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

The remote station have all necessary call-inputs and arrow-outputs (even for selective door-controlling).

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

If there is a optional shaftbus necessary, you can use the shaftbus No.3 in the colour yellow.

The **7-pole Terminal below** with the call-wires 2xA & 2xB is reserved for the **Doorside 1,** the other **Terminal above** with 2xC & 2xD is for the **Doorside 2**.

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**.

The **yellow marked RJ-12 Terminal** is for highrise TFT Graficdisplays with KW-bus-operation.

Bus- RJ-45 Bue/Yellow		Terminal Matrix Indicator with RJ-12					Bus- RJ-45 Blue/Yelow	
GND 0V	500		Switch		TFT	200	Controller Voltage +24V	
Landing Call Door1 Up	2xA				RJ-12	PZ2	Piezo Buzzer Door2	
Landing Call Door1 Down	2xB		**Remote Station ER-2013**			98B	Level Arrow D2 Down	
Level Arrow Door1 Up	97A					97B	Level Arrow D2 Up	
Level Arrow Door1 Down	98A					2xD	Landing Call D2 Down	
Piezo Buzzer Door1	PZ1					2xC	Landing Call D2 Up	
Controller Voltage +24V	200					500	GND 0V	

Terminal **Left** at the Remote Station

Terminal	Function	Pin	Terminal 7 poles R 3,5
500	GND 0V DC	1	
2xA	Landing Call Doorside 1 Up	2	
2xB	Landing Call Doorside 1 Down	3	
97A	Level Arrow Doorside 1 Up	4	
98A	Level Arrow Doorside 1 Down	5	
PZ1	Piezo buzzer Doorside 1	6	
200	Controler voltage +24V DC	7	

Terminal **Right** at the Remote Station

Terminal 7 poles R 3,5	Pin	Terminal	Function
	7	200	Controler voltage +24V DC
	6	PZ2	Piezo buzzer Doorside 2
	5	98B	Level Arrow Doorside 1 Down
	4	97B	Level Arrow Doorside 2 Up
	3	2xD	Landing Call Doorside 2 Down in cases of selective Door-control
	2	2xC	Landing Call Doorside 2 Up in cases of selective Door-control
	1	500	GND 0V DC

FUNCTION-VISUALISATION

When the ER-2013 connected with bus line and the controll is aktive, the green LED is blinking. In short circuit on the busline or malfunction expires or shine the LED. You can controll the Remote Station in Menu C6 Modul Monitor/ Remote Station ER01-16 and Remote Station ER 17-32, .. to 64.

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 hightest floor which are recognized in the system.

ADRESS SETTING

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

1. Step: Controler switch OFF (**Mainswitch Q1, F6 &F7 switch-OFF**).

2. Step: The Remote Station which should be programed is to put with the RJ-45 cable into the central unit. All other Remote Stations may not be connected!

3. Step: Thre must be set a iron-bridge to the 5-pole terminal between **Pin 2 and Pin 3** (-> like the picture left). Now you can switch ON the system (**Mainswitch Q1, F6 switch ON**).

4. Step: You can regulating the parameter " Remote Station Adress programming" in menu C6 Modul Monitor. The ER-2013 gets his adress with the selection of the number of floors. (01-64). Then the ER-2013 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 or the yellow marked RJ-12 jack!

Connecting a TFT-Display at the ER-2013

The connection of a TFT-Display will be done at the yellow **marked RJ-12 terminal with the** standard RJ-12 cable.
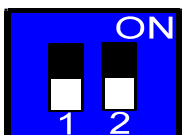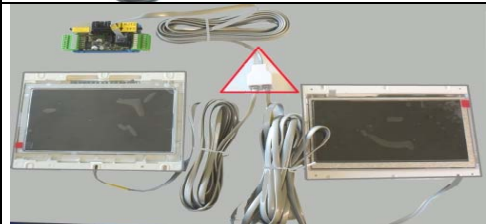
Don`t do the RJ-12 in the silver RJ-45 jack or the RJ-12 jack of the matrix-indicators!
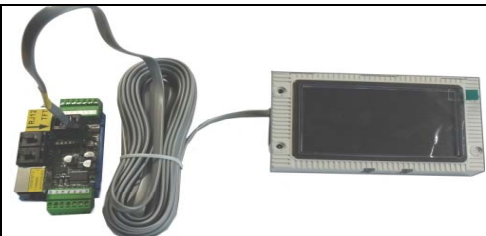
Connecting several TFT-Displays at the ER-2013

With the help of a **RJ-12-changer** you can use serval TFT-Displays at the same output-terminal.

