bus, a termination resistor is required.</p> <p>If there is only one SIL-3 shaft copying system in the CANopen-standart, it is sufficient that all DiI switches are ON, as in the adjacent picture with switch position down!</p>	

2.0 Check the software settings

	<p>Before starting the teach-in, you should read the specifications in the attachment parameters A4 and the shaft copying menu B43.</p>	
<p>2.1</p>		<p>The CANopen shaft copying system must be functionally installed. Subsequently, the activation takes place in the CANopen menu A402, in which a YES is entered for encoder 1 activated.</p>
<p>2.2</p>		<p>In menu A403 the CAN bus must be switched on. This is done by activating in the menu item CAN bus: a YES.</p>
<p>2.3</p>		<p>In the B43 CANopen encoder menu a SAFE shaft copying system should be set. The choices are: 1.) Variotech ANTS SAFE 2.) LIMAX-33CP SAFE (in preparation)</p>

3.0 Teach-In Setup-1

		<p>After the SIL 3 shaft copying system has been recognized, the Setup 1 parameter is displayed in the Status Safe parameter. By pressing the Enter key one enters the input routine.</p>
	<p>3.1 Enter the zone length This parameter is used to enter the zone length. Later, the zone length can be shortened, but not increased!</p>	
		<p>Change value and enter default value of 200 mm.</p>
		<p>The entry is completed with the ENTER key. When the value is accepted, the saved message appears.</p>
	<p>3.2 Entering the inspection limit switch (protection mode) With shortened pit or / and shortened pit head, inspection switches can be set. The distance to the upper or lower limit switch is 1.2m. These positions are fixed. In order to make it possible to leave the shaft head / pit, the car is already stopped at a distance of 1.4 m!</p>	
		<p>Shaft pit and pit brow have normal height. attitude -> No limit switch and confirm with enter.</p>
		<p>Shaft pit have reduced depth. attitude -> Limit switch down and confirm with enter.</p>
		<p>Pit brow have reduced height. attitude -> Limit switch up and confirm with enter.</p>
		<p>Shaft pit and pit brow are reduced. attitude -> Limit switch up+down and confirm with enter.</p>

	<p>ANTSSafe Inspektion gespeichert Rückholsteuerung Lernfahrt ungültig</p>	<p>After confirmation with ENTER the saved message appears.</p>
	<p>3.3 Enter the nominal speed The SIL-3 shaft copying system can detect overspeed at 115% of nominal speed. For this, the nominal speed must be entered.</p>	
	<p>ANTSSafe Nennge- schwindigkeit: 5,000m/s Rückholsteuerung Lernfahrt ungültig</p>	<p>The default value is 5,00 m/s. This value must be adjusted on the nominal speed of the elevator system.</p>
	<p>ANTSSafe Nennge- schwindigkeit: gespeichert Rückholsteuerung Lernfahrt ungültig</p>	<p>The entry is completed with the ENTER-Key. When the value is accepted, the saved message appears.</p>

3.4 Teaching the limit switch UP

<p>3.4a Normal pit-brow</p>	<p>3.4b Reduced pit-brow</p>
<p>Key down:</p>	<p>Key down:</p> <p>ANTSSafe Endschalt. OBEN-1500 lern.:nein Rückholsteuerung Lernfahrt ungültig</p> <p>Set to YES with yellow keys.</p> <p>ANTSSafe Endschalt. OBEN-1500 lernen: ja Rückholsteuerung Lernfahrt ungültig</p>

	<p>Reach top level landing position (1400 mm under flush) with the return control and enter YES in the menu.</p>
<p>1.) Move the limit switch position UP (100mm above flushing) with the backflow regulator. Elevator car stops, when reaching the position. 2.) Enter yes in the menu.</p>	
	<p>Move limit switch position UP (100mm over flush) with the return control. Elevator car stops on reaching the position.</p>
<p>The ANTSSafe limit switch UP position is automatically saved!</p>	
	<p>The ANTSSafe limit switch UP position is automatically saved!</p>

3.5 Learning the lower limit switch

		<p>1.) Enter YES in the menu. 2.) Move the limit switch position DOWN (100mm over flush) with the return control. Elevator stops on reaching the position.</p>
		<p>The ANTSSafe limit switch DOWN position is automatically saved! Note: From now on the SiKr is closed, if the elevator is not in the limit switch!</p>

3.6 Entry Distance – Lower Delay Control Point

		<p>Enter and change the value, OFF, 2 to 500 cm; Can be changed later -. possible in inspection mode or return to safe state Vnenn: 1,6 m/s -> 300 cm Vnenn: 2,0 m/s -> 350 cm Vnenn: 2,5 m/s -> 400 cm</p>
		<p>ANTSSafe Delay control down was stored.</p>

3.7 Entry Distance – Upper delay control point

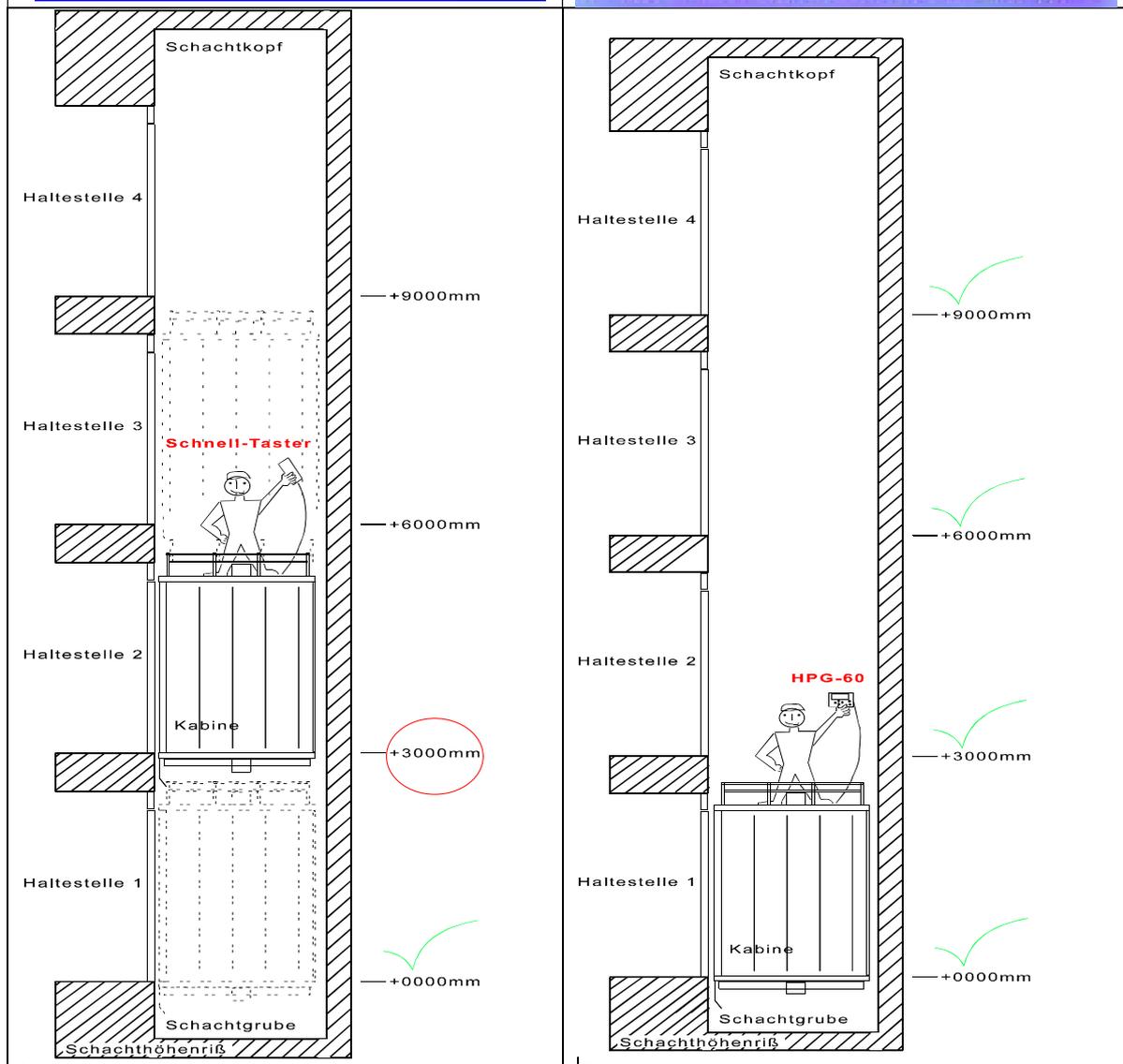
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	<p>ANTSSafe Verzöger.- kontroll.oben: aus Rückholsteuerung Lernfahrt ungültig</p>	<p>Enter value and change OFF, 2 to 500 cm; Can be changed later - possible in inspection mode or return to safe condition Vnenn: 1,6 m/s -> 300 cm Vnenn: 2,0 m/s -> 350 cm Vnenn: 2,5 m/s -> 400 cm</p>
	<p>ANTSSafe Verzöger.- kontroll.oben: gesp. Rückholsteuerung Lernfahrt ungültig</p>	<p>ANTSSafe Delay Contro Top has been saved!</p>
	<p>B43 ANTSSafe Status SAFE setup-3 Rückholsteuerung Lernfahrt ungültig</p>	<p>Note: (setup-3 means that all ASA parameters have been configured but no floors have been learned into the ASA) Note: If DSK is active, i. the floors have already been taught-in in the D613 and the flush levels are set then: ENTER ->STEP-3 key otherwise: DOWN key</p>

3.8 STEP-2: D613-Learn leves and adjust levels

Two methods can be selected for learning floors, in the B43 menu learning floors:

<p>B43 Etage lernen: manuell anfahren Rückholsteuerung Lernfahrt ungültig</p>	<p>B43 Etage lernen: mit Schachttabelle Rückholsteuerung F45-Motortemperatur</p>
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<p>All, except for the top Floor be approached with inspection. The car is leveled and the position is learned and accepted with the red button on the HPG-60 or the quick button on the inspection control.</p>	<p>All flush values in mm were entered into the shaft table of the control system on the basis of the floor height. The car is driven flush with inspection in the lowest floor and with the help of the HPG-60 this floor is synchronized. As a result, all floors are learned!</p>
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3.8A Learn floors with the method „ Manually start“

	<pre> ↵B43 Etage lernen: manuell anfahren Rückholsteuerung Lernfahrt ungültig </pre>	<p>With the push button down the setting „manually start“ choose.</p>
	<pre> ↵B43 lernen aktiv: nein Rückholsteuerung Lernfahrt ungültig </pre>	<p>Use the yellow keys to set the value "Yes".</p>
	<pre> ↵B43 lernen aktiv: Etage-01 lernen Eingabe: AUF-Taste Lernfahrt ungültig </pre>	<p>.. and press the enter key!</p> <p>The display now indicates that the lowest floor is to be taught-in.</p>
<p>ODER</p>		<p>Therefore, the bottom floor will start manually (INSPECTION OR RETURN CONTROL)</p> <p>Now press the red "UP" button in the HPG or press the QUICK button on the inspection bulb</p>
	<pre> ↵B43 lernen aktiv: Etage-01 Etage gespeichert Lernfahrt ungültig </pre>	<p>Result: The piezo sounds in the cabin for 1 second and in the 3rd line the text „Floor saved“ is displayed as confirmation!</p>
	<pre> ↵B43 lernen aktiv: Etage-02 lernen Rückholsteuerung Lernfahrt ungültig </pre>	<p>Learn next floor by: Pressing the UP-button on the Inspection Onbulb or if the HPG-60 is being used, press the ENTER button. 3rd line activated: Display 3rd line: „Input: UP button“</p>
	<pre> ↵B43 lernen aktiv: Etage-02 lernen Eingabe: AUF-Taste Lernfahrt ungültig </pre>	<p>1.) The floor-02 with start inspection (or return). 2.) Press the QUICK button on the inspection bulb, or press the UP button if the HPG-60 is being used</p>
<p>Note: If the penultimate floor is reached, then the top floor is automatically occupied (end-switch TOP: - 100mm). Result: The piezo sounds in the cabin for 1 second & in the 3rd line the text „Floor stored“ is displayed as confirmation!</p>		
	<pre> ↵B43 lernen aktiv: ! Etagen gelernt ! Etage gespeichert ↵ Menü Wert </pre>	<p>Now switch the elevator to normal operation</p> <p>Go to STEP 3.9</p>

3.8B OPTIONAL: Learning floors with the method, „With shaft table“

Assignment of the shaft table

In the menu item "Flush input", switch to the "Floor height" setting. Now you can enter the value in millimeters for each floor, e.g. HS01-0000mm, HS02-3000mm.). After all floors have been preset, switch back to the setting Flush Correction.

