

1.0 Manufacture – KONE Monospace

When modernising the KONE Monospace, only the controls and the regulation have to be replaced, while the proven MX06 /10 /18 /20 drive or the new NMX drives are retained. The MX drives are supplemented with a pulse encoder and a positioning magnet and thus digitally updated.

There are two variants for the new control system. In the first generation of the Monospace, the mounting plate had a width of 400mm. This allows the control unit to be integrated on a replacement plate. The external frequency converter GOLIATH-90 sits in the shaft head next to the drive.

A much more elegant method is to use the KW 280 shaft control cabinet, in which the controller is integrated and sits next to the drive (see picture on the right).

This is a very compact and quick-to-install solution.



There are two possibilities for the service panel (in connection with the KW280).

The first is to replace the old control plate in the door frame of the top landing door with a new one, on which the service panel is located. This way, the old functionality of the KONE frame box can be maintained.

The other possibility is to use a frame post, which is mounted on the door frame, as shown in the picture on the right.

In the upper part of the panel, the car position, the car movement and the flushness are displayed. Two key buttons are available for the emergency release and the brake test.

One segment below, you will find the return control, emergency brake switch, remote release button, button, sink prevention and a triangular reset button for the shortened shaft pit or shaft head.

Access to the system parameters, call input and visualization of the meters is via the 7-inch DAVID 613T touch terminal. The voice connection to the cabin is made simply by pressing a button.

The safety-circuit taps for measurement are also located behind this cover.

Scanning the QR code will take you to the Youtube video about KONE Monospace lift modernisation.



2.0 Manufacture – OTIS Gen2

In the OTIS Gen2, we have a belt drive that is located in the shaft head as a gearless synchronous machine. In the original, the shaft control cabinet with the control system and the regulation is located in the shaft. The operating terminal with the fuses and connection terminals is located in the door frame of the top landing door.



The existing belt wear monitoring device can continue to be operated with the new KW control system using the potential-free signal contacts.



As a replacement for the existing load measurement system, we can supply an equivalent system for the belts.



Servicepanel

The first option is to replace the old control panel in the door frame cabinet with a new one, on which the **KW120 type F service panel**, measuring **1750 x 116 mm**, is located (**left image**). This allows the old functionality of the old door frame cabinet to be retained.

The other option is to use a **KW120 frame-mullion-F**, which is mounted on the door frame. The unit is plug-in ready (**centre image**).



As a replacement for the OTIS control cabinet, we offer a **KW280 shaft control cabinet** with integrated control system.

The Mark-I has a GOLIATH-90-32A frequency converter on board, which can supply gearless machines with up to 32A rated current.

For larger machines, the KW380 Mark-II shaft switch cabinet is used (internal max. 52A).

Image on the left: **KW280 MARK-I switch cabinet: 2035 x 280 x 240 mm (HxWxD)**

service panel KW120 Typ F

KW120 frame post -F

KW280 MARK-I

3.0 Manufacture – OTIS MRL 2003 (MCS 220 VF MRL)

In the OTIS MRL with the MCS 220, we have a conventional drive, which is located as a worm gear with asynchronous machine in the shaft head.

In the original state, the frequency converter is also located in the shaft head next to the drive.

The control unit is located in the uppermost door frame.

With the existing control, the mounting plate had a width of approx. 400mm.

This allows the control unit to be integrated on the mounting plate of the KW265. This means that the functionality of the OTIS control cabinet can be retained.



Original equipment –Motor & Inverter shaft-head

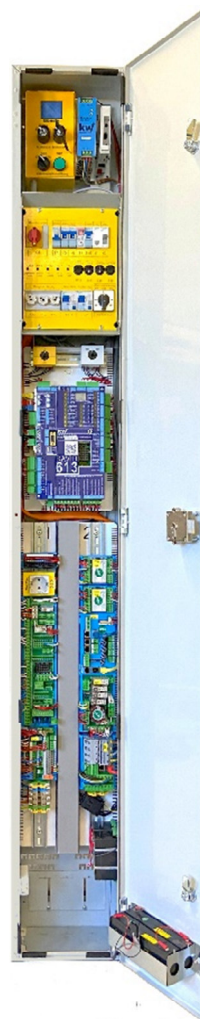
Original cabinet

Another possibility is to use the complete control cabinet **KW265: 2000 x 265 x 170mm (H x W x D).**

The external Goliath-90 frequency converter is located in the shaft head next to the drive. The brake opening is electrical, UPS buffered.