This is necessary if you have lifts with serval door-sides, or a groupe of lifts.
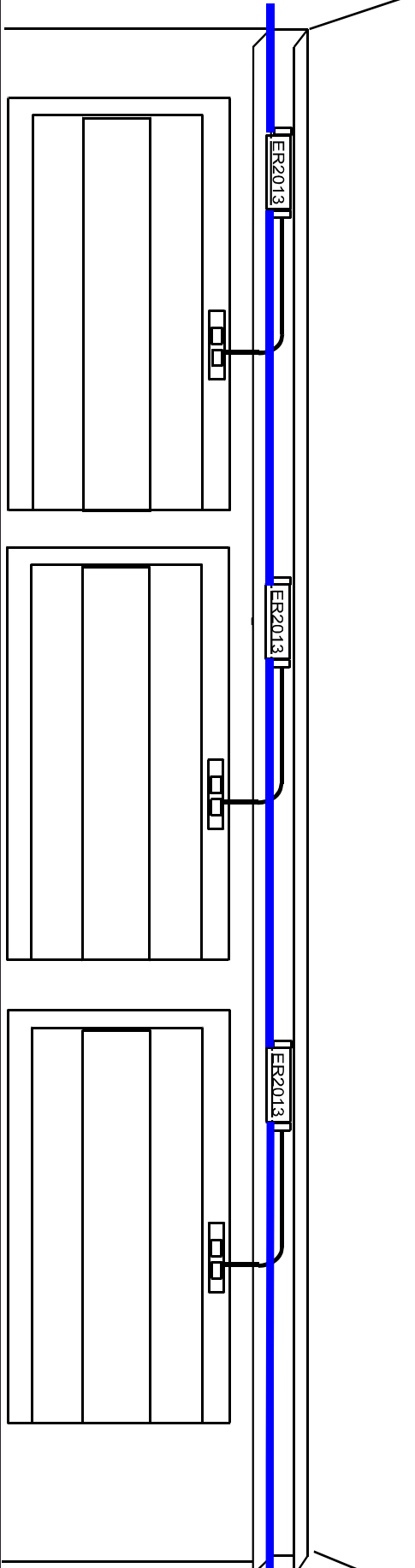
At the remote station ER-2013 there is a 2-pole DIL-Switch for activation the following functions:
1.) At the first switch you can switch ON the termination-resistors. Please switch ON the termination only at the last remote station!
2.) At the second switch you can activate the passive bus. A passive bus can only give out informations like for example arrows and car-position. Therefore the passive bus can work in the same address-room like the shaftbus no.1.

Schachtbus ER2013 mit einer Schachttürseite

RJ-45 Buskabel zum Maschinenraum Oben

RJ-45 Buskabel zum Maschinenraum Unten

Assembly in the shaft:

According to standart the floor computer strand si along.integrated into the troughing. Our recommended standard throughing 90 x 40 mm offers sufficiently place.

The lowest stop gets the floor computer with the marking HS01 assigned. The remote station should be positioned approximately at the height of the door fighter.

The tablet cable for the door side 1 with a lenght of 2 metres is attached down to the remote station.

If a floor with front and back door should likewise be present in the floor (door side 29 then the tablet cable of the 2 landing cap panel is put above to the remote station.

Exactly the same as for the first floor for all other floors will proceed.

The inlet cable for the floor computer strand is put in either lowest or at the highest floor computer depending upon situation of the machine-room.