Performing the synchronization in the lowest floor

Now the ABS encoder must be synchronized with the controller, i. The control must assign the individual pulses to the reported impulse levels of the ABS encoder. To do this, drive the drive basket with the manual control (return control or inspection control) to the lowest level flush and activate the Synchronize HS01 menu item.

3.9 Setting the final delay V0 > 0

In the menu End delay V0 > 0 learn to activate the point. The elevator drives about 0.5m with the speed V0. After that, the delaying pain is learned and stored.



Note: Zones are not yet issued from SAFE copying, doors open at standstill on the approached floor

3.10 Choice of travel speeds by adjusting the braking distances

If you only want to use speed V3 on your lift system, you can now give a couple of intercom calls to check the entry behavior of the system.

However, if you also want to drive with the V1 or / and V2, or even have short-stay stops, you must enter the delay paths for V1 or V2.

Please note when entering: braking **distance V1 <braking distance V2 <braking distance V3**. By selecting the braking distance, you also specify the speed with which the elevator control approaches the stops. If a delay path for a speed has been set to the value zero, then this speed is also no longer used by the controller.

Is e.g. if the two-storey floor space is smaller than the entered value "B43 Delay at V3", the speed V2 is automatically selected during this drive (for example, floor drive for fast systems). If the floor distance is less than the entered value "B43 Delay at V2", the speed V1 is automatically selected during this drive (for example, short landing stop).

If the floor distance is smaller than the entered value "B43 delay at V1", the speed V0 is automatically selected during this drive (extreme short stay, a few cm).



The parameter delay V3 must always have a value!

3.11 Measuring the irregularities and correcting the flush values

6.1	After checking from the controller that the elevator car does not override the stops and that it is possible to drive from the cab, please bring your HPG60 and, if possible, connect it to the FKR (car computer) on the car roof.
6.2	<p>Take the elevator car to the first stop and select the Flush Level 1 parameter. Press the yellow plus or minus buttons to set the hold inaccuracies.</p> <p>-> If your elevator car is too high, press the minus button to enter the millimeter value that your elevator car is too high.</p> <p>-> If it is too low, pressing the plus button will enter the millimeter value that your elevator car is too low. The calculated flush value is automatically corrected.</p>
6.3	Repeat the procedure for the other stops.

4.0 STEP-3: Safekopierung – teach zones

   		<p>Navigate with arrow keys and select the menu item with ENTER.</p>
 		<p>Navigate with yellow keys and enter "yes"</p>
   		<p>Note: Elevator moves 2x all floors. Afterwards, the status of the ANTS safe system is in "normal mode" and all zones are output and monitored</p>

	<p>Warning! If the Step-3 is not closed successfully, there is a message like „Out of Order“ in the displays and all 25 seconds a warning-signals appears! A normal operation is NOT possible!</p>
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4.1 Adjustment of releveing

	<p>Before you activate readjustment, you must make the following parameter settings in menu B17 readjustment:</p>
<p>7.1</p>	<p>In parameter Max. Catch-up distance you set the length of the catch-up path. The distance should always be shorter than half the zone area. Please also note the following facts: The zone area must be set so that it is shorter than the length of the door.</p>
<p>7.2</p>	<p>In parameter Tolerance Recall you set the starting point for the start of the retrieval. By default, you should not go below 5 - 10mm, as otherwise existing rope vibrations lead to unnecessary readjustment. If the above entries have been made, the parameter Recall can be activated.</p>

4.2 ANTS- SAFE – copy – error handling

If the ANTSsafe detects a serious fault and locks itself, this condition can only be reset for safety reasons by deactivating the power supply and switching on the 24VDC on the ANTSsafe again. This can be done on the D613 by briefly changing the state of the inspection or return switch. This will set the output function A611 for 2 sec. The function A611 should control a relay, which will break the 24V supply voltage at the ANTSsafe.

104a- Commissioning with CANopen Shaft-Copy KÜBLER ANTS-SAFE

1.0 Making the mechanical Mounting

The Kübler LES02 is an absolute measuring system for determining the position of the elevator car, consisting of the reading head, the steel band and the mounting set.

The steel strip is fixed in the upper and lower part of the shaft by means of shaft flag holders. Pay attention to the correct spring preload.

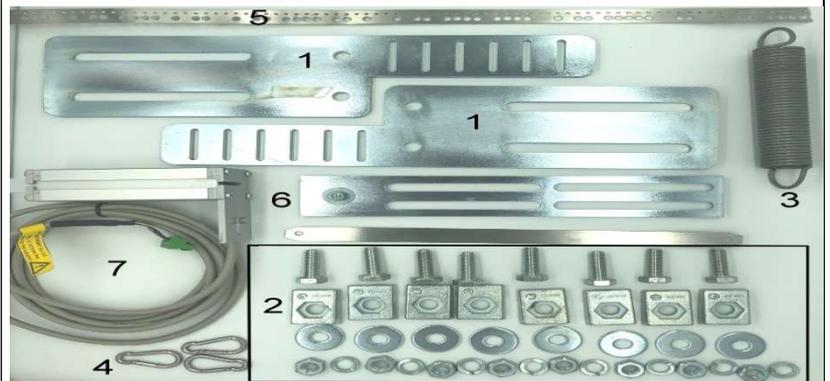
The reader can be placed on the steel strip by means of a lateral opening. The position of the large & small holes in the steel strip must be observed when inserting!

Please also note the Kübler-LES02-SAFE installation instructions!



Mounting kit complete:

- 1 Shaft holder straight and angled
- 2 Screws & Clamps
- 3 Tension spring mounting at the bottom
- 4 K-hook tape mounting on top
- 5 Steel tape
- 5 Holder for reader-unit with attachment
- 7 Reader-unit with cable & plug
- 8 Stainless Steel Band



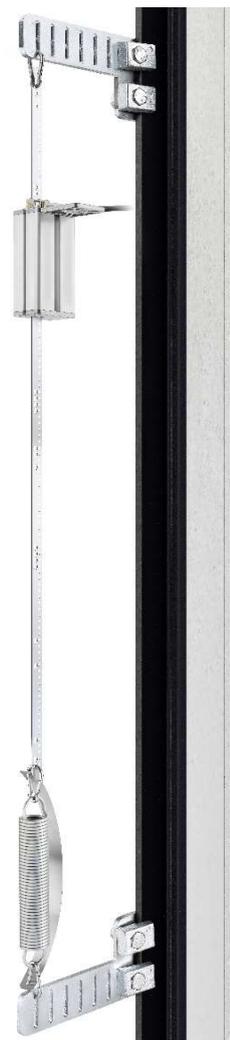
1. Mount the shaft flag holder in the shaft head in compliance with **legal and company-related safety regulations**. Depending on whether you are installing a central rail or backsack system, use the shaft flag holder straight or angled and fasten it with the fastening set 2.

2. Attach the upper end of the belt by inserting the carabiner hook **4** into the shaft flag holder **1**. Before doing this, please check the orientation of the tape using the large & small holes!

3. Drive down with the inspection and rewind the tape directly. Please provide personal protective equipment recommended for use.

4. Further assembly takes place in the shaft pit. Before entering the pit, ensure that the car is secured against uncontrolled downward movement. For work longer than 15 minutes, the car must be supported in compliance with the safety regulations of the assembly company!

5. Equivalent to steps 1 and 2, the lower shaft flag holder 1 and the holder **2** for the magnetic tape are to be mounted. A tension spring **3** is to be installed and it must be saved with a Stainless steel band **8**. Decisive for the functionality is the spring preload. **It should be 170mm!**



6. Insert the steel band through the side opening on the reader. Check the correct alignment of the holes using the marks on the reader.



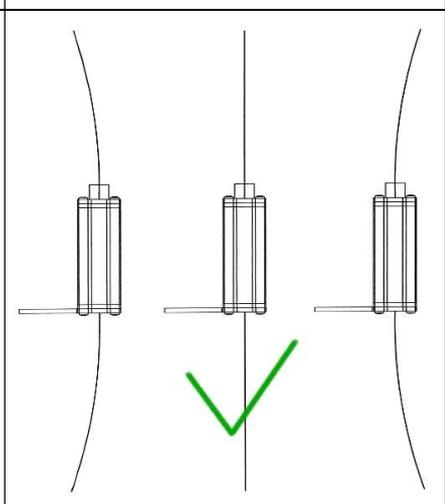
7. Push the sliding jaw through the opening with the notch intended for the steel strip.

8. Insert the aluminum strip from top to bottom into the slot provided for this purpose.



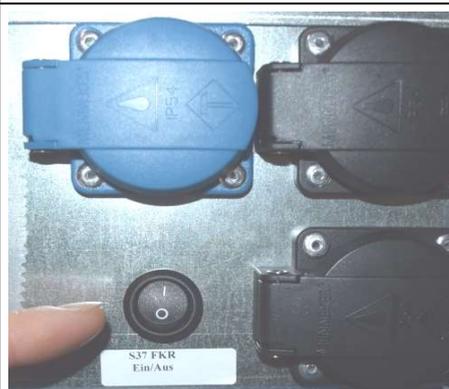
9. Please mount the reader 7 on the holder 6 provided. **Up to 3 screws are available.**

10. The holder with the reading head is mounted on the cabin roof with the **4 screws** provided.



11. Check the correct assembly. The tape should be installed as vertically and straight as possible. Deviations and angular misalignments must be corrected. Otherwise the sliding jaws will be damaged!

12. Switch the car computer off with the switch **S37** FKR at the inspection box.



13. The plug of the Kübler LES02 read head can be plugged into the ASE unit when de-energized. Subsequently, the switch **S37** can be switched on again.