Taking into account the criterion of escape and rescue routes, the control cabinet **KW03Z: 1900 x 450 x 260mm (H x W x D)** with integrated frequency converter is also an option.



Cabinet/Plate KW265



Cabinet KW03Z with internal Inverter

4.0 Manufacture – Schindler - SMART

The Schindler SMART has a conventional drive, which is located in the shaft head as a worm gear with an asynchronous machine. In its original condition, the frequency converter and parts of the control system are located in the shaft head next to the drive. The control cabinet with mechanical emergency release is located in the masonry at the top landing (see centre bottom image). The modernisation process is as follows:

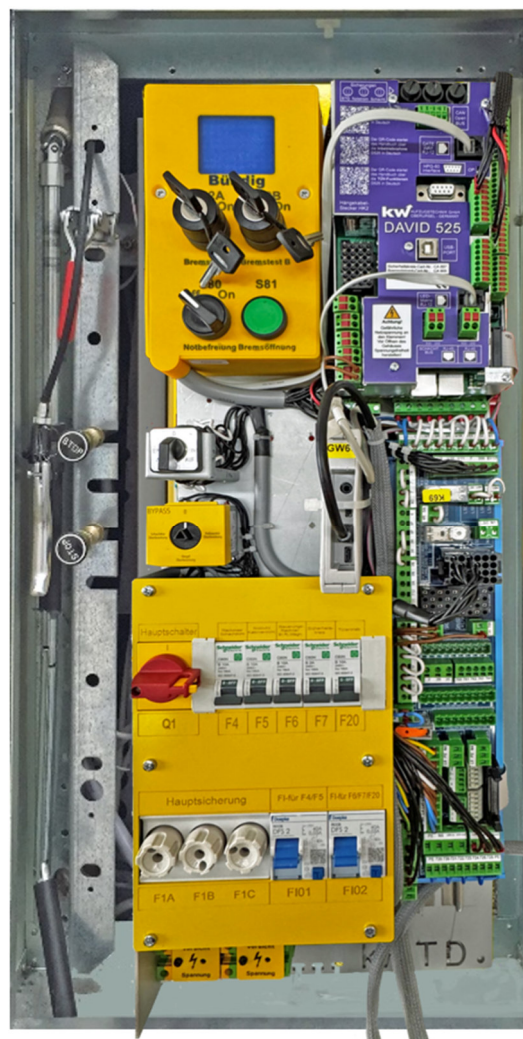


Servicepanel

The wall cabinet will continue to be used for the simple reason that the mechanical emergency release and the crank device for moving the cage will remain functional while the drive is retained. For this purpose, the old control plate is removed and replaced with a new **Typ KW120-D type** (image right). The dimensions are **700 x239mm**.

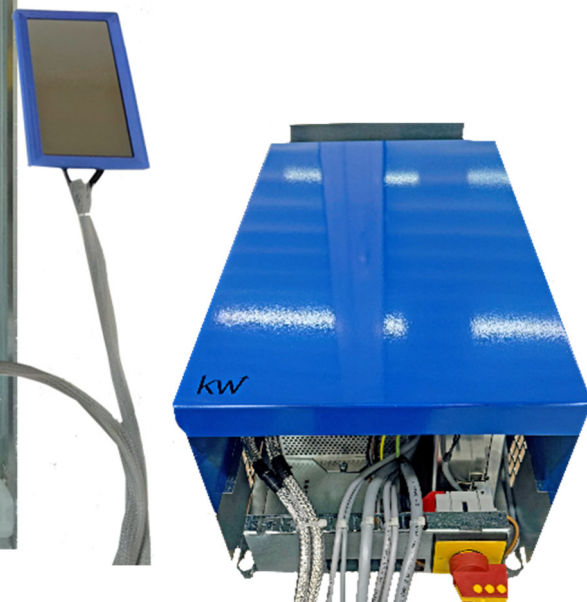
While retaining the old functionality, the new STG offers an electric emergency release and brake test function.

The asynchronous machine can continue to be operated without any problems using the GOLIATH-90 frequency converter while retaining the encoder.



service panel KW120 Typ D

The external Goliath-90 frequency inverter is located in the shaft head next to the drive.

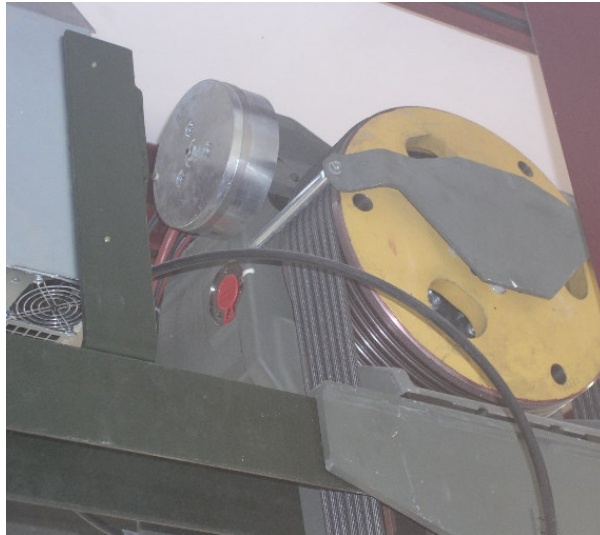


frequency inverter GOLIATH-90 EXT

5.0 Manufacture – Schindler – EUROLIFT

The Schindler Eurolift has a synchronous rope drive, which is located in the shaft head as a gearless synchronous machine.

In the original, the frequency converter is located in the shaft head next to the drive (see picture on the right).



Frequenzumrichter und Synchron-Gearlessmaschine



STG Schindler

The control unit with mechanical/electrical emergency release is located in the door frame at the top landing (see image STG Schindler).

The control frame box is 240 mm wide and 130 mm deep. It contains the control terminal, processor unit with fuses and connection terminals (image on the far right).



service panel KW120 Typ F

Operating terminal

The first option is to replace the old control plate in the door frame cabinet with a new one, on which the **KW120 type F service panel, dimensions 1750 x 116 mm, is located** (left image).

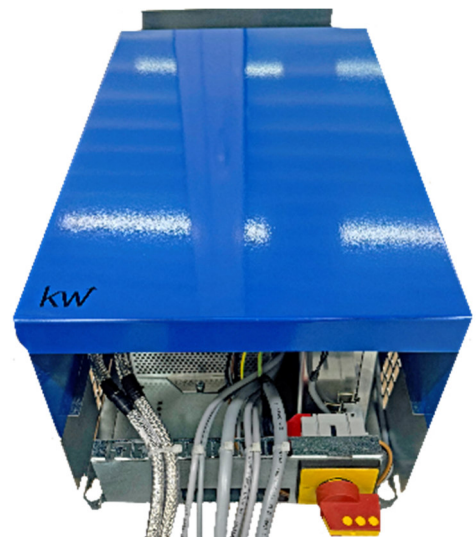
This allows the old functionality of the old frame box to be retained.

The other option is to use a **KW120 frame post F**, which is mounted on the door frame. The unit is plug-in ready (centre image).



KW120 frame post -F

The external Goliath-90 frequency inverter is located in the shaft head next to the drive.



frequency inverter GOLTATH-90 EXT

6.0 Manufacture – Schindler – Bausatz 3300 / 5500

The Schindler 3300 and 5500 have a belt drive, which is located in the shaft head as a gearless asynchronous machine (3300) or synchronous machine (5500). In its original state, the frequency converter is located in the shaft head next to the drive. The control unit with electrical emergency release is located in the door frame at the top stop. The frame box has a width of 120 mm.



Motor Schindler 3300



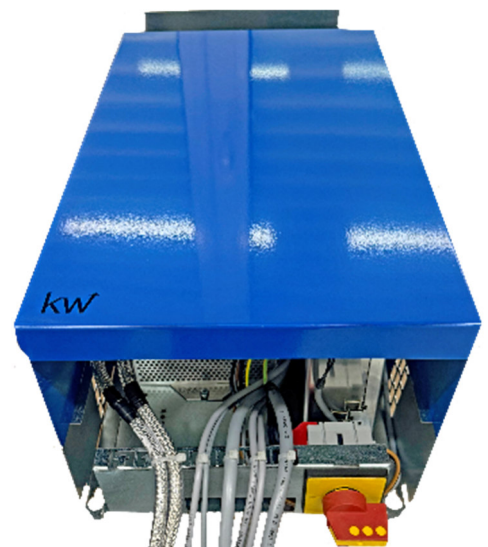
Servicepanel
The first option is to replace the old control plate in the door frame cabinet with a new one, on which the **KW120 type F service panel**, dimensions **1750 x 116 mm**, is located (left image). This allows the old functionality of the old frame box to be retained.

The other option is to use a **KW120 frame post F**, which is mounted on the door frame. The unit is plug-in ready (centre image).



KW120 frame post -F
09.10.2025

The external Goliath-90 frequency inverter is located in the shaft head next to the drive.



frequency inverter GOLTATH-90 EXT
Seite 6

7.0 Manufacture – Thyssenkrupp – Spirit

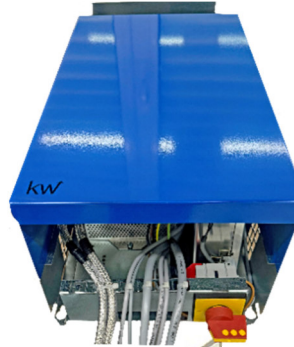
The ThyssenKrupp Spirit kit features a conventional drive, which is a gearless synchronous machine of type DAF 210 or 270 located in the shaft head.

In its original state, the frequency converter is also located in the shaft head next to the drive.

The control system with electric emergency release is located in the door frame box at the top landing. The mounting plate is 240 mm wide.



There is also a version with an F30 wall box. For this, there is **the KW120 type D** exemption terminal plate measuring 239 x 700 mm and an external GOLIATH frequency converter.



The functionality of the control cabinet can be maintained by retaining the door frame box with the new mounting plate of the **KW 240: 1980 x 235 (H x W)**.

Another option is to install the complete **KW240 switch cabinet: 2000 x 240 x 220 mm (H x W x D)** for machine room-less lift systems (MRL) for installation next to the shaft door, or the **KW265 switch cabinet: 2000 x 265 x 170 mm (H x W x D)**.

The control cabinet **KW03Z: 1900 x 450 x 260mm (H x W x D)** with integrated frequency inverter is also an option, taking into account escape and rescue route criteria.



Cabinet/Plate
KW240

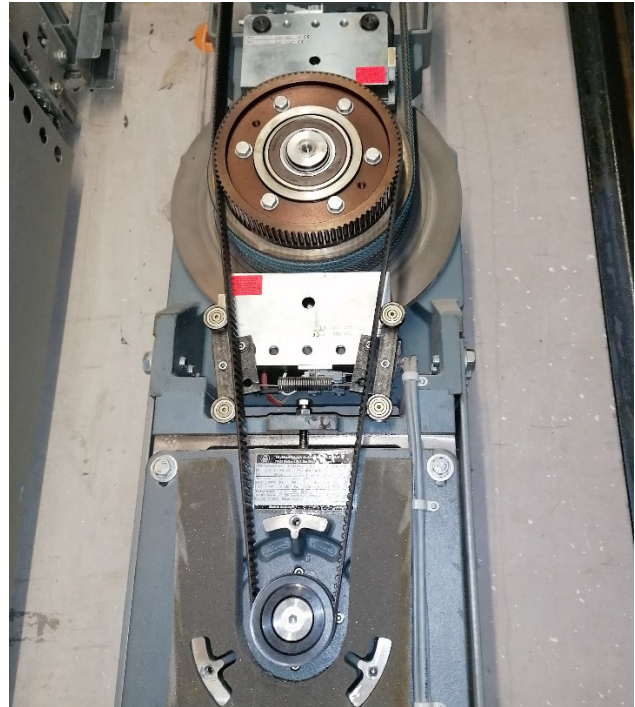
Cabinet/Plate
KW265

Cabinet KW03Z with
internal Inverter

8.0 Manufacture – Thyssenkrupp – Synergy-1

In the ThyssenKrupp Synergy kit we have a conventional drive, which is a gearless synchronous machine of type SB150 located in the lowest stop. The data set of the SB150 drive is stored in the GOLIATH-90 inverter.

ThyssenKrupp Aufzugswerke GmbH 70623 Stuttgart, P.O. Box 23 03 70, Germany										
PSM 3-phase motor		SB150 M002		No.		1748		Year		2006
IM	IP 20	Ins.-cl. F	Max. sheave load (SW)		18		[kN]			
S5	180 c/h		50 % duty cycle		Weight		198 [kg]			
P _N	n _N	U _N	I _N	cos φ	f	M _a	I _a	I _{max}		
[kW]	[1/min]	[V]	[A]		[Hz]	[Nm]	[A]	[A]		
4,3	441	Y 320	9,5	0,93	154,4	205	21	21		
Braking torque		2 x 400		[Nm]						
Traction sheave		φ 260	[mm]		Max. no. of ropes		6 X φ 6,5 [mm]			
Encoder		2 x 2048		EnDat		ECN113				
Made in Germany										



In its original state, the frequency converter is located next to the operator.

The control unit with electrical emergency release is located in the lowest mounting point in the door frame. The width of the mounting plate is 240 mm.

While retaining the door frame box, the functionality of the control cabinet can be retained with the new **mounting plate of the KW 240: 1980 x 235 (H x W)**.

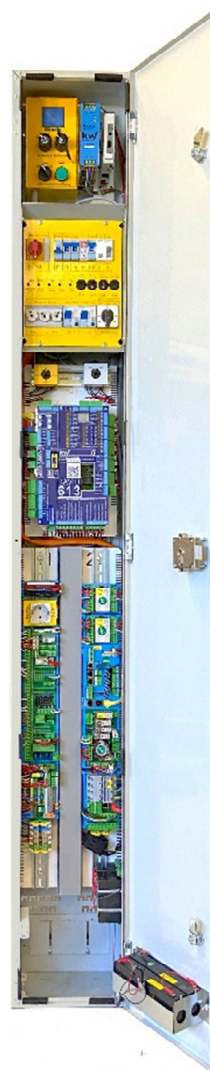
Another possibility is to use the complete **KW240 control cabinet: 2000 x 240 x 220 mm (H x W x D)** for machine room-less lift systems (MRL) for installation next to the shaft door, or the **KW265 control cabinet: 2000 x 265 x 170 mm (H x W x D)**.

The external Goliath-90 frequency converter is located in the shaft head next to the drive. The brake opening is electrical, UPS buffered.

Taking into account the criterion of escape and rescue routes, the control cabinet **KW03Z: 1900 x 450 x 260mm (H x W x D)** with integrated frequency converter is also an option.



Cabinet/Plate
KW240



Cabinet/Plate
KW265





Cabinet KW03Z with
internal Inverter

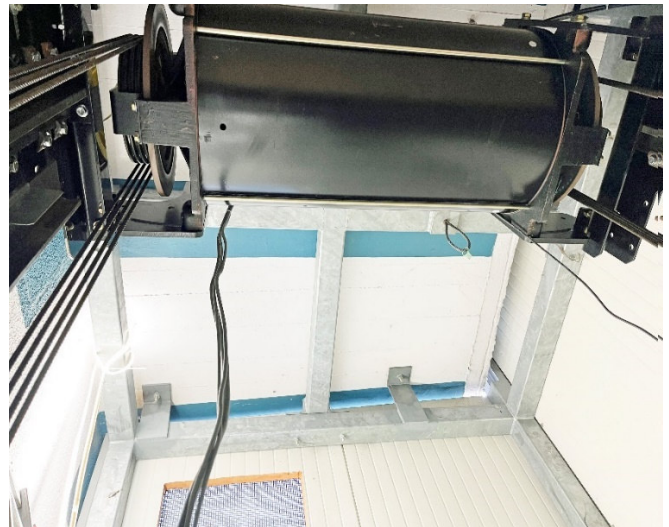
9.0 Manufacture – Thyssenkrupp – Galaxy

In the ThyssenKrupp Galaxy kit, we have a conventional drive which is located in the shaft head as a gearless synchronous machine.

In its original state, the frequency converter is located next to the drive.

The data set of the drive is stored in the GOLIATH-90 inverter. An EnDat or BISS encoder is recommended for retrofitting.

			
MOTEUR THYSSEN ASCENSEURS 12 508 003 - Made in France			
P: 4,3kW	U: 360V ~	In: 12A	Cd: 850Nm
n: 681/mn	180 d / h FM 40%	Isol.: classe F	Prot.: IP 21
Charge statique radiale max. par poulie: 12,8 kN		Poids: 460	
N° de série: 090041 / 003		Année de fabrication: 2003	



The control unit with electrical emergency release is located in the door frame at the uppermost mounting point. The width of the mounting plate is 240 mm.

While retaining the door frame box, the functionality of the control cabinet can be retained with the new mounting plate of the **KW 240: 1980 x 235 (H x W)**.

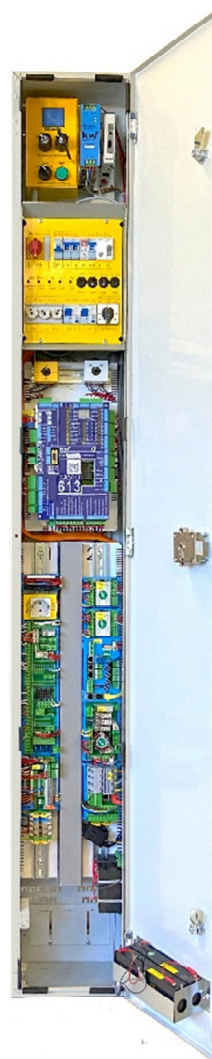
Another option is to install the complete **KW240 switch cabinet: 2000 x 240 x 220 mm (H x W x D)** for machine room-less lift systems (MRL) for installation next to the shaft door, or the **KW265 switch cabinet: 2000 x 265 x 170 mm (H x W x D)**.

The external Goliath-90 frequency converter is located in the shaft head next to the drive. Braking is performed electrically, with UPS buffering.

The control cabinet **KW03Z: 1900 x 450 x 260mm (H x W x D)** with integrated frequency inverter is also an option, taking into account the criterion of escape and rescue routes.



Cabinet/Plate KW240



Cabinet/Plate KW265



Cabinet KW03Z with internal Inverter

10.0 Manufacture – LM Liftmaterial JADE

The Jade lift kit includes a gearless synchronous machine of type Sassi Gxxx or Ziehl-Abegg type SMxxx.

In its original condition, the frequency converter is located in the lower third of the control cabinet (see image on the right).

These gearless machines are standard types and can be operated without any problems with our GOLIATH-90 frequency converter.

The complete control system, the converter and the emergency release are located on the mounting plate, which has an approximate width of 450 mm.

These are ideal conditions for a simple conversion.



The master solution is to remove the old mounting plate. The new control system, including the frequency converter, is delivered on the **KW03Z mounting plate** and can be installed in the existing cabinet body.

This allows the functionality of the control cabinet to be maintained.

Another option is to use the complete **KW03z control cabinet: 1900 x 450 x 260 mm (H x W x D)** with the integrated frequency converter.

This can be placed in front of the existing wall opening, for example.

These are ideal conditions for a simple conversion.

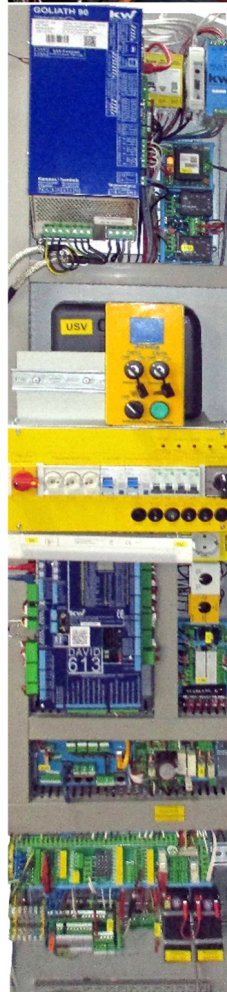


Plate KW03Z



Cabinet KW03Z