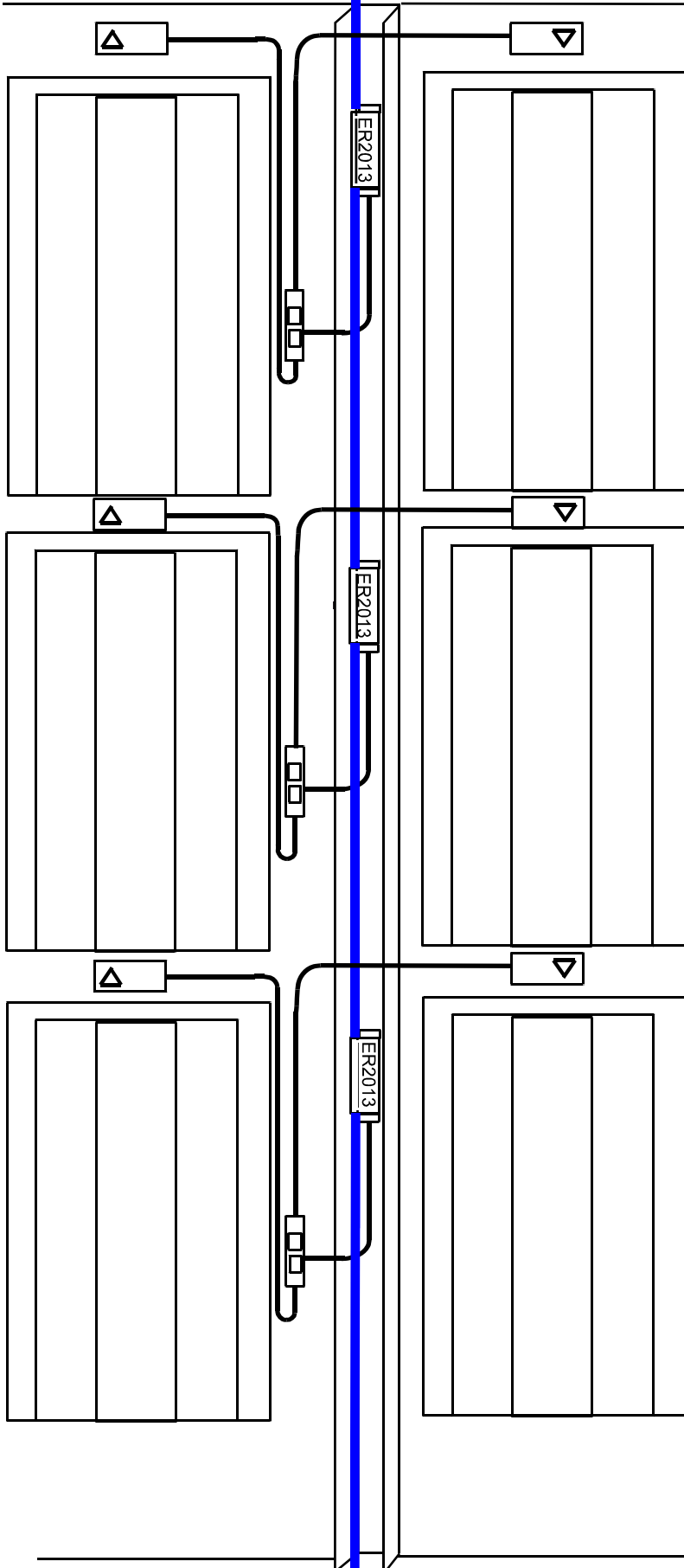## Schachtbus ER2013 mit zwei Schachttürseiten