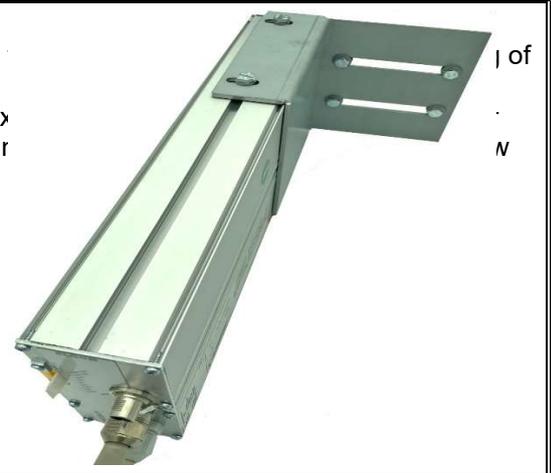


105- Commissioning with CANopen Shaft-Copy ELGO-SAFE 33CP

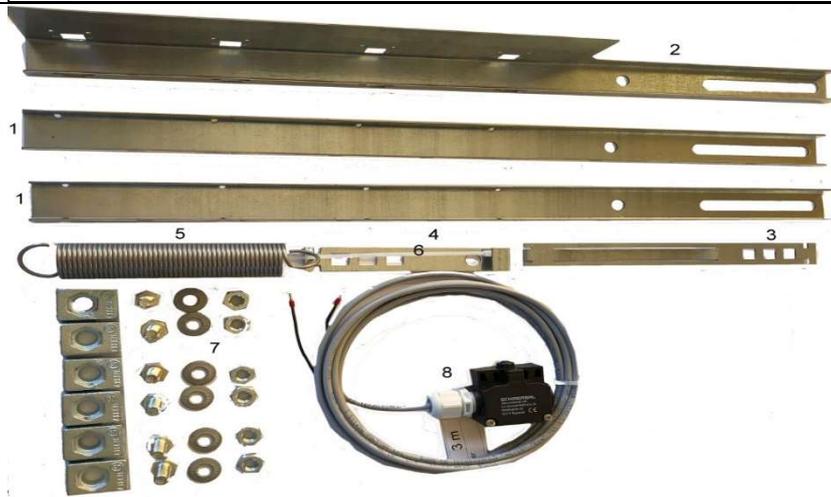
1.0 Making the mechanical / electrical Installation

The ELGO LIMAX CP33 is an absolute measuring system for determining the reading head, the steel belt and the fixing set.
 The measuring system can work at a shaft height of up to 100m and a max resolution. The magnetic tape is fixed with shaft tab holders in the upper ar shaft flag holder a shaft flag holder is attached to the belt breaker.
 It is important to pay attention to the correct spring preload.
 Passed through a gap in the reader on the magnetic tape

Please also note the ELGO-LIMAX installation instructions!



- Assembly kit complete:
- 0 Reader with mounting bracket
 - 1 2x Shaft flag holder for top & bottom
 - 2 1x Shaft flag holder for tape demolition switch
 - 3 Bandholder below for tape demolition switch
 - 4 Top band holder
 - 5 Tension spring
 - 6 2x cable ties
 - 7 6x screws, u-washer, nuts & Clamping claws
 - 8 Tape breaker with cable and attachment
 - 9 Magnetic tape



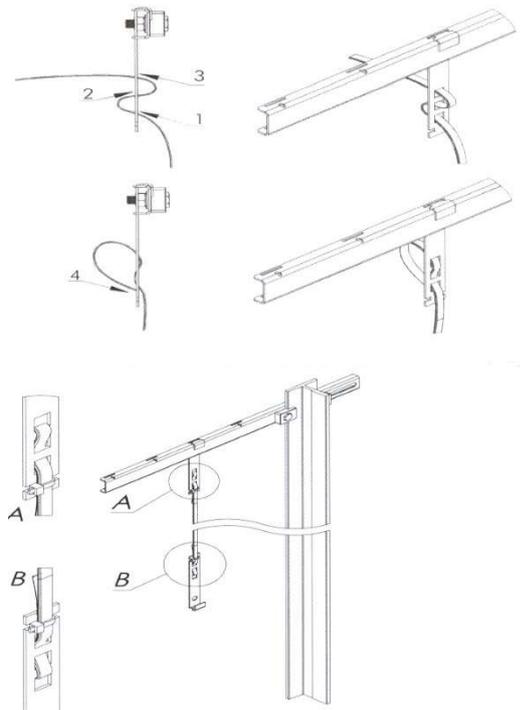
Montage-Set

1. Mount the shaft flag holder 1 in the shaft head in compliance with the **legal and company-related safety regulations**. With fastening set 4 (clamps) with a tightening torque of 20 Nm.

2. Attach the top end of the tape by inserting the holder 4 into the shaft flag holder 1. Before inserting the magnetic tape, please check the orientation of the tape. **The printed arrows on the magnetic tape must point to the shaft head!** The image to the right shows you how to insert the tape into the holder. Finally, the band end is secured with a cable tie 6.

3. Go down with inspection and unwind the tape directly. Please wear the personal protective equipment recommended for use. Avoid damage to the tape.

4. Drive the cabin into the middle of the shaft and let the entire belt into the shaft pit so that it hangs freely.



5. The freely suspended magnetic tape shows you the position where you have to mount the sensor on the cabin. The mounting bracket is already pre-mounted on the ELGO-CP33 sensor and the screw mounting is included. Check again whether the chosen mounting position is suitable.

6. Now pass the tape through the sensor. When using the tape as a reference, align the sensor in the middle.

7. Now adjust the distance between the tape and the sensor. For lifting heights up to 50 meters we recommend a distance of approx. 15mm. This offset ensures that the strip is correctly guided on the steel side during operation. Make sure that the sensor head is mounted vertically. Deviations lead to increased wear.

8. Further assembly takes place in the shaft pit. Before entering the pit, ensure that the car is secured against uncontrolled downward movement. When working for more than 15 minutes, be sure to wear the car while observing the safety regulations of the company!

9. Equivalent to steps 1 and 2, the lower shaft flag holder 1 and the holder 3 for the magnetic tape to be mounted. Please note that deviating from step 2 the space for a tension spring 5 must be provided! See right picture!

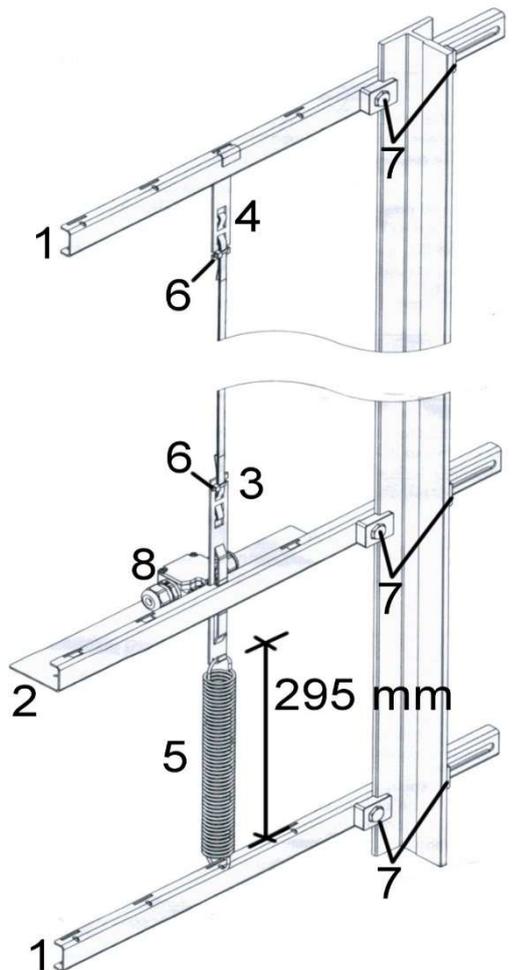
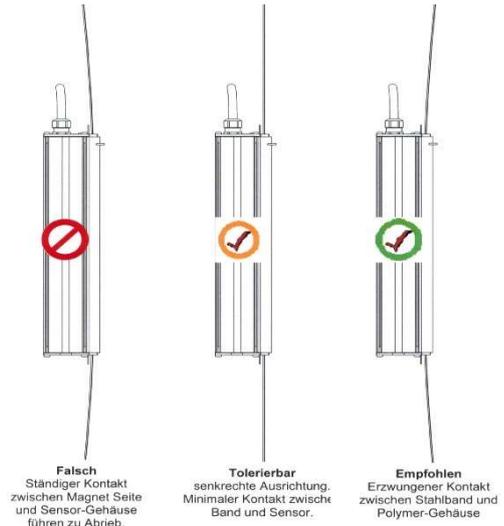
You need a space of 295mm.

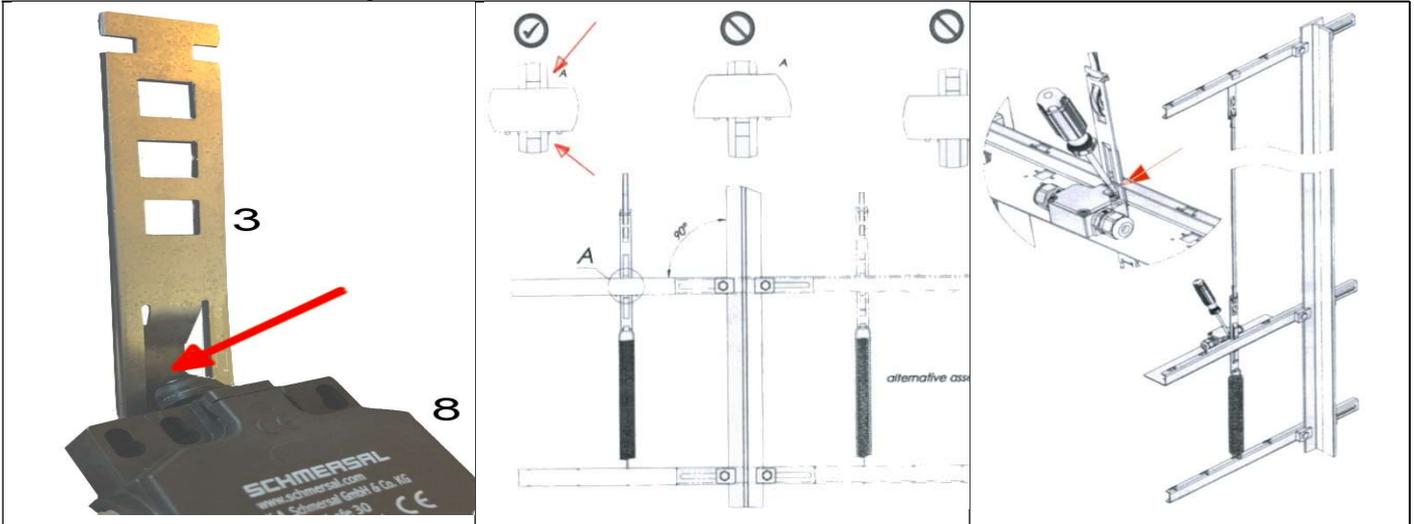
10. Before you attach the spring, you must mount the shaft flag holder 2 with the belt breaker 8. The final location will be determined later.

11. Now you can hook in the spring 5. Decisive for the functionality is the spring preload. **It should be 295mm!**

12. Now it goes on with the exact installation of the strip breaker 8:

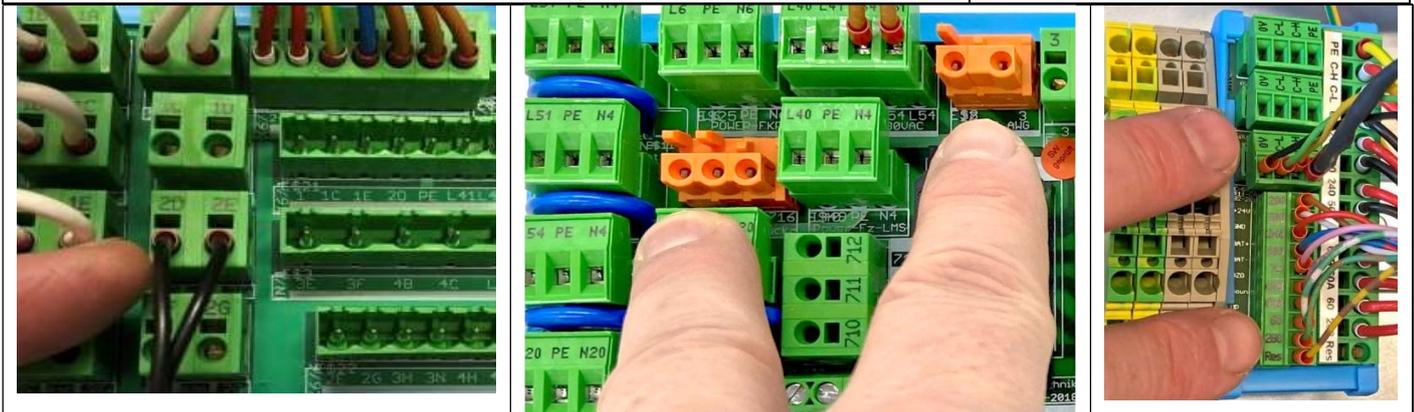
The tape breaker is used to detect a tearing of the magnetic tape. The plunger of the switch is pushed in by the lower band holder and locks in this position. As a result, the safety circuit is permanently interrupted.





13. The belt breaker 8 is operated by the groove in the lower belt holder 3. Please fasten the belt breaker on the shaft lug holder. The shaft flag holder with the belt breaker is now positioned so that a mark on the belt clip is visible upwards and one downwards. The shaft flag holder is to be tightened at a **90 degree angle** with a tightening torque of 20 Nm.

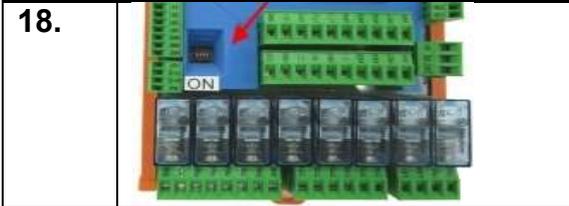
14. Subsequently, the band breaker 8 is set sharp. To do this, carefully remove the plunger (actuator) with a screwdriver



15. In the shaft pit / shaft pit box: Inserting the belt breaker cable with the wires 1-> 2D and 2-> 2E.

16. On the elevator car / inspection box: Plug in the SCA cable with the **715-PE-716 plug** and the **2Z-3 plug**.

17. In the inspection box: Plug in the **POI cable** with the pre-extended plugs.



18. For proper operation of the CANopen bus, a termination resistor is required.

If there is only one SIL-3 shaft copying system in the CANopen standard, it is sufficient that all Di1 switches are ON, as shown in the picture with switch position down!



Attention!
18. Ground the sensor with the grounding cable provided by mounting the sensor with the flat plug and the other end in the inspection box on PE!



20. Check the correct installation. Deviations and angular misalignment must be corrected. An inspection trip through the shaft is the best way to do this.

21. Check the correct installation. Deviations and angular misalignment must be corrected. An inspection trip through the shaft is the best way to do this.

2.0 Check the Software Settings

	Before starting the teach-in, you should read the specifications in the attachment parameters A4 and the shaft copying menu B43.	
2.1		The CANopen shaft copying system must be installed properly. The activation then takes place in the CANopen menu A402 , in which a YES is entered for encoder 1 activated.
2.2		In menu A403 the CAN bus must be switched on. This is done by activating in the menu item CAN bus: a YES .
2.3		A SAFE shaft copying system should be set in menu B43 CANopen encoder. The following selection is made: LIMAX-33CP SAFE

3.0 Teach-In Setup-1

		Setup-1 config. means that the LIMAX33CP has not yet done a basic configuration. The basic configuration is only possible once and is usually carried out before delivery!
	3.1 Input – electromagnetic safety gear? The option "yes" is only required if an electrical catch is to be controlled directly by the electronic output eSGC on the LIMAX33CP.	
		Normally, this is not the case. Therefore: No -> Continue with 3.2 Inspection If you want to control an electromagnetic safety gear or a TSB brake: Yes -> Continue with catch triggering
	3.1 a Input - type of catch triggering? The LIMAX CP33 offers the options of catch release UP & DOWN, DOWN only and UP only.	
		Depending on the electromagnetic safety gear used: UP & DOWN, DOWN only and UP only
	3.1 b Input - UCM Trip of the safety gear? The LIMAX CP33 offers the option to connect the UCM function with the catch release in connection with the catch release.	
		If you have an electromagnetic safety gear Yes -> Continue monitoring the inspection
	3.2 Input - Monitoring the Inspection ? The LIMAX CP33 offers the options for inspection operation: monitoring / no cabling. The monitoring mode monitors the inspection speed and the optional inspection limit switches.	

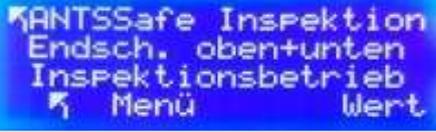
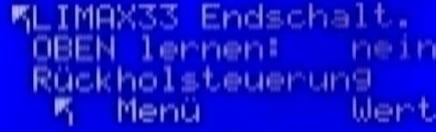
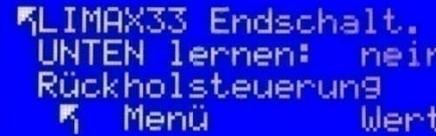
	<p>KLIMAX33 Inspektion: Überwachung Normalbetrieb Lernfahrt ungültig</p>	<p>Basically, we always select monitoring mode to comply with EN81-20. The following entry: Monitoring</p>
	<p>KLIMAX33 Nennge- schwindigkeit: 1,000m/s Rückholsteuerung Menü Wert</p>	<p>Entering the rated speed of the Elevator system in: m/s</p>
	<p>KLIMAX33 Verzöger.- kontrolle ETSL: aus Rückholsteuerung Menü Wert</p>	<p>Normal shaft -> OFF Reduced head / pit -> ON</p>
<div style="text-align: center;"> <p>Have You any reduced Shaft-Pit or Shaft-Head?</p> <pre> graph TD A([Have You any reduced Shaft-Pit or Shaft-Head?]) --> B([NO - Normal Shaft]) A --> C([YES - Reduced Shaft-Pit or Shaft-Head]) </pre> </div>		
	<p>3.4a Input – Delay Control -> Braking delay Each brake element has its characteristic delay value. The value of the braking system of the drive system is stated in the certificate. Value range from 0.1 to 10 m / s².</p>	
	<p>KLIMAX33 ETSL Verz. Bremsen: 01,400m/s² Rückholsteuerung Menü Wert</p>	<p>Entering the braking deceleration of the elevator system in: m/s²</p>
	<p>3.4b Input – Delay Control -> Time delay Each control system has runtimes due to switching elements. Here, the time delay is to be entered until the brake element responds. Value range from 20 to 500 ms.</p>	
	<p>KLIMAX33 ETSL Zeit- verzug: 100ms Rückholsteuerung Menü Wert</p>	<p>Enter the time delay until the brake element responds: 100 ms</p>
	<p>3.4c Input - Delay Control -> buffer speed Here, the value for the speed is entered, with which the buffer can be maximally opened. Range of values from 0.0 to 2.5 m / s.</p>	
	<p>KLIMAX33 ETSL Puffer geschwindigkeit: 0,600m/s Rückholsteuerung Menü Wert</p>	<p>Entering the maximum buffer speed of the elevator system m/s</p>

	<p>3.4d Input – Delay Control -> Offset UP Offset distance in mm of the calculated distance s (shelter) in the upwards direction. Value range from 0 to 1000 mm.</p>	
		<p>Input of the offset value in the upwards direction: 100 mm</p>
	<p>3.4e Input – Delay Control -> Offset Down Offset distance in mm of the calculated distance s (shelter) in the downward direction. Value range from 0 to 1000 mm.</p>	
		<p>Input of the offset value in the downward direction: 100 mm</p>

		<p>To save, select "yes" with + or - and press ENTER.</p>
		<p>The message LIMAX33 Configuration saved appears: ok</p>
	<p>The basic configuration is now stored in the LIMAX33CP. This cannot be changed!</p>	

3.5 Teach-In Setup-2

	<p>3.5 Enter the zone length This parameter is used to enter the zone length. Later, the zone length can be changed!</p>	
		<p>Change value and enter default value of 200 mm (maximum value). This value can be changed again later!</p>
	<p>3.6 Input of the inspection limit switch For shortened shaft pit and/or shortended pit-brow, inspection switches can be set. The following options exist:</p>	
		<p>Shaft pit and pit-brow have normal height. Setting -> No limit switch</p>
		<p>Shaft pit has reduced depth. Setting -> Limit switch down</p>

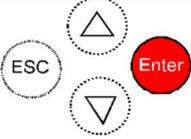
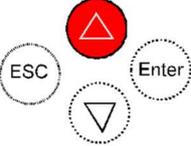
 		<p>Pit-brow has a reduced height. Setting -> Limit switch top</p>
 		<p>Shaft pit and pit-brow are reduced. Setting -> Limit switch top + bottom</p>
   	<p>3.7 Learning the upper limit switch</p>	
 		<p>1.) Approach the limit switch position UP with the return control. Stop the elevator car when reaching position.</p>
   		<p>2.) A YES is entered in the menu. The LIMAX CP33 limit switch TOP position is saved!</p>
   	<p>3.8 Learning the lower limit switch</p>	
 		<p>1.) Approach limit switch position DOWN with the return control. Stop the elevator car when reaching position.</p>
   		<p>2.) A YES is entered in the menu. The LIMAX CP33 limit switch DOWN position is stored!</p>
	<p>From now on, the safety circuit is now closed if the lift-cab is inside the limit switch.</p>	

3.9 STEP-2: D613-Learn floors and adjust Precision

There are two ways to learn the floors, in the B43 menu Learning floors	
<p>⬆B43 Etage lernen: manuell anfahren Rückholsteuerung Lernfahrt ungültig</p>	<p>⬆B43 Etage lernen: mit Schachttabelle Rückholsteuerung F45-Motortemperatur</p>
<p>All, except for the top stop are approached with inspection. The car is leveled and the position is learned and accepted with the red button on the HPG-60 or the quick button on the inspection control.</p>	<p>All flush values in mm were entered into the manhole table of the control system on the basis of the manhole height. The elevator car is driven flush with inspection in the lowest stop and with the help of the HPG-60, this stop is synchronized. As a result, all floors are learned!</p>