RJ-45 Buskabel zum Maschinenraum Oben
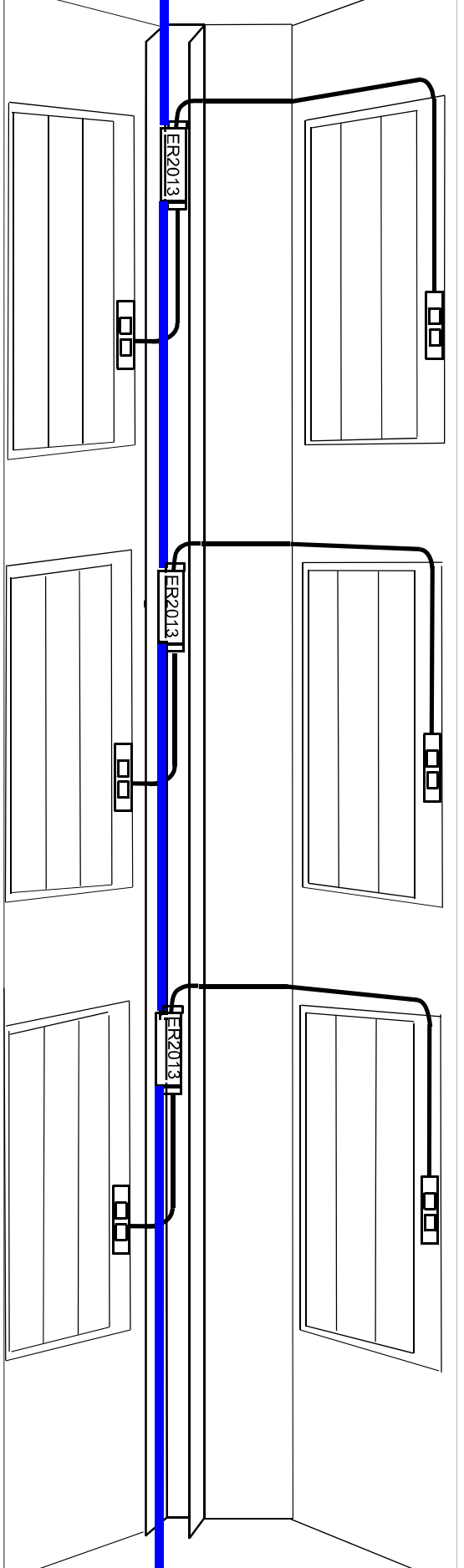
RJ-45 Buskabel zum Maschinenraum Unten

Gruppen-Schachtbus ER2013 mit einer 2er Gruppe

RJ-45 Buskabel zum Maschinenraum Oben

Anlage A1　　　　　　　　　**Anlage A2**

ER2013

ER2013

ER2013

RJ-45 Buskabel zum Maschinenraum Unten

Assembly in the shaft:

According to standart the floor computer strand is along-intergrated into the throughing. Our recommended standart throughing 90*40mm offers sufficiently place.

The lowest Stopp gets the remote station with teh marking ST01 assigned. The floor computer should be positioned approximately at height of the door fighter.

The tablet cable 1 with a length of 2 meters is attached down to the remote station.
The following functions are contained:
  1) 2xA landing call Up
  2) 2xB landing call Down
  3) 97A arrow diplay Up A1
  4) 98A arrow display Down A1