3.9A Floors learn with the method, „Manually start“

	<p>⬆B43 Etage lernen: manuell anfahren Rückholsteuerung Lernfahrt ungültig</p>	<p>Use the maintenance key downwards to select the setting "manually approach".</p>
	<p>⬆B43 lernen aktiv: nein Rückholsteuerung Lernfahrt ungültig</p>	<p>Use the yellow buttons to set the value "Yes".</p>

	<pre> KW43 lernen aktiv: Etagē-01 lernen Eingabe: AUF-Taste Lernfahrt ungültig </pre>	<p>.. and press the ENTER key!</p> <p>Display now indicates that the lowest floor should be installed...</p>
		<p>Therefore, the lowest floor will start manually (INSPECTION OR RETURN CONTROL)</p> <p>Now press the red "UP" button in the HPG or press the QUICK button on the inspection bulb</p>
	<pre> KW43 lernen aktiv: Etagē-01 Etagē gespeichert Lernfahrt ungültig </pre>	<p>Sequence! The piezo will sound in the cabin for 1 second and the text "Floor stored" will be displayed as confirmation in the 3rd line</p>
	<pre> KW43 lernen aktiv: Etagē-02 lernen Rückholsteuerung Lernfahrt ungültig </pre>	<p>Learn next floor by: Pressing the UP-button on the inspection bulb or if the HPG-60 is being used, press the ENTER button. The 3rd line is activated: Display 3rd line: "Input: UP button".</p>
	<pre> KW43 lernen aktiv: Etagē-02 lernen Eingabe: AUF-Taste Lernfahrt ungültig </pre>	<p>1.) The floor-02 with start inspection (or return). 2.) Press the QUICK button on the inspection bulb, or press the UP button if the HPG-60 is being used.</p>
<p>Note: If the penultimate floor is reached, then the top floor is automatically occupied (limit switch TOP:-100mm) Result: The piezo sounds in the cabin for 1 second and in the 3rd line the text "Floor saved" is displayed as confirmation</p>		
	<pre> KW43 lernen aktiv: ! Etagen gelernt ! Etagē gespeichert ↩ Menü Wert </pre>	<p>Now switch the elevator to normal operation Go to STEP 3.10</p>

3.9B OPTIONAL: Floors learn with the method „With shaft table“

Assignment of the flush positioning

In the menu item "Flush input", switch to the "Floor height" setting. Now you can enter the value in millimeters for each floor, e.g. HS01-0000mm, HS02-3000mm.). After all floors have been preset, switch back to the setting Flush Correction.

Performing the synchronization in the lowest stop

Now the ABS encoder must be synchronized with the controller, i. the controller must assign the individual pulses to the reported impulse levels of the ABS encoder. To do this, drive the drive basket with the manual control (return control or inspection control) to the lowest level flush and activate the Synchronize HS01 menu item.

3.10 Setting the Final deceleration V0 > 0

In the menu **Final deceleration V0>0 learn to activate the point**. The elevator moves about 0.5m at the speed V0. After that, the delaying pain is learned and stored.



Note: There are still no zones issued by the SAFE copy, doors open at standstill in the approached floor

3.11 Choice of travel speeds by adjusting the braking distances

If you only want to use the V3 speed on your lift system, you can now give a couple of intercom calls to check the entry behavior of the system.

However, if you also want to drive with the V1 or / and V2, or even have short-stay stops, you must enter the delay paths for V1 or V2.

Please note when entering: braking distance V1 <braking distance V2 <braking distance V3

By choosing the braking distance, you also specify the speed with which the elevator control approaches the stops. If a delay path for a speed has been set to the value zero, then this speed is also no longer used by the controller.

Is e.g. If the floor level of two floors is smaller than the entered value "B43 Delay at V3", then the speed V2 is automatically selected during this drive (for example floor drive for fast systems). If the floor distance is less than the entered value "B43 Delay at V2", the speed V1 is automatically selected during this drive (for example, short landing stop).

If the floor distance is smaller than the entered value "B43 delay at V1", the speed V0 is automatically selected during this drive (extreme short stay, a few cm).

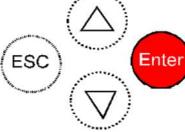
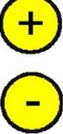
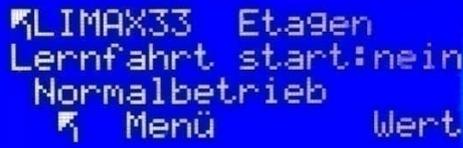
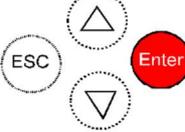


The parameter delay V3 must always have a value!

3.12 Measuring the irregularities and correction der Bündigwerte

1	After checking from the controller that the car does not override the stops and that it is possible to drive from the cab, please bring your HPG60 and, if possible, connect it to the FKR (car computer) on the car roof
2	Take the car to the first stop and select the parameter Flush Level 1. Press the yellow plus or minus buttons to seat the stop inaccuracies.
->	If your elvator car is too high, press the minus button to enter the millimeter value that your elevator car is too high.
->	If it is too low, pressing the plus button will enter the millimeter value that your elevator car is too low. The calculated flush value is automatically corrected.
3	Repeat the procedure for the other stops.

4.0 STEP-3: Safecopying – Teach Zones

		<p>Navigate with arrow keys and select the menu item with ENTER.</p>
		<p>Use yellow keys + or - to navigate and enter "yes"</p>
		<p>Note: Elevator moves 2x all floors. Afterwards, the status of the LIMAX-CP33 system is in "normal operation" and all zones are output and monitored.</p>

	<p>Warning! If the Step-3 is not closed successfully, there is a message like „Out of Order“ in the displays and all 25 Seconds a warning-signals appears! A Normal-operation is NOT possible!</p>
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4.1 Setting the readjustment

	<p>Before activating readjustment, you must make the following parameter settings in menu B17 readjustment:</p>
<p>7.1</p>	<p>In the parameter Max. Catch-up distance you set the length of the catch-up path. The catch-up distance should always be shorter than half the zone area. Please also note the following facts: The zone area must be set so that it is shorter, such as the length of the door sash.</p>
<p>7.2</p>	<p>In the Parameter Tolerance Recalculate you set the starting point for the beginning of the retrieval. As a default, you should not go below 5 - 10mm, as otherwise existing rope vibrations lead to unnecessary readjustment. If the above entries have been made, the parameter Catch-Up can be activated.</p>

4.2 ELGO LIMAX CP33 -Copy – Error handling

If the LIMAX33 detects a serious error and locks, this state can only be reset by a RESET command for safety reasons. This can be done on the D613 by briefly changing the state of the inspection or return switch.
This will send a RESET command to the LIMAX33CP via the CANopen protocol and this will reboot.

4.3 ELGO LIMAX CP33 – Brief summary of commissioning

Status LIMAX33CP: Setup-1-Konfig. (only possible if LIMAX33CP still without basic configuration)

Possible settings:

1. LIMAX33 Exit: eSGC Elevator arrestor activ: **no**
2. LIMAX33 Inspection: **Monitoring**/No cabling
3. LIMAX33 Nominal speed: 1,000m/s
4. LIMAX33 Delay control ETSL: off / on
If delay control=yes:
 - a. LIMAX33 ETSL Delay brake: 01,400m/s²
 - b. LIMAX ETSL Delay: 100ms
 - c. LIMAX33 ETSL Buffer speed: 0,600m/s
 - d. LIMAX33 ETSL Offset up: 0010mm
 - e. LIMAX33 ETSL Offset down: 0010mm
5. LIMAX33 Configuration to save: no/yes

Status LIMAX33CP: Setup-2

Possible settings:

1. LIMAX33 Zone: Length= +-200mm
2. (if in setup-1 „Inspection: Monitoring“ activated) LIMAX33 Inspection: none
3. End switch/End switch up/End switch down/End switch up+down
4. LIMAX33 End switch UP learn: no/yes
5. LIMAX33 End switch DOWN learn: no/yes

→ Status LIMAX33CP: Setup-3

Status LIMAX33CP: Setup-3

Possible settings:

1. LIMAX33 Etagen: Learning trip start: no/yes
2. LIMAX33 End switch UP learn: no
3. LIMAX33 End switch DOWN learn: no

Status LIMAX33CP: Normal Operation

Possible settings: (Insp/Return motion must be activated)

1. LIMAX33 Zone: can be changed in the range +-10 bis +-200mm.
2. LIMAX33 Inspection (If Inspection monitoring activ): Inspection limit switches can be activated or deactivated.
3. LIMAX33 End switch UP push: Can be moved in the range 0 bis -980mm compared to the learned limit switch point UP.
4. LIMAX33 End switch DOWN push: can be moved in the range 0 to + 980mm opposite to the learned limit switch point DOWN.
5. LIMAX33 Learn new floors: no/yes: A new floor learning drive for the safe copy can be carried out (Insp/Return motion must be disabled).
6. LIMAX33 End switch UP learn: The limit switch Point UP can be taught-in again. To do this, the cab must be moved manually to the desired limit switch position, then confirm with YES. New limit switch position must be above the lower limit switch position.
7. LIMAX33 End switch DOWN learn: The limit switch point DOWN can be taught in again. To do this, the cabin must be moved manually to the desired limit switch position below, then confirm with YES. New limit switch position must be below the upper limit switch position.

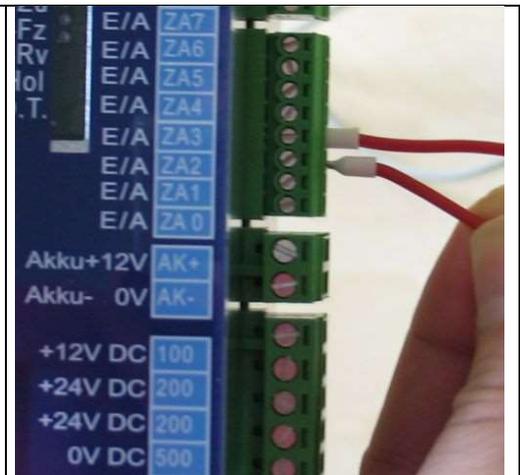
I06 Function test – Self-Monitoring of the Braking Elements after EN81-1/2:1998+A3:2009

Generally

Due to the development of the software, the function of the brake elements in-plant monitoring at KW Aufzugstechnik GmbH in the testing, as well as in the on-site commissioning of the lift system must be examined. The description of the functional test is part of the manual.

Test cable break - Monitoring Input 1

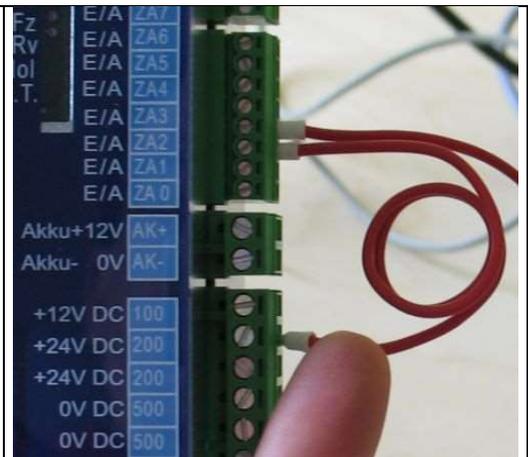
- 1.) Switch off the signal line at the monitoring input channel 1.
- 2.) Return Motion Drive UP or DOWN
- 3.) The Controller DAVID 606/613/2005 gives the error message "F54 – Brake Element Synchronization" and locks. More trips are not possible!
- 4.) Switch on the signal line at the monitoring input channel 1.
- 5.) With the Return-Drive to try to take a ride. A drive may be not possible!
- 6.) In the menu C0 the Controller DAVID 606/613/2005 can be unlocked in the fault memory by selecting the error. The elevator system is ready to start again.



Removing the monitoring channel 1

Test cable bridge - Monitoring Input 1

- 1.) Switch off the signal line at the monitoring input channel 1 and put in a jumper between terminal 200 (+24 V DC) and channel 1.
- 2.) Return Motion Drive UP or DOWN
- 3.) The Controller DAVID 606/613/2005 gives the error message "F51 – Brake Element Function" and locks. More trips are not possible!
- 4.) Put off the jumper between the terminal 200 and channel 1. Switch on the signal line at the monitoring input channel 1.
- 5.) With the Return-Drive to try to take a ride. A drive may be not possible!
- 6.) In the menu C0 the Controller DAVID 606/613/2005 can be unlocked in the fault memory by selecting the error. The elevator system is ready to start again.



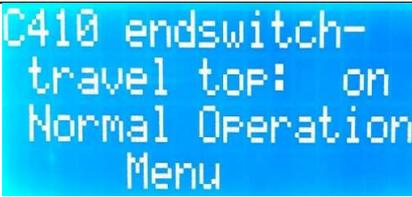
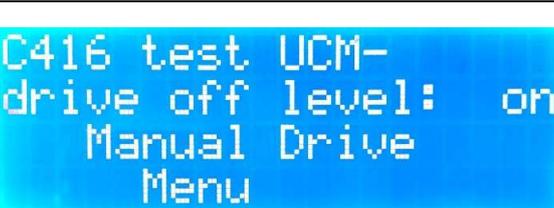
Setting the jumper between 200 and Channel 1

Repeat the test steps

After the two test steps were carried out for the monitoring braking element 1, then for all other brake circuits have now equivalent to the test steps are carried out!

107A ANTS-SAFE instruction for ANTS-ASA2-ASE:

The ANTS-SAFE shaft copying system with the ANTS-ASA2-ASE evaluation unit is a safe position evaluation according to SIL-3 for implementing the functions of limit switches, inspection limit switches, deceleration limit switches, Unintended Car Movement (UCM) as well as for safe bridging of the safety circuit in the area of the doors in the event of premature failure door opening / retrieval of elevator systems according to EN81-20. The complete system consists of two devices, the ANTS-SAFE encoder and the ANTS-SAFE evaluation unit (ASA2) described here. In contrast to a conventional shaft copying with safety limit switches, as well as redundant zone switches with a safety circuit for door bridging, safe-copying no longer exists! The position detection takes place exclusively via a coded band, as well as a redundant evaluation unit. Thus, it is not possible to test non-existent switches! In a learning sequence, the positions of the limit switches and the floors must be taught-in. Thereafter, the taught-in limit switch positions and the zones around the taught-in levels are emulated. The functioning of the emulated switches is not tested, since the safe system (SIL-3) already performs all self-tests

<p>STEP-1</p>	 <p>Checking the opening of the safety circuit: To ensure that an ANTS-SAFE fault actually opens the safety circuit, the XTS connector can be disconnected at the ANTS-ASA-2-ASE evaluation unit.</p>	 <p>As a result, the safety circuit of the elevator control is interrupted. This can be visually checked on the D613, all LEDs of the safety circuit from U8 must now light up red.</p>
<p>STEP-2</p>	 <p>Checking the limit switches above: The limit switch position can be approached in the D613 control via the "C410 limit switch travel up" menu.</p>	 <p>When passing this position, the safety circuit on the ANTS-ASA2-ASE is opened at connector X5. At the D613 control, all LEDs of the safety circuit now light up red starting at U8. At the same time an error entry appears in the control.</p>
<p>STEP-3</p>	 <p>Checking the limit switches below: In the D613 control, the limit switch position can be approached via the "C411 limit switch travel down" menu.</p>	 <p>When passing this position, the safety circuit on the ANTS-ASA2-ASE is opened at connector X5. At the D613 control, all LEDs of the safety circuit now light up red starting at U8. At the same time an error entry appears in the control.</p>
<p>STEP-4+5</p>	 <p>Check the zone switch: First of all, in menu D9 floors ANTSSAFE: xy "/" floors D613: xy "it can be checked that the ANTSSAFE and the D613 control board have learned the same number of floors.</p>	 <p>The zone areas can be identified on the D613 using the two green ZONE LEDs. Only in the area of the zones around the respective floors may these LEDs light up. The zone information is from the ANTS ASA2 ASE.</p>
<p>STEP-6+(7)</p>	 <p>The function of the door override can be checked by activating in the menu "B16 retraction with open door". When traveling up to the floor, the door lock is activated only in the zone area, which is indicated by the rapid flashing of the LED "Drive O.T in the D613. independently and permanently and thus, e.g. the permitted door lockout complies with the standards.</p>	 <p>In addition (OPTIONAL), the function "C416 Test UCM zone travel" can be checked on every floor so that the UCM case is triggered when leaving the zone when door lock is activated.</p>

107B – ELGO LIMAX CP33 Test Instructions

The shaft copying system ELGO LIMAX CP33 is a safe position evaluation according to SIL-3 for the implementation of the functions of limit switches, inspection limit switches, deceleration limit switches, Unintended Car Movement (UCM) as well as for safe bridging of the safety circuit in the area of the doors in the case of premature door opening / retrieval of Lift systems according to EN81-20.

The complete system consists of the central unit LIMAX CP33 and the corresponding magnetic tape. In contrast to a conventional shaft copying with safety limit switches, as well as redundant zone switches with a safety circuit to bridge the door, safe-copying no longer exists! Position detection takes place exclusively via a coded band as well as a redundant evaluation unit. Thus, it is not possible to test non-existent switches! In a learning sequence, the positions of the limit switches and the floors must be taught-in. Thereafter, the taught-in limit switch positions and the zones around the taught-in levels are emulated. The functioning of the emulated switches is not tested, since the safe system (SIL-3) already performs all self-tests independently and permanently and thus, e.g. the permitted door lockout complies with standards.

STEP-0	<p>System Reboot Some self-diagnostic checks of the LIMAX33CP-00 are only performed when the system is restarted. Therefore, it is absolutely necessary to restart the LIMAX33CP-00 at the annual check. This can be done either via the RESET button, by a RESET command from CAN or by disconnecting / reconnecting the main power supply.</p>	
	<p>Magnet Tape For the magnetic tape, tape guide and tape presence sensor, observe the maintenance instructions in the manual for the magnetic tape.</p>	
	<p>Configuration Set The configurable parameters / features of the LIMAX33CP-00 are noted on the information sheet enclosed with the lift documentation. They must correspond to the conditions of the elevator.</p>	
STEP-1	 <p>Checking the opening of the safety circuit: To ensure that a fault of the LIMAX CP33 actually opens the safety circuit, the connector 2Z-3 can be removed from the FK R.</p>	 <p>On the LIMAX CP33, the safety circuit is opened at the OC / terminal 2Z - 3 SiKr output. All LEDs of the safety circuit from U8 on the D613 control now light up red.</p>
STEP-2	 <p>Check the limit switch above: The limit switch position can be approached in the D613 control via the "C410 limit switch travel up" menu.</p>	 <p>When crossing this position, the safety circuit on the LIMAX CP33 at the OC / terminal 2Z - 3 SiKr output is opened. At the D613 control, all LEDs of the safety circuit now light up red starting at U8. At the same time, a fault entry appears in the control.</p>
STEP-3	 <p>Checking the limit switches below: In the D613 control, the limit switch position can be approached via the "C411 limit switch travel down" menu.</p>	 <p>When crossing this position, the safety circuit on the LIMAX CP33 at the OC / terminal 2Z - 3 SiKr output is opened. At the D613 control, all LEDs of the safety circuit now light up red starting at U8. At the same time, a fault entry appears in the control.</p>
STEP-4+5	 <p>Check the zone switch: First of all, in menu D9 floors ANTSSAFE: xy "/" floors D613: xy ", it can be checked that the ANTSSAFE and the D613 controller have learned the same number of floors</p>	 <p>The zone areas can be identified by the two green ZONE LEDs on the D613. Only in the area of the zones around the corresponding floors may these LEDs light up. The zone information comes from the LIMAX CP33</p>

<p>STEP- 6+(7)</p>	 <p>The function of the door override can be checked by activating in the menu "B16 retraction with open door". When traveling to the floor, the door override is activated only in the zone area, which is indicated by the rapid flashing of the LED "Einf.O.T in the D613.</p>	 <p>Additionally (OPTIONAL) the function "C416 Test UCM zone travel" can be checked on every floor to trigger the UCM case when leaving the zone when the door lock is activated.</p>
<p>STEP- 8</p>	<p>The function of checking the inspection direction is initiated by activating the inspection. The examiner drives the elevator up and down half a meter to see if it is moving in the right direction. In the event of deviations in this test, the wiring of the inspection inspection is checked and, if necessary, corrected. If the elevator first moves in the right direction but is then stopped by an open OC, the UP and DOWN signals are incorrectly connected to the LIMAX33CP-00.</p>	 <p>On the LIMAX CP33, the safety circuit is opened at the OC / terminal 2Z - 3 SiKr output. At the D613 control, all LEDs of the safety circuit now light up red starting at U8.</p>
<p>STEP- 9</p>	<p>The function of checking the inspection limit switches is initiated by activating the inspection. When approaching the inspection limit switches at normal inspection speed, due to the open OC, the cab should come to a stop before the pre-set stop system triggers. Otherwise a man would be trapped on the roof or in the pit. The inspector carries out an inspection trip at normal inspection speed upwards. OC opens when the upper limit switch position is overrun and the vehicle comes to style. Control: Standstill is reached before the position of the The same thing happens in the down direction. After the cab has come to the style stand, it should be possible to move the vehicle in the safe direction to push the correct direction button.</p>	 <p>On the LIMAX CP33, the safety circuit is opened at the OC / terminal 2Z - 3 SiKr output. At the D613 control, all LEDs of the safety circuit now light up red starting at U8.</p>
<p>STEP- 10</p>	<p>Function of overspeed V-rated (advance solution)</p> <p>The tester adjusts the elevator control / inverter so that overspeed can be achieved. It moves in both upward and downward direction and at a speed slightly above the speed ahead. Check: OC opens when the pre-trip speed is reached and the engine brake stops the lift.</p>	 <p>On the LIMAX CP33, the safety circuit is opened at the OC / terminal 2Z - 3 SiKr output. At the D613 control, all LEDs of the safety circuit now light up red starting at U8.</p>
<p>STEP- 11</p>	<p>Function of overspeed V-inspection</p> <p>The inspector carries out an inspection run at an inspection speed higher than the prefeeling speed in inspection of the LIMAX33CP-00. To check: OC opens on reaching the "advance speed inspection" and the engine brake stops the elevator.</p>	 <p>On the LIMAX CP33, the safety circuit is opened at the OC / terminal 2Z - 3 SiKr output. At the D613 control, all LEDs of the safety circuit now light up red starting at U8.</p>