The tablet cable 2 with a length of 2 meters is attached down to the remote station.
The following functions are contained:
  5) 2xC free allocable
  6) 2xD free allocable
  7) 97B arrow diplay Up A2
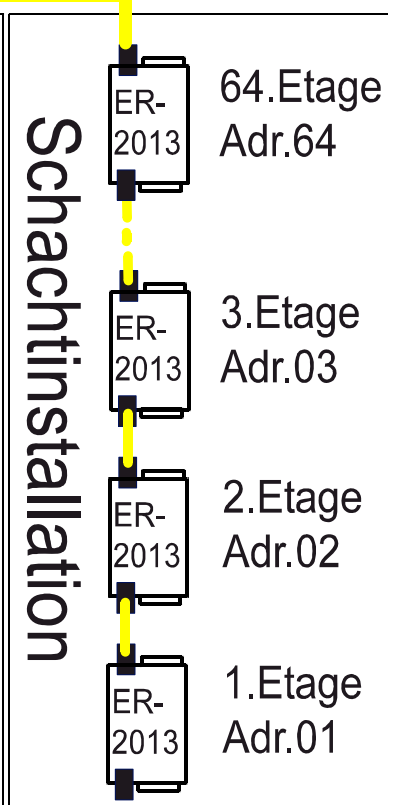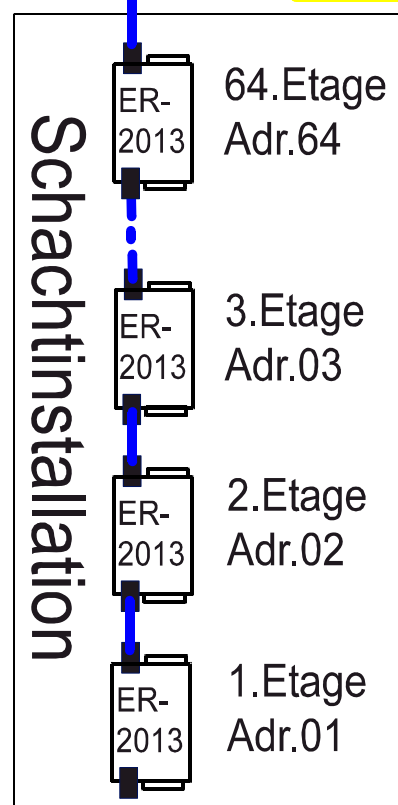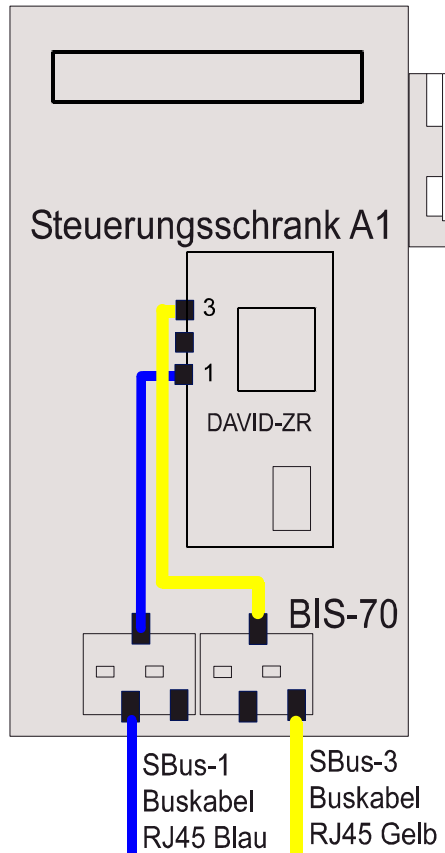 8) 98B arrow display Down A2

Exactly the same as for the first floor for all other floors will proceed.
The inlet cable for the remote station strand isput in either lowest or at the highest remote station, depending upon situation of the machine-room.

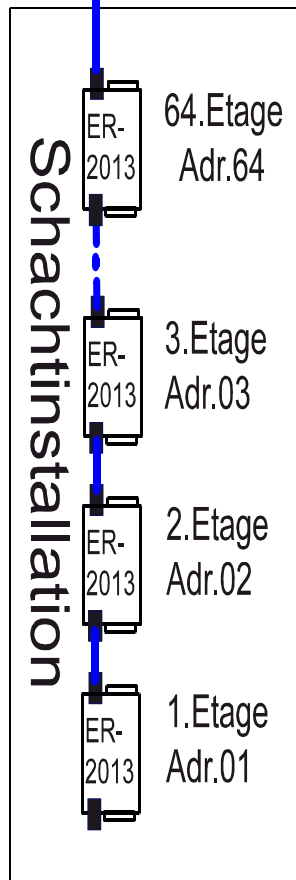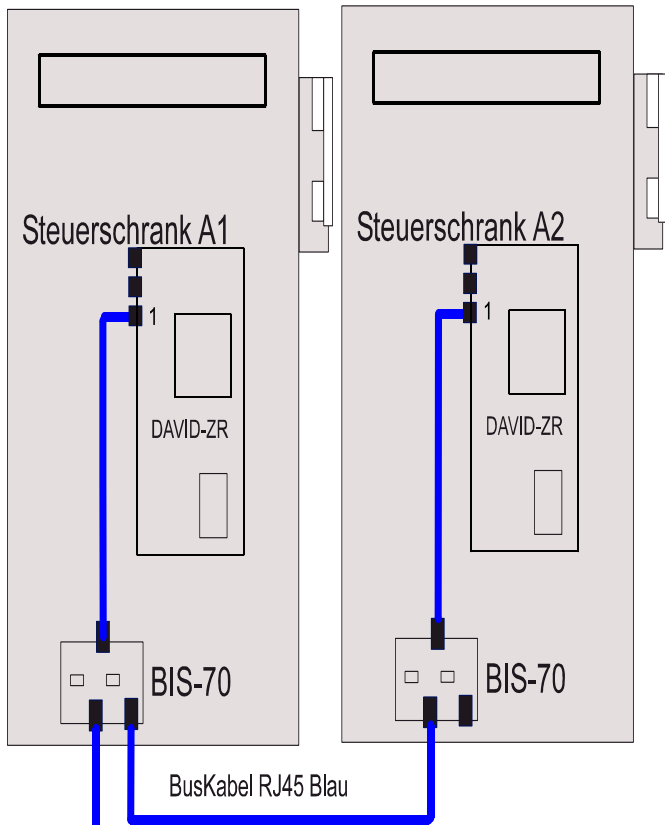Shaft bus wiring with remote station ER-2013 in a shaft of a single lift:
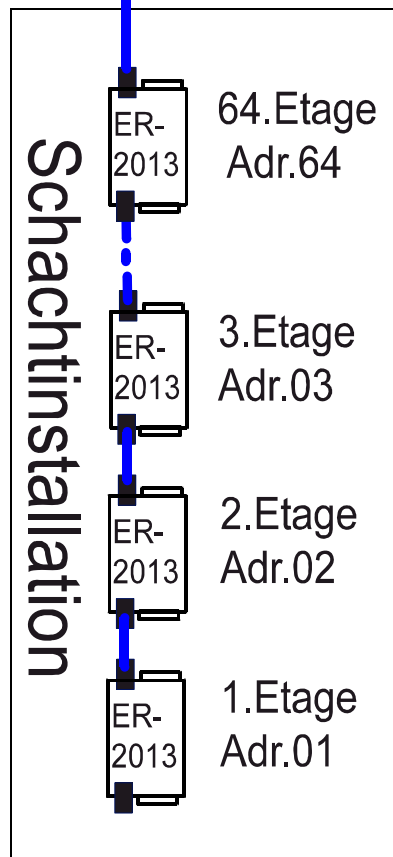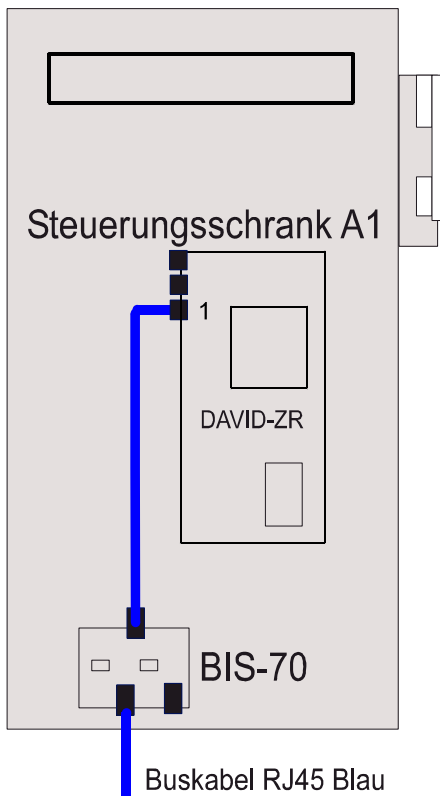
Shaft bus wiring with remote station ER-2013 in a very large shaft with two door-sides of a single lift:

Steuerungsschrank A1

1

DAVID-ZR

BIS-70

Buskabel RJ45 Blau

Schachtinstallation

ER-2013   64.Etage Adr.64

ER-2013   3.Etage Adr.03

ER-2013   2.Etage Adr.02

ER-2013   1.Etage Adr.01

Steuerungsschrank A1

3

1

DAVID-ZR

BIS-70

SBus-1 Buskabel RJ45 Blau

SBus-3 Buskabel RJ45 Gelb

Schachtinstallation

ER-2013   64.Etage Adr.64

ER-2013   3.Etage Adr.03

ER-2013   2.Etage Adr.02

ER-2013   1.Etage Adr.01

Schachtinstallation

ER-2013   64.Etage Adr.64

ER-2013   3.Etage Adr.03

ER-2013   2.Etage Adr.02

ER-2013   1.Etage Adr.01

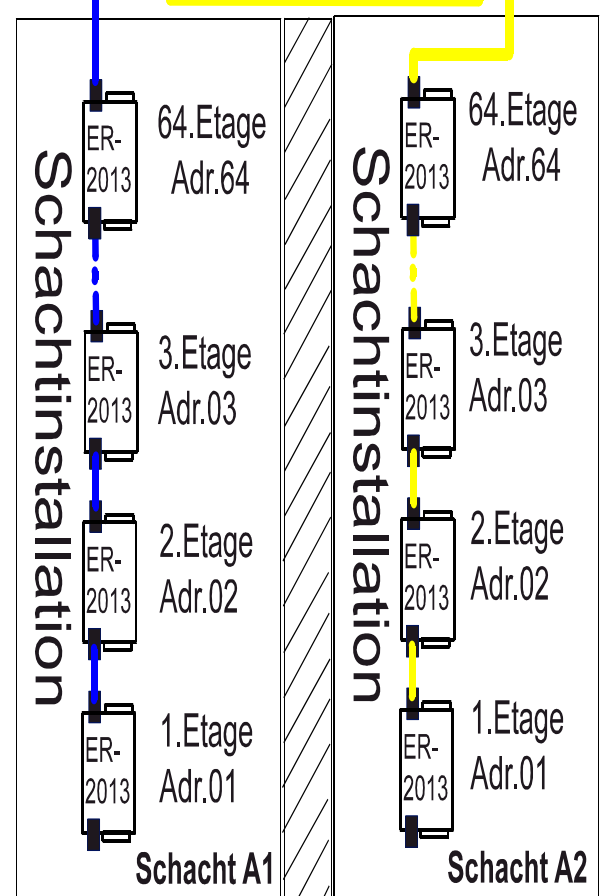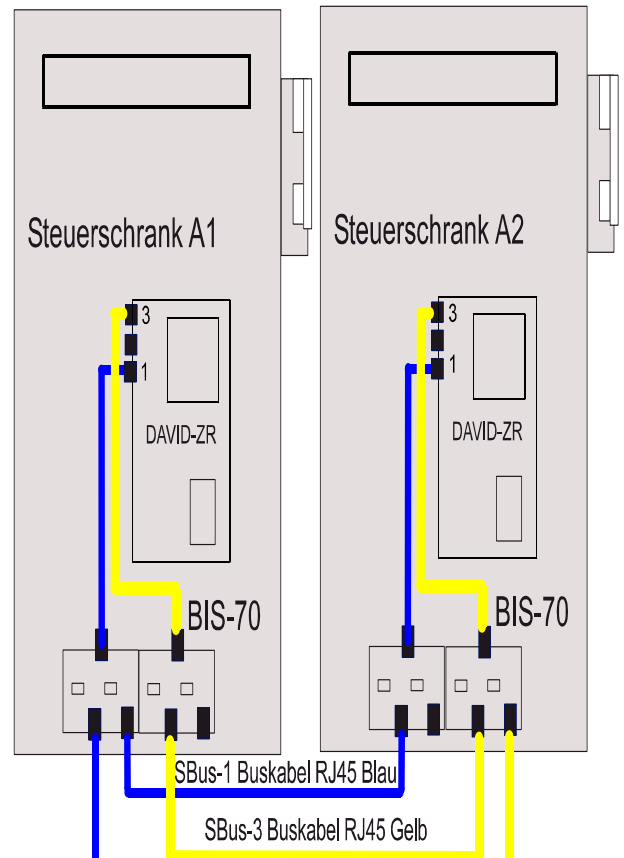Sehr großer Schacht mit zwei Türseiten