107C Function Test – Bypass of the Door- and bolt magnet EN81-20

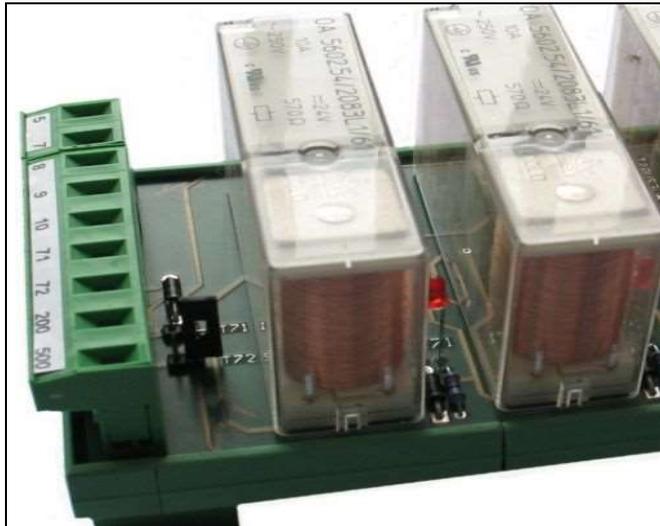


Illustration:

Security circuit SIS16-101 with the two contacts strips T71 and T72, and one Jumper. Here you can set a Jumper for permanently activation of the safety-relais for the zone 71 or zone S72 in order to simulate a no opening contact set of a zone-switch.

Definition

An independent switching element for the zone, also referred to as a zone switch, may be a magnetic switch, a Hall switch, a forked light barrier, an inductive switch, a capacitive switch, a roller switch, a "sensor" which according to the prior art can detect a zone, likewise, a zone can be output via an absolute position measuring system in cooperation with the control computers. In conjunction with one of the switching elements described above (S71 via discrete switching element, S72 via absolute value encoder & control computer output), this results in a higher level of safety. In order to guarantee a perfect speech regulation we talk about zone sensors (devices), which generate a zone signal!

General

The zone switches S71 and S72 are installed after the defaults in the solenoid plan and the switching contacts are closed, i. E. the car is within the zone range.

Experation

Give a call to any floor and keep you closed with the start of the car the zone switch to S71. In addition you push a Jumper over the upper Dil-contact strip T71 with the clamp 71. At the entry into the finish level now no bypass of the door contacts and the check central switch take place. The green LED „status“ does not shine any longer and the next trip remains closed.

Procedure for systems with external Servicepaneel

Give you a call in any floor and hold it at the start of the car closed the zone switch S71. This is the terminal to 71 to 200 bridges.

At the entrance to the destination floor now takes no bridging de door contacts and the locking means switch instead. In the HPG, the error message “F92 – safety circuit”.

Properties

With elevators with hydraulic drive and adjusted sinking trip an error of the protection circuit 16-101 leads not to an immediate blockage during the next trip, but only after the emergency sinking and reaching the sinking level. With rope elevator plants the reaction is adjustable in the menu production circuit.

Unblocking

After you removed the Jumper over the Dil contact strip T71 you must switch the controller on and off. The accumulator buffering must be interrupted however likewise at short notice (to take off emergency power batteries).

Repetition

The same procedure must be repeated now for the zone switch S72. Therefore the Dil contact strip T72 is to you at the disposal. The further operational sequence the reaction as well as the unblocking is an equivalent procedure.



Attention!

Remove the put Jumper in any case after the functional test!

To initiate the journey from the zone, note the following:

- 1.) Stopping the elevator car flush with the bottom landing (top stop).
- 2.) Turning the Return Motion Drive -> Close the doors.
- 3.) Function "UCM-zone drive" in the TÜV Menue-C416 activate
- 4.) Return Motion Drive UP (DOWN), until the security circuit SIS16-101 interrupt.
- 5.) Open the shaft door and measure the stopping distance.
- 6.) Close the shaft door
- 7.) In the **C0 RESET** menu error „F60 A3-case“ reset
- 8.) Cabin with Return Motion Drive downwards (top down) drive.
- 9.) Return Motion Drive off -> door opens -> normal operation
- 10.) Repeated process for the top stop on your way down zone -> () note entries!

General

According to the new standard **EN 81-20: 2014-11** "protection of unintended car movement away from the landing with the landing door not in the locked position and the car door not in the closed position" the car must leave the door zone and must come to a halt within the legal stopping distance.

As a worst-case scenario here, the "Motor-driven exit" door opener in the zone with acceleration values of the normal operation is considered.

Basically, the simulation of the process is never done with an open door!

To facilitate this, a separation in the control terminal is available a Relay "K69", the safety circuit of the door lock of SIS16-101 / feedforward separates drive contactors in the simulation case. In order to allow the elevator to the start of the journey, is a software function in TÜV menu of the control computer of the series D606, D912 and D2005 activates the security circuit for a drive, so that the drive and braking elements contactors are energized until they leave the zone. After leaving the zone, the drive is disconnected and so the car comes to a stop. You can now open the landing door with the emergency release and determine the stopping distance, based on the hatch door to the cabin doorway clamp.

Experation

The elevator car is parked in the lowest landing floor and turned on the Return Motion Drive. This will be the landing and car door closed and a call input over indoor and outdoor control is suppressed.

Please listen in with the local intercom in the cabin, if there are people in it. You can take the handheld terminal HPG-60 in the control computer to the TÜV menu 416th UCM-zone drive. The UCM-zone drive is set to ON. Now you can start with the Return Motion Drive Switch UP holt the drive, which ends when you leave the zone. Automatically increase the speed to rated speed and the acceleration was increased to 100% (in conjunction with GOLIATH inverter).

The stopping distance is displayed in mm on the display. The system is locked with the error "F60 A3-case". Optionally, you can open the Landing door chess with the emergency release and measure the stopping distance (Chess doorway to the cabin door threshold).

After re-closing the landing door and turning off the safety circuit fuse F7. Before switching on the safety fuse F7 in the circuit, **C0 RESET** menu must be reset the A3 error then you can drive with the Return Motion Drive Switch DOWN, the elevator car in the lowest station.

Repetition

The same process must now be repeated for the top stop. Therefore, the elevator car at the top station is placed flush with the zone and performs way down.

109 Functional test – Mech. Brake-Opening in landing and the car door is not in the closed position EN 81-20: 2014-11

According to the new standard EN 81-20: 2014-11 “protection of unintended car movement away from the landing with the landing door not in the locked position and the car door not in the closed position” the car must leave the door zone and must come to a halt within the legal stopping distance. **Basically, the simulation of the process is never done with an open door!**

	<ol style="list-style-type: none"> 1.) Stopping the elevator car aligned in a middle floor. 2.) Listening-with the phone, if there are people in the elevator car. 3.) If there any people, then push the service-button on the upper left of the central unit D606/ D613/ D2005 to close the doors.
	<ol style="list-style-type: none"> 4.) All the doors are closed, when all the LED lights are green of the Safety-Circuit-Positions U1 to U12! 5.) Switch off the landing control via the switch S36 in the service panel in right position.
	<ol style="list-style-type: none"> 6.) Please switch off the fuse F7 of Safety-Circuit. 7.) Please put away the wire X1/6 Number 6. 8.) Please isolate the wire! 9.) Please switch on the fuse F7 of Safety-Circuit. 10.) Now the LEDs are red for the Safety-Circuit-Positions of the doors, but in reality the doors are closed!
	<ol style="list-style-type: none"> 11.) Mechanical press brake lever until the safety circuit SIS16-101 interrupts the journey when leaving the zone, or at a safety device with anti-creep until the catch engages.
	<ol style="list-style-type: none"> 12.) The Communicator HPG-60 shows the error F60 A3 case. The elevator system is locked! 13.) Please open the shaft door and possibly measure the stopping distance. Then close shaft door again. 14.) Please switch off the fuse F7 of Safety-Circuit. 15.) Please put in the wire X1/6 with the designations 6. 16.) Please switch on the fuse F7 of Safety-Circuit. 17.) Reset the error "F60 A3-case" in the C0-RESET menu. 18.) Switch on the landing control via the switch S36 in the service panel in right position.

110 Inspector-session

4.0 Execution of the Watchdog Timing

In the submenu **C40 run time** test of the processor system DAVID-613 it is possible to limit all running times for the next trip on 1,0 seconds.

1	The car is in a stop concisely place
2	Adjust the menu C-Diagnosis/ Inspection-session, C40 run time test in the processor DAVID-613. All running times are set on one second
3	Call input by lowest/ highest call at the top side of the DAVID-613 central processing unit in the menu C-Diagnosis /C- Call input
4	The plant opposes with run time error when going away from the stop
5	Unblocking the plant by In-/ Offswitching the switch S33 or releasing of the reset in the menu C-Diagnosis / C0-Reset
6	The system is in normal operation again

4.1 Execution of the buffer trip

In the submenu **C41 buffer trip** it possible is to be driven with the back getting control downward. (without obligation delay by the before-finals-switched 13B on the cab buffers). But only if the limit switch down by technical personal at the strip of passing is pressed.

1	The back getting control S61 switch on
2	Adjust the menu C-Diagnosis/ Inspection-session, C41 buffer trip in the processor DAVID-613. The pre-end switch Down S13B is not considered.
3	Switch over hand terminal (HPG-60) into the parameters of the frequency changer (Goliath-60). Increase the parameter "speed Vi" in the menu "desired value" to the desired worth.
4	The protection F7 switch off and emergency limit switch down bridge. Protection F7 restart.
5	The car drive with the releleveling control upwards on the buffer.
6	After examination the car drive upward from the buffer. Bridge from the safety circuit remove and the speed back of Vi put to the the regular value.
7	The releleveling control S61 switch off. The control returns to normal operation.

4.2 Execution of the seat sample

In the submenu **C42 seat sample** it possible is to be driven with the back getting control downward. (without obligation delay by the before-final-switched 13B on the counterweight buffers). But only if the limit switch down by technical personal at the strip of passing pressed. The speed for this trip is to be positioned in the regulation.

1	The back getting control S61 switch on
2	Adjust the menu C-Diagnosis/ Inspection-session, C42 seat sample in the processor DAVID-613. The pre-end switch Up S13A is not considered.
3	Switch over hand terminal (HPG-60) into the parameters of the frequency changer (Goliath-60). Increase the parameter "speed Vi" in the menu "desired value" to the desigred worth.
4	The protection F7 switch off and emergency limit switch down bridge. Protection F7 restart.
5	The car drive with the releleveling control upwards on the buffer.
6	After examination the car drive upward from the buffer. Bridge from the safety circuit remove and the speed back of Vi put to the the regular value.
7	The releleveling control S61 switch off. The control returns to normal operation.

4.3 Execution of the Claw Test of the elevator car

In order to implement the catch sample with the elevator car the car must arrive in overspeed. This is only possible if that short-circuit protection and the monitoring function $V < 0,2$ m/s deactivated.

1	The car in the center and/or in the upper half of the pit concisely place.
2	Invite the test weights into the elevator car.
3	The releveling control S61 switch on.
4	Adjust the menu C-Diagnosis/ Inspector-session, C43 Claw Test in the processor system DAVID-613. By this parameter that becomes short-circuit protection in frequenz inverter of the series Goliath-60. The monitoring function is waived which prevents the brake opening at a speed of more largely 0,2 m/s.
5	The emergency freeing switch S80 activate and the brake opening key S81 press unto the car has imprisoned.
6	Switch over the hand terminal the HPG-60 into the parameter frequence inverter Goliath-60. In the menu drive out /stop the parameter catch freeing activate. Thus for short time the current is increased on 2.0 sub-ject of the rated current.
7	The car with the releveling control in upward direction from the catch pull.
8	The back getting control S61 switch off. The control returns to normal operation.

4.4 Driving ability with fixed counterbalance

1	The car is in a highest stop concisely place
2	The back getting control S61 switch on
3	Adjust the menu C-Diagnosis/ Inspection-session, C44 speed in the processor DAVID-613. In this menu are spend the speed of the car and the number of revolutions of the drive.
4	The car move upward with the releveling control. If the car comes to short time to a halt, evidently at the speed of 0 m/s but the number of revolutions of the drive larger 0 rpm is waived the driving ability and the examination successfully terminates. If the speed does not drop to 0 m/s the driving ability is too high.
5	The car with the releeling control upwards from the upper emergency limit switch move.
6	The releveling control S61 switch off. The control returns to normal operation.

4.5 Brake test

In the **submenu C45 break test** the processor system DAVID-2005-613 is possible during switched resent control the short-circuit protection and the monitoring function $V < 0,2$ m/s to deactivate. Security the monitoring function becomes $V > V_{nenn}$ activates which bracked with exceeding of the nominal speed terminated (both brake coils become without tension).

	Attention!
	The following activities may be accomplished only by authorized technical personal. Thus all irregu-laties and disturbances can when assembling and with operated a lift to be recognized and repaired. Regardless of the safety regulation specified in this guidance in the user country valid laws regulations are to keep guidelines and standards.
	1 The car must be at least two floors below the highest stop.
	2 Please pay attention of the empty car. You scolded the resend control S61 and drive the cab outside of the door zone. The doors remain closed.
	3 Adjust the menu C-Diagnosis/Inspector-session, C45 brake test . By this parameter that becomes short contactor power down in the frequency inverter of the series Goliath-60. The monitoring function is waived (those the brake opening at a speed of more largely 0,2 m/s prevented).
	4 Give a car call with the HPG-60 or press at the central unit the calling button for the lowest stop place.
	5 After the car has started moving you must activate the break-test key button S82 by a rotation to the right. Press the brake opening racer S 82A. Now the brake is opened permanently.
	6 Now operate the brake opening tracer S81A. The security circle interrupted the brake coil A is still under tension and remains open, but the brake coil B drops.
	7 The brake coil B which can be examined closes, rake coil A is still under tension. The minimum delay value for a brake circuit amounts to 0.4 m/s ² , and/or the maximum stopping distance with $V_{nenn} = 1.0$ m/s amounts to 1,8 m and/or with $V_{nenn} = 1.0$ m/s of 3,5m!
	8 Test procedure for the second brake circuit repeat!
9 After successful braking code switch S82 braked switches off and keys off takes.	

4.6 Execution of the Remote Trigger Car

In the submenu **C46 Remote Trigger Car** of the processor system DAVID-613 is possible to activate the function Remote Trigger Car over the Switch S50 on the operating panel of the controller cabinet in order to switch on the coil of the speedlimiter. After put off the switch S50, the function is switched off.

4.7 Execution of the Reset Remote Trigger Car

In the submenu **C47 Reset Remote Trigger Car** of the processor system DAVID-613 is possible to activate the function Reset Remote Trigger Car over the Switch S50 on the operating panel of the controller cabinet in order to switch on the Reset-coil of the speedlimiter. After put off the switch S50, the function is switched off.

4.8 Execution Remote Trigger Counterweight

In the submenu **C48 Remote Trigger Counterweight** of the processor system DAVID-613 is possible to activate the function Remote Trigger Counterweight over the Switch S50 on the operating panel of the controller cabinet in order to switch on the coil of the speedlimiter of the counterweight. After put off the switch S50, the function is switched off.

4.9 Execution Reset Remote Trigger Counterweight

In the submenu **C49 Reset Remote Trigger Counterweight** of the processor system DAVID-613 is possible to activate the function Reset Remote Trigger Counterweight over the Switch S50 on the operating panel of the controller cabinet in order to switch on the Reset-coil of the speedlimiter of the counterweight. After put off the switch S50, the function is switched off.

4.10 Execution End Switch Travel Top

In the submenu **C410 End Switch Travel Top** of the processor system DAVID-613 it is possible to over-drive the highest level point by switching on the function. The travel ends in the end switch top.

4.11 Execution End Switch Travel Bottom

The submenu **C411 Endswitch Travel Bottom** of the processor system DAVID-613 it is possible to over-drive the lowest level point by switching on the function. The travel ends in the end switch bottom.

4.12 Execution Switch Cabinet Temperature Test

In submenu C412 switch cabinet temperature test of the processor system DAVID-613. You can decrease the temperature limit, in order to produce an error message. It is very important that the switch cabinet temperature function is active in the menu B600 monitoring functions.

4.13 Execution Motor-PTC Test

In the submenu **C413 motor PTC test** of the processor system DAVID-613 it is possible to simulate a motor PTC error for one travel, in order to generate an error in the controller system. It is very important that the PTC-function is active in the menu B600 monitoring functions.

4.14 Execution DSK-Pulse-Encoder Test

In the submenu **C414 DSK encoder test** of the processor system DAVID-613 it is possible to switch off the encoder of the shaft copy for one travel. The shaft copying software technically produce an error response. A condition is natural that in the menu B600 monitoring functions is the DSK monitoring active.

4.15 Execution Test Sink-prevention

In the submenu **C415 Test Sink Prevention** of the processor system DAVID-613 is possible to activate the function Test Sink Prevention over the Switch S50 on the operating panel of the controller cabinet in order to switch off the coil of the speedlimiter. After put off the switch S50, the function is switched off.

4.16 Functional test –Detection of an unintended car movement EN 81-20:2014-11

	<p>To initiate the journey from the zone, note the following:</p> <ol style="list-style-type: none"> 1.) Stopping the elevator car flush with the bottom landing (top stop). 2.) Turning the Return Motion Drive -> Close the doors. 3.) Function "UCM-zone drive" in the TÜV Menue-C416 activate 4.) Return Motion Drive UP (DOWN), until the security circuit SIS16-101 interrupt. 5.) Open the shaft door and measure the stopping distance. 6.) Close the shaft door 7.) In the C0 RESET menu error „F60 A3-case“ reset 8.) Cabin with Return Motion Drive downwards (top down) drive. 9.) Return Motion Drive off -> door opens -> normal operation 10.) Repeated process for the top stop on your way down zone -> () note entries!
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General

According to the new standard **EN 81-20: 2014-11** "protection of unintended car movement away from the landing with the landing door not in the locked position and the car door not in the closed position" the car must leave the door zone and must come to a halt within the legal stopping distance.

As a worst-case scenario here, the "Motor-driven exit" door opener in the zone with acceleration values of the normal operation is considered.

Basically, the simulation of the process is never done with an open door!

To facilitate this, a separation in the control terminal, is available a Relay "K69", the safety circuit of the door lock of SIS16-101 / feedforward separates drive contactors in the simulation case. In order to allow the elevator to the start of the journey, is a software function in TÜV menu of the control computer of the series D613, D912 and D2005 activates the security circuit for a drive, so that the drive and braking elements contactors are energized until they leave the zone. After leaving the zone, the drive is disconnected and so the car comes to a stop. You can now open the landing door with the emergency release and determine the stopping distance, based on the hatch door to the cabin doorway clamp.

Experation

The elevator car is parked in the lowest landing floor and turned on the Return Motion Drive. This will be the landing and car door closed and a call input over indoor and outdoor control is suppressed.

Please listen to the local intercom in the cabin, if there are people in it. You can take the hand held terminal HPG-60 in the control computer to the TÜV menu 416th UCM-zone drive. The UCM-zone drive is set to ON. Now you can start with the Return Motion Drive Switch UP holt the drive, which ends when you leave the zone. Automatically increase the speed to rated speed and the acceleration was increased to 100% (in conjunction with GOLIATH inverter).

The stopping distance is displayed in mm on the display. The system is locked with the error "F60 A3-case". Optionally, you can open the landing door chess with the emergency release and measure the stopping distance (Chess doorway to the cabin door threshold).

After re-closing the landing door and turning off the safety circuit fuse F7. Before switching on the safety fuse F7 in the circuit, **C0 RESET menu** must be reset the A3 error then you can drive with the Return Motion Drive Switch DOWN, the elevator car in the lowest station.

Repetition

The same process must now be repeated for the top stop. Therefore, the elevator car at the top station is placed flush with the zone and performs its way down.

4.17 Carrying out simulation failure of brake element-1 in accordance with EN81-20

In submenu C417 test braking element brake-1 of the DAVID-613 processor system, it is possible to switch off the monitoring of the braking element of drive 1 for software purposes in order to generate an error response. This corresponds to a physical interruption of the line of the respective brake element. This is required for brake components requiring monitoring, in order to simulate a failure of a brake element according to EN 81-20.

4.18 Carrying out the brake test

In submenu C418 test brake test of the DAVID-613 processor system, it is possible to activate the brake test for one trip. After pressing the corresponding key switch S82A or S82B, the stopping distance in mm is displayed after stopping the elevator car. This function can only be used in conjunction with a GOLIATH-90 inverter.

4.19 Test direction change counter

In submenu C419 test direction change counter, it is possible to simulate a triggering of the direction change counter for the suspension cables / carrying straps by test activation.

4.20 Test rope wear counter

In the submenu C420 test rope wear counter, it is possible to simulate a triggering of the rope wear counter for the suspension ropes / carrying straps by test activation.

4.21 Test brake monitor brake-2

In submenu C421 test brake element brake-2 of the DAVID-613 processor system, it is possible to switch off the monitoring of the braking element of drive 2 for software purposes in order to generate an error response. This corresponds to a physical interruption of the line of the respective brake element. This is required for brake components requiring monitoring, in order to simulate a failure of a brake element according to EN 81-20.

4.22 Resetting the speed-gov pre-trigger

In submenu C422 test reset GB pre-shutdown of the DAVID-613 processor system, it is possible to reset this by activating the function in the case of a lockable pre-shutdown of the GB for the car with reset coil via pushbutton S50. After releasing the button S50, the function is deactivated again.

**SAFE shaft copy system:**

When using SAFE shaft copying, the settings can be viewed in menu D9.

4.23 Hydraulic-Testdrive – Broken-Pipe-Valve

In submenu C423 Hydraulic test drive – Broken-Pipe-Valve of the DAVID-613 processor system, it is possible to output the fast speed (V2) by switching on the function for the next run with the return control in the downward direction. This enables the functionality of the pipe rupture valve to be tested. The error message “overspeed” is ignored and travel is not aborted.

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