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

Steuerschrank A1

DAVID-ZR

BIS-70

BusKabel RJ45 Blau

Schachtinstallation

64.Etage Adr.64

3.Etage Adr.03

2.Etage Adr.02

1.Etage Adr.01

Steuerschrank A2

DAVID-ZR

BIS-70

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

Steuerschrank A1

DAVID-ZR

BIS-70

Steuerschrank A2

DAVID-ZR

BIS-70

SBus-1 Buskabel RJ45 Blau
SBus-3 Buskabel RJ45 Gelb

Schachtinstallation

64.Etage Adr.64

3.Etage Adr.03

2.Etage Adr.02

1.Etage Adr.01

Schacht A1

Schachtinstallation

64.Etage Adr.64

3.Etage Adr.03

2.Etage Adr.02

1.Etage Adr.01

Schacht A2

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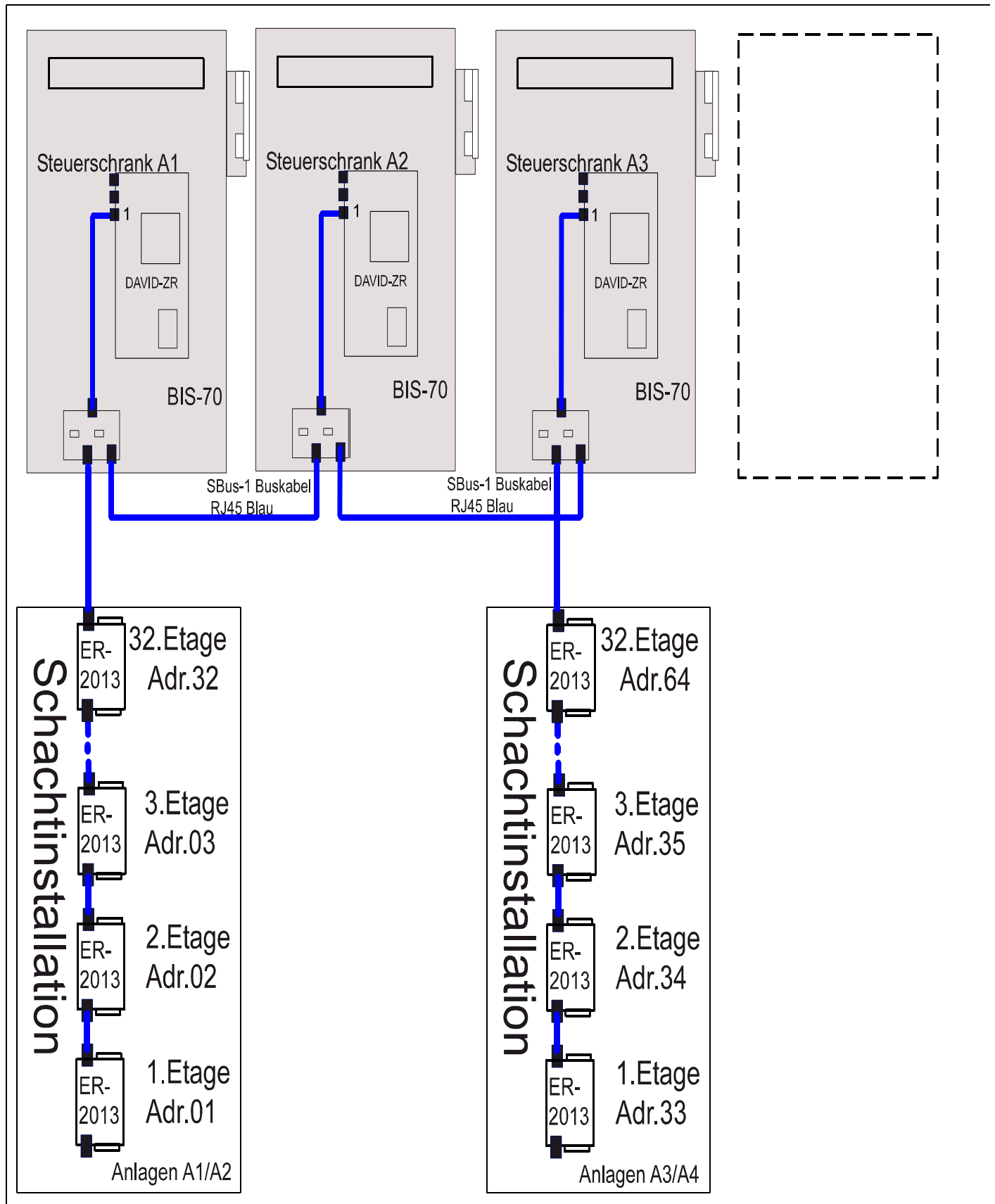
Shaft bus wiring with remote station ER-2013 with a 3- or 4-member group with separate / very large shafts to 32 floors: