OPERATING MANUAL
LIFT CONTROLLER SYSTEM DAVID-2005

Functions
Start-Up Instructions

KW Aufzugstechnik GmbH Lift Controller DAVID-2005
Version V1.25 of 14.01.2008

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1.0 SYSTEM DESCRIPTION

GUARANTEE

By this consumer guarantee KW Aufzugstechnik GmbH guarantees the product to be free from defects in material and workmanship for two (2) years from the time of its original purchase.

CONDITIONS

This guarantee will not reimburse nor cover damage resulting from adaptations or adjustments which may be made to the product, without the prior written consent of KW Aufzugstechnik GmbH, in order to conform to the national or local technical or safety standards in force in any country other than the ones for which the product was originally designed and manufactured. This guarantee will not apply if the type or serial number on the product has been altered, deleted or made illegible.

This guarantee covers none of the following:

- Periodic maintenance and repair or replacement of parts due to normal wear and tear;
- Any adaptation or changes to moify the product from its normal purpose as described in the instruction manual, without the prior written consent of KW Aufzugstechnik GmbH;
- Transport costs, home service transport costs and all risks of transport relating directly or indirectly to the guarante of the product;
- Damage resulting from:
    - Misuse, including but not limitted to (a) failure to use the product for its normal purpurse or in accordance with KW Aufzugstechnik GmbH's instructions on the proper use and maintenance, and (b) installation or use of the productin a manner inconsistent with the technical or safety standardsin force in the country where it is usedand (c) improper or incorrect installation of software.
    - Repair done by non authorized service stations or dealers, or the customer himself;
    - Accidents, lighting, water, fire, improver ventilation or any cause beyond the control of KW Aufzugstechnik GmbH;
    - Defects of the system into which this product incorporated.

This guarantee does not affect the consumer's statutory rights under applicable national laws in force, nor the consumer'srights against the dealer arising from their sales/purchase contract.

1.2 SAFETY CONDITIONS

IN GENERAL

Running the controller system DAVID-2005 without casing is forbidden, because of the high voltage in there. If you do runing without casing, there could be personal damage.
Only skilled workers can do working at the frequency inverter system controller system DAVID-2005. It must be consider the following national and local safety conditions and laws: DIN VDE0100 ,DIN VDE 0110,IEC364,IEC664

USE OF THE CONTROLLER SYSTEM DAVID-2005

The controller system DAVID-2005 is device for the use in elevators. Other using is forbitten without the prior written consent of KW Aufzugstechnik GmbH. The following laws must be considered, when you are build in the inverter:

- EG-Richtlinie 89/392/EWG (Maschinenrichtlinie) .
- EN 60204.
- Niederspannungsrichtlinie 73/23/EWG
- EMV-Richtlinie (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 transport of the frequency inverter must be very carefully organized. Please do not touch electronical parts and terminals. They could be destroyed by the hand voltage of a person! If you want to connect the frequency inverter, you don't have to open the casing. All terminals are out there.
Please pay attention at the place above and under the inverter. It is nessary for cooling.

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 EG-Declaration of Conformity

Produkt Controller for Elevators

Typ Microprocessor System DAVID -2005

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. A operating instruction is issued with each unit.The safety advices must be studied in detail, before operating the unit.

EG-Guideline 89/336 EWG, Electromagnetic Compatibility
DIN Standard EN 50081 Part 1, Electromagnetic Compatibility, Basic Standard Radiation Disturbance in Living-, Business-, and Working Quarters
DIN EN 55011 Standard, High Frequency Interference, Class B Living Quarters
DIN EN 50082 Part 1 und 2, Electromagnetic Compatibility, Basic Standard Resistance against Interference in the Industry
IEC 801-2, corresponding with VDE 0843 Electrostatic Discharge ESD
IEC 804-1, corresponding with prEN 55024 Part 4, Burst-Test with Signal- and Control Cables
IEC 804-1, corresponding with prEN 55024 Part 4, Burst-Test with AC-Supply Cables

Eschborn, den 01.08.2001

Hans-Werner Walbert

1.4 Description Processor Inquiry-Safety Circuit

FUNCTION

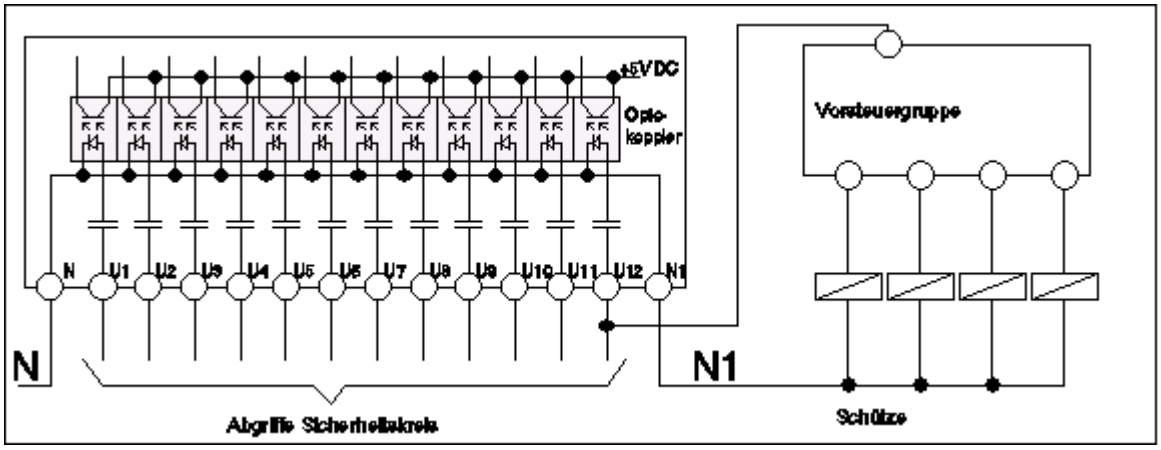
The Central Processing Unit contains a function through which the voltage level in the safety circuit of the elevator system is monitored.The safety circuit voltage is divided through X2 capacitors and resistors and then forwarded to the input of the opto-couplers. Further processing of these signals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

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.

DECRIPTION 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.



Eschborn, den 01.08.2001

Hans-Werner Walbert

1.5 Description Temperature Monitor

Product Controller for Elevators

Type Microprocessorsystem DAVID-2001/2005/606 – 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 thresold can for the cycle non-repeat function of the plant can between 30 degrees Celsius and 100 degrees Celius be adjusted.
During factory setting the temperature thresold 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 swichgear cabinet temperature below the limit value threshold sinks.

Oberursel, den 01.03.2006

Hans-Werner Walbert

2. Performance Features

2.1 Performance Features of the Microprocessorsystems DAVID-2005

The microprocessorsystem DAVID-2005 is a very high flexible controller system for rope- and hydraulic elevators with maximal 32 floors. You can chooose a very high number of controller types, like Send-controlling, attendant-controlling, no-collecting, One-button down, one button up & down, Two buttons aud the group function with an optional pcb-card.
Fundamentally all door types can be used with this controller, like automatic with limitswitch / without limitswitch, or handdoors with or without cardoor by choosing the right parameters.
There are 5 systems of shaft copy in the controller software. If you are working only with magnets you can choose between Standard and minimum copy. If you are prefering digital shaft copy systems you have three possibilities like relative- , absolute digital copy and the system which use the pulses of the motor encoder.
For functions, like pre-opening doors or releveling, you can use our safety-pcb-board. The microprosseor-units in the casing, on the car, in the car panel and in the floor can show the position of the car by car indicators in different codes (1 of N, binär & graycode). For the direction arrows and the hall lantern are also output channels at the units, the gong-function is a stanard-function of the system. You have only to connect a loudspeaker at output-terminals.
The controller have a lot of special functions, like fire evacuation service, emergency power service, fire fighter service,.. in the software.
With the help of the mobil handterminal HPG-60 with LCD-Display and clear sentence working in two langunges, you can make the commissioning and monitoring at the car and perhaps inside the car though the car panel. There is a Event / Fault Log with a depht of 100 entries.

Basic componentes of the controllersystem DAVID 2005:

CENTRAL UNIT DAVID-2005

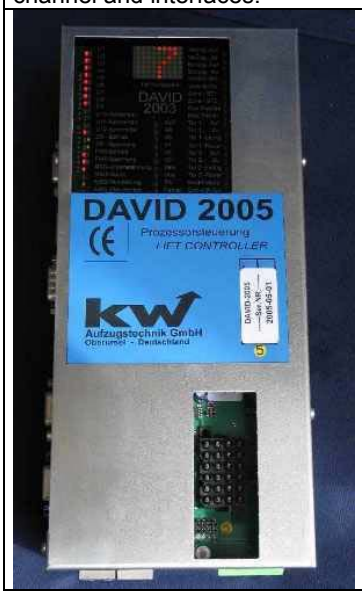
Car Bus Connection RS-485 with Hanging Wire EHK-40

CAR CONTROLLER DAVID-2005-FKR

Car Calling Controller DAVID-2005-EIT or DAVID-2003-ITR

2.2 Description Central Unit ZR

The central-unit in a full casing of aluminium metal with an integrate power supply of 24V DC 4,0A and a emergency power supply of 12V DC 1,2A. You do not need a optional power supply. The system has the following in- & output channel and interfaces:



Indication of the Running System (from top to bottom)

The multifunctionsindicator on the top side of the casing shows you a lot of typical informations about the running system:

- Actual carposition
- Safety-ciruit (red LED -> Open green LED-> closed)
- Monitorfunction about the voltage and running of the ZR- and FKR-controllersystem
- Four LEDs about the emergency supply
- Indication about the speeeds and the direction
- Switching position of the shaft copy
- Doorfunctions

Each DAVID-2005-ZR-Unit get a serial number, as characteristic of existed climatic and function tests.
In the lower part of casing cover is a connection of the hanging wire. (Plug and Play).

Left Side Part: (from left to right side)

2 optional Expansionports, Command relay output-16P, Nominal-Value-9P, Shaftbus-RJ45, Liftbus-Connector-9P, Encoder-Digital Shaft Copy System, Serial interface hand terminal HPG-60, Serial Interfaces Modem /DFÜ
12 free relay exits (K300 to K315)

Integrating Emergency power device 12V-1.0A with emergency light providing, delay Alarmtaster, 12V-Akku, 24V-Akku for Processor puffering.

Right Side Part: (from. Left to right side)

16 free programmable Inputs ZA0..7, ZB0..7, 8 free programmable Outputs ZC0..7, 24 free programmable Inputs & Outputs ZD0..7, ZE0..7, ZF0..7

12 230V-AC Inputs for Safety circuit promt (U1 to U12), 4 230V-AC Inputs for Emergency power evacuation & Cab Light, 2 free programmable Relay

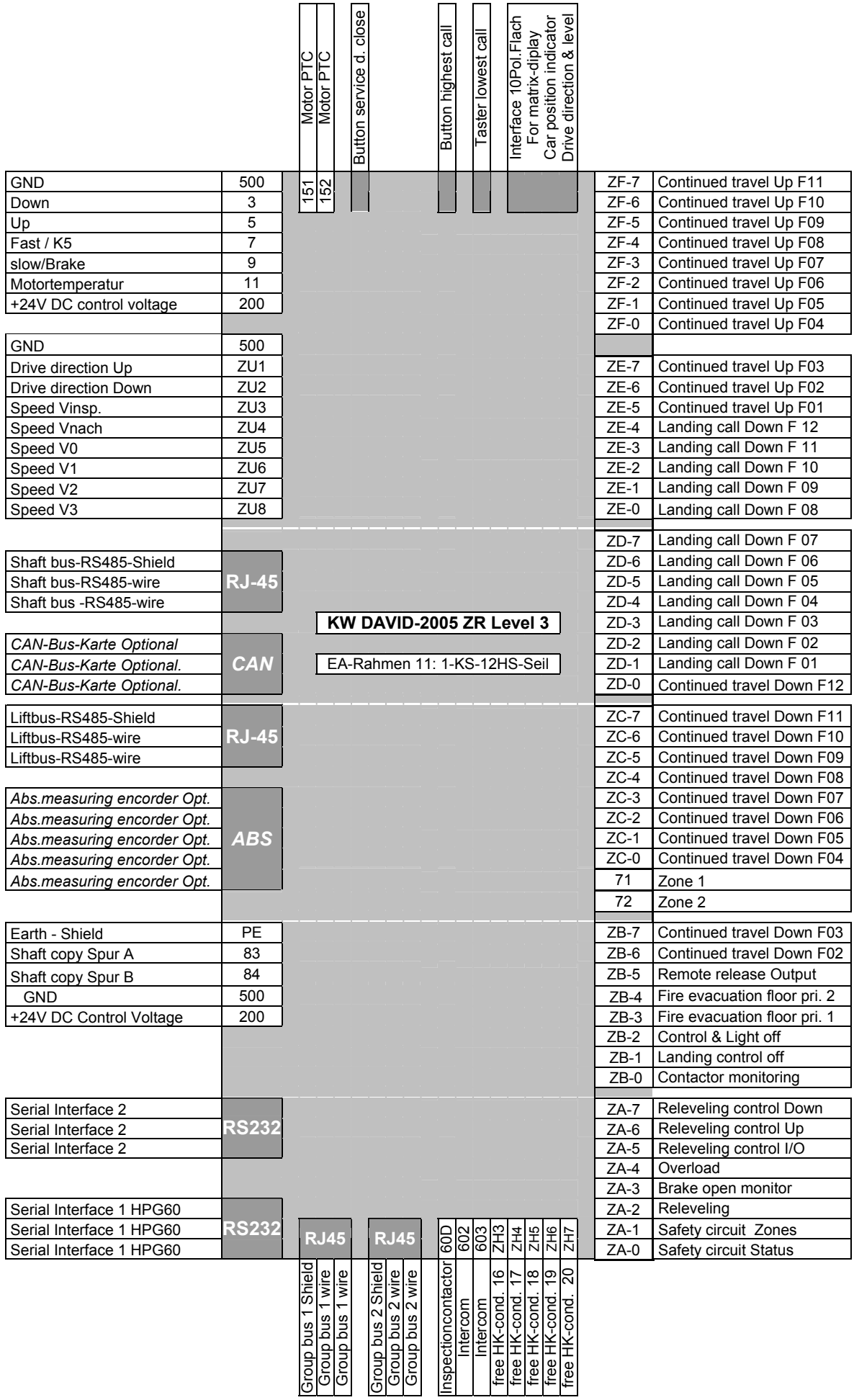
Net connection for Phase Processor & Emergency Power (N, L6, L5, PE). Built in Net device 24V-3,5A. (Terminals 200-500)

	**Bottom Side Part**: (from Left to right side) facutaltive Additionaloutlet Connection Groupe bus 1 RJ45 (facilities 1-4), Connection Groupe bus 2 RJ45 (facilitiers 5-8), Connection Inspection contactor K60, 2xIntercom, 5 free hanging wire conductor
	**Upstairs Side Part**: (from Left to right side) Connector Bus-display Typ KW; Button Call lowest stop, Button Call highest stop, Button Care Doors close for 15 min., Motor-ptc (Treminal 151,152)

H01- Terminal Description Central Unit

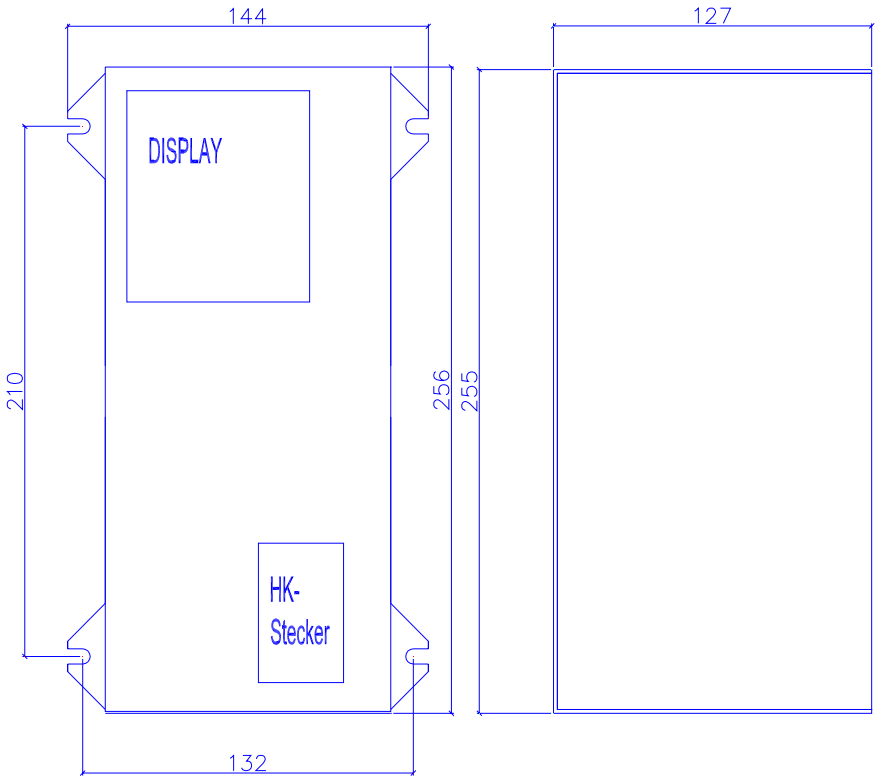
Emergency light	101	**KW DAVID-2005 ZR Level 1**	200	Controller Voltage +24V
GND	500		200	Controller Voltage +24V
Intercom	100		200	Controller Voltage +24V
Level Indicator	100		200	Controller Voltage +24V
			200	Controller Voltage +24V
GND	500		200	Controller Voltage +24V
Alert output	102	**Power Supply 24V 3,5A Max.**	500	GND
Voltage +12V	100		500	GND
Alert button	103			
Akku -	Akku-		PE	Shield
Akku +	Akku+		L5	230V AC emer. power device
0V Puffer Akku	GND	**Emergency power supply 12V 1,0 A Max.**	L6	230V AC ZR-unit
+24V Puffer Akku	ESV		N	Zero

Car Pos.Indicator 25h no.	311a		L51	Car Light on
Car P.Indicator 25h com.	311b		L5	Car Light com
	311c			
Car Pos.Indicator 24h no.	310a		312a	standart operation schließer
Car P.Indicator 24h com.	310b		312b	standart operation com
	310c		312c	
Car Pos.Indicator 23h no.	309a	**KW DAVID-2005 ZR Level 2**		
Car P.Indicator 23h com.	309b			
	309c			
Car Pos.Indicator 22h no.	308a			
Car P.Indicator 22h com.	308b	EA-Rahmen 11: 1-KS-12HS-Seil		
	308c			
Car Pos.Indicator 21h no.	307a			
Car P.Indicator 21h com.	307b		S30	Input 230V AC Car Light
	307c		404	restarting
Locked magnet closer	306a		402	Emergency power drive
Locked magnet com.	306b		401	Emergency power device
Locked magnet opener	306c			
Door 2 close closer	305a			
Door 2 close com	305b			
Door 2 close opener	305c			
Door 2 open closer	304a			
Door 2 open com	304b			
Door 2 open opener	304c		N1	Zero Conductor
			U12	Safery-Circuit U12
Door 1 close closer	303a		U11	Safery-Circuit U11
Door 1 close com.	303b		U10	Safery-Circuit U10
Door 1 close opener	303c		U9	Safery-Circuit U9
Door 1 open closer	302a		U8	Safery-Circuit U8
Door 1 open com	302b			
Door 1 open opener	302c		U7	Safery-Circuit U7
			U6	Safery-Circuit U6
No disturbance closer	301a		U5	Safery-Circuit U5
No disturbance com	301b		U4	Safery-Circuit U4
No disturbance opener	301c		U3	Safery-Circuit U3
Alert message closer	300a		U2	Safery-Circuit U2
Alert message com	300b		U1	Safery-Circuit U1
Alert message opener	300c		N	Zero


Motor PTC
Motor PTC
Button service d. close
Button highest call
Taster lowest call
Interface 10Pol.Flach
For matrix-diplay
Car position indicator
Drive direction & level
GND 500
Down 3
Up 5
Fast / K5 7
slow/Brake 9
Motortemperatur 11
+24V DC control voltage 200
151
152
GND 500
Drive direction Up ZU1
Drive direction Down ZU2
Speed Vinsp. ZU3
Speed Vnach ZU4
Speed V0 ZU5
Speed V1 ZU6
Speed V2 ZU7
Speed V3 ZU8
Shaft bus-RS485-Shield
Shaft bus-RS485-wire
Shaft bus -RS485-wire
RJ-45
CAN-Bus-Karte Optional
CAN-Bus-Karte Optional.
CAN-Bus-Karte Optional.
CAN
KW DAVID-2005 ZR Level 3
EA-Rahmen 11: 1-KS-12HS-Seil
Liftbus-RS485-Shield
Liftbus-RS485-wire
Liftbus-RS485-wire
RJ-45
Abs.measuring encorder Opt.
Abs.measuring encorder Opt.
Abs.measuring encorder Opt.
Abs.measuring encorder Opt.
Abs.measuring encorder Opt.
ABS
Earth - Shield PE
Shaft copy Spur A 83
Shaft copy Spur B 84
GND 500
+24V DC Control Voltage 200
Serial Interface 2
Serial Interface 2
Serial Interface 2
RS232
Serial Interface 1 HPG60
Serial Interface 1 HPG60
Serial Interface 1 HPG60
RS232
RJ45
RJ45
Group bus 1 Shield
Group bus 1 wire
Group bus 1 wire
Group bus 2 Shield
Group bus 2 wire
Group bus 2 wire
Inspectioncontactor 60D
Intercom 602
Intercom 603
free HK-cond. 16 ZH3
free HK-cond. 17 ZH4
free HK-cond. 18 ZH5
free HK-cond. 19 ZH6
free HK-cond. 20 ZH7
ZF-7 Continued travel Up F11
ZF-6 Continued travel Up F10
ZF-5 Continued travel Up F09
ZF-4 Continued travel Up F08
ZF-3 Continued travel Up F07
ZF-2 Continued travel Up F06
ZF-1 Continued travel Up F05
ZF-0 Continued travel Up F04
ZE-7 Continued travel Up F03
ZE-6 Continued travel Up F02
ZE-5 Continued travel Up F01
ZE-4 Landing call Down F 12
ZE-3 Landing call Down F 11
ZE-2 Landing call Down F 10
ZE-1 Landing call Down F 09
ZE-0 Landing call Down F 08
ZD-7 Landing call Down F 07
ZD-6 Landing call Down F 06
ZD-5 Landing call Down F 05
ZD-4 Landing call Down F 04
ZD-3 Landing call Down F 03
ZD-2 Landing call Down F 02
ZD-1 Landing call Down F 01
ZD-0 Continued travel Down F12
ZC-7 Continued travel Down F11
ZC-6 Continued travel Down F10
ZC-5 Continued travel Down F09
ZC-4 Continued travel Down F08
ZC-3 Continued travel Down F07
ZC-2 Continued travel Down F06
ZC-1 Continued travel Down F05
ZC-0 Continued travel Down F04
71 Zone 1
72 Zone 2
ZB-7 Continued travel Down F03
ZB-6 Continued travel Down F02
ZB-5 Remote release Output
ZB-4 Fire evacuation floor pri. 2
ZB-3 Fire evacuation floor pri. 1
ZB-2 Control & Light off
ZB-1 Landing control off
ZB-0 Contactor monitoring
ZA-7 Releveling control Down
ZA-6 Releveling control Up
ZA-5 Releveling control I/O
ZA-4 Overload
ZA-3 Brake open monitor
ZA-2 Releveling
ZA-1 Safety circuit Zones
ZA-0 Safety circuit Status

U1	Safery-Circuit U1		**Indicator Car position**		**11A**	11A Brakept. Up
U2	Safery-Circuit U2				**11B**	11B Brakept.Down
U3	Safery-Circuit U3				**12A**	12A Level Up
U4	Safery-Circuit U4				**12B**	12B Level Down
U5	Safery-Circuit U5				**13B**	13APreendswitcher bottom
U6	Safery-Circuit U6				**13A**	13B Preendswitcher top
U7	Safery-Circuit U7				**71**	71 Zone 1
U8	Safery-Circuit U8				**72**	72 Zone 2
U9	Safery-Circuit U9				**Impulse**	Pulses
U10	Safery-Circuit U10				**Fault**	Fault Shaft Copy
U11	Safery-Circuit U11	**Auf**	Direction Up		**D1 open**	Door 1 Open
U12	Safery-Circuit U12	**Ab**	Direction Down		**D1 close**	Door 1 Close
ZR-Run	Run ZR-CPU	**V0**	Speed V0		**D1 Lg**	Door 1 Photocell
ZR-Spg	Power-ZR-CPU	**V1**	Speed V1		**D1 Rev**	Door 1 Reverse
FKR-Run	Run FKR-CPU	**V2**	Speed V2		**D2 open**	Door 2 Open
FKR-Spg	Power-FKR-CPU	**V3**	Speed V3		**D2 close**	Door 2 Close
NSG-Spg	NSG-Under voltage	**Vins**	Speed Vins		**D2 Lg**	Door 2 Photocell
NSG-Alarm	NSG-Alert	**Vna**	Speed Vnh		**D2 Rev**	Door 2 Reverse
NSG-Lad.	NSG-Accu Loading	**FS**	Error memory		**NH**	Releveling aktiv
NSG-Akku	NSG-Accu Drive	**Fehler**	Error in drive		**EoT**	Drivei n with open door

Displayanzeige mit Leuchtdioden und Stockwerksanzeige



Technical measures of the central controller unit (ZR)

2.3 Description Expansion Unit DAVID-ZG-24

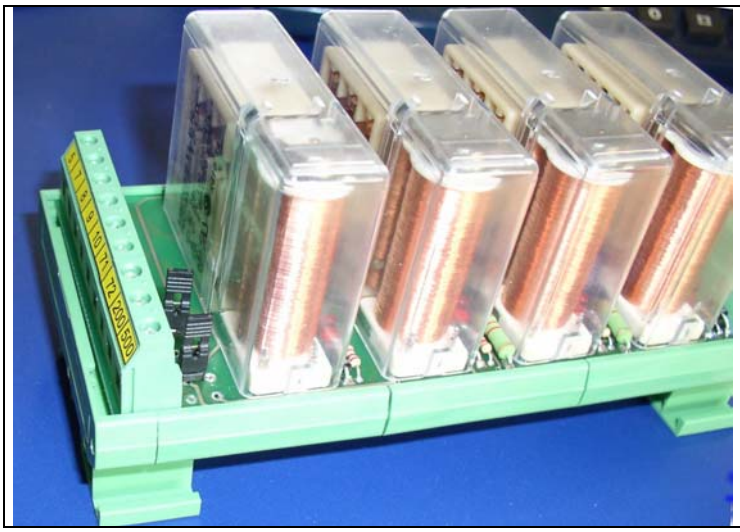
The Expansion-device DAVID-ZG-24 has 24 additional Inputs and Outputs. You can connect the expansion-device with bus-cable RJ45 and voltage supply (200 and 500) with the central unit or shaft bus. Inputs and outputs are freely selectable. You can have up to 4 expansion units in a central unit.

Address setting:
1.EU-> DIP switch 00
2.EU-> DIP switch 01
3.EU-> DIP switch 10
4.EU-> DIP switch 11

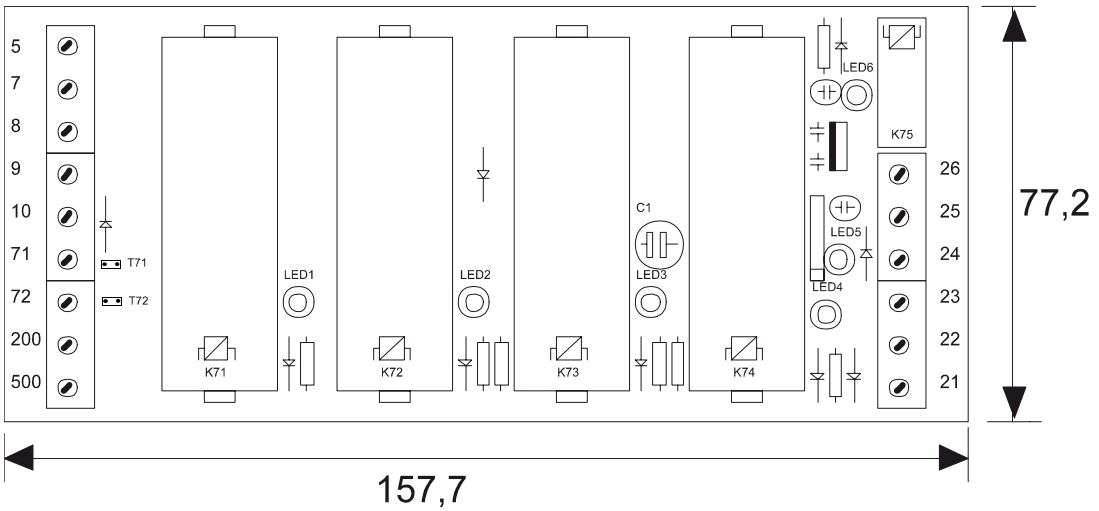
H03- Terminal Description Expansion-device DAVID-ZG-24

Bus Connection			21g	ZG0 In/Output
RJ-45			22g	Free In/Output
			23g	Free In/Output
Bus Connection			24g	Free In/Output
RJ-45			25g	Free In/Output
		Dip-Schalter Adres.	26g	Free In/Output
0V GND	500		27g	Free In/Output
+24V Controller Voltage	200		28g	Free In/Output
0V GND	500			
+24V Controller Voltage	200			
			29g	Free In/Output
Free In/Output	37g		30g	Free In/Output
Free In/Output	38g		31g	Free In/Output
Free In/Output	39g		32g	Free In/Output
Free In/Output	40g	**DAVID-ZG-24**	33g	Free In/Output
Free In/Output	41g	Expansion-device	34g	Free In/Output
Free In/Output	42g		35g	Free In/Output
Free In/Output	43g		36g	Free In/Output
Free In/Output	44g			

2.4 Description Safery Circuit SIS-16

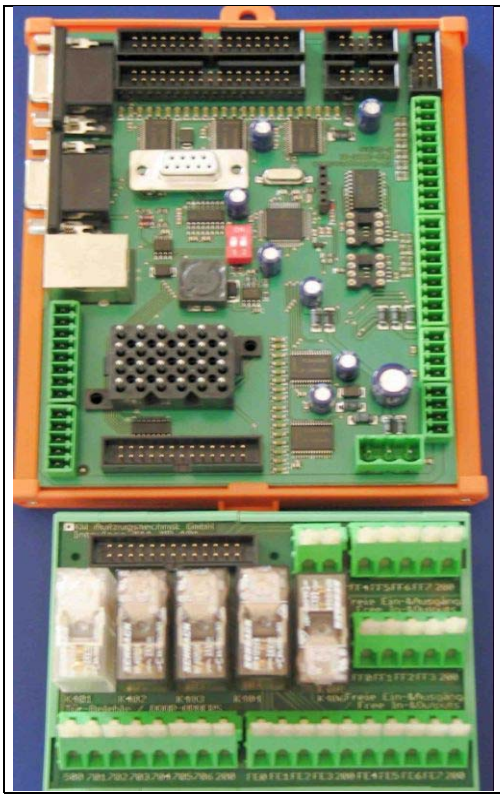


The Safety Circuit SIS16-101 has 4 safety relays and a small relay for the level-indicator. Screw terminals are on the right and on the left of the Safety Circuit.
SIS16-101 is preparatory for the Mounting-rail- assembly.
To the test of normal function of protection circuit is necessary to set the Jumper!



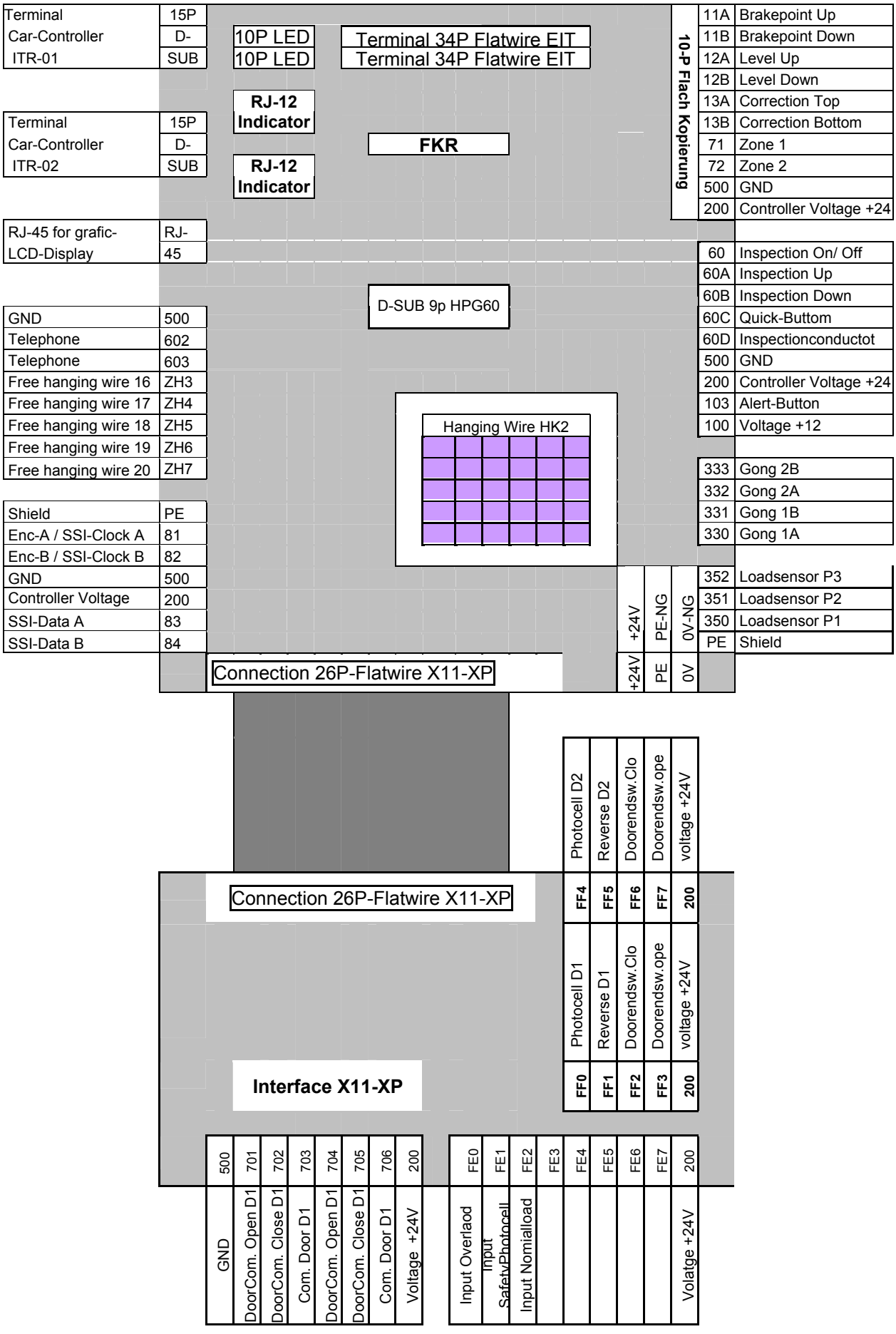
Relay and indicator elements:	K71= Zone relay 71 with red LED-Indicate LED1 K72= Zone relay 72 with red LED-Indicate LED2 K73=Control relay 73 with red LED-Indicate LED3 K74=Start relay Entry/Releveling with red LED-Indicate LED4 K75=level relay with red LED-Indicate LED 6 LED Status= Colour Green, Control display LED 5
Dimensions (with bowl):	(Lenght x Bright x Hight) 157,7mm x 77,2mm x 65,0mm
Weight:	Ca. 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 to +24V DC / 250mA lever-indicator
Switching cycles:	~ 1.000.000 Switching cycles
Ambient temperature:	0 to +65 °degree

2.5 Description Car Controller FKR



3	Controller-voltage-output
2	Gong-output
1	Load-sensor-input
28	+24V DC Inputs
1	Encoder-inputs
16	+24V DC Outputs
5	Relay outputs
1	Flashbang-Interface 10 pole
1	Serial interface RS 232
2	Car-paneel-Interfaces for EIT
2	Car-paneel-Interfaces for ITR
1	Bus-Connection for Grafik-LCD-Display
1	Hanging wire interface

H02- Terminal Description Car-Controller FKR

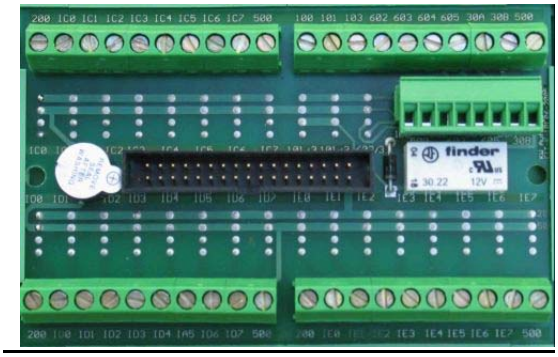


2.6 Description Car Calling EIT

The car calling EIT offers an economic alternative to car calling controller. The following point configurations can be obtained:

1) 8 Car calls with one car controller standart display 1 of N
2) 12 Car calls with one binary car controller standart display
3) 24 Car calls with one KW LED or LCD Display

Car panel pcb EIT-2005 SCHRAUB, mit boiltterminal for universal Connection of Cal&:

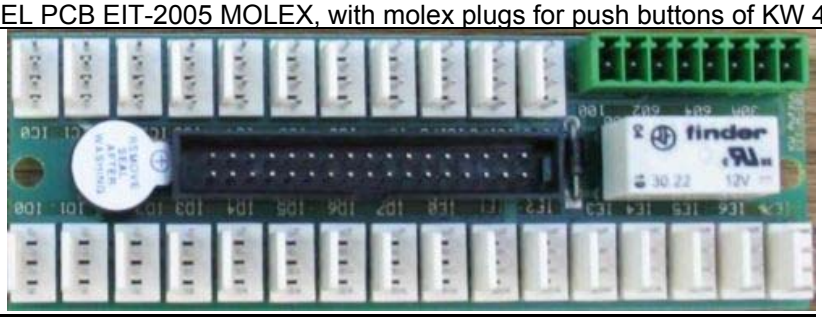


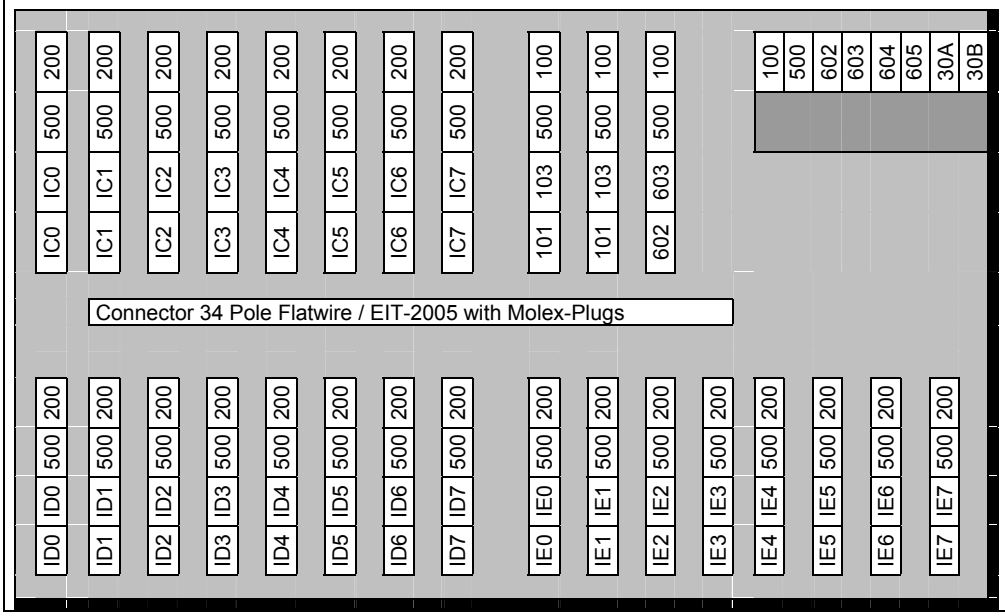
200	IC0	IC1	IC2	IC3	IC4	IC5	IC6	IC7	500		100	101	103	602	603	604	605	30A	30B	500
Voltage +24V DC	Anzeige 21h	Anzeige 22h	Anzeige 23h	Anzeige 24h	Anzeige 25h	Anzeige 26h	Anzeige 27h	Anzeige 28h	GND		Voltage +12V DC	Em.Light+12V DC	Alert Push Button	Intercom/Telephon	Intercom/Telephon	Intercom/Teleph	Intercom/Teleph	Alert Terminal	Alert Terminal	GND

Connection 26P-Flatwire at X11-XP — EIT-2005

200	ID0	ID1	ID2	ID3	ID4	ID5	ID6	ID7	500		200	IE0	IE1	IE2	IE3	IE4	IE5	IE6	IE7	500
Voltage +24V	Car Call F 1	Car Call F 2	Car Call F 3	Car Call F 4	Car Call F 5	Car Call F 6	Car Call F 7	Car Call F 8	GND		S Voltage +24V	Door 1 open	Door 1 close	Door 2 open	Overload indica	Car Fan	Car Priority	Arrow Up	Arrow Down	GND

CAR PANEL PCB EIT-2005 MOLEX, with molex plugs for push buttons of KW 40,44, 46 und 60:





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 (high aktiv)	21h – Car Position Indicator HS01	IC0	EA	2
3	EA	ID1	– Car Call HS 02 (high aktiv)	22h - Car Position Indicator HS02	IC1	EA	4
5	EA	ID2	– Car Call HS 03 (high aktiv)	23h - Car Position Indicator HS03	IC2	EA	6
7	EA	ID3	– Car Call HS 04 (high aktiv)	24h - Car Position Indicator HS04	IC3	EA	8
9	EA	ID4	– Car Call HS 05 (high aktiv)	21h - Car Position Indicator HS05	IC4	EA	10
11	EA	ID5	– Car Call HS 06 (high aktiv)	22h - Car Position Indicator HS06	IC5	EA	12
13	EA	ID6	– Car Call HS 07 (high aktiv)	23h - Car Position Indicator HS07	IC6	EA	14
15	EA	ID7	– Car Call HS 08 (high aktiv)	24h - Car Position Indicator HS08	IC7	EA	16
17	EA	IE0	S43A– Door Open Push Button D1 open	100 +12V Voltage (Akku-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 - Alarmtaster	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 Errow Indicator–Direction Up	605 - ZH4 – Free Hanging Wire	605	S	30
31	EA	IE7	Car Errow 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 (high aktiv)	– Car Call HS 09 (high aktiv)	IE0	EA	2
3	EA	ID1	– Car Call HS 02 (high aktiv)	– Car Call HS 10 (high aktiv)	IE1	EA	4
5	EA	ID2	– Car Call HS 03 (high aktiv)	– Car Call HS 11 (high aktiv)	IE2	EA	6
7	EA	ID3	– Car Call HS 04 (high aktiv)	– Car Call HS 12 (high aktiv)	IE3	EA	8
9	EA	ID4	– Car Call HS 05 (high aktiv)	21h - Car Position Indicator HS01cod.	IE4	EA	10
11	EA	ID5	– Car Call HS 06 (high aktiv)	22h - Car Position Indicator HS02cod.	IE5	EA	12
13	EA	ID6	– Car Call HS 07 (high aktiv)	23h - Car Position Indicator HS03cod.	IE6	EA	14
15	EA	ID7	– Car Call HS 08 (high aktiv)	24h - Car Position Indicator HS04cod.	IE7	EA	16
17	EA	IE0	S43A - Door Open Push Button –D1 Open	100 +12V Spannung (Akku-puffer	100	A	18
19	EA	IE1	S44A- Door Close Push Button –D1 Close	E101 – Notlicht +12V DC	101	A	20
21	EA	IE2	S43B- Door Open Push Button – D2 Open	S103 - Alarmtaster	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 Errow Indicator –Direction Up	605 - ZH4 – Free Hanging Wire	605	S	30
31	EA	IE7	Car Errow Indicator –Direction Down	Pieco Signal (high aktiv)	-	A	32
33	A	200	200 +24V DC Controller Voltage	GND	500	A	34

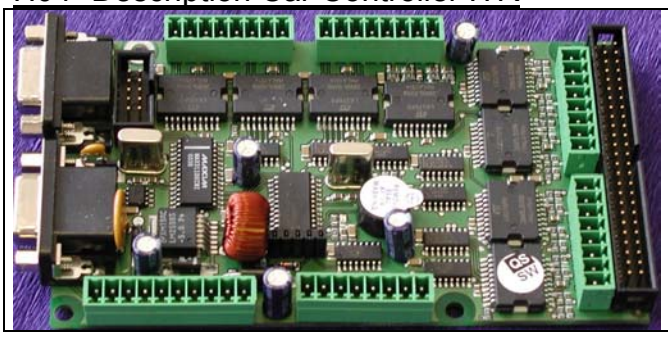
If you need new functions, you must erase the input- and output channels IE1, IE2, IE4.

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 (high aktiv)	– Car Call HS 09 (high aktiv)	IE0	EA	2
3	EA	ID1	– Car Call HS 02 (high aktiv)	– Car Call HS 10 (high aktiv)	IE1	EA	4
5	EA	ID2	– Car Call HS 03 (high aktiv)	– Car Call HS 11 (high aktiv)	IE2	EA	6
7	EA	ID3	– Car Call HS 04 (high aktiv)	– Car Call HS 12 (high aktiv)	IE3	EA	8
9	EA	ID4	– Car Call HS 05 (high aktiv)	– Car Call HS 13 (high aktiv)	IE4	EA	10
11	EA	ID5	– Car Call HS 06 (high aktiv)	– Car Call HS 14 (high aktiv)	IE5	EA	12
13	EA	ID6	– Car Call HS 07 (high aktiv)	– Car Call HS 15 (high aktiv)	IE6	EA	14
15	EA	ID7	– Car Call HS 08 (high aktiv)	– Car Call HS 16 (high aktiv)	IE7	EA	16
17	EA	IE0	S43A-Door Open PushButton–Door1 Open	100 +12V Voltage (Akku-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 - Sprechanlage	602	S	24
25	EA	IE4	S150 - Car fan Button Open	602 - Sprechanlage	603	S	26
27	EA	IE5	S36 – Landing Calls (opener)	604 - ZH3 – Free Hanging Wire	604	S	28
29	EA	IE6	Car Errow Indicator –Direction of Travel Up	605 - ZH4 – Free Hanging Wire	605	S	30
31	EA	IE7	Car Errow Indicator –Direction of Travel Down	Pieco Signal (high aktiv)	-	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.

H04- Description Car Controller ITR



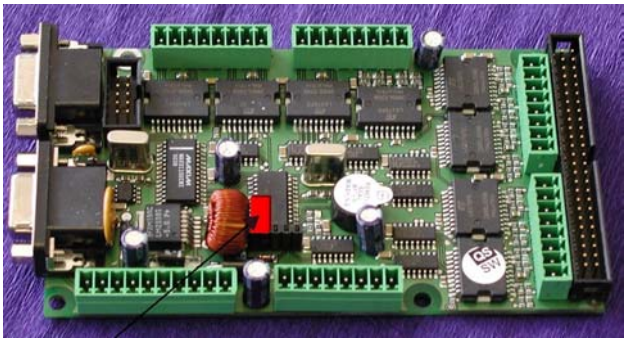
The car calling controller ITR is mounted behind of the cabin indicator board or in inspection box at description car. It is responsible for Car Calls, Door Button-commands….You can decide between 8-Stops-version and 16-Stops-version.

H05- Terminal Description Car Controller ITR

Freie HK-Ader	**ZH3**	D-Sub FKR	D-Sub HPG	21h	**IA0**	A57- Car Pos. Indicator F1
Freie HK-Ader	**ZH4**			22h	**IA1**	A58- Car Pos. Indicator F2
Freie HK-Adern	**ZH5**		Flatwire.8P Indicator	23h	**IA2**	A59- Car Pos. Indicator F3
0V Steuermasse	**500**			24h	**IA3**	A60- Car Pos. Indicator F4
+24V Steuerspannung	**200**			25h	**IA4**	A61- Car Pos. Indicator F5
Notlicht +12V DC	**101**	Codier-Jumper		26h	**IA5**	
Alarmtaster	**103**			27h	**IA6**	
+12V Spannung	**100**			28h	**IA7**	
Sprechanlage	**603**					
Sprechanlage	**602**			97	**IB0**	A127- Car Arrow Up
0V Steuermasse	**500**			98	**IB1**	A128- Car Arrow Down
+24V Steuerspannung	**200**				**IB2**	A18- Overload Indicatior
E33-Taster Tür1 Auf	**IE0**	43A			**IB3**	A45- Message Car Fan
E34-Taster Tür1 Zu	**IE1**	44A			**IB4**	E/A03 - Evacuation Indicator
E35-Taster Tür2 Auf	**IE2**	43B			**IB5**	E/A129- Fire Fighter Indicator
E36-Taster Tür2 Zu	**IE3**	44B	**KW DAVID-2005 ITR**		**IB6**	E/A11 - Out Of Order
E16-Licht & Steuerung	**IE4**	201			**IB7**	E/A35 - Special Drive
E186-Innenvorzug	**IE5**	206A			**500**	0V GND
E24 -Tasterlüfter	**IE6**	158			**200**	+24V Controller Voltage
E22 -Rampenfahrt	**IE7**					

	21i	**22i**	**23i**	**24i**	**25i**	**26i**	**27i**	**28i**	**29i**	**30i**	**31i**	**32i**	**33i**	**34i**	**35i**	**36i**
Pinbelegung Flachband: Pin 1 - 200 Pin 2 - 21i Pin 3 - 500 ...	Car Call F 1	Car Call F 2	Car Call F 3	Car Call F 4	Car Call F 5	Car Call F 6	Car Call F 7	Car Call F 8	Car Call F 9	Car Call F 10	Car Call F 11	Car Call F 12	Car Call F 13	Car Call F 14	Car Call F 15	Car Call F 16

You can connect to a car controller FKR up to 2 discription car calling. The second discription car calling must encording with the red code-jumper.
It is not importent which 15 pin connector you choose, but it´s important to know what ITR has code-plug.



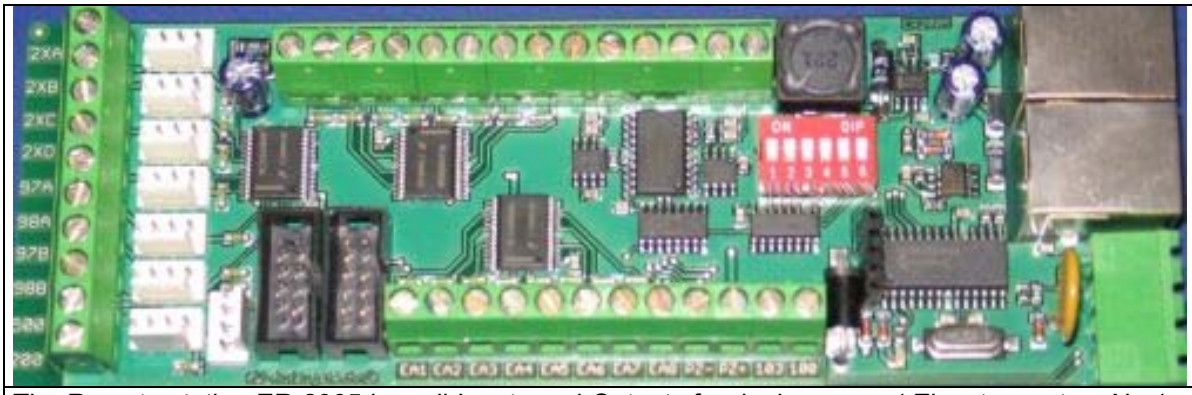
Attention! Connection of car calling controller and plug on of the coding plug make take place in the condition without tension!

When I start a second car calling?

You have a second car calling and you don´t want a parallel-wiring at the description car controller.

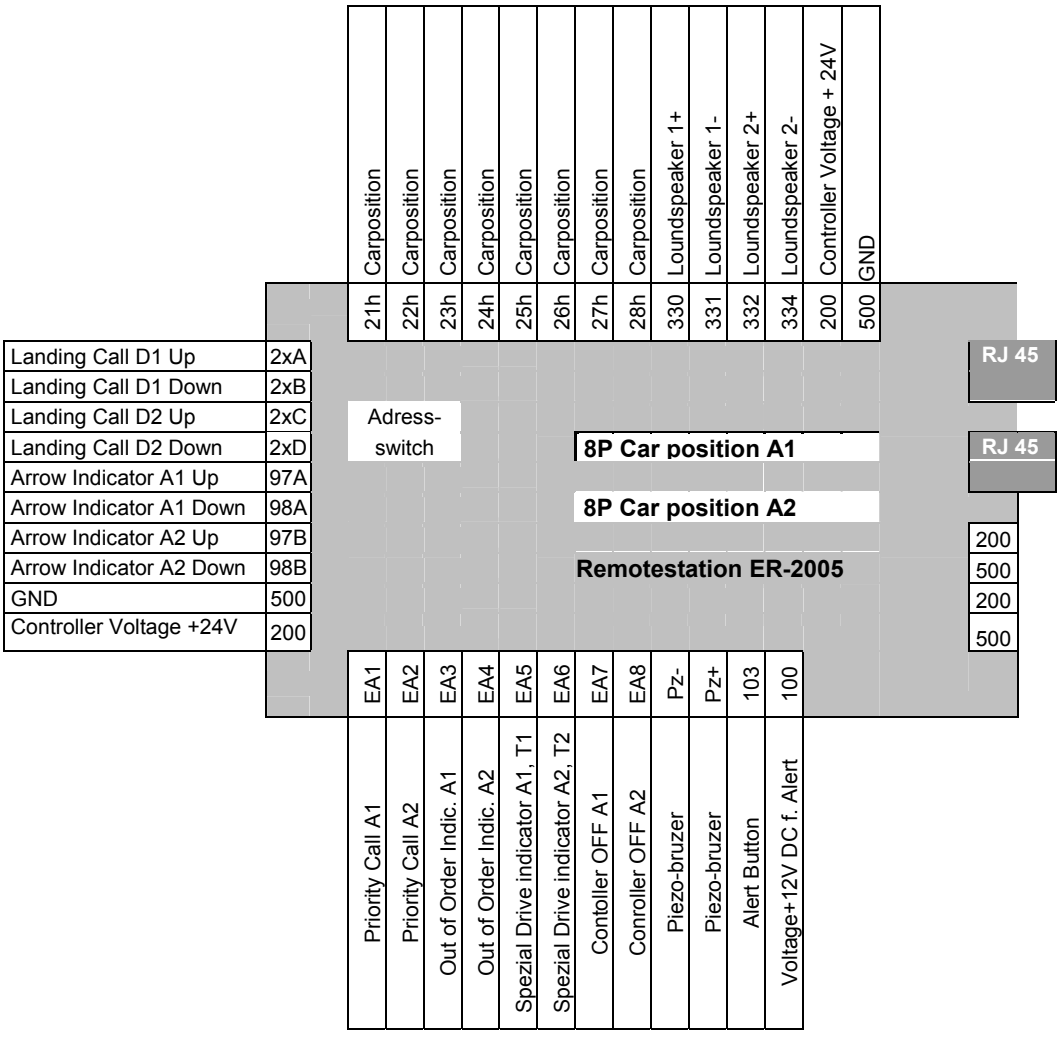
You have more than 16 Stops. With 2 description car controller you get 17-32 car calls.

2.7 Description Remote Station ER-2005

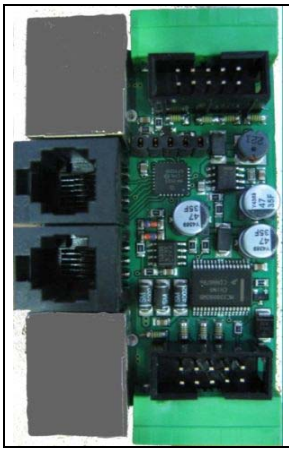


The Remote station ER-2005 has all Inputs and Outputs for duplex group (Elevator system No.1 and No.2) at one floor. There are call-inputs for Up and Down (each twice in selectivity) and two each landing priority imputs.
For group are operating according 4 outputs for displaying car position and 2 arrows per elevator. In addition, there are 2 Outputs for landing operation and special trip per elevator. You connect 2 speacers (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…)

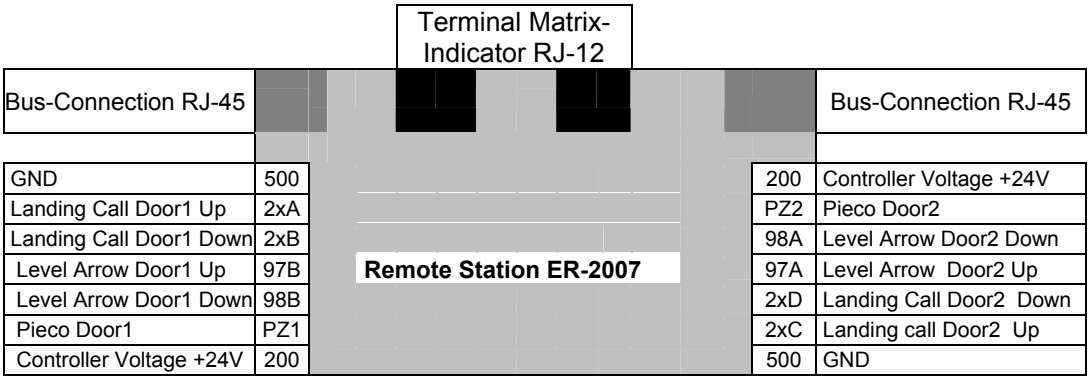
H07- Terminal Description Remote Station ER-2005



2.8 Device Description Remote Station ER-2007



The remote station ER-2007 provides 8 inputs and outputs, including 6 free inputs and outputs. There are 2 pieco-outputs for the call messaging of bus-matrix-indicator.
The remote station have all necessary call-petitions and arrow-outputs (even for selective door-controlling)
The installation of Remote Station is in the standart shaft cable channel 90x40. You combinate 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 connector 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.



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

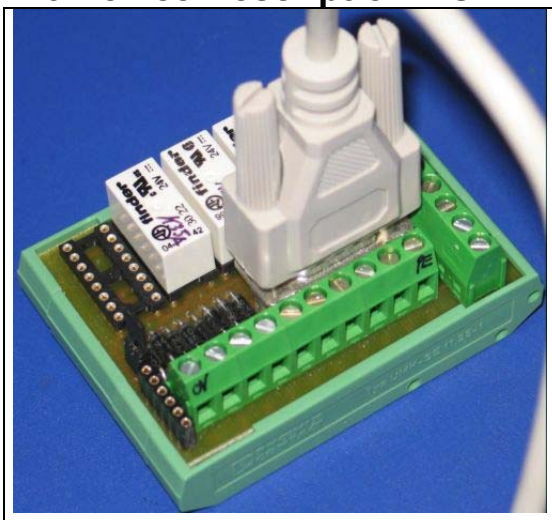
VISUALISATION

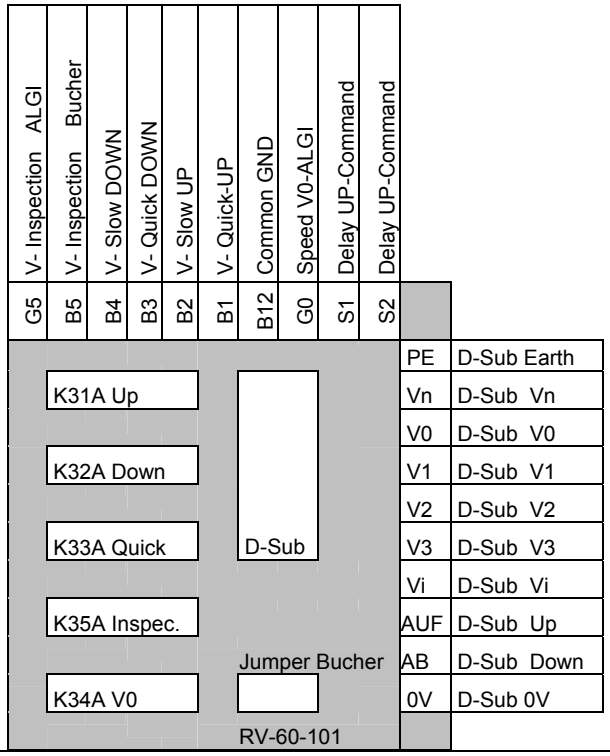
When the ER-2006/2007 connected with bus line and the controll is aktive, the green LED is blinking. In short circuit on the busline or malfunction expires or shine the LED. You can controll the Remote Station in Menu C6 Modul Monitor/ Remote Station ER01-16 and Remote Station ER 17-32.

ADRESS SETTING

All ER-2006/2007 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 & ER-2004, but by setting software.
The Remote Station programmed with the RJ-45 cable with the central unit. All other Remote Stations may not be connected. You can regulating the parameter “ Remote Station Adress programming” in menu C6 Modul Monitor. The ER-2006/2007 gets his adress with the selection of the number of floors. (01-32). Then the ER 2006/2007 can be installed in the corresponding floor.

2.9 Device Description CONTROL-VALVE-Controlling RV-60-101





The assembly RV-60-101 is used to control the contral chart of the type AZRS company ALGI and LRV-DELCON the company Bucher.
The configuration is done through the insertion of the relay K34A for ALGI and set the jumper for Bucher. The connection to the cenral-unit ZR is done by a 9-pole D-Sub-cable.

2.10 Device description Hanging wire EHK40

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

It is always the same pining. There is no difference in a 2 or a 32 Floor elevator system. The Hanging wire has three shield twisted pairs of wires . With this pairs, you can do the multiprocessorcommunication, the telephoneconnection, the encoder channels for the shaft encoder on the top of the car.

White hanging wire pins with black numbers				Black Hanging wire pins with white numbers			
Pin-Stecker	Bennenn.	**Ader**	Function	Pin-socket	Bennenn.	**Pin**	Function
1	PE		Schirm=Erde	1	3	**1**	Safety Ciruit Safety gear
2	PE		Schirm=Erde	5	3A	**2**	Safety Ciruit Inspection
3	PE		Schirm=Erde	9	4A	**3**	Safety Ciruit Re-Send
4	PE		Schirm=Erde	13	5	**4**	Safety Ciruit Inspection
5	LT2 - P1	**1**	Baus Channel B	17	6	**5**	Safety Ciruit Car Door
9	LT1 - P1	**2**	Baus Channel A	21	6A	**6**	Safety Ciruit Car Door
6	80 - P2	**3**	Encoder Channel A	22	L20/707	**7**	Doorengine 230V/ 400V Door 1
10	81 - P2	**4**	Encoder Channel B	23	708	**8**	Doorengine 400V – Door 1
7	200 - P3	**5**	Controller Voltage +24V	24	709	**9**	Doorengine 400V – Door 1
11	500 - P3	**6**	GND	20	710	**10**	Doorengine 400V – Door 2
8	602 - P4	**7**	Telephone	16	711	**11**	Doorengine 400V – Door 2
12	603 - P4	**8**	Telephone	12	712	**12**	Doorengine 400V – Door 2
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	N4	**17**	Zero
18	72	**14**	Zone 2 72	10	715	**18**	Mech.Locked
19	60D	**15**	Inspection Conductor	14	716	**19**	Mech.Locked
20	RA16	**16**	free	18	PE	**PE**	Earth
21	RA17	**17**	free				
22	RA18	**18**	free				
23	RA19	**19**	free				
24	RA20	**20**	free				

2.11 Description Handprogramming Unit HPG60

The handprogramming 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 indicate on the display about the happening in the microcontroller system. There is a memory, in which is a lot of place 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 microprocessorsystem:

1) **Cenral Unit Controller ZR (Casing)**
2) **Car Controller FKR (At the top of the car)**
3) **Car Calling Controller ITR (In the car panel)**

If you have a GOLIATH-60 Frequency Inverter System, you can also have a look on the parameters and actual messages with the same HPG-60 Unit.

3. Menu Description

3.1 Menu- and Parameter structure

A-LIFTPARAMETER			
A1 Lift Type		Werkseinstellung	Anlageneinstellung
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	Yes, No		
A1.6 Language	German, English	English	
A1.7 Display Line-1	XXXXXXXXXX		
A1.8 Display Line-2	XXXXXXXXXX		
A1.9 Software Version	D606-1.02e or higher		
A1.10 Password	X X X X		
A2 Steuerung			
A2.1 Type of Drive	Rope-Variable Frequency	X	
	Rope-Variable Voltage		
	Rope-Not Regulated		
	Hydraulik-Variable Frequency		
	Hydraulic-Regulated		
	Hydraulic-Not Regulated		
A2.2 Type of Controller	One Button exclusive		
	One Button deadman		
	Pre-selection contr.		
	Two Buttons UP+DOWN		
	One Button UP+DOWN		
	One Button down coll.	X	
	One Button no coll.		
	Attendand Controling		
	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 32	8	
A3.2 Main Floor	1 to 32	2	
A3.2 Main Floor 2	No, 1 to 32	No	
A3.3 Lowest Floor	1,2,3,4,5,6,7,8	1	
A3.4 Door Sides	1, 2 Door Sides	1	
A3.5 Shaft Copy	R&S-Copy		
	Minimum Copy		
	Motor-Copy		
	Absolut-Copy		
	Relativ-Copy		
	Standart-copy	X	
A3.6 nominal speed	V-nominal	1,00 m/s	
B-Controllerarameter			
B1 Doorparameter			
B10 Doors in General			
Doorfunction	Normal Operation/ Revision-Door closed/ Door sluice	Normal Operation	
	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		
	Automatik + SW Close		
	Hand/Cargo. + SW Open		
	Hand/Cargo. + SW Close		

Door-1 End-switch	Inverted/ Not Inverted	Inverted	
Door-2 (Only with 2 doorsides!)	Like 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		
	Automatik + SW Close		
	Hand/Cargo. + SW Open		
	Hand/Cargo. + SW Close		
Door-2 End-switch	Inverted/ Not Inverted	Inverted	
Doorengine active	Always on / standby off	Standby off	
Doorengine 2 active	Always on / standby off	Standby off	
Shaftdoor Waiting	0,1 to 2,0 Sek.	0,5 sec	
Cardoor Waiting	0,1 to 2,0 Sek.	0,3 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	Selektiv, Generell 1,0 bis 20	7 sec	
Further Travel Delay Landing Call	Selektiv, Generell 1,0 bis 20	9 sec	
F. Del. C-C mainf	Selektiv, Generell 1,0 bis 20	7 sec	
F. Del. L-C mainf	Selektiv, Generell 1,0 bis 20	9 sec	
Further-Time-Trigger	No,Yes	No	
Door Rev. Delay	Selektive, Generel 50 to 1000 ms	500 ms	
Dooreng. Stb. off	Selektive, Generel 1 to 60 sec	10 sec	
Dooringine-2 stand-by off	Selektive, Generell 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.	Individual, Together, Selective	Together	
Button Holdtime	No, Yes 1,0 to 600 Sec	No	
Button Holdtime Function	Individuel, Together	No	
Button Door Close Function	Individual, Together, Selective	Together	
Button Door Close Reaction	0,0 to 5,0 sec	1 sec	
Door Control Atemps	1 to 10 efforts	3	
Door Open Time	1 to 60 sec	2 sec	
Door Opening			
Door Closing			
B11 Table of Entrance		Tür-1 Tür-2	Tür-1 Tür-2
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 -32	Existing Yes or No	...../.....	...../.....
B12-Safety Photocell			
Safety Photosell	Off/On	Off	
Photocell- Monitor	Off, On 1 to 80 sec	60 sec	
Ramp Travel	Off,ON	Off	
Door Close del.	Off, On 1 to 10 sec	2 sec	
Photocell	Not Inverted/Inverted	Inverted	
Reverse Contact	Not Inverted/Inverted	Inverted	

B13-Nudging Function			
Nudging	Off, On 1 to 180 sec	Off	
B14-Entrance Monitor			
Entrance Monitor	No,Yes	No	
Time a. st. Door-1	0,5 to 10 sec	2 sec	
Time a. st. Door-2	0,5 to 10 sec	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	
B16-Safty-Circuit			
Pre-Opening Doors	No,Yes	No	
Early Premagn.	No,Yes	No	
Safety Circuit	SIS-60 / SIS-16	SIS-16 (KW)	
B17 Doorparameter			
Releveling	No,Yes	No	
No Releveling Distance	5 to 50mm	10 mm	
Max. Releveling Distance	10 to 250mm	100 mm	
Leveling-UP	10 to 50mm	0 mm	
Leveling-DOWN	10 to 50mm	0 mm	
Time Limit	3 to 25 sec	20 sec	
Attempt Limit	5 to 25	20	
Limit at Level 1	Releveling, No Releveling	No Limit	
Overload	Releveling, No Releveling	Releveling	
Fault Handling	Block, Go Down & Block	X	
	Only error message		
finereleveling	No,Yes	No	
B2-Call Options			
B21 Car Calls			
Door Reverse Car Call	Off,On	Off	
Selectiv Car Calls	No,Yes	No	
Callreset/ Error	directly, 1 to 40 sec	4 sec	
Car Call CPU	EIT / ITR-1 aktiv / ITR-1 & ITR-2 aktiv	EIT aktiv	
Car Call Limit	OFF, 2 to max.floor call erase	Off	
Misure Defence		No	
Button-Buzzer	Off,On	Off	
Car Call Range	Off, 1-2/ 1-3/ 1-4/ 1-5/ 1-6/ 1-7/	Off	
B22-Landing Calls			
Door Reverse Landing Call	Off,On	Off	
Modul	ZR,ER	ZR	
Sel. Land. Calls	No,Yes	No	
Erase op. Calls	No,Yes	No	
Save Travel	0 to 20 sec	5 sec	
B23-Car Priority			
Floor Calls	erase, save	erase	
Mail Travel		off	
B24-Landing Priority			
Time callinput	1 to 30 sec	20 sec	
Floor Calls	erase,save	erase	
Prior. Car Call	individual / collective / soft individual	individual	
B25 Groupcontroller			
Doorfailure	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 97B	Free programmable Groupfunction	G05 priority A2-4-6-8	
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 -1 to 300 ms.	100 ms	
Direction Up Delayed Off	No,Yes -1 to 2000 ms.	400 ms	
Start with Door Controlling	No,Yes -1 to 3 sek. verzögert	No	
Inspection Speed	Slow, Quick	slow	
Time to go Down	1 to 15 Minuten	10 Min.	
Fault Handling	No,Yes -Abbruch & Absenken	No	
Travel down at Overload	No,Yes	No	
Signal Top of Ramp	No,Yes	Yes	
C. Down Delay. On	No,Yes	Yes	
C. Down Delay. Off	Yes, No	Yes	
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 300 ms.	100 ms	
Direction Up Delayed Off	No,Yes -10 to 900 ms.	No	
Start with Door Controlling	No,Yes -10 to 2000 ms.	400 ms	
Start with Door Controlling	No,Yes -1 to 3 sek. Verzögert	No	
Inspection Speed	Slow, Quick, Vinsp	Vi	
Time to Go Down	1 to 15 Minutes	10 Min.	
Fault Handling	No, Interrupt, Block, Block & Go	Yes, Interrrupt	
Travel Down at Overload	No,Yes	No	
Signal Top Of Ramp	No,Yes	Yes	
C. Down Delay. On	No,Yes	No	
C. Down Delay. Off	No,Yes	No	
B32 Hydraulic Variable Frequency			
V0 Delayed Off	No,Yes -10 to 300 ms.	No	
Main Conductor Delayed Off	No,Yes -10 to 2000 ms.	600 ms	
Direction Delayed Off	No,Yes -10 to 2000 ms.	1500 ms	
Releveling Speed	Vn, V0	Vn	
Inspektion Speed	Vo, Vinsp.	Vinsp.	
Time to Go Down	1 to 15 Minutes	15 Min.	
Fault Handling	No, Interrupt, Block, Block & Go	No	
Travel Down at Overload	No,Yes	No	
Blocking Top-End-switch	No,Yes	Yes	
Command Output	Bucher / ALGI FRHZ	Bucher	
B33 Rope 2 Speeds			
Motorventilation	No, Yes - 1 to 600 sec	No	
Direction Contactor 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-Liftbus, DCP-3	Off	
Mono Fan	No,Yes -1 to 600 sek.	No	
V0 Delayed Off	No,Yes -10 to 3000 ms.	No	
Direction Delayed Off	No,Yes -10 to 3000 ms.	1900 ms	
Main Constructor Delayed off	No,Yes -10 to 3000 ms.	2500 ms	
Reveling Speed	Command Vn / Command V0	Vn	
Fault Handling	Abbruch/Sperre-1.Stör/"-"2.Stör/"-"3.Stör	Abbruch	
Command Output	Standard-GOLIATH/ DIETZ-Freigabe	Standard-GOLIATH	
B 35 Rope Variable Frequency			
Liftbus	Off,KW-Liftbus, DCP-3	Off	
Mono Fan	No,Yes -1 to 600 sek.	No	
V0 Delayed Off	No,Yes -10 to 3000 ms.	No	
Direction Delayed Off	No,Yes -10 to 3000 ms.	1900 ms	
Main Conductor Delayed Off	No,Yes -10 to 3000 ms.	2500 ms	
Releveling Speed	Command Vn / Command V0	Vn	
Fault Handling	Abbruch/Sperre-1.Stör/"-"2.Stör/"-"3.Stör	Abbruch	
Command Output	Standard-GOLIATH/ DIETZ-Freigabe	Standard-GOLIATH	
B4-Shaft Copy			
B41 Standart-Copy			
Pulse Buffer Delay	2 to 50 ms	50 ms	
Correction Travel	After call/ automatic	After call	

B42 Relativ Copy			
Pulse Buffer Delay	2 to 50 ms	2 ms	
Correction Travel to	After call/automatic	After call	
2nd Prel. SW bot	No,Yes	No	
2nd Prel. SW top	No,Yes	No	
Short travels	No/1 short tr./2 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 ,.....		
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	V1, V2, V3 execute	V1	
Encoder Termin.	At ZR/FKR	ZR	
Lern Drive Activate	No,Yes	No	
Switch Hysteres Overlapping	Xxx mm	0 mm	
Level. Floor-01 lev. Value	Bündigwert: 000,000 m	000,000 m	
Level. Floor-32 lev. Value	Bündigwert: xxx,xxx m	xxx,xxx m	
B43 Absolut Copy			
Distance-system	Schmersal-USP / Wachendorff	Schmersal-USP	
Floorswitches	no/ Vorend+Zone	No Floorswitches	
Short travels	No/1 short tr./2 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 ,.....		
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	
Countdirection	Negativ / positiv	Negativ	
Learn Drive	V1, V2, V3 execute	V1	
Learn Drive activate	No,Yes	No	
Synchronisation Floor-1	No,Yes	No	
Level Mode	Floor level// floor distance		
Level. Floor-01 lev. Value	Bündigwert: 000,000 m	000,000 m	
Level. Floor-32 lev. Value	Bündigwert: xxx,xxx m	xxx,xxx m	
B44 Motor Copy			
Pulse Buf. Delay	2 bis 50 ms	2 ms	
Correct. Travel	After call / automatic	After call	
2nd Prel. SW bot	No,Yes	No	
2nd Prel. SW top	No,Yes	No	
Short travels	No/1 short tr./2 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 ,.....		
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	V1, V2, V3 execute	V1	
Encoder Termin.	At ZR/FKR	ZR	
Learn Drive activate	No,Yes	No	

Swiching-hysterese			
Level. Floor-01 lev. Value	Bündigwert: 000,000 m	000,000 m	
Level. Floor-32 lev. Value	Bündigwert: xxx,xxx m	xxx,xxx m	
B45 Minimum Copy			
Pulse Buf. Delay	2 to 50 ms	50 ms	
Correct. Travel	After call / automatic	After call	
B46 R&S copy			
Pulse Buf. Delay	2 to 50 ms	50 ms	
Correct. Travel	After call / automatic	After call	

B5-Indicate

B501 Car Indicate			
Cabine	Gray / 1 of N / Binär/ 7-Seg / free	1 of N	
Main-CPU	Gray / 1 of N / Binär/ 7-Seg / free	1 of N	
Floor-CPU	Gray-Code / 1 of N / Binär	1 of N	
Code 7-Segment	Setup for every Floor	U,E,1,2,3,4,5,6,7,..	
Code select	Setup for every Floor	0000 0000 b	
Secial Mode Inspect./ manua : ON	No,Yes	Yes	
Secial Mode error case : ON	No,Yes	Yes	
Secial Mode spezial trv : ON	No,Yes	Yes	
B502 Car Arrow			
Description	Only direction		
	Direction+ move on		
	Only move on	X	
M-Arrow-OFF	No,Yes 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 direction		
	Direction+ move on		
	Only move on	X	
ZR:M-Arrow-Off	No,Yes 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	No	
Car Call UP	No,one ring,double ring,trible ring	No	
Car Call DOWN	No,one ring,double ring,trible ring	No	
Floor Call UP	No,one ring,double ring,trible ring	One ring	
Floor Call DOWN	No,one ring,double ring,trible ring	Double ring	
Priority Call UP	No,one ring,double ring,trible ring	No	
Priority Call DOWN	No,one ring,double ring,trible ring	No	
Fire Fighter Tr.	No,one ring,double ring,trible ring	No	
Special Travel	No,one ring,double ring,trible ring	No	
Gongfunction Volume	1 to 15	7	
Gongfunction Tone	1 to 15	7	
B505 Gongfunction			
Gongfunction	No,Yes	No	
Car Call UP	No,one ring,double ring,trible ring	No	
Car Call DOWN	No,one ring,double ring,trible ring	No	
Floor Call UP	No,one ring,double ring,trible ring	One ring	
Floorcall DOWN	No,one ring,double ring,trible ring	Double ring	
Priority Call UP	No,one ring,double ring,trible ring	No	
Priority Call DOWN	No,one ring,double ring,trible ring	No	
Fire Fighter TR.	No,one ring,double ring,trible ring	No	
Special Travel	No,one ring,double ring,trible ring	No	
Gongfunction Volume	1 to 15	7	
Gongfunction Tone	1 to 15	7	
Gongimpuls	Short puls, 1sec, 2 sec	Short puls	
B506 LED-Matrix			

Car + Floor	Setup for every Floor	U,E,1,2,3,4,5,..	
Car Display Errow	No,Yes,Scroll	Scroll	
Kabine Segmente	2 / 3 Ziffern	3 Ziffern	
Text ÜBERLAST laufend	No,Yes	No	
Text EVAKUIERUNG laufend	No,Yes	No	
Text FEUERWEHR laufend	No,Yes	No	
Text SONDERFAHRT laufend	No,Yes	No	
Text AUSSER BETRIEB laufend	No,Yes	No	
Etagenrechner Pfeilanzeige	No,Yes,Scroll	Scroll	
Etagenrechner Segmente	2 / 3 Number	2 Number	
Etagenrechner Leuchtfeld	Off / out of order / spezial travel	No	
Text ÜBERLAST laufend	No,Yes	No	
Text EVAKUIERUNG laufend	No,Yes	No	
Text FEUERWEHR laufend	No,Yes	No	
Text SONDERFAHRT laufend	No,Yes	No	
Text AUSSER BETRIEB laufend	No,Yes	No	
Main Unit	1 to 32	1 to 32	
B6-Functions			
B600 Monitorfunctions			
Cont. Monitor Start	OFF, On 500 to 4000 ms	on	
Cont. Monitor Trav.	On,Off	on	
Cont. Moninot Insp.	On,Off	on	
Carlight Monitor	On,Off	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	Bei Seil	
	Stopp+ delete Calls		
	Go down		
	Go down+ block	Bei Hydraulik	
Brake-Open Monitor	Off,On	Aus	
Brake-Shoe Monitor	Off,On	Aus	
	Stop+ delete Calls	X	
	Stopp+ Block		
Brake-Shoe Mo. Input	Not inverted/inverted	inverted	
Brake-Shoe Mo. Delay	0 to 6000 ms	2000 ms	
Switch-cabinet T-Max	No, Yes – 30 to 99°C	60 °C	
Switch-cabinet T-Min	No, Yes - 0 to 25°C	3 °C	
PTC-Motortemp.	Off, imput 1, imput 2, 1 + 2	Imput 1	
DSK-Impulse	Off,On	On	
B601 Inspection Travel			
Restart locking	No,Yes	No	
Restart locking Door	No,Yes	No	
Speed Button	No,Yes	Yes	
B602 Emergency Unit			
Alert Push Button Delay	0 to 5 Sec	1 sec	
B603 Car Fan			
Start Of Fan	Push Button, Travel-Start	Travel	
Fan Delay	0 to 600 sec	30 sec	
B604 Load Mearement			
Overload imput	Not inverted/inverted	Not inverted	
Load Measurem. Loadsensor FKR	No,Yes	No	
Overload	120%	120%	
Full Load	100%	100%	
Half Load	50%	50%	
Under Load	10%	10%	
Save Full Load	No,Yes	No	
Save Zero Load	No,Yes	No	
Underload evaluation	No,Yes / 1 / 2 / 3 / 4 Calls	No	
Volllastauswertung	No,Yes	No	
B605 Standby Travel			
Standby Travel	No,Yes	Yes	
Standby Trvl. 1 Floor	Next Floor, Floor1 to max.	Next Floor	

Standby Trvl. 2 Floor	Next Floor, Floor1 to max.	Next Floor	
Standby Travel Door	Open/close	open	
B606 Parking Travel			
Parking Travel	No, Yes	No	
Parking Level	Floor 1 to max. Floor	Etage 2	
Start Parking Travel	1 to 15 Min.	1 min	
Door	Open, Close	Open	
B607 Floor Blocking			
Floor Blocking	Input of a blocked Floors	No	
Dynam. Blocking	No, only carcalls		
	only floorcalls, carcalls+floorcalls	No	
B608 Car Light			
Automatik off	No,Yes	No	
Delay	1 to 600 sec	60 sec	
B609 Emergency Power service			
Emergency Power Service	No/yes, power generator, accupower	No	
Emergency Power Service floor 1	Next floor, 1 to 32	1	
Entrance Open	1, 2, 1+2	1	
Follow-Circuit	No,Yes	No	
Piezo Buzzer	Off / on	off	
Follow Circuit Deadtime	10 to 360 sec	360 sec	
B610 Emergency Fire Service			
Fire Evacuation Service	No, Yes-1, Yes-2, Yes-3, dynamic	No	
1. Priority	1 to max.	2	
Entrance open	1, 2, 1+2	1	
2. Priority	1 to max.	2	
Entrance open	1, 2, 1+2	1	
3. Priority	1 to max.	3	
Entrance open	1, 2, 1+2	1	
Piezo Buzzer	Off , on	off	
Em. Fire Serv. Input	Not inverted/ inverted	Not inverted	
Em. Fire Serv. Schweitzer Vers.	No,Yes	No	
B611 Fire Fighter service			
Firefighter Tr.	No,Yes	No	
1. Priority	1 to max.	2	
Entrance open	1, 2, 1+2	1	
2. Priority	1 to max.	2	
Entrance open	1, 2, 1+2	1	
3. Priority	1 to max.	2	
Entrance open	1, 2, 1+2	1	
Firefighter Tr. Input	Not inverted/ inverted	Not inverted	
Firefighter Tr.	Deutsch / Englisch / Australisch / EN 81-	Deutsch	
B612 Rescue Travel			
Rescue Travel	No,Yes	No	
Floor 1	1 to max.	1	
Opendoorside	1, 2, 1+2	1	
Send Floor	1 bis max.	2	
Opendoorside	1, 2, 1+2	1	
resendfloor	0, 1 to max.	2	
Dleaytime	10 to 300 sec	10	
B613 Attendent Trav.			
Attandent Travel	No,Yes	No	
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	Off	
Delaytime	0,5 to 300 sec	0,5	
Pulstime	0,5 to 300 sec	0,5	
Time Relay-2	Off/switch-on delay/off delay/off puls	Off	
Delaytime	0,5 to 300 sec	0,5	
Pulstime	0,5 to 300 sec	0,5	
Speed-threshold Vx	0,1 m/s bis Vmax	0,8 m/s	
Start-1 Timer-1 to 10	00:00 Uhr		

Stopt-1 Timer-1 to 10	00:00 Uhr		
Start-2 Timer-1 to 10	00:00 Uhr		to
Stop-2 Timer-1 to 10	00:00 Uhr		
Day Timer-1 to 10	Mo Tu We Th Sa So		
B616 Elevator Check			
Interval	Off/ev. Week/ ev 2 weeks	off	
Weekday	MO DI MI DO FR SA SO		
Start time	xx : xx Uhr		
Action	Testtravel/alertbuttontest	Testtravel	
Reaction	Only message//m. and vblock		
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	Stop		
Bolt Mobil	Stop		
Bolt retrieving	No,Yes	No	
Bolt Wake Lowering	ms	1000 ms	
Bolt Pressing Wake	ms	4000 ms	
Bolt sinking trip	No,Yes	Yes	
B618 Codelock Calls			
Codelock calls floor	No, HS 01 .. HS Max	No	
Codeeingabe Etage 01 bis Max.	4 stelliger Zahlencode		

B7 Input/ Output			
B73 I/O			
Frame-30: 0KS- 4HS Hydraulics	Frame -36: 0KS- 4HS Seil-U	Frame -42: 0KS- 4HS Seil-F	
Frame -31: 1KS- 7HS Hydraulics	Frame -37: 1KS- 7HS Seil-U	Frame -43: 1KS- 7HS Seil-F4	Frame -44: 1KS- 7HS Seil-FA
Frame -32: 1KS- ER Hydraulics	Frame -38: 1KS- ER Seil-U	Frame -45: 1KS- ER Seil-F4	Frame -46: 1KS- ER Seil-FA
Frame -33: 2KS- 6HS Hydraulics	Frame -39: 2KS- 6HS Seil-U	Frame -47: 2KS- 6HS Seil-F4	Frame -48: 2KS- 6HS Seil-FA
Frame -34: 2KS- ER Hydraulics	Frame -40: 2KS- ER Seil-U	Frame -49: 2KS- ER Seil-F4	Frame -50: 2KS- ER Seil-FA
Frame -35: GR - ER Hydraulics	Frame -41: GR - ER Seil-U	Frame -51: GR - ER Seil-F4	Frame -52: GR - ER Seil-FA

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 :0,5 to 48,0 hours	8,0 hours	
C13-Random Floor Calls	Off, On	Off	
	Off after :0,5 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	Errowtext	
	Uhrzeit xx:xx:xx	Datum xx.xx.xxxx	
C4-INSECTOR			
C40 Run Time Test	All running times are set on 1.0 seconds for the next trip:		
C41 Buffer Trip	With the resend drive speed can be driven downward without delay 13B		
C42 Seat Sample	With the resend drive speed can be driven upward without delay 13A		
C43 Catch Sample	Disconnection of the short-circuit protection with the catch sample		
C44 Driving Abillity	For the driving ability examination with MRL processor		
C45 Break Test	For MRL with electrical manual brake operation		
C46 Remote Trigger	Start up the function remote trigger		
C47 Reset Remote Trigger	Start up function resets remote trigger		
C48 Remote Trigger Counterweight	Start up the function remote trigger Counterweight		
C49 Reset Remote Tri.	Start up the function reset remote trigger		
C410 Shaft-Endswitch Top	Limit switch trip UP with reduction of the V. but over driving concisely Top		
C411 Shaft-Endswitch Bottom	Limit switch trip Down with reduction of the V. but over driving concisely Bottom		

C412 Temperature-Casing-Test	Lower the temperature minimum trigger level to immediate reasing
C413 Motor-PTC-Test	
C414 DSK-Encoder-Test	
C5-Compactness 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	
DSC-Pulses	
Revision Number	
ER-Adress prog. Adress	
C7 –Assembly Trip	
Ignoring the SiKr entrances U3 to U12 resent option at assembly option	

D-Informations			
D1-In/Output			
D2-Trip Counter			
All Trips			
Reset Tripcounter			
Tripcounter UP			
Tripcounter DOWN			
Reset Tripcounter			
Floorcounter Floor 1			
Floorcounter Floor max.			
Reset Floorcounter			
D3-Run-Time Counter			
Mainpowercounter			
Travel Time			
Reset Travel Time			
Reset Counter			
D4-Doormove Counter			
Doorside 1			
Reset Doormove- Counter			
Disp. Doormaintan	Expenditure of message over A126 maintenance counter doors		

4. Function Description

4.1 General working with the HPG 60

The Hand-held Programming Unit HPG-60 is the universal programming tool for the entire control system. It is equipped with 6 keys, a four-lined LCD-display, one red LED, and a 9-pole RS232-Interface.Through the HPG-60, all parameters can be displayed and changed. Current actions of the control system are displayed though permanent status indicators. The accumulated fault events can be read out from the fault memory. Inquiries can also be initiated through this unit. The HPG-60 can communicate with the Microprocessor System in three places:

1) **through the CPU ZR ZR (located in the switch cabinet)**
2) **through the Car-Mounted Control Unit FKR (located on top of the cabin)**
3) **through the Car Panel ITR (located in the cabin)**

The serial cable which is supplied with the unit, has to be connected with the 9-pole interface socket of the HPG-60, and the corresponding socket of the CPU, the FKR, or the ITR. If the access authorization of the HPG-60 is accepted by the CPU, the display will show „A1 Anlagedaten “.
The six keys are separated in two groups.The four red keys are working as a two-axis control, i.e. the upper and the lower key are used to scroll through the menu. There are eight main menus, between which you can change by using the keys „left arrow“ and „right arrow“.The right and the left red buttons will select the individual parameters.The values of the parameters appear on the right side.
The yellow keys are used if parameters are to be changed.The upper yellow key will increase the parameter value, through the lower yellow key the parameter value is reduced.After adjustment, the parameter value will flash on the display.The right, red key (ENTER) must be pressed to store the new setting. In case that the new value is to be disregarded, the left red key must be pressed ESCAPE). The current key allocation is displayed on the fourth line of the display. Parameters can only be changed in standstill condition, and only if no command has been entered. Mistakes are indicated by flashing of the display.

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 Suppression100 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 used to connect the Handprogramming 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.

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: A1.6 LANGUAGE
There are two languages,which you can choose **German and Englisch**. 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.

A2- Controller

PARAMETER: A2.1 TYPE OF DRIVE
In this parameter, you have to choose the type of drive:

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

PARAMETER: A2.2 TYPE OF CONTROLLER
In this parameter, you have to choose the type of controller:
- **Send-Controlling**
- **Attendant-Controlling**
- **No Collecting**
- **One Button Down**
- **One Button Up & Down**
- **Two Buttons**
- **Pre-Selection-Controlling**

PARAMETER: A2.3 GROUP
In this parameter, you can activate the Group-drive.

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 ist 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: A3.3 LOWEST FLOOR
If you have a groupe 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 two door sides.

PARAMETER: 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**
- **R&S-Copy**

PARAMETER: A3.6 Nominal Speed
In this parameter you can put in your nominal speed.

B1- Doorparameter

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

Terminal mark	**Location**	**Hard-ware**	Function
Free choice of the Relay Output	FKR, or ZR	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 K401 software locked.
Free choice of the Relay Output	FKR, or ZR	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 K402 sofware locked.
Free choice of the Relay Output	FKR, or ZR	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 K403 software locked.
Free choice of the Relay Output	FKR, or ZR	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 K404 software locked.
(Inputs FF0 or FF4)	FKR	24V DC Input	**Photocell input Door 1 or Door 2** The Photocell ist blocked if you have +24V DC at the Input. That mean 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"**
	EIT or ITR	24V DC Input	**Button Door Open Door 1 / Door 2** If passenger wishes door movement, mean 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. For abort ot the load time funktion over the time you have to push the button door close or button door open.
	EIT or ITR	24V DC Input	Button Door close input Door1 / Door 2 If passenger wishes door movement, mean 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)	FKR	24V DC Input	**Door reversion entrance Door 1 / Door 2** 24V DC at this input mean that somebody or something is in Door 1 or Door 2. 0V DC mean there is no barriers. (Working model normally maker NO) **Reaction: Reversion of the door movement on door open.**
(Inputs FF2 or FF6)	FKR	24V DC Input	**Door limit switch Open Input Door 1/ Door 2** 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 open.**
(Inputs FF3 or FF7)	FKR	24V DC Input	**Door limit switch close entrance Door 1/ Door 2** The Door ist completely close, in the end position, that mean 0V DC at this Input. **Reaction: Switch the door dommand line Door 1 close/ Door 2 close.**
U10	ZR	230V AC Input	**Shaft-door input Safety-circuit-terminals U10** All shaft doors are electrically closed if you have in the Input 230 V AC.
U11	ZR	230V AC Input	**Car-door-inputs Safety-circuit-terminals U11** All car doors are electrically closed if you have in the Input 230 V AC
U12	ZR	230V AC Input	**Blockedswitch-imputs Safety-circuit-terminals U12** All Shaft doors are locked, if this input have 203V AC. At the imput is 0V AC, that means actuelly stop don´t locked 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.
The technical execution of the automatic door allows a wide variety of options, from uncontrolled 400 Volt AC drive to spindle- and electronically controlled door drives.

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 mean for the implemented software a telescope shaft door in connection with a telescope car and door car those to be together coupled.

For the automatic door without door limit switches in principle the same description is valid, as with 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 mean 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 hapens with the blockedswitch. The control of the blockedswitch 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 come out only if the kind of door with door limit switch are chosen. The standart value is Opener.

PARAMETER: DOORENGINE 1 ACTIVE / DOORENGINE 2 AKTIVE

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, the is a interpretation, if the door is open or closed. If you have old doorcontacs in the safety circuit of the shaftdoor, you must set the time high. The best way is always to use new doorcontacts. The standart 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, the is a interpretation, if the door is open or closed. If you have old door contacs in the safety circuit of the cardoor, you must set the time high. The best way is always to use new doorcontacts. The standart value is 0,5 seconds.

PARAMETER: LATER DOOR OPENING

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

PARAMETER: LIMITED DOOR OPENING

This function is at this time not available!

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 closes again. The procedure is repeated dependent on the entered number of door attemps. 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 openes again. The procedure is repeated dependent on the entered number of door attemps. 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 severel calls are present, then this time starts after opening the door. Passengers are to able to leave the cab in this time. Upon the expiration of the driving on time inside the door is closed and driven to the next stop. The standart value is 7,0 sec.

PARAMETER: FURTHER DELAY LANDING CALL

If the elevator holds at the stop with landing call and other severel calls are present, then this time starts after opening the door. Passengers are to able to entry the cab in this time. Upon the expiration of the driving on time outside the door is closed and driven to the next stop. The standart 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 standart value is NO.

PARAMETER: DOOR RESERVE DELAY

If the door is in motion to close and she should be reverse, this means she should be open, then you need a delay time to prevent a mechanical demage of the door. The standart value is 0,5 seconds.

PARAMETER: DOOR ENGINE 1/2 AT STANDBY OFF

In Parameter you can selected the time if the door engine don´t work and the cab stand with closed door. You can use this preference if you choose the parameter„ Door engine“ was selected actively 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 standart 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 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 are last closed.

PARAMETER: BUTTON HOLDTIME
With this parameter if a time is registered, 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 be pushed, then the load time is interruped and the door is closing. The range of values for the load time extends between 1 and 600 seconds.

PARAMETER: HOLDTIME FUNKTION
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** mean that the Door-close-button, which connected on 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 attitude **selective** is only one door button attached during a selective door control. The reaction of the button is always arranged the last door movemant at Door 1 / Door 2. The standart 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 attemps you can make to close or open the door , before there would be show a door-fault. The standart value is 3 attemps.

PARAMETER: DOOR OPEN TIME
If you have a car-door without endswitches, you can choose in this parameter the time, when the ZR-Unit shows you that the door is open. Please measure the time, whitch the doors needs to open.

B11- Table of Entrance

Menu B11 is active only if you choose in menu “ A Liftparameter/ A3 Shaft/ A3.4 Door Sides” the option “2 Door Sides”. For every floor, there are two doorsides prepared. Now you can decide, which door realy exists.

B12- Safery Photocell

PARAMETER: SAFETY PHOTOSELL
At an elevator with shaft door without car door the entrance “safety photocell” can be. In the stop or standart drive, i.e. the jets of the safety photocell are not interrrupted, that mean landing and car calls are accepted and progressed. Is there an interruption of the safety photocell, then the input safety photocell is deactivated at the FKR. As a result all calling are erased. The drive is possible only be car calls. The landing calls are not possible.

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 standart value time is 2,0 sec.

PARAMETER: PHOTOCELL
The entrance behavior of the photocell input can be selected here between closer and opener. The standart value is opener.

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.

B14- Entrance Monitor

PARAMETER: ENTRANCE MONITOR
This parameter activate function and inputs of the entrance-monitor.

PARAMETER: TIME A START DOOR 1/ DOOR 2
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 standart value is closer.

B15- Mech. 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 allow delayed on the locked magnet. The standart value is without delay.

PARAMETET: LOCK DELAY OFF
With this parameter you can realize an delay-off-function of the lock-magnet. If you have horizontal car doors, you need this function. The standart 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 standart 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 nessecary to switch off the lock-magnet, before you try to open the car door. The delay-time for the car door is free programmable.

B16- Safety-Circuit

PARAMETER: PRE-OPENING DOORS
If the lift-controller have a integrated safety-circuit-pcb, yon can activate the function for drive into the floor with open door. 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 actice 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, the can start without time-delay. With this function the floor-delay-time can reduced very powerful.

PARAMETER: SAFETY CIRCUIT

In this parameter you can choose the type of the safety-circuit-pcb. Ths 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.
Depends on the shaft-copy-system in use, you can make it in a digital system with the programming unit HPG-60 in mm stepps, or you have a magnet-system, you have to move the magnets.

PARAMETER: NO REVELING 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 exacty 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 lenght 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 standart value is 20 sec. In this time interval if the retrieving procedure is not successfully brought to end, then it is brocken.

PARAMETER: NUMBER OF ATTEMPS
With this parameter the number of attemps can be limited with the regulation, in order to so e.g. protect the hydraulic aggregate against overheating. The standart 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 releveling-attemps is reduced, like in parameter before or the is no limit.

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

PARAMETER: FAULT HANDLING
If there is an error at the releveling-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 Immeadedly**" – This value can be used for rope elevators.
- „**Next Floor & Block**" – This value can be used for rope elevators.

PARAMETER: FINE-RELEVELING
The releveling will be handled by an external hydraulic-aggregate.

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 activate 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 standart value is 4,0 sec.

PARAMETER: CAR PANEL CONTROLLER
In this parameter you can indicate whether the selective car calls realise with one or two car controller ITR. To 8 stops the realization you can use an car calling controller, and/or can alternatively second car calling controller ITR.

PARAMETER: BUTTON BUZZER
In this parmeter you can indicate wherther 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 automically deleted.

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

B22- Landing Calls

PARAMETER: DOOR REVERSE LANDING CALL
If the door revision is active with landing call, the door movement reverse with pushing the landing call button at the current stop, then the door continues and open.

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 extrenal call pushers are operated, there the door opened. The realization is made by the two call entrances 2xC and 2xD at the Remote Station ER-2007 and/or ER-2005.

PARAMETER: ERASE UP AND DOWN CALLS
During the attitude 2KS Up call and Down call can be given faulty operations both calls, i.e. although only one trip desire is present. Thus it comes to unnecessary movements of the lift. If the parameter oportunity call erasement 2KS is active, then the second call, which is given within a short time interval, is suppressed. With entry into the goalstop both calls are deleted. The standart value for this function is off.

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

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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.

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, Seperately softly** and **Separately emptying.**

During the attitude **separately** comes the car, with assigne 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 an hindrance drive without reducing the traffic capacity of the group drastically.

B25- Group

DOOR FAILURE
The group control works according to the principle „flying of the master“ to take over the group control that means that each central computer (ZR) is able to take over the group control. It is possible to interconnect maximally 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 unimportent. The group master fail or be switched off, so automatically another central computer takes over this function. By the group bus all branches of landing call, at which the remote station are 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 ased 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 itself opens 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 elevater 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 spend 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:

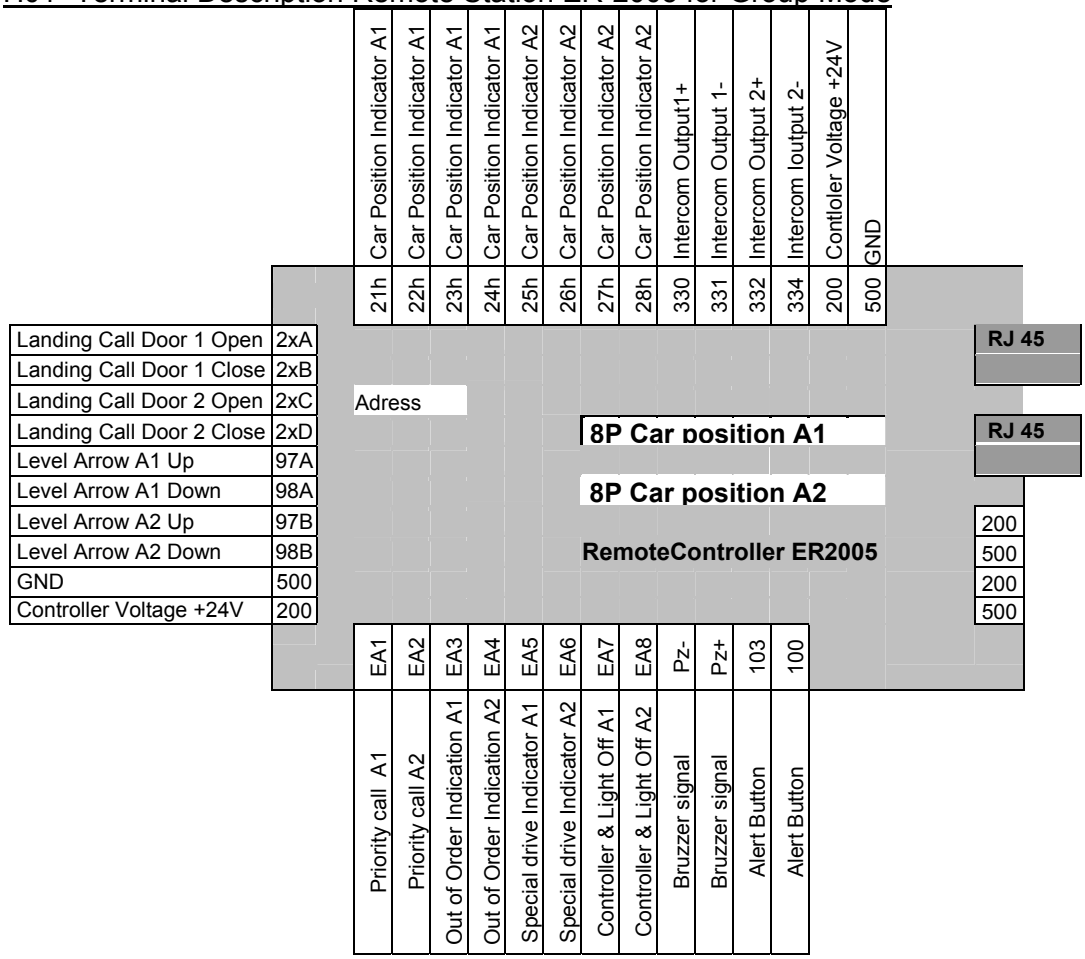
- Even extent of utilization of all elevators and balanced energy balance of the individual lifts
- Shorter waiting periods in the individual floors and dynamic adjustment to the call arising
- High availability of the group system
- Optimized processing of the external calls guarantees shortest drives

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:

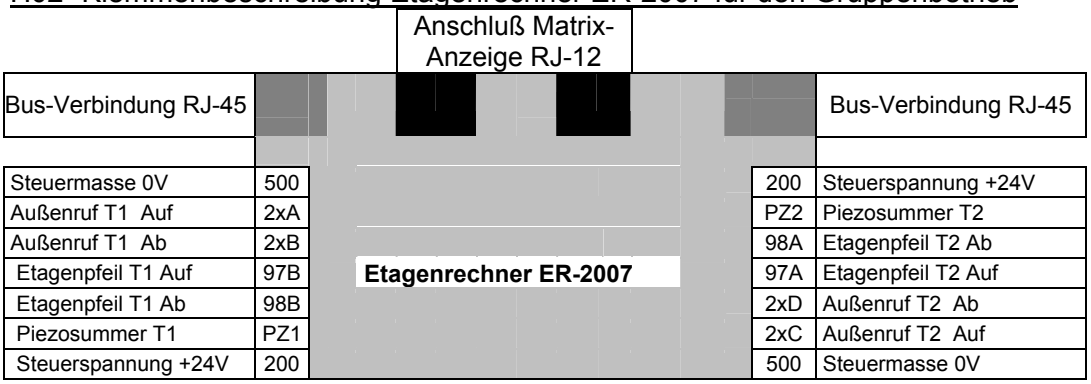
G00	no function	
G01	Landing call door 2 Up	Selective landing call up Door 2
G02	Landing call door 2 Down	Selective landing call down Door 2
G03	Collective priority call	To call the next elevator with priority
G04	Priority landing call elevator 1	To call elevator 1 with priority
G05	Priority landing 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

H01- Terminal Description Remote Station ER-2005 for Group Mode



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 loudspeaker is attached. Volume and pitch, as well as multiple gong are adjusted over the control.
Each remote station needs its own adress in the system.This adress is modulate with the ER-2005 over DIP switch on the PCB.

H02- Klemmenbeschreibung Etagenrechner ER-2007 für den Gruppenbetrieb



Terminal	Function
2xA	Landing Call D1 Up
2xB	Landing Call Down
2xC	Free allocable : i.g. Landing Call D2 Up at selective door
2xD	Free allocable : i.g. Landing Call D2 Down at selective door
97A	Free allocable: i.g. Floor Arrowl D1 Up
98A	Free allocable: i.g. Floor Arrowl D1 Down
97B	Free allocable: i.g. Floor Arrowl D2 Up
98B	Free allocable: i.g. Floor Arrowl D2 Down
500	**GND**

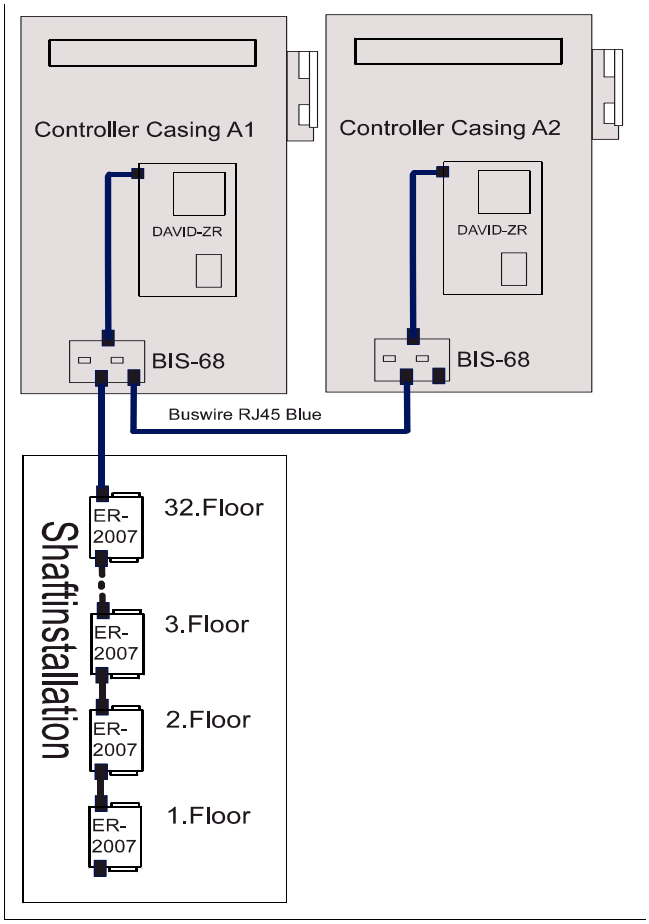
200	**Control Voltage +24V DC**

Each remote station needs own address in the system. This address is stopped over the dip-switcher on the printed circuit board.

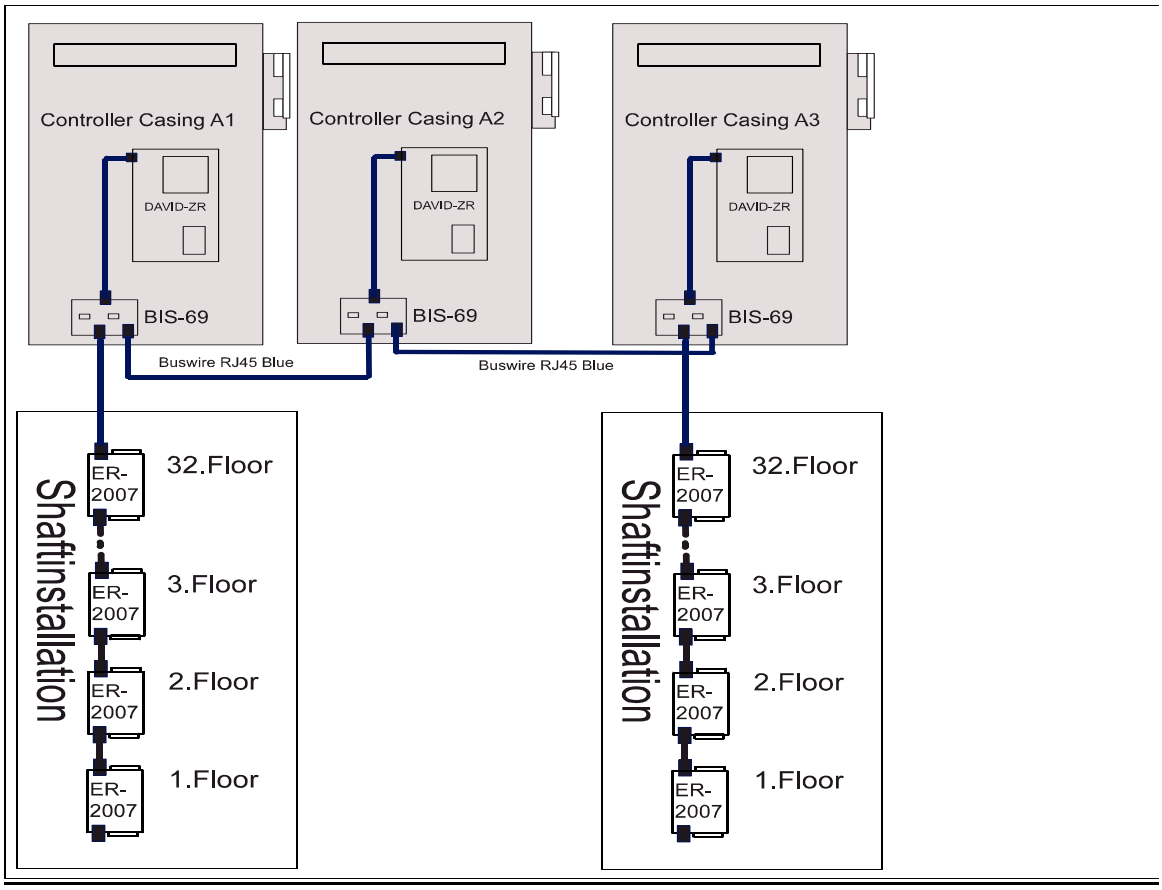
Adress input remote station 1. group-bus (for 2 elevators)			
Floor	Number / Setup at the Dipp-switch	Floor	Number / Setup at the Dipp-switch
1	000000	9	001000
2	000001	10	001001
3	000010	11	001010
4	000011	12	001011
5	000100	13	001100
6	000101	14	001101
7	000110	15	001110
8	000111	16	001111

Adress 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

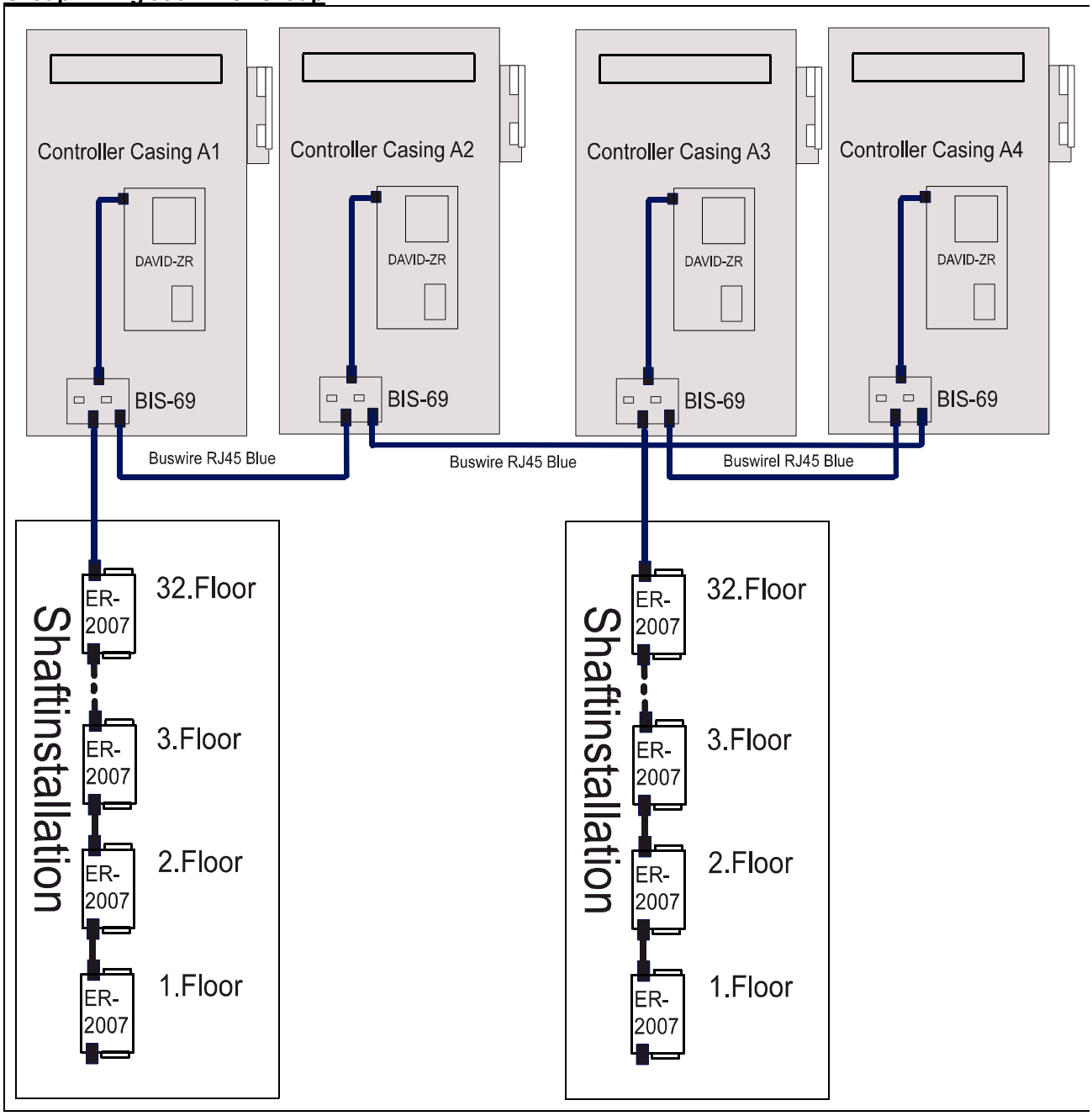
Group wiring at a 2 No.-Group



Group wiring at a 3 No.-Group



Group wiring at a 4 No.-Group



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 have 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

Speed:

1.) SLOW
2.) QUICK

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 back taken 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 at expiration of the sinking time be decided whether lower or not. The standart value is NO.

PARAMETER: SIGNAL TOP OF RAMP

After eaching „the Top Of the Ramp“ o 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 strainghtening on retarded. This is needed with the employment of a return flow prevention valve (e.g.ALGI-S5). The standart value is NO.

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 have 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
Speed:
1- slow
2- Vi
3- quick

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 back taken 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 at expiration of the sinking time be decided whether lower or not. The standart 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 strainghtening on retarded. This is needed with the employment of a return flow prevention valve (e.g.ALGI-S5). The standart value is NO.steht auf NEIN.

B32 – Hydraulic Variable Frequency

PARAMETER: V0 DELAYED OFF
The parameter contains the attitude to switch the speed V0 off retarded. The standart value is NO.

PARAMETER: MAIN CONDUCTOR DELAYED OFF

The parameter contains the attitude to switch off the main contactors retarded. The standart 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 makes connot spend of Vn to the releveling. It can be selected by the menu attitude whether the releveling time is accomplished with the speed of Vn or V0.

PARAMETER: INSPECTION SPEED

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

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 back taken 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 at expiration of the sinking time be decided whether lower or not. The standart 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 paramenter 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)

Command-Output DAVID:	Input ALGI-AZFR:
UP	UP
Down	DOWN
Vi	M
V2	V

Another parameter input for ALGI AZFR:

Speed V0 switched of with delay:	-> No
Direction with delay:	-> No
Releveling speed:	-> Vn
Inspection speed:	-> Vi

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**

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 that drops high-speed contactor and the slow contactor is activated. With reaching the concise signal become both contactors breaked.

PARAMETER: MOTORVENTILATION

Here you can activate the motor ventilation and put in the time. The standart 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 between 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
5	**K31**		K3 Main contactor	**K1 Up contactor**
3	**K32**		K5 Main contactor	**K2 Down Contactor**
7				**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: MOTORVENTILATION

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

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 chosse speed VN or V0.

PARAMETER: FAULT HANDING

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

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

B35- Robe Variable Frequency

Contactor Switching

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

Term	Vorsteuerung		Rope Frequency	Robe Variable Frequency
5	K31		K3 Drive Contactor	K1 Auf-Schütz
3	K31		K5 Main Contactor	K2 Ab-Schütz
				K5 Main Contactor
9	K34		K7-Brake Contactor	K7-Brake 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 LIFTBUS

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 the KW liftbus, Thyssen LS2-bus and DCP-3 are available.

PARAMETER MOTOR FAN

An 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 chosse VN or V0.

PARAMETER: FAULT HANDING

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

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

B4 – Shaft Copy Systems

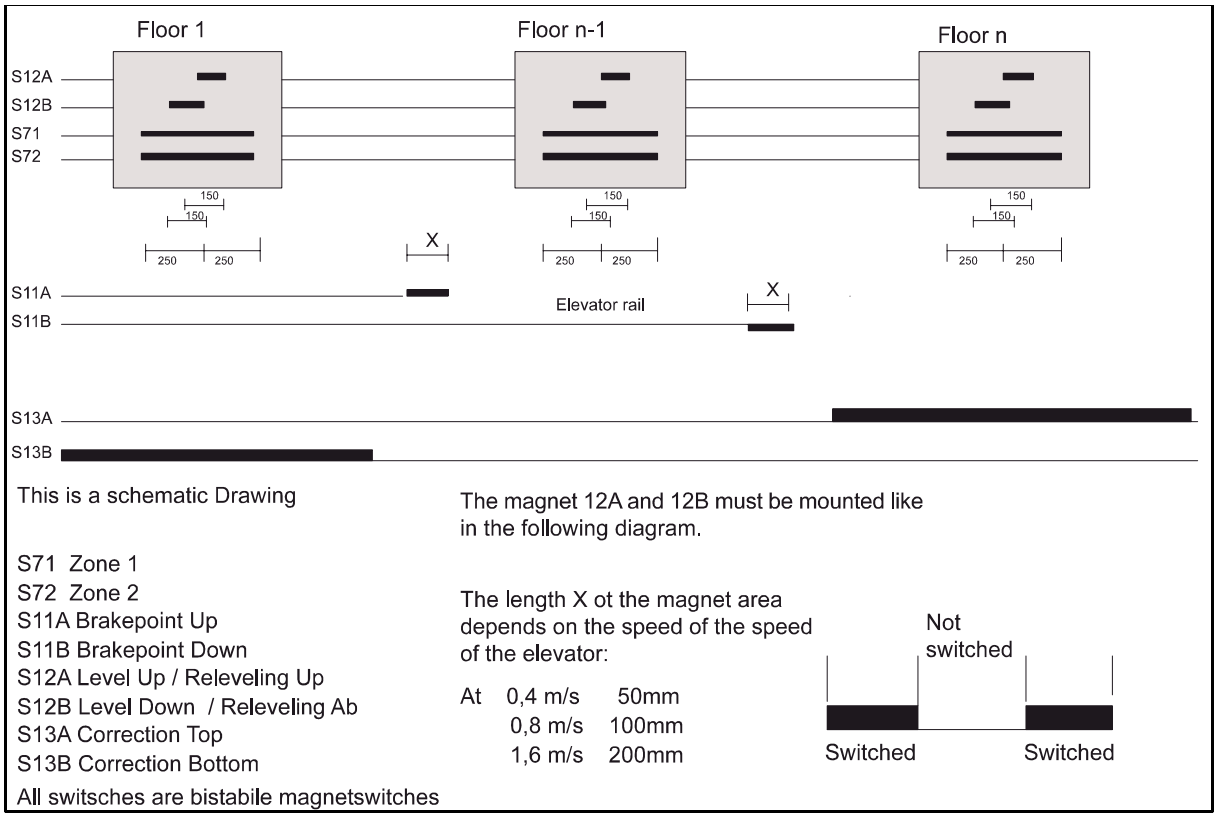
B41 – Standart Copy

1.0 General

The standart-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 biposition-switches with the corresponding round-magnet. For the pinning of the magnets you must use the elevator-rail and shaft-flags.



2.0 Leveling

he 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.

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 doesn't 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 BUFFER DELAY

Depend 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.

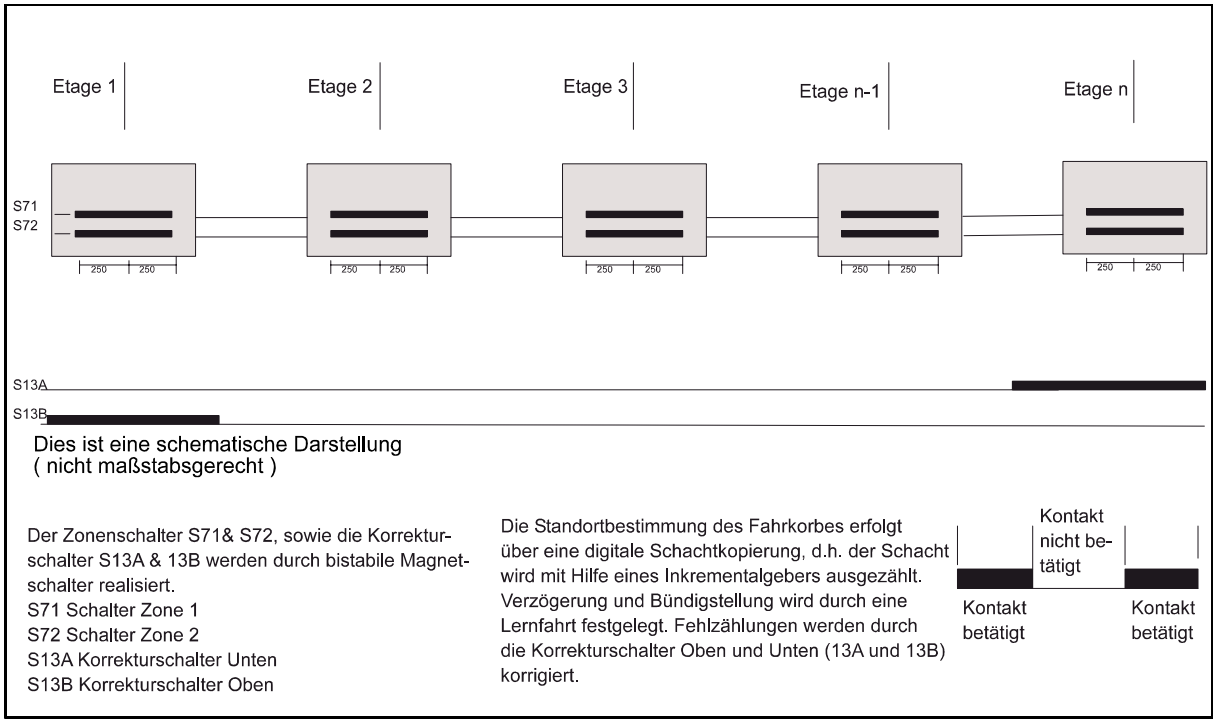
B42-Relative-Copy

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 biposition-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.



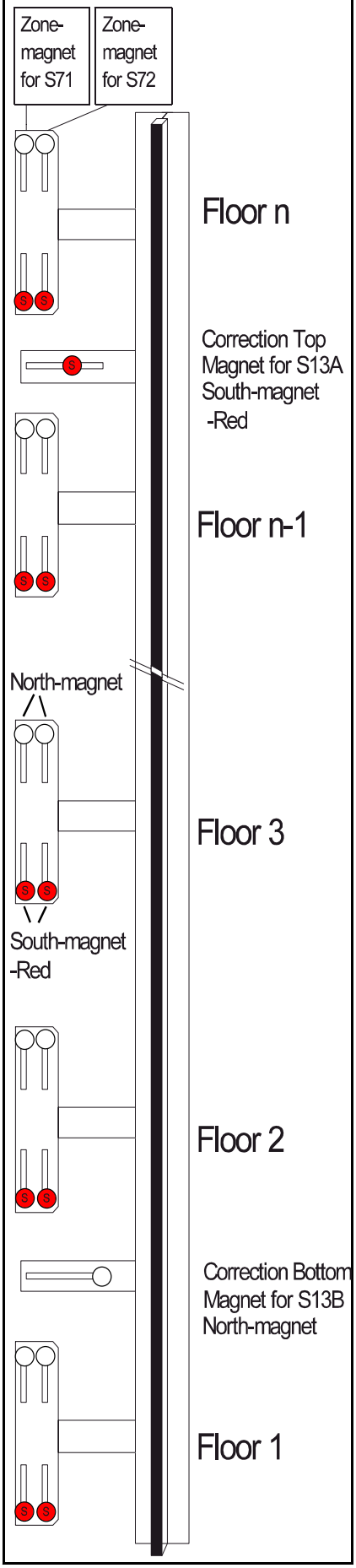
2.0 Releveling

After the learn-drive the middle of the Zone-way is the value of the floor-level. This can be corrigate by the parameter “Leveling” for each floor. A change of the position of the zone-magnets is forbidden. A very concret description is in the 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 used only for synchronize the shaft-copy-system and for a safe deceleration in the end-floors in a emergency-situation, like a failure in the 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.**

1.0 Unit shaft copying system



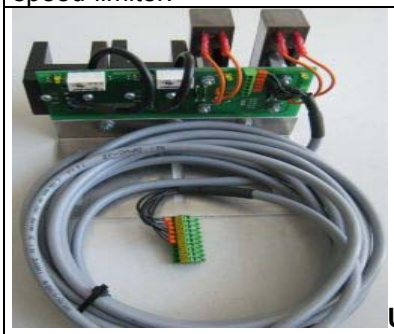
← ESK-90 System ←

The shaftcopysystem ESK-90 has the following components, like the shaft flag ESF-16 and the shaft flag carrier SFH-16 with the magnets and the fixing material. On the shaft flags are the north magnets always on the top! The magnet switch panel ESK-90 is mounted on the car roof with the help of the mounting metal plate. **The switch distance between the magnet and the magnet switch is regulary 7- 9 mm! Is the distance too short than there are a lot of error switchings!**
The electrical connection is made by a 10 pole flatwire.
Every digital / absolute value system needs an encoder, e.g. at the motor, or an the car roof, or in the shaft, or at the speed-limiter.

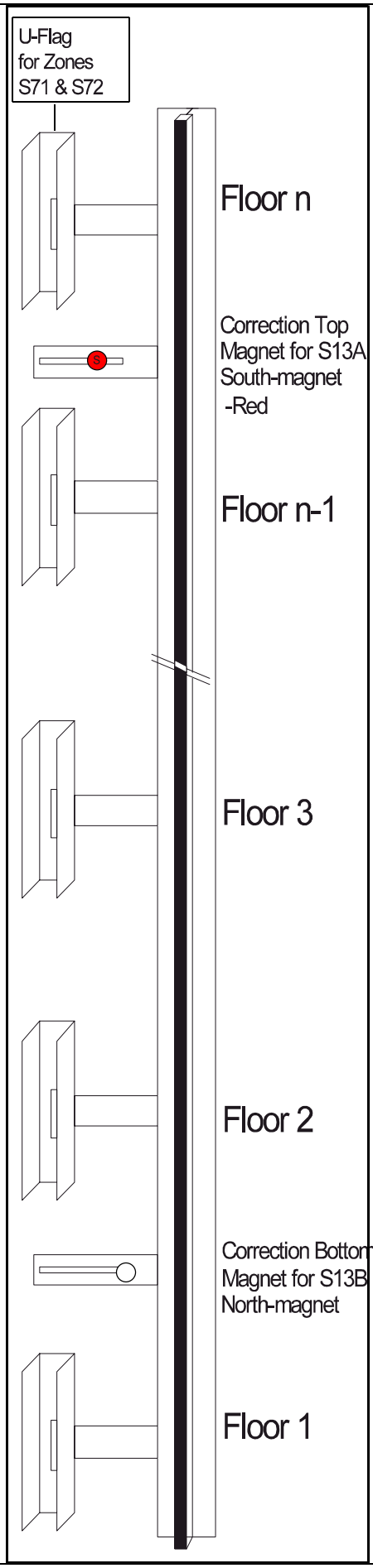
ESK-90

-> USK-90 System ->

The shaftcopysystem USK-90 has the following components, like the U-shaft flag UF-16 and the shaft flag carrier SFH-16 with the fixing material.
The fork photo cell must handle into the U-flag. The fork-photocell-panel USK-90 is mounted on the car roof with the help of the mounting metal plate.
The switch distance for the correction switches S13A & 13B is regulary 7- 9 mm! Is the distance too short than there are a lot of error switchings!
The electrical connection is made by a PVC wire with terminal.
Every digital / absolute value system needs an encoder, e.g. at the motor, or an the car roof, or in the shaft, or at the speed-limiter.



USK-90



PARAMETER: PULSE BUFFER DELAY
There is a pulse buffer-delay-time between 2 and 150ms. Its 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 take place ”after callinput” 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 carconcisely.

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 carconcisely. 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 is 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 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 automaticly 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 standart 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 standart 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 standart 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 chosse speed V1. The standart 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: LERN DRIVE ACTIVATE
If the electrical installation is ok 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 concret description is in the chapter **I01-Activation of the digital shaft presentation.**

PARAMETER: SWITCH HYSTERES OVERLAPPING
After successful learning trip the value of the hysteress 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 corrigate unlevels for every floor.

B43 – Absolut Copy

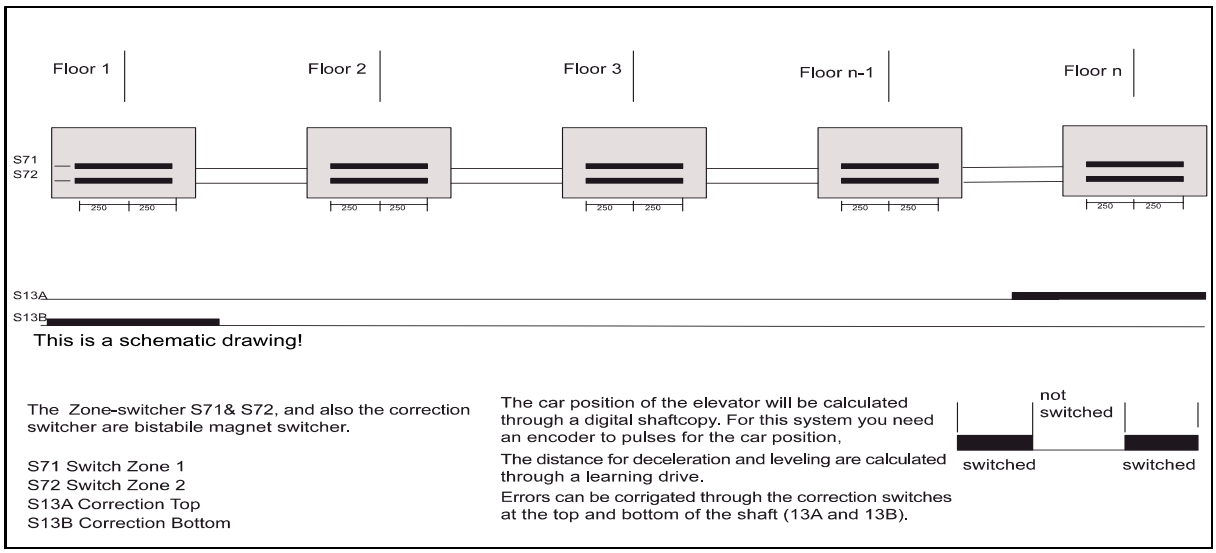
1.0 General

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

Variant 1: Without shaft switches

After assembly that of ABS-encoder-system is turned off the car between floor 1 and 2. After start of the parameter way-collection-learn, the car moves downward with the back getting control or the inspection control . Now the control recognized the counting direction. Afterwards the car in the floor 1 (lowest stop) placed concisely. Now the parameter synchronisation stop 01 is activated. The control knows now, the lowest floor possesses which impulse conditions. With reserved pit table (all floors were reserved with calculated concise conditions) the concise correction can take place now in the other stops.

Variante 2: With shaft switches



After Mounting of the ABS-Giver-System and the shaft switcher can start the learn drive. An precise discription you can find in I01-COMMISSIONING THE DIGITAL SHAFT COPY.

The absolute value giver works with System USP or band of nops with absolute encoder.

Variante 1: Schmersel UPS, transferformat/ Interface USP30: USP-30-M24BS

Pinbelegung	USP30/100 (D-SUB)	D2005/D606 (9 pol-Reihenstecker 3,5mm)
	Schirm	1
5	GND	8
6	SSI_Daten (B)	5
7	SSI_Takt (B)	3
9	Ub (+24V)	9
10	Select	8
13	SSI_Daten (A)	4
14	SSI_Takt (A)	2

Variante 2: SSI-Revolving giver Type KW, with band of nops

PARAMETER: PULSE BUFFER DELAY

There is a pulse buffer-delay-time between 2 and 150ms. Its 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. To the choice the Schmersal UPS system, the ELGO system, W&W Type 2 and the Wachendorff SSI rotation transducer.

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: DECELERATION Speed V0 -> 0

This parameter is the brake-way from the drive-in speed V0 to the stop (0). The value comes automaticly 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 standart 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 standart 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 standart value is 1500 mm.

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 chosse speed V1. The standart value is speed V1.

PARAMETER: LEARN DRIVE ACTIVATE

If the electrical installation is ok 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 concret description is in the chapter **I02-Activation of the digital shaft presentation.**

PARAMETER: COUNTDIRECTION (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 COUNTDIRECTION 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 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 FLOOR-XX

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

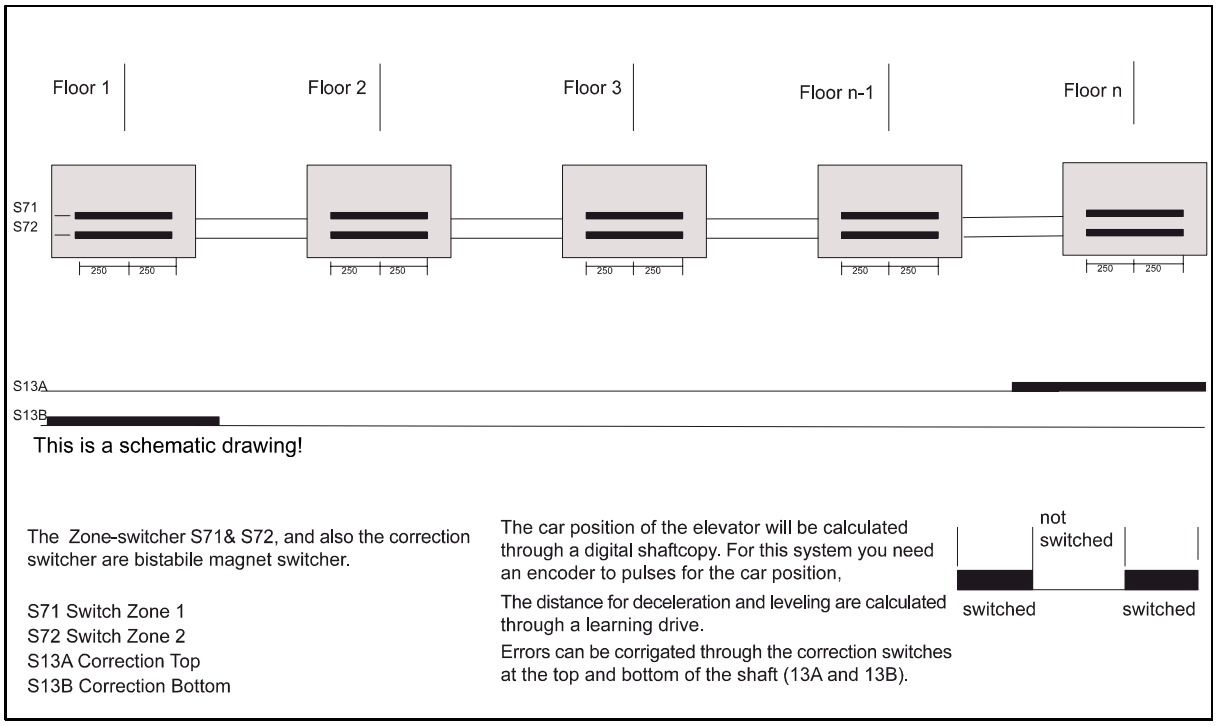
B44 – Motor-Copy

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 necessarity with releveling or entry with open door)
S13A Correctionswitch Top
S13B Correctionswitch Bottom

All magnet-switches are biposition-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.



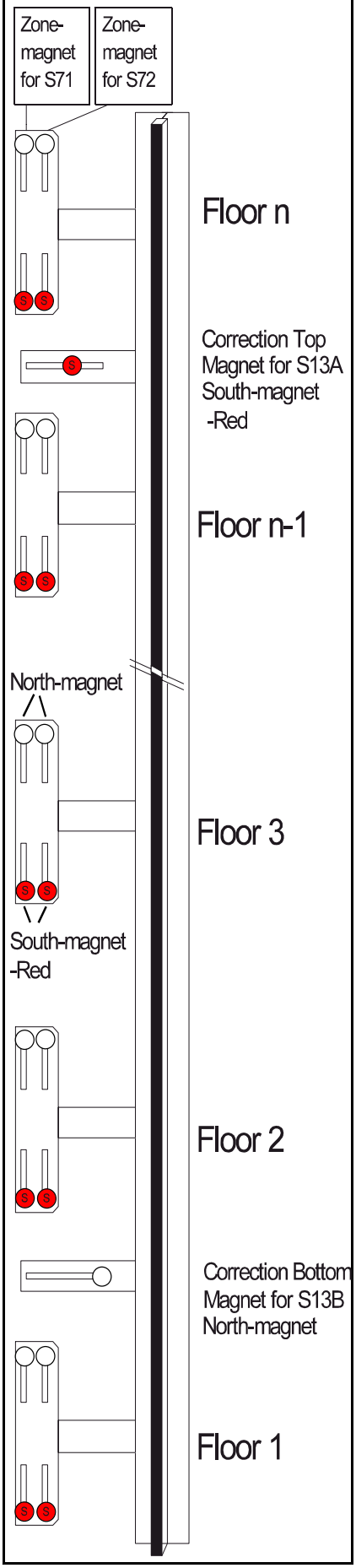
1.0 Releveling

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

2.0 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 used only for synchronize the shaft-copy-system and for a safe deceleration in the end-floors in a emergency-situation, like a failure in the 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.**

1.0 Einheitsschachtkopierungssystem



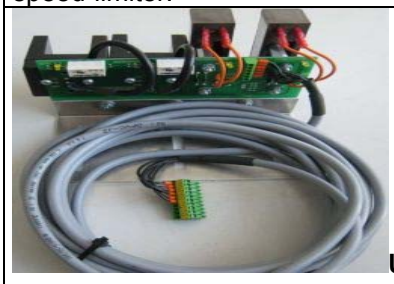
← ESK-90 System ←

The shaftcopysystem ESK-90 has the following components, like the shaft flag ESF-16 and the shaft flag carrier SFH-16 with the magnets and the fixing material. On the shaft flags are the north magnets always on the top! The magnet switch panel ESK-90 is mounted on the car roof with the help of the mounting metal plate. **The switch distance between the magnet and the magnet switch is regulary 7- 9 mm! Is the distance too short than there are a lot of error switchings!**
The electrical connection is made by a 10 pole flatwire.
Every digital / absolute value system needs an encoder, e.g. at the motor, or an the car roof, or in the shaft, or at the speed-limiter.

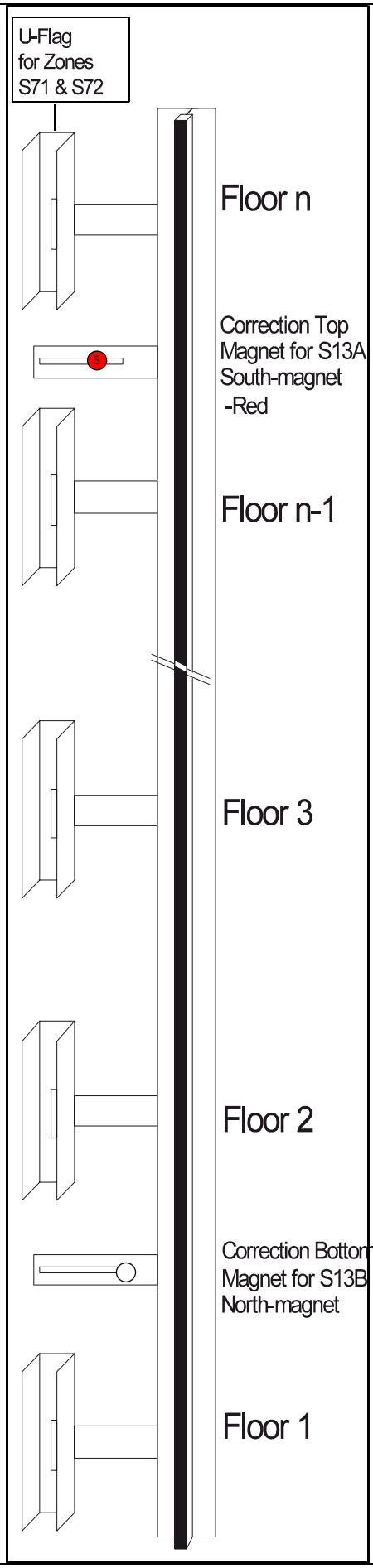
ESK-90

-> USK-90 System ->

The shaftcopysystem USK-90 has the following components, like the U-shaft flag UF-16 and the shaft flag carrier SFH-16 with the fixing material.
The fork photo cell must handle into the U-flag. The fork-photocell-panel USK-90 is mounted on the car roof with the help of the mounting metal plate.
The switch distance for the correction switches S13A & 13B is regulary 7- 9 mm! Is the distance too short than there are a lot of error switchings!
The electrical connection is made by a PVC wire with terminal.
Every digital / absolute value system needs an encoder, e.g. at the motor, or an the car roof, or in the shaft, or at the speed-limiter.



USK-90



There is a pulse buffer-delay-time between 2 and 150ms. Its 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 is 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 carconcisely.

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 carconcisely. 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 is 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 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
This parameter is the brake-way from the drive-in speed V0 to the stop (0). The value comes automaticly 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 standart 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 standart 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 standart 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 standart 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: LERN DRIVE ACTIVATE
If the electrical installation is ok 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 correctionswitch bottom. Then the learn-drive should be started. A very concret description is in the chapter **I01-Activation of the digital shaft presentation.**

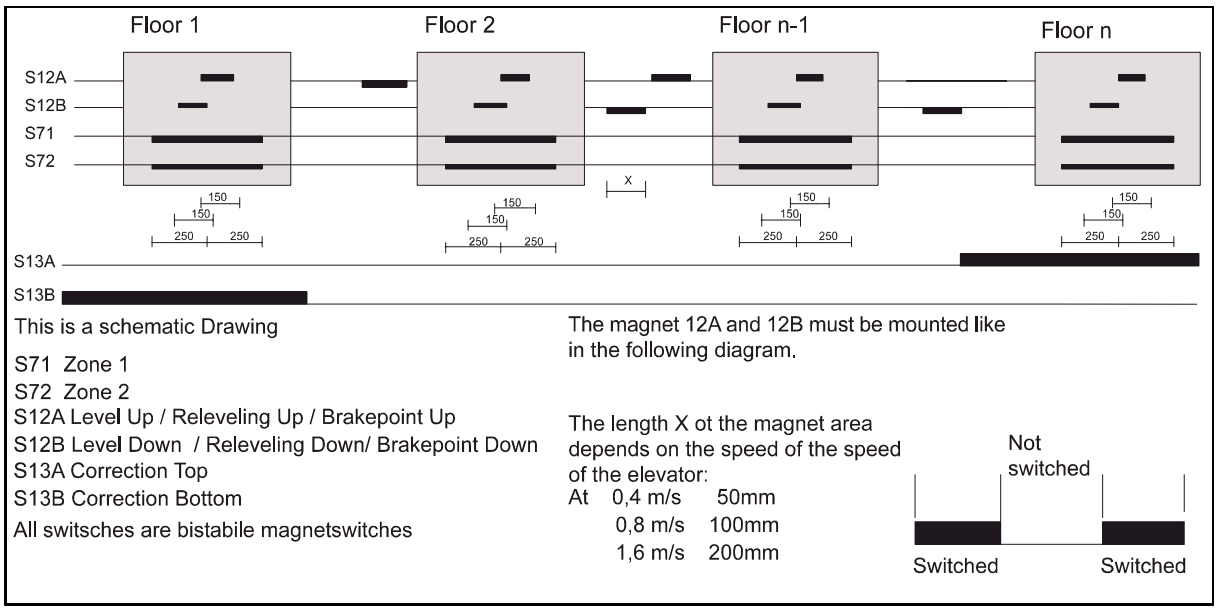
PARAMETER: SWITCH HYSTERES OVERLAPPING
After successful learning trip the value of the hysteress was determined for the shaft switches.

PARAMETER: LEVELING-FLOOR-XX
After a learn-drive, you must put in this parameter in the level-values for each floor. Here you can corrigate unlevels for every floor.

B45 – Minimum-Copy

1.0 General

In principle 6 magnet counter are necessary with minimum copying. If the plant does not have releveling function or no entry with open door a magnet counter can be omitted i.e. S72. The concise position takes place related to the direction. All magnet counter are bistabile block switches with the appropriate round magnets. As attachment for the magnets the guide rail, as also the pit flag system can serve ESK04..



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.

3.0 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 doesn't 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 BUFFER DELAY

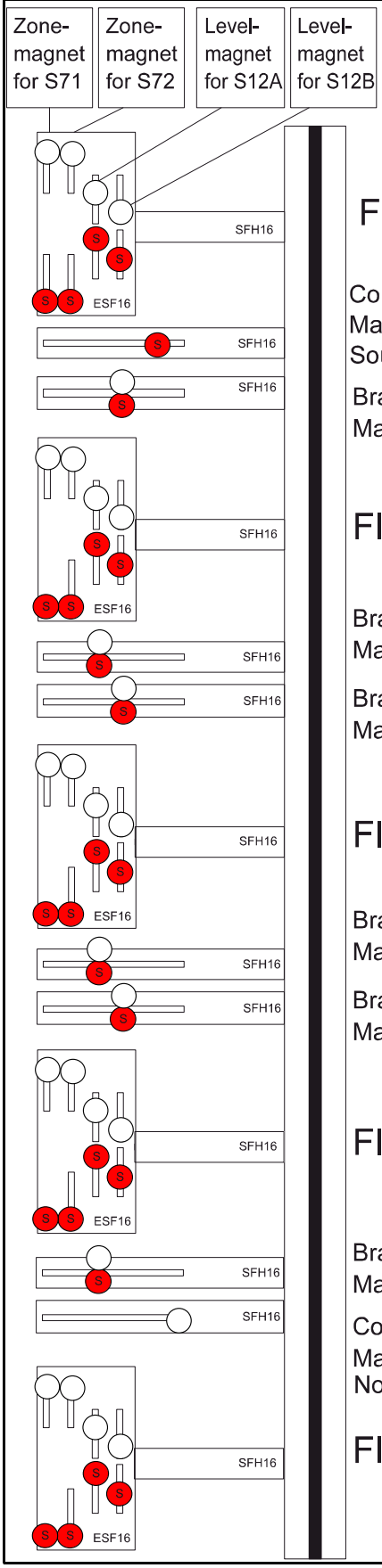
There is a pulse buffer-delay-time between 2 and 150ms. Its depends on the type of magnets, you are using. The KW-magnets only needs a delay-time of 2ms.

PARAMETER: CORRECTION TRAVEL

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

1.0 Unit shaft copying system

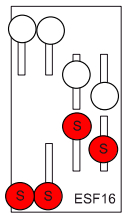
Shaftcopysystem ESK04 & 02



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 rthe elevator.

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!



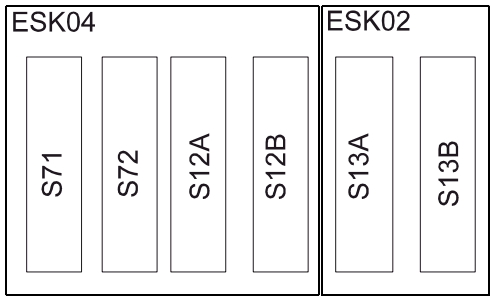
The south magnet is red coloured.

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!

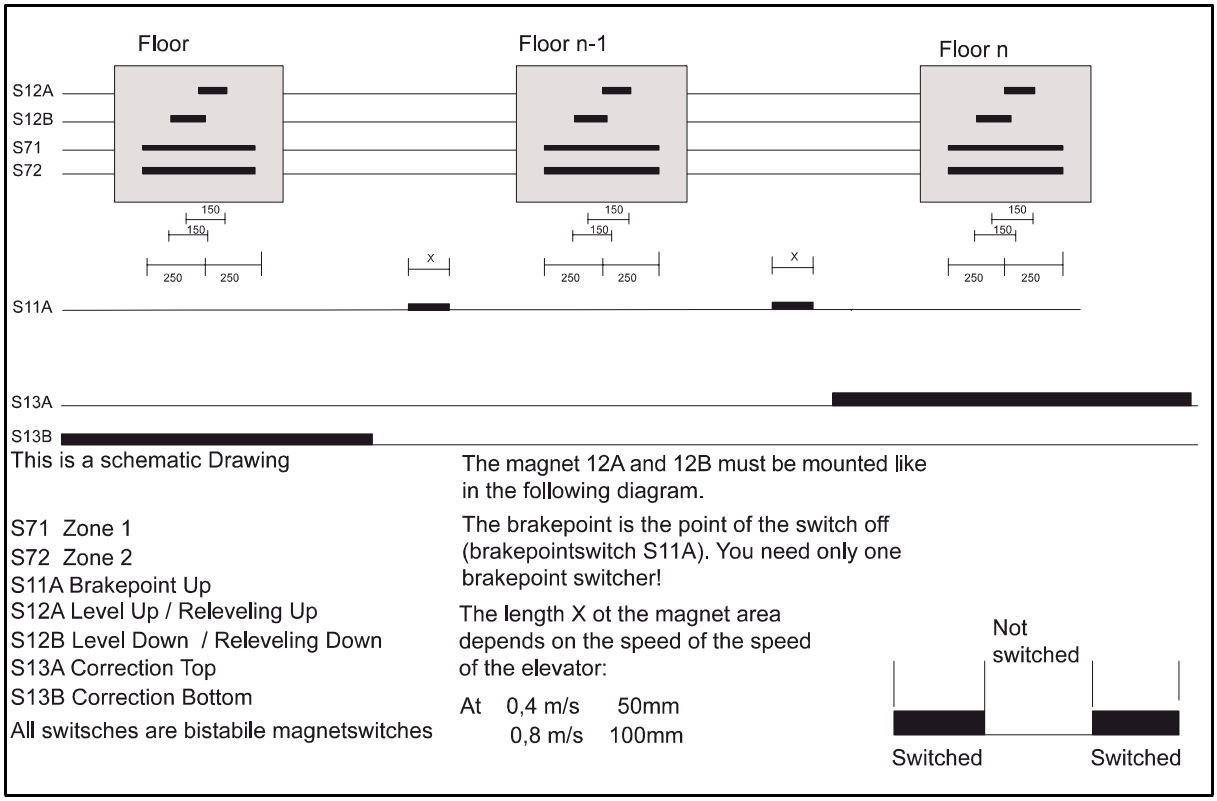


The electrical connection is made by a PVC-wire with terminal.

B 46-R&S-Copy

1.0 General

Are fundamental with the R&S copying 5 magnet counter necessarity. If the elevator does not have a releveling function or the entry with open door you can omitted the magnet counters S71 and S72. The concise position takes place related to the direction. All magnet counter are instabile block switches with the appropriate round magnets. As attachment for the magnets the guide rail also the shaft flag system can serve ESK16.



This is a schematic Drawing

S71 Zone 1
S72 Zone 2
S11A Brakepoint Up
S12A Level Up / Releveling Up
S12B Level Down / Releveling Down
S13A Correction Top
S13B Correction Bottom
All switsches are bistabile magnetswitches

The magnet 12A and 12B must be mounted like in the following diagram.

The brakepoint is the point of the switch off (brakepointswitch S11A). You need only one brakepoint switcher!

The length X ot the magnet area depends on the speed of the speed of the elevator:

At 0,4 m/s 50mm
0,8 m/s 100mm

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.

3.0 Brakepoints and Correction

The magnet switch 11A is the brake-switches to drive into the destination floor. If you are driving from the second floor to the first floor you doesn't 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. The switch mode of S11A is the falling pulse. In cause it is possible to use only one brakepoint switch in the shaft. You can use this methode only with elevators with small speed. The half of the floor distance is the possible brake distance.

B5 Indicate

B501- Car Indicators

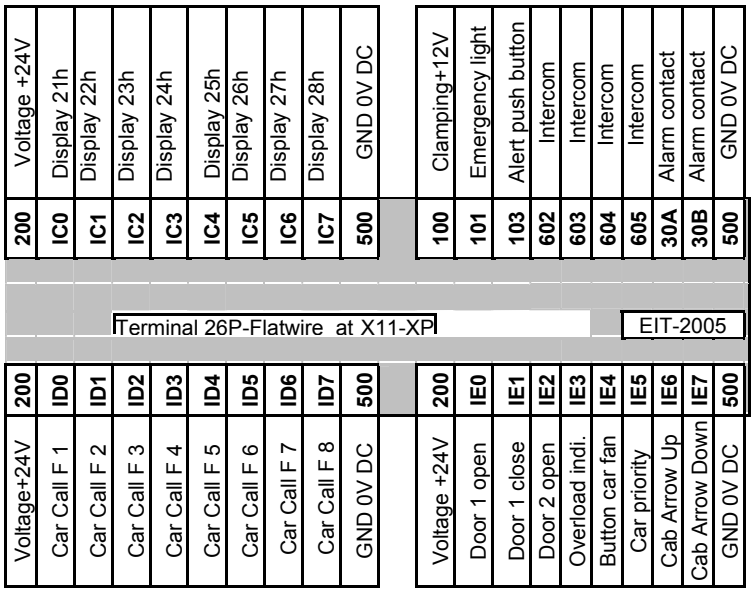
General

The car-position of the elevator has two output-devicels, namely ZR and ITR. In both of the following parameters you can choose the output of the car-position:

A) Parameter Car Indicate ZR
B) Parameter Car Indicate ITR
C) 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) 1 of N-Code
2) Binary-Code
3) Graycode
4) 7 Digits-Indicator



1 of N Code

The 1 of N code has always one output-channel for one floor indicator. Is the car in the first floor so channel 21 h is active (+24V DC).

Binarycode

In the binarycode, the floors are a combination of some outputchannels. 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

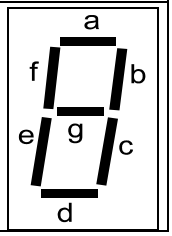
Graycode

In the graycode, the floors are a combination of some outputchannels. 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 outputchannels. 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 characterset

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 spezial drives

With the modes of operation inspection, releveling , spezial trip and case of error, it can will decide whether the car permament spend all or does nothing spend .

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 Direktion 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 closes of the doors.

B503- Floor Indicators

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 Direktion Arrows
b) Direction Arrow and move-on Arrow
c) Only move-on Arrows

DISCONNECTION OF THE DRIVING ON ARROWS

You can switch off the driving on arrows on two ways.

A) Disconnection by expiration of an adjusted time.
B) Disconnection by closes of the doors.

B504- Gong at the Car

In the first parameter of this menu you can activate the car gong function. You can attache a miniature loudspeaker with an impedance by 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-brigade enterprise
E) Special trips

In the parameter volume you can be adjusted a value from 1 o 15, whereby 1 represents the lowest volume. The pitch can be adjusted like the volume in a range from 1 to 15. At the value 1 it concerns thereby a very deep pitch. The standart value is 7.

B505- Gong at the Floor

Like the car controller unit FKR, then also the remote station ER 2005 offer the possibility of activating the gong function. You can attache a miniature loudspeaker with an impedance by 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-brigade enterprise
E) Special trips

In the parameter volume you can be adjusted a value from 1 o 15, whereby 1 represents the lowest volume. The pitch can be adjusted like the volume in a range from 1 to 15. At the value 1 it concerns thereby a very deep pitch. The standart value is 7.

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.

ARROW DISPLAY CAR
You can choose between:
- No (No expenditure for arrow)
- Yes (Standing arrow)
- Scroll (Current arrow)

SEGMENTS CAR
Depending upon selected matrix unit it can be selected whether 2 or 3 segment matrix display is to be headed for.

RUN TEXTS CAR
You can choose between: overload, evacuation, fire-brigade trip, special trip & out of operation.

ARROW DISPLAY REMOTE STATION
You can choose between:
- No (No expenditure for arrow)
- Yes (Standing arrow)
- Scroll (Current arrow)

SEGMENTS REMOTE STATION
Depending upon selected matrix unit it can be selected whether 2 or 3 segment matrix display is to be headed for.

INDICATOR FIELD REMOTE STATION
Depending upon selected matrix unit an indicator field present, which can assigned for a type-output .

RUN TEXTS REMOTE STATION
You can choose between: Overload,Evacuation,Fire-brigade trip, special trip & out of operation

CENTRAL UNIT DISPLAY
You can choose between:
- Display 1 to 32
- Display like the car

B6 Special Functions

B600- Monitor-Functions

PARAMETER:CONTACTOR MONITOR
Is the contactor-monitor active, the main- and brake contactors will be controlled on 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 stopped 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. The is available between 500 ans 4000 ms.

PARAMETER: CONTACTOR MONITOR TRAVEL
If the system is blocked, you can only can 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: CAR LIGHT MONITOR
If the fuse of the carlight is falling out or the light of the car is going out, this means the elektrical power is sinking under 40W, then the car 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.

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: DECELATION 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: BRAKE-SHOE-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 " resend drive", then the drive clear and remain in this condition, until the error condition is repaired.

PARAMETER: BRAKE-OPEN-MONITOR

The process of brake open and closing will be supervisor by two input-channels. If the brake is closed, there will be a voltage level of +24V DC. If the brake contactor will be actice, the voltage level fall down to 0V DC. The delay-time for monitoring is max. 4 seconds. For each coil you need one input channel.

PARAMETER: BRAKE-OPEN-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-SHOE MONITOR INPUT

The Input of the brake open monitor is switchable between the function not inverted (high 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: 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 standart 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 theshold value.

PTC-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 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.

B601- Inspection Travel

Description Inputs and Outputs of the inspection control

Terminal	Location	Hardware	Function
60	FKR	24V DC Input	Inspection control On/Off - This entrance serves for recognizing whether the inspection control switched on. In normal operation rests against this input +24V. Becomes those inspection control switch on then there is a 0V DC.
60A	FKR	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	FKR	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 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	FKR	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	FKR	24V DC	Signal to the activation of the inspection contactor K60.

Description Inputs and Outputs of the resend control

Terminal	Location	Hardware	Function
61	ZR	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. Becomes those remote motion control switch on then lies 0V DC.
61A	ZR	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 to the consequence.
61B	ZR	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 61A. If both entrances are activated, this trip desire and/or immediate cancelling of the driving or door instructions does not have to the consequence.
61D	ZR	24V DC	Signal for activation 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: INSPECTION STOP UP

You can choose between:

1) ZONE The inspection trip is stopped with beginning of the upper zone.
2) PRE-SWITCH The inspection trip is stopped wih reaching the upper pre-switch button S13A.

B602- Emergency Light System

General

The emergency power equipment is integrated in that central unit controller makes with 12V a maximum river available of 1,2A. This power serves 1.1 AH Akkus, 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.

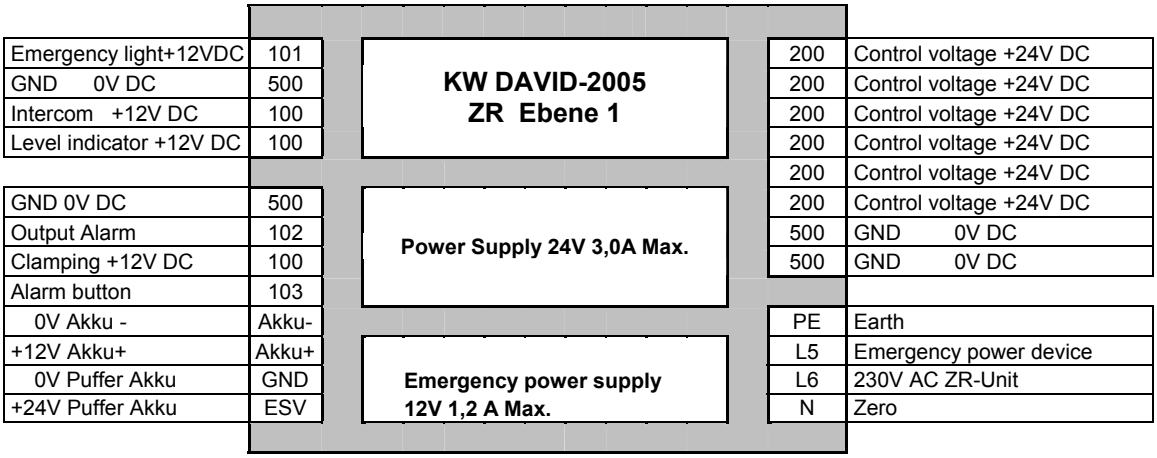
PARAMETER: ALERT PUSH BUTTON MISUSE PROTECTION

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 arror

If one of these conditions is not full filled, the alarm is release.



B603- Car of Fan

Description of the In-& Output channels

terminal	Pos.	Hardware	Function
A24	FKR	Relay common	Phase L5, to supply the car fan
E24	EIT	24V DC Input	Input push-button car fan; A level of +24V DC means that the car fan is startet.
A24	EIT	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 automaticly at the start of a travel. The fan switch off after the delay time.

PARAMETE: 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 Measure

General
In principle you can selected 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 (high actively) or inverted (low actively).

Load Measurem. Loadsensor 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 than full load entrance, and/ or less load entrance.

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 / or 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.

PARAMETER: STANDBY TRAVEL 1 FLOOR
One quiescent level can select at rope lifts. At the standart 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 open the doors and switches after a certain time the light off at the next stop. The door position is reely selectable. If the cab is not in full speed, then it remais 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 2 FLOOR
Like the function before, you choose a second floor.

PARAMETER: DOOR
Here you can choose, if the doors are open or closed in the standby travel floor.

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: Parks 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 an be specified on the free-provale 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 standart 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 PARAMETER ATTITUDE
The permanent blockage of levels can be met by the parameter attitudes. Landing- and car calls are erased for this 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 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.

B608- Carlight switch off

PARAMETER: AUTOMATIK OFF
In general you can switch off the carlight, if the car is standing in the floor and has no calls or the car is in the parking travel floor. In this parameter you can activate this funktion**.**

PARAMETER: DELAY
In this parameter you can put in the delay-time. After this time, and there are no calls, the carlight will be switched off. You can put in a time from 1 to 600 seconds. The standart value is 60 seconds.

B609-614 – Special Functions

Titel	Rang	Function	Description
B611	1	**Fire-brigade control**	The fire-brigade control is devided into two functional moduls: a) Fire-brigade priority in the 1st, 2nd or 3nd fire-brigade level. b) Fire-brigade trip in the cab with dead man door control
B609	2	**Emergency power evacuation**	The emergency power evacuation is devided in principle into two variants: a) Emergency power evacuation with single investments without sequence circuit b) Emergency power evacuation at a plant group with sequence circuit
B610	3	**Fire drop evacuations**	With the case of the elevators evacuate 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/ unter the fire level position.
B612	5	**Rescue Travel**	If the floor the obstruction rescue entrance is set actively. The car drives immediately to the stop. The car is occupied with the VIPs and drive to special level . Afterwards the car returns to the departure level.
	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 aster flash up to the call input.(no time limit) After effected call input; start for this stop; afterwards again flash the achnowledgement 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 activety (duration High). The landing and car calls are deleted, new set landing calls let the acknowledgements of the car calling aster 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 starts immediately the stop. The landing calls are stored; all 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.
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

General
Is the function of the emergency power service active, the signal of the input-channel 401 will be controlled. A 230V AC level means that there is a normal drive, but when there is a 0V AC level, then we have the emergency power service. The car is driving in the emergency power service floor an and all car- and landing-calls are cleared. The car is standing with open doors in this floor.
If the 230 AC level on the input-channel 401 is coming back, the car is back in normal drive.

PARAMETER: ENERGENCY POWER SERVICE
In this parameter you can activate the function of the emergency power service.

PARAMETER: FLOOR
The floor of the emergency power service is freely chosen. The standart value is the first floor.

PARAMETER: PIECO BUZZER
If you activate this parameters the piezo buzzer of the carpanel-unit ITR can switch on, if there is an emergency power service travel.

PARAMETER: INPUT
The input-channel E1 can be switched up between the reaction as high active or low active.

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 returnes automatically to normal operation. During the 3 Fire evacuation entrance equivalent is acted. All entrances for the fire drop evaculation know High actively (normally open contacts or as Low actively (openers) o be adjusted.

DYNAMIC FIRE DROP EVACUATION
During the dynamic fire drop evaclation floor fire alarms are present in each stop. It is present a main evacuation floor, into which in principle one evacuates. The exceptions consists 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 sofware two are present dynamic fire drop evacuations. Those can driven through the fire source the oter one stops above the fire source.

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 parameters the piezo buzzer of the carpanel-unit ITR can switch on, if there is an emergency fire service travel.

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).

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 cosing 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 necessarity 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 shines " for EVACUATION REQUEST ELEVATOR LEAVING" at the same time sounds a buzzer 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" lighs up
C) An unhindered input of driving instuctions 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 impented. An incorrent driving instruction input can be erased through OFF/ON-switching on of the FW code switch.
Afer 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 in its momentary position stops.
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 by pressing the door open tracer, whereby the registered driving instruction is deleted.
In the car adjusted 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 Ausralian 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"

EN81-70 FIRE BRIGADE MODEL

B612 Rescue Drive

(not realized)

B613 Leader Enterprice

PARAMETER: LEADER ENTERPRISE

If this function is activated the function of the leader enterprise becomes by manipulation interior advantages code switch in the car switch on.

- The external control is off i.e. the control does not react automatically to landing calls. Instead the lying close external calls are put on the acknowledgements of the approprite car calls.
- The elevator conductor recognizes the lying close landing calls by the bright receipts and selects the car calls.
- With entry into the floor the landing call and the appropriate acknowledgement at the car calls are deleted.

This function is not relized yet.

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.

B615 Timerelay

PARAMETER: TIME RELAY 1

By attutude 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 adjusable 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 a 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 (standart 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 Car locking

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 electromagnets of the alarm racer in expectation of the notification of emergency.
- All doors remain fundamental closed during the AW
- It does not sound a gong
- AW indicated as special trip

PARAMETER: REACTION
In this parameter with 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 & Blockade

PARAMETER: FLOOR BLOCKADE
During the elevator attendant examination all floors are started and checked for it is not ok. 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.

B617 Bolt

PARAMETER: BOLT
You can choose between:
A) Statically- i.e. the pin boling devise 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 mobilety the stops places registered the pin bolting device is active.

PARAMETER: BOLT RETRIEVING
In this parameter you can decide, the releveling 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 bestartet 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 more accepted.

The bolts are drive out. Afterwards the calls are again acepted. 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 bolding 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 a 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 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 ant 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.Before 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 drive 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 close
2) The bolts drive out
3) DSK Shift-OFF, elevator drives concisely, door opens

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 becomes with programable input function E334-E344 entered. For the input of the code as the latter " #"-button is pressed. If the code was entered correctly an interior call is realeased to the appropriate and one time pieco buzzer. If the code entered wrong, so is beeped 3 times. Per depressing the key the place counter is increased. If longer than 5 seconds no depressing the key taken 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) fo 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

B7 Input/ Output

General

In- and Output-channels at the control system DAVID-2005 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 not hae o occupy with this control system also over 350 input- and otput functions each channel separately, preemption frameworks were introduces which make a preempition possible of the channels. Nevertheless each free-programable 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.

Afterwards the entrances and exits are adapted after the control needs. This happen 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 represenation	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 dorr 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 emrgency 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 relax 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 aktivated motor fan function.
A24	A24-CAR FAN	Output at aktivated car fan function.
A25	A25-CABINET FAN	Output at aktivated 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 spezial 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- Car door close	The relay energizes if at U 11 tension lies on.(car door close)
A40	A40- Shaft door close	The relay energizes if at U 10 tension lies on.(shaft 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 messagering car fan	Expenditure call messagering at active car fan
A46	A46 nudging door 1	Expenditure of the nudging command for door 1 unter ignoring photoelectric cell
A47	A47 nudging door 2	Expenditure of the nudging command for door 2 unter 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 ca bconditions 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 errow 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	A153Call 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	Ependiture 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 aktive.
A185	A185 Pre-end switcher Down	Expenditure of the entrance pre-end switcher DOWN aktive.
A186	A186 Door closes	Expenditure of the message that the door closes
A187	A187 Door opens	Expenditure of the message that the door openes
A188	A188 car driving Up	Expendure of the message taht teh car move UP
A189	A189 car driving Down	Expendure of the message taht teh 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 elevatorin 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 and Block contacts active	Die safety circuit contacts Shaft-& Car Door, Block (U10,11&12) are closed
A198	A198 Safety circuit actave	Die safety circuit contacts (U2 bis U9) are closed
A199	A199 ER achnowledgement landing call Up Door 2	Expenditure on the remote station; Acknowledgement of the external call UP at D2
A200	A199 ER achnowledgement 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-arror on the remote station for door side 2
A204	A203 ER Arrow Down Door 2	Expenditure of the Down-arror on the remote station for door side 2
A205	A205 light barrier blocks	Expenditure of the message taht 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 electromagnet in the alarm tracer
A212	A212 elevator attendant: Tracer Alarm	Base functions to the activation of the electromagnet 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 reserting 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	Aktiv 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 t he 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 thecar 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 Stop9 for 1 of N
A294	A294 Car Position Indicator ZR10	Exediture for driving car condition Stop10 for 1 of N
A295	A295 Car Position Indicator ZR11	Exediture for driving car condition Stop11 for 1 of N
A296	A296 Car Position Indicator ZR12	Exediture for driving car condition Stop12 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	

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 distrubance.
E9	E09-Si-circuit zone	Entrance for the message of the protection circuit that 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 teh cab light off
E17	E17-Fire brigade outside 1 Priorität	Entrance for the FW lock for landing call 1.th floor
E18	E18-Fire brigade outside 2 Priorität	Entrance for the FW lock for landing call 2.th floor
E19	E19-Fire brigade outside 3 Priorität	Entrance for the FW lock for landing call 3.th 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 Australien 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 brakeventilation 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	E33-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 groop > own landing calls
E40	E40- Fire drop level Prioritat 1	Entrance for the fire drop evaclation into the first evacuation level
E41	E40- Fire drop level Prioritat 2	Entrance for the fire drop evaclation into the second evacuation level
E42	E40- 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 flor blockade of the Stop 01
E76	E76- Floor Blockade St.02	Entrance for the flor blockade of the Stop 02
E77	E77- Floor Blockade St.03	Entrance for the flor blockade of the Stop 03
E78	E78- Floor Blockade St.04	Entrance for the flor blockade of the Stop 04
E79	E79- Floor Blockade St.05	Entrance for the flor blockade of the Stop 05
E80	E80- Floor Blockade St.06	Entrance for the flor blockade of the Stop 06
E81	E81- Floor Blockade St.07	Entrance for the flor blockade of the Stop 07
E82	E82- Floor Blockade St.08	Entrance for the flor blockade of the Stop 08
E83	E83- Floor Blockade St.09	Entrance for the flor blockade of the Stop 09
E84	E84- Floor Blockade St.10	Entrance for the flor blockade of the Stop 10
E85	E85- Floor Blockade St.11	Entrance for the flor blockade of the Stop 11
E86	E86- Floor Blockade St.12	Entrance for the flor blockade of the Stop 12
E87	E87- Floor Blockade St.13	Entrance for the flor blockade of the Stop 13
E88	E88- Floor Blockade St.14	Entrance for the flor blockade of the Stop 14
E89	E89- Floor Blockade St.15	Entrance for the flor blockade of the Stop 15
E90	E90- Floor Blockade St.16	Entrance for the flor blockade of the Stop 16
E91	E91- Floor Blockade St.17	Entrance for the flor 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 priorty
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 Output-1	Entrance of the universal channel 1
E236	E236 Universal Output-2	Entrance of the universal channel 2
E237	E237 Universal Output-3	Entrance of the universal channel 3
E238	E238 Universal Output-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	pener 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, Stopp 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 geginns 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 delated
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 aeras

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 tha bolts drove out

E330	E330 Bolt drive in	Feedback that the bolt drove 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“ than 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 contection with Input E13
E357	E357 Group off	
E358	E358 Emgine temperature rise	If „1“ than 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/ releveling+ mobile bolting device
E365	E365 Bolt manually drive out	Only with Insp/ releveling+ 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 Pahse 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 powr down
E437	E437 Car Person Senor	
E438	E438 Brake open monitor 2. coil	
E439	E439 Brake open monitor 3. coil	

Description of functions and expirations

FUNKTION E361 Slow speed V1
If „1“ is then implemented the trip only with V1. (“Glass bone” trip)

FUNKTION E362 QUIESCENT SPEED-2
Resembles function as E16 quiescent trip only another quiescent level can be stopped here. If E16 has actively, then E16 priority. At the group at the floor computer only E16 is evaluated.

FUNKTION E363 GAS TRIP
The gas trip has the same function as the interior preference/ advantage E189. Around the gas trip to active +24V must be set on the entrance E363. All car calls and landing calls are deleted the cab door open and/ or remain open. Now an car call can be entered, the car call however is only the processed, after the light barrier was interrupted. Also the door remains so long opened. Thus is to be guaranteed that the user after input of the car call the cab left.

B73- I/O Allocation

		Frame-10	Frame -11	Frame -12	Frame -13	Frame -14
		1KS-12HS Rope	2KS-10HS Rope	1KS-10HS Hydraulic	2KS-08HS Hydraulic	
K301	Relay	O-/Collecting Fault/	O-/Collecting Fault/	O-/Collecting Fault/	O-/Collecting Fault/	
K302	Relay	O-Door-controlling D1 open	O-Door-controlling D1 open	O-Door-controlling D1 open	O-Door-controlling D1 open	
K303	Relay	O-Door-controlling D1 close	O-Door-controlling D1 close	O-Door-controlling D1 close	O-Door-controlling D1 close	
K304	Relay	O-Door-controlling D2 open	O-Door-controlling D2 open	O-Door-controlling D2 open	O-Door-controlling D2 open	
K305	Relay	O-Door-controlling D2 close	O-Door-controlling D2 close	O-Door-controlling D2 close	O-Door-controlling D2 close	
K306	Relay	O-Locked Magnet	O-Locked Magnet	O-Locked Magnet	O-Locked Magnet	
K307	Relay	O- Car Pos. Indic.-1	O- Car Pos. Indic.-1	O-Emergency power Level reached	O-Emergency power Level reached	
K308	Relay	O- Car Pos. Indic.-2	O- Car Pos. Indic.-2	O-No Function	O-No Function	
K309	Relay	O- Car Pos. Indic.-3	O- Car Pos. Indic.-3	O-No Function	O-No Function	
K310	Relay	O- Car Pos. Indic.-4	O- Car Pos. Indic.-4	O-Arrow up	O-Arrow up	
K311	Relay	O- Car Pos. Indic.-5	O- Car Pos. Indic.-5	O-Arrow down	O-Arrow down	
K312	Relay	O-Remote Release	O-Remote Release	O-Remote Release	O-Remote Release	
K401	Relay	Controlling D1 Open	Controlling D1 Open	Controlling D1 Open	Controlling D1 Open	
K402	Relay	Controlling D1 Close	Controlling D1 Close	Controlling D1 Close	Controlling D1 Close	
K403	Relay	Controlling D2 Open	Controlling D2 Open	Controlling D2 Open	Controlling D2 Open	
K404	Relay	Controlling D2 Close	Controlling D2 Close	Controlling D2 Close	Controlling D2 Close	
K405	Relay	O-Car Fan	O-Car Fan	O-Car Fan	O-Car Fan	
ZA-0	I/O	I-Safery Circuit	I-Safery Circuit	I-Safery Circuit	I-Safery Circuit	
ZA-1	I/O	I-Si-Zone	I-Si-Zone	I-Si-Zone	I-Si-Zone	
ZA-2	I/O	O-Releveling	O-Releveling	O-Releveling	O-Releveling	
ZA-3	I/O	I-Brake open monitor	I-Brake open monitor	E-Hydr.Hochlauf	E-Hydr.Hochlauf	
ZA-4	I/O	I-Overload	I-Overload	I-Overload	I-Overload	
ZA-5	I/O	I-Releveling I/O	I-Releveling I/O	I-Releveling I/O	I-Releveling I/O	
ZA-6	I/O	I-Releveling Up	I-Releveling Up	I-Releveling Up	I-Releveling Up	
ZA-7	I/O	I-Releveling Down	I-Releveling Down	I-Releveling Down	I-Releveling Down	
ZB-0	I/O	I-ContactorMonitoring	I-ContactorMonitoring	I-ContactorMonitoring	I-ContactorMonitoring	
ZB-1	I/O	I-Landing Control Off	I-Landing Control Off	I-Landing Control Off	I-Landing Control Off	
ZB-2	I/O	I-Control& Light Off	I-Control& Light Off	I-Control& Light Off	I-Control& Light Off	
ZB-3	I/O	I-Fire evac. F. prior.1	I-Fire evac. F. prior.1	I-Fire evac. F. prior.1	I-Fire evac. F. prior.1	
ZB-4	I/O	I-Fire evac. F. prior.2	O-Continued Travel Down F02	I-Fire evac. F. prior.2	I-Fire evac. F. prior.2	
ZB-5	I/O	I-Remote Release	O-Continued Travel Down F03	I-Remote Release	I-Remote Release	
ZB-6	I/O	O-Continued Travel Down F02	O-Continued Travel Down F04	O-Continued Travel Down F02	O-Continued Travel Down F02	
ZB-7	I/O	O-Continued Travel Down F03	O-Continued Travel Down F05	O-Continued Travel Down F03	O-Continued Travel Down F03	
ZC-0	I/O	O-Continued Travel Down F04	O-Continued Travel Down F06	O-Continued Travel Down F04	O-Continued Travel Down F04	
ZC-1	I/O	O-Continued Travel Down F05	O-Continued Travel Down F07	O-Continued Travel Down F05	O-Continued Travel Down F05	
ZC-2	I/O	O-Continued Travel Down F06	O-Continued Travel Down F08	O-Continued Travel Down F06	O-Continued Travel Down F06	
ZC-3	I/O	O-Continued Travel Down F07	O-Continued Travel Down F09	O-Continued Travel Down F07	O-Continued Travel Down F07	
ZC-4	I/O	O-Continued Travel Down F08	O-Continued Travel Down F10	O-Continued Travel Down F08	O-Continued Travel Down F08	
ZC-5	I/O	O-Continued Travel Down F09	Lan. Call Down F02	O-Continued Travel Down F09	Lan. Call Down F02	
ZC-6	I/O	O-Continued Travel Down F10	Lan. Call Down F03	O-Continued Travel Down F10	Lan. Call Down F03	
ZC-7	I/O	O-Continued Travel Down F11	Lan. Call Down F04	Lan. Call Down F01	Lan. Call Down F04	
ZD-0	I/O	O-Continued Travel Down F12	Lan. Call Down F05	Lan. Call Down F02	Lan. Call Down F05	
ZD-1	I/O	Lan. Call Down F01	Lan. Call Down F06	Lan. Call Down F03	Lan. Call Down F06	
ZD-2	I/O	Lan. Call Down F02	Lan. Call Down F07	Lan. Call Down F04	Lan. Call Down F07	
ZD-3	I/O	Lan. Call Down F03	Lan. Call Down F08	Lan. Call Down F05	Lan. Call Down F08	
ZD-4	I/O	Lan. Call Down F04	Lan. Call Down F09	Lan. Call Down F06	Lan. Call Up F01	
ZD-5	I/O	Lan. Call Down F05	Lan. Call Down F10	Lan. Call Down F07	Lan. Call Up F02	
ZD-6	I/O	Lan. Call Down F06	Lan. Call Up F01	Lan. Call Down F08	Lan. Call Up F03	
ZD-7	I/O	Lan. Call Down F07	Lan. Call Up F02	Lan. Call Down F09	Lan. Call Up F04	
ZE-0	I/O	Lan. Call Down F08	Lan. Call Up F03	Lan. Call Down F10	Lan. Call Up F05	
ZE-1	I/O	Lan. Call Down F09	Lan. Call Up F04	O-Continued Travel Up F01	Lan. Call Up F06	

ZE-2	I/O	Lan. Call Down F10	Lan. Call Up F05	O-Continued Travel Up F02	Lan. Call Up F07	
ZE-3	I/O	Lan. Call Down F11	Lan. Call Up F06	O-Continued Travel Up F03	O-Continued Travel Up F01	
ZE-4	I/O	Lan. Call Down F12	Lan. Call Up F07	O-Continued Travel Up F04	O-Continued Travel Up F02	
ZE-5	I/O	O-Continued Travel Up F01	Lan. Call Up F08	O-Continued Travel Up F05	O-Continued Travel Up F03	
ZE-6	I/O	O-Continued Travel Up F02	Lan. Call Up F09	O-Continued Travel Up F06	O-Continued Travel Up F04	
ZE-7	I/O	O-Continued Travel Up F03	O-Continued Travel Up F01	O-Continued Travel Up F07	O-Continued Travel Up F05	
ZF-0	I/O	O-Continued Travel Up F04	O-Continued Travel Up F02	O-Continued Travel Up F08	O-Continued Travel Up F06	
ZF-1	I/O	O-Continued Travel Up F05	O-Continued Travel Up F03	O-Continued Travel Up F09	O-Continued Travel Up F07	
ZF-2	I/O	O-Continued Travel Up F06	O-Continued Travel Up F04	O- Car Pos. Indic.21h	O- Car Pos. Indic.21h	
ZF-3	I/O	O-Continued Travel Up F07	O-Continued Travel Up F05	O- Car Pos. Indic.22h	O- Car Pos. Indic.22h	
ZF-4	I/O	O-Continued Travel Up F08	O-Continued Travel Up F06	O- Car Pos. Indic.23h	O- Car Pos. Indic.23h	
ZF-5	I/O	O-Continued Travel Up F09	O-Continued Travel Up F07	O- Car Pos. Indic.24h	O- Car Pos. Indic.24h	
ZF-6	I/O	O-Continued Travel Up F10	O-Continued Travel Up F08	O- Car Pos. Indic.25h	O- Car Pos. Indic.25h	
ZF-7	I/O	O-Continued Travel Up F11	O-Continued Travel Up F09	O- Car Pos. Indic.26h	O- Car Pos. Indic.26h	

		Frame-10	Frame-11	Frame-12	Frame-13	Frame-14
		1KS-12HS Rope	**2KS-10HS Rope**	**1KS-10HS Hydraulic**	**2KS-08HS Hydraulic**	
ZR401	Input	I- Emer. Power oper.	I- Emer. Power oper.	I- Emer. Power oper.	I- Emer. Power oper.	
ZR402	Input	I- Emer. Power drive	I- Emer. Power drive	I- Emer. Power drive	I- Emer. Power drive	
ZR404	Input	I-Restarting	I-Restarting	I-Restarting	I-Restarting	
Z-S30	Input	Cab Light Off	Cab Light Off	Cab Light Off	Cab Light Off	
Car Controller FKR						
FE-0	I/O	I-Overload	I-Overload	I-Overload	I-Overload	
FE-1	I/O	I- Safety Photocell	I- Safety Photocell	I- Safety Photocell	I- Safety Photocell	
FE-2	I/O	I- Full Load	I- Full Load	I- Full Load	I- Full Load	
FE-3	I/O	I- No Function	I- No Function	I- No Function	I- No Function	
FE-4	I/O	I- No Function	I- No Function	I- No Function	I- No Function	
FE-5	I/O	I- No Function	I- No Function	I- No Function	I- No Function	
FE-6	I/O	I- No Function	I- No Function	I- No Function	I- No Function	
FE-7	I/O	I- No Function	I- No Function	I- No Function	I- No Function	
FF-0	I/O	I-Photocell D1	I-Photocell D1	I-Photocell D1	I-Photocell D1	
FF-1	I/O	I-Reverse Contakt D1	I-Reverse Contakt D1	I-Reverse Contakt D1	I-Reverse Contakt D1	
FF-2	I/O	I-Door end switcher Open D1	I-Door end switcher Open D1	I-Door end switcher Open D1	I-Door end switcher Open D1	
FF-3	I/O	I-Door end switcher Close D1	I-Door end switcher Close D1	I-Door end switcher Close D1	I-Door end switcher Close D1	
FF-4	I/O	I-Photocell D2	I-Photocell D2	I-Photocell D2	I-Photocell D2	
FF-5	I/O	I-Reverse Contakt D2	I-Reverse Contakt D2	I-Reverse Contakt D2	I-Reverse Contakt D2	
FF-6	I/O	I-Door end switcher Open D2	I-Door end switcher Open D2	I-Door end switcher Open D2	I-Door end switcher Open D2	
FF-7	I/O	I-Door end switcher Close D2	I-Door end switcher Close D2	I-Door end switcher Close D2	I-Door end switcher Close D2	
Car Indicator Board EIT						
IC-0	I/O	Car Call Down F09	Car Call Down F09	O- Car Pos. Indic.-1	O- Car Pos. Indic.-1	
IC-1	I/O	Car Call Down F10	Car Call Down F10	O- Car Pos. Indic.-2	O- Car Pos. Indic.-2	
IC-2	I/O	Car Call Down F11	Car Call Down F11	O- Car Pos. Indic.-3	O- Car Pos. Indic.-3	
IC-3	I/O	Car Call Down F12	Car Call Down F12	O- Car Pos. Indic.-4	O- Car Pos. Indic.-4	
IC-4	I/O	O- Car Pos. Indic.-1	O- Car Pos. Indic.-1	O- Car Pos. Indic.-5	O- Car Pos. Indic.-5	
IC-5	I/O	O- Car Pos. Indic.-2	O- Car Pos. Indic.-2	O- Car Pos. Indic.-6	O- Car Pos. Indic.-6	
IC-6	I/O	O- Car Pos. Indic.-3	O- Car Pos. Indic.-3	O- Car Pos. Indic.-7	O- Car Pos. Indic.-7	
IC-7	I/O	O- Car Pos. Indic.-4	O- Car Pos. Indic.-4	O- Car Pos. Indic.-8	O- Car Pos. Indic.-8	
ID-0	I/O	Car Call Down F01	Car Call Down F01	Car Call Down F01	Car Call Down F09	
ID-1	I/O	Car Call Down F02	Car Call Down F02	Car Call Down F02	Car Call Down F09	
ID-2	I/O	Car Call Down F03	Car Call Down F03	Car Call Down F03	Car Call Down F09	
ID-3	I/O	Car Call Down F04	Car Call Down F04	Car Call Down F04	Car Call Down F09	
ID-4	I/O	Car Call Down F05	Car Call Down F05	Car Call Down F05	Car Call Down F09	
ID-5	I/O	Car Call Down F06	Car Call Down F06	Car Call Down F06	Car Call Down F09	
ID-6	I/O	Car Call Down F07	Car Call Down F07	Car Call Down F07	Car Call Down F09	
ID-7	I/O	Car Call Down F08	Car Call Down F08	Car Call Down F08	Car Call Down F09	
IE-0	I/O	I-Door 1 Open	I-Door 1 Open	I-Door 1 Open	I-Door 1 Open	
IE-1	I/O	I-Door 1 Close	I-Door 1 Close	I-Door 1 Close	I-Door 1 Close	
IE-2	I/O	I-Door 2 Open	I-Door 2 Open	I-Door 2 Open	I-Door 2 Open	
IE-3	I/O	O-Overlaod	O-Overlaod	O-Overlaod	O-Overlaod	
IE-4	I/O	I-Button Fan	I-Button Fan	I-Button Fan	I-Button Fan	
IE-5	I/O	I-Car Priority	I-Car Priority	I-Car Priority	I-Car Priority	
IE-6	I/O	O-Cab Arrow Up	O-Cab Arrow Up	O-Cab Arrow Up	O-Cab Arrow Up	
IE-7	I/O	O-Cab Arrow Down	O-Cab Arrow Down	O-Cab Arrow Down	O-Cab Arrow Down	
Car Calling Controller ITR-1 and ITR-2						
IA-0	Output	O- Car Pos. Indic.-1	O- Car Pos. Indic.-1	O- Car Pos. Indic.-1	O- Car Pos. Indic.-1	
IA-1	Output	O- Car Pos. Indic.-2	O- Car Pos. Indic.-2	O- Car Pos. Indic.-2	O- Car Pos. Indic.-2	
IA-2	Output	O- Car Pos. Indic.-3	O- Car Pos. Indic.-3	O- Car Pos. Indic.-3	O- Car Pos. Indic.-3	
IA-3	Output	O- Car Pos. Indic.-4	O- Car Pos. Indic.-4	O- Car Pos. Indic.-4	O- Car Pos. Indic.-4	
IA-4	Output	O- Car Pos. Indic.-5	O- Car Pos. Indic.-5	O- Car Pos. Indic.-5	O- Car Pos. Indic.-5	
IA-5	Output	O- Car Pos. Indic.-6	O- Car Pos. Indic.-6	O- Car Pos. Indic.-6	O- Car Pos. Indic.-6	
IA-6	Output	O- Car Pos. Indic.-7	O- Car Pos. Indic.-7	O- Car Pos. Indic.-7	O- Car Pos. Indic.-7	
IA-7	Output	O- Car Pos. Indic.-8	O- Car Pos. Indic.-8	O- Car Pos. Indic.-8	O- Car Pos. Indic.-8	
IB-0	Output	O-Cab Arrow Up	O-Cab Arrow Up	O-Cab Arrow Up	O-Cab Arrow Up	
IB-1	Output	O-Cab Arrow Down	O-Cab Arrow Down	O-Cab Arrow Down	O-Cab Arrow Down	
IB-2	Output	O-Overlaod	O-Overlaod	O-Overlaod	O-Overlaod	
IB-3	Output	O-Messaging Fan	O-Messaging Fan	O-Messaging Fan	O-Messaging Fan	
IB-4	I/O	O-Evacuation	O-Evacuation	O-Evacuation	O-Evacuation	
IB-5	I/O	O- Emer.Power oper.	O- Emer.Power oper.	O- Emer.Power oper.	O- Emer.Power oper.	
IB-6	I/O	O-Out Of Operation	O-Out Of Operation	O-Out Of Operation	O-Out Of Operation	
IB-7	I/O	O-Special Drive	O-Special Drive	O-Special Drive	O-Special Drive	
IC-0	I/O	I/O Car Call - F1	I/O Car Call - F1	I/O Car Call - F1	I/O Car Call - F1	
IC-1	I/O	I/O Car Call – F2	I/O Car Call – F2	I/O Car Call – F2	I/O Car Call – F2	
IC-2	I/O	I/O Car Call – F3	I/O Car Call – F3	I/O Car Call – F3	I/O Car Call – F3	
IC-3	I/O	I/O Car Call – F4	I/O Car Call – F4	I/O Car Call – F4	I/O Car Call –F4	

IC-4	I/O	I/O Car Call – F5	I/O Car Call – F5	I/O Car Call – F5	I/O Car Call –F5	
IC-5	I/O	I/O Car Call – F6	I/O Car Call – F6	I/O Car Call – F6	I/O Car Call –F6	
IC-6	I/O	I/O Car Call – F7	I/O Car Call – F7	I/O Car Call –F7	I/O Car Call –F7	
IC-7	I/O	I/O Car Call – F8	I/O Car Call – F8	I/O Car Call –F8	I/O Car Call –F8	
ID-0	I/O	I/O Car Call – F9	I/O Car Call – F9	I/O Car Call –F9	I/O Car Call –F9	
ID-1	I/O	I/O Car Call - F10	I/O Car Call - F10	I/O Car Call –F10	I/O Car Call –F10	
ID-2	I/O	I/O Car Call - F11	I/O Car Call - F11	I/O Car Call –F11	I/O Car Call –F11	
ID-3	I/O	I/O Car Call - F12	I/O Car Call - F12	I/O Car Call –F12	I/O Car Call –F12	
ID-4	I/O	I/O Car Call - F13	I/O Car Call - F13	I/O Car Call –F13	I/O Car Call –F13	
ID-5	I/O	I/O Car Call - F14	I/O Car Call - F14	I/O Car Call –F14	I/O Car Call –F14	
ID-6	I/O	I/O Car Call - F15	I/O Car Call - F15	I/O Car Call –F15	I/O Car Call –F15	
ID-7	I/O	I/O Car Call - F16	I/O Car Call - F16	I/O Car Call –F16	I/O Car Call –F16	
IE-0	Input	I-Door-1 Open	I-Door-1 Open	I-Door-1 Open	I-Door-1 Open	
IE-1	Input	I-Door-1 Close	I-Door-1 Close	I-Door-1 Close	I-Door-1 Close	
IE-2	Input	I-Door-2 Open	I-Door-2 Open	I-Door-2 Open	I-Door-2 Open	
IE-3	Input	I-Door-2 Close	I-Door-2 Close	I-Door-2 Close	I-Door-2 Close	
IE-4	Input	I-Control& Light Off	I-Control& Light Off	I-Control& Light Off	I-Control& Light Off	
IE-5	Input	I-Car Priority	I-Car Priority	I-Car Priority	I-Car Priority	
IE-6	Input	I-Button Fan	I-Button Fan	I-Button Fan	I-Button Fan	
IE-7	Input	I-Ramp Travel	I-Ramp Travel	I-Ramp Travel	I-Ramp Travel	
Expansion Unit ZG-1 OTIS-REM 5.0						
21g	I/O	O-Car in drive	O-Car in drive	O-Car in drive	O-Car in drive	
22g	I/O	O-D.&Block contact	O-D.&Block contact	O-D.&Block contact	O-D.&Block contact	
23g	I/O	O-S. circuit switcher	O-S. circuit switcher	O-S. circuit switcher	O-S. circuit switcher	
24g	I/O	A-Ready for Use	A-Ready for Use	A-Ready for Use	A-Ready for Use	
25g	I/O	O-Calls are present	O-Calls are present	O-Calls are present	O-Calls are present	
26g	I/O	Com. Door1 open	Com. Door1 open	Com. Door1 open	Com. Door1 open	
27g	I/O	Com. Door1 close	Com. Door1 close	Com. Door1 close	Com. Door1 close	
28g	I/O	Drive without door opening	Drive without door opening	Drive without door opening	Drive without door opening	
29g	I/O	/normal operation/	/normal operation/	/normal operation/	/normal operation/	
30g	I/O	Com. Door2 open	Com. Door2 open	Com. Door2 open	Com. Door2 open	
31g	I/O	Com. Door2 close	Com. Door2 close	Com. Door2 close	Com. Door2 close	
32g	I/O	free	free	free	free	
33g	I/O	free	free	free	free	
34g	I/O	free	free	free	free	
35g	I/O	free	free	free	free	
36g	I/O	free	free	free	free	
37g	I/O	free	free	free	free	
38g	I/O	free	free	free	free	
39g	I/O	free	free	free	free	
40g	I/O	free	free	free	free	
41g	I/O	free	free	free	free	
42g	I/O	free	free	free	free	
43g	I/O	free	free	free	free	
44g	I/O	free	free	free	free	

		Frame-15	Frame-16	Frame-17	Frame-18	Frame-19
		ER-EF-Rope	**ER-2nd-GR-Rope**	**ER-EF-Hydraulic**	**ER-2nd-GR-Hydrau.**	
K301	Relay	O-/Collecting Fault/	O-/Collecting Fault/	O-/Collecting Fault/	O-/Collecting Fault/	
K302	Relay	O-Door-controlling D1 open	O-Door-controlling D1 open	O-Door-controlling D1 open	O-Door-controlling D1 open	
K303	Relay	O-Door-controlling D1 close	O-Door-controlling D1 close	O-Door-controlling D1 close	O-Door-controlling D1 close	
K304	Relay	O-Door-controlling D2 open	O-Door-controlling D2 open	O-Door-controlling D2 open	O-Door-controlling D2 open	
K305	Relay	O-Door-controlling D2 close	O-Door-controlling D2 close	O-Door-controlling D2 close	O-Door-controlling D2 close	
K306	Relay	O-Locked Magnet	O-Locked Magnet	O-Locked Magnet	O-Locked Magnet	
K307	Relay	O- Car Pos. Indic.-1	O- Car Pos. Indic.-1	O-Emergency power Level reached	O-Emergency power Level reached	
K308	Relay	O- Car Pos. Indic.-2	O- Car Pos. Indic.-2	O-No Function	O-No Function	
K309	Relay	O- Car Pos. Indic.-3	O- Car Pos. Indic.-3	O-No Function	O-No Function	
K310	Relay	O- Car Pos. Indic.-4	O- Car Pos. Indic.-4	O-Arrow up	O-Arrow up	
K311	Relay	O- Car Pos. Indic.-5	O- Car Pos. Indic.-5	O-Arrow down	O-Arrow down	
K312	Relay	O-Remote Release	O-Remote Release	O-Remote Release	O-Remote Release	
K401	Relay	Controlling D1 Open	Controlling D1 Open	Controlling D1 Open	Controlling D1 Open	
K402	Relay	Controlling D1 Close	Controlling D1 Close	Controlling D1 Close	Controlling D1 Close	
K403	Relay	Controlling D2 Open	Controlling D2 Open	Controlling D2 Open	Controlling D2 Open	
K404	Relay	Controlling D2 Close	Controlling D2 Close	Controlling D2 Close	Controlling D2 Close	
K405	Relay	O-Car Fan	O-Car Fan	O-Car Fan	O-Car Fan	
ZA-0	I/O	I-Safery Circuit	I-Safery Circuit	I-Safery Circuit	I-Safery Circuit	
ZA-1	I/O	I-Si-Zone	I-Si-Zone	I-Si-Zone	I-Si-Zone	
ZA-2	I/O	O-Releveling	O-Releveling	O-Releveling	O-Releveling	
ZA-3	I/O	I-Brake open monitor	I-Brake open monitor	I-Brake open monitor	I-Brake open monitor	
ZA-4	I/O	I-Overload	I-Overload	I-Overload	I-Overload	
ZA-5	I/O	I-Releveling I/O	I-Releveling I/O	I-Releveling I/O	I-Releveling I/O	
ZA-6	I/O	I-Releveling Up	I-Releveling Up	I-Releveling Up	I-Releveling Up	
ZA-7	I/O	I-Releveling Down	I-Releveling Down	I-Releveling Down	I-Releveling Down	
ZB-0	I/O	I-ContactorMonitoring	I-ContactorMonitoring	I-ContactorMonitoring	I-ContactorMonitoring	
ZB-1	I/O	I-Landing Control Off	I-Landing Control Off	I-Landing Control Off	I-Landing Control Off	
ZB-2	I/O	I-Control& Light Off	I-Control& Light Off	I-Control& Light Off	I-Control& Light Off	
ZB-3	I/O	I-Fire evac. F. prior.1	I-Fire evac. F. prior.1	I-Fire evac. F. prior.1	I-Fire evac. F. prior.1	
ZB-4	I/O	I-Fire evac. F. prior.2	O-Continued Travel Down F02	I-Remote Release	I-Fire evac. F. prior.2	
ZB-5	I/O	I-Remote Release	O-Continued Travel Down F03	I-Remote Release	I-Remote Release	
ZB-6	I/O	I-Fire brigade call	I-Fire brigade call	I-Fire brigade call	I-Fire brigade call	
ZB-7	I/O					
ZC-0	I/O	I-Case of Fire Detector-F01	I-Case of Fire Detector-F01	I-Case of Fire Detector-F01	I-Case of Fire Detector-F01	
ZC-1	I/O	I-Case of Fire Detector –F02	I-Case of Fire Detector –F02	I-Case of Fire Detector –F02	I-Case of Fire Detector –F02	
ZC-2	I/O	I-Case of Fire Detector – F03	I-Case of Fire Detector – F03	I-Case of Fire Detector – F03	I-Case of Fire Detector – F03	
ZC-3	I/O	I-Case of Fire Detector – F04	I-Case of Fire Detector – F04	I-Case of Fire Detector – F04	I-Case of Fire Detector – F04	
ZC-4	I/O	I-Case of Fire Detector –F05	I-Case of Fire Detector –F05	I-Case of Fire Detector –F05	I-Case of Fire Detector –F05	
ZC-5	I/O	I-Case of Fire Detector – F06	I-Case of Fire Detector – F06	I-Case of Fire Detector – F06	I-Case of Fire Detector – F06	
ZC-6	I/O	I-Case of Fire Detector –F07	I-Case of Fire Detector –F07	I-Case of Fire Detector –F07	I-Case of Fire Detector –F07	
ZC-7	I/O	I-Case of Fire Detector –F08	I-Case of Fire Detector –F08	I-Case of Fire Detector –F08	I-Case of Fire Detector –F08	
ZD-0	I/O	I-Case of Fire Detector – F09	I-Case of Fire Detector – F09	I-Case of Fire Detector – F09	I-Case of Fire Detector – F09	
ZD-1	I/O	I-Case of Fire Detector –F10	I-Case of Fire Detector –F10	I-Case of Fire Detector –F10	I-Case of Fire Detector –F10	
ZD-2	I/O	I-Case of Fire Detector –F11	I-Case of Fire Detector –F11	I-Case of Fire Detector –F11	I-Case of Fire Detector –F11	
ZD-3	I/O	I- Case of Fire Detector –F12	I- Case of Fire Detector –F12	I- Case of Fire Detector –F12	I- Case of Fire Detector –F12	
ZD-4	I/O	I-Case of Fire Detector –F13	I-Case of Fire Detector –F13	I-Case of Fire Detector –F13	I-Case of Fire Detector –F13	
ZD-5	I/O	I-Case of Fire Detector –F14	I-Case of Fire Detector –F14	I-Case of Fire Detector –F14	I-Case of Fire Detector –F14	
ZD-6	I/O	I-Case of Fire Detection –F15	I-Case of Fire Detection –F15	I-Case of Fire Detection –F15	I-Case of Fire Detection –F15	
ZD-7	I/O	I-Case of Fire Detection –F16	I-Case of Fire Detection –F16	I-Case of Fire Detection –F16	I-Case of Fire Detection –F16	
ZE-0	I/O	I-Floor blockade F01	I-Floor blockade F01	I-Floor blockade F01	I-Floor blockade F01	

ZE-1	I/O	I-Floor blockade F02	I-Floor blockade F02	I-Floor blockade F02	I-Floor blockade F02	
ZE-2	I/O	I-Floor blockade F03	I-Floor blockade F03	I-Floor blockade F03	I-Floor blockade F03	
ZE-3	I/O	I-Floor blockade F04	I-Floor blockade F04	I-Floor blockade F04	I-Floor blockade F04	
ZE-4	I/O	I-Floor blockade F05	I-Floor blockade F05	I-Floor blockade F05	I-Floor blockade F05	
ZE-5	I/O	I-Floor blockade F06	I-Floor blockade F06	I-Floor blockade F06	I-Floor blockade F06	
ZE-6	I/O	I-Floor blockade F07	I-Floor blockade F07	I-Floor blockade F07	I-Floor blockade F07	
ZE-7	I/O	I-Floor blockade F08	I-Floor blockade F08	I-Floor blockade F08	I-Floor blockade F08	
ZF-0	I/O	I-Floor blockade F09	I-Floor blockade F09	I-Floor blockade F09	I-Floor blockade F09	
ZF-1	I/O	I-Floor blockade F10	I-Floor blockade F10	I-Floor blockade F10	I-Floor blockade F10	
ZF-2	I/O	I-Floor blockade F11	I-Floor blockade F11	I-Floor blockade F11	I-Floor blockade F11	
ZF-3	I/O	I-Floor blockade F12	I-Floor blockade F12	I-Floor blockade F12	I-Floor blockade F12	
ZF-4	I/O	I-Floor blockade F13	I-Floor blockade F13	I-Floor blockade F13	I-Floor blockade F13	
ZF-5	I/O	I-Floor blockade F14	I-Floor blockade F14	I-Floor blockade F14	I-Floor blockade F14	
ZF-6	I/O	I-Floor blockade F15	I-Floor blockade F15	I-Floor blockade F15	I-Floor blockade F15	
ZF-7	I/O	I-Floor blockade F16	I-Floor blockade F16	I-Floor blockade F16	I-Floor blockade F16	

		Frame-15	Frame-16	Frame-17	Frame-18	Frame-19
		ER-EF-Rope	**ER-2er-GR-Rope**	**ER-EF-Hydraulic**	**ER-2er-GR-Hydrau.**	
ZR401	Output	O-Emer. Power oper.	O-Emer. Power oper.	O-Emer. Power oper.	O-Emer. Power oper.	
ZR402	Output	O-Emer. Power drive	O-Emer. Power drive	O-Emer. Power drive	O-Emer. Power drive	
ZR404	Output	O-Restarting	O-Restarting	O-Restarting	O-Restarting	
Z-S30	Output	Cab Light Off	Cab Light Off	Cab Light Off	Cab Light Off	
Car Controller FKR						
FE-0	I/O	I-Overload	I-Overload	I-Overload	I-Overload	
FE-1	I/O	I- Safety Photocell	I- Safety Photocell	I- Safety Photocell	I- Safety Photocell	
FE-2	I/O	I- Full Load	I- Full Load	I- Full Load	I- Full Load	
FE-3	I/O	I- No Function	I- No Function	I- No Function	I- No Function	
FE-4	I/O	I- No Function	I- No Function	I- No Function	I- No Function	
FE-5	I/O	I- No Function	I- No Function	I- No Function	I- No Function	
FE-6	I/O	I- No Function	I- No Function	I- No Function	I- No Function	
FE-7	I/O	I- No Function	I- No Function	I- No Function	I- No Function	
FF-0	I/O	I-Photocell D1	I-Photocell D1	I-Photocell D1	I-Photocell D1	
FF-1	I/O	I-Reverse Contakt D1	I-Reverse Contakt D1	I-Reverse Contakt D1	I-Reverse Contakt D1	
FF-2	I/O	I-Door end switcher Open D1	I-Door end switcher Open D1	I-Door end switcher Open D1	I-Door end switcher Open D1	
FF-3	I/O	I-Door end switcher Close D1	I-Door end switcher Close D1	I-Door end switcher Close D1	I-Door end switcher Close D1	
FF-4	I/O	I-Photocell D2	I-Photocell D2	I-Photocell D2	I-Photocell D2	
FF-5	I/O	I-Reverse Contakt D2	I-Reverse Contakt D2	I-Reverse Contakt D2	I-Reverse Contakt D2	
FF-6	I/O	I-Door end switcher Open D2	I-Door end switcher Open D2	I-Door end switcher Open D2	I-Door end switcher Open D2	
FF-7	I/O	I-Door end switcher Close D2	I-Door end switcher Close D2	I-Door end switcher Close D2	I-Door end switcher Close D2	
Car Indicator Board EIT						
ID-0	I/O	I/O- Car Call - F1	I/O- Car Call - F1	I/O- Car Call - F1	I/O- Car Call - F1	
ID-1	I/O	I/O- Car Call – F2	I/O- Car Call – F2	I/O- Car Call – F2	I/O- Car Call – F2	
ID-2	I/O	I/O- Car Call –F3	I/O- Car Call –F3	I/O- Car Call –F3	I/O- Car Call –F3	
ID-3	I/O	I/O- Car Call – F4	I/O- Car Call – F4	I/O- Car Call – F4	I/O- Car Call – F4	
ID-4	I/O	I/O- Car Call – F5	I/O- Car Call – F5	I/O- Car Call – F5	I/O- Car Call – F5	
ID-5	I/O	I/O- Car Call – F6	I/O- Car Call – F6	I/O- Car Call – F6	I/O- Car Call – F6	
ID-6	I/O	I/O- Car Call – F7	I/O- Car Call – F7	I/O- Car Call – F7	I/O- Car Call – F7	
ID-7	I/O	I/O- Car Call – F8	I/O- Car Call – F8	I/O- Car Call – F8	I/O- Car Call – F8	
IC-0	I/O	I/O- Car Call - F9	I/O- Car Call - F9	O- Car Pos. Indic.-1	O- Car Pos. Indic.-1	
IC-1	I/O	I/O- Car Call – F10	I/O- Car Call – F10	O- Car Pos. Indic.-2	O- Car Pos. Indic.-2	
IC-2	I/O	I/O- Car Call – F11	I/O- Car Call – F11	O- Car Pos. Indic.-3	O- Car Pos. Indic.-3	
IC-3	I/O	I/O- Car Call- F12	I/O- Car Call- F12	O- Car Pos. Indic.-4	O- Car Pos. Indic.-4	
IC-4	I/O	O- Car Pos. Indic.-1	O- Car Pos. Indic.-1	O- Car Pos. Indic.-5	O- Car Pos. Indic.-5	
IC-5	I/O	O- Car Pos. Indic.-2	O- Car Pos. Indic.-2	O- Car Pos. Indic.-6	O- Car Pos. Indic.-6	
IC-6	I/O	O- Car Pos. Indic.-3	O- Car Pos. Indic.-3	O- Car Pos. Indic.-7	O- Car Pos. Indic.-7	
IC-7	I/O	O- Car Pos. Indic.-4	O- Car Pos. Indic.-4	O- Car Pos. Indic.-8	O- Car Pos. Indic.-8	
IE-0	I/O	I-Door 1 Open	I-Door 1 Open	I-Door 1 Open	I-Door 1 Open	
IE-1	I/O	I-Door 1 Close	I-Door 1 Close	I-Door 1 Close	I-Door 1 Close	
IE-2	I/O	I-Door 2 Open	I-Door 2 Open	I-Door 2 Open	I-Door 2 Open	
IE-3	I/O	O-Overlaod	O-Overlaod	O-Overlaod	O-Overlaod	
IE-4	I/O	I-Button Fan	I-Button Fan	I-Button Fan	I-Button Fan	
IE-5	I/O	I-Car Priority	I-Car Priority	I-Car Priority	I-Car Priority	
IE-6	I/O	O-Cab Arrow Up	O-Cab Arrow Up	O-Cab Arrow Up	O-Cab Arrow Up	
IE-7	I/O	O-Cab Arrow Down	O-Cab Arrow Down	O-Cab Arrow Down	O-Cab Arrow Down	
Car Calling Controller ITR-1 and ITR-2						
IA-0	Output	O- Car Pos. Indic.-1	O- Car Pos. Indic.-1	O- Car Pos. Indic.-1	O- Car Pos. Indic.-1	
IA-1	Output	O- Car Pos. Indic.-2	O- Car Pos. Indic.-2	O- Car Pos. Indic.-2	O- Car Pos. Indic.-2	
IA-2	Output	O- Car Pos. Indic.-3	O- Car Pos. Indic.-3	O- Car Pos. Indic.-3	O- Car Pos. Indic.-3	
IA-3	Output	O- Car Pos. Indic.-4	O- Car Pos. Indic.-4	O- Car Pos. Indic.-4	O- Car Pos. Indic.-4	
IA-4	Output	O- Car Pos. Indic.-5	O- Car Pos. Indic.-5	O- Car Pos. Indic.-5	O- Car Pos. Indic.-5	
IA-5	Output	O- Car Pos. Indic.-6	O- Car Pos. Indic.-6	O- Car Pos. Indic.-6	O- Car Pos. Indic.-6	
IA-6	Output	O- Car Pos. Indic.-7	O- Car Pos. Indic.-7	O- Car Pos. Indic.-7	O- Car Pos. Indic.-7	
IA-7	Output	O- Car Pos. Indic.-8	O- Car Pos. Indic.-8	O- Car Pos. Indic.-8	O- Car Pos. Indic.-8	
IB-0	Output	O-Cab Arrow Up	O-Cab Arrow Up	O-Cab Arrow Up	O-Cab Arrow Up	
IB-1	Output	O-Cab Arrow Down	O-Cab Arrow Down	O-Cab Arrow Down	O-Cab Arrow Down	
IB-2	Output	O-Overlaod	O-Overlaod	O-Overlaod	O-Overlaod	
IB-3	Output	O-Messaging Fan	O-Messaging Fan	O-Messaging Fan	O-Messaging Fan	
IB-4	I/O	O-Evacuation	O-Evacuation	O-Evacuation	O-Evacuation	
IB-5	I/O	O- Emer.Power oper.	O- Emer.Power oper.	O- Emer.Power oper.	O- Emer.Power oper.	
IB-6	I/O	O-Out Of Operation	O-Out Of Operation	O-Out Of Operation	O-Out Of Operation	
IB-7	I/O	O-Special Drive	O-Special Drive	O-Special Drive	O-Special Drive	
IC-0	I/O	I/O Car Call - F1	I/O Car Call - F1	I/O Car Call - F1	I/O Car Call - F1	
IC-1	I/O	I/O Car Call – F2	I/O Car Call – F2	I/O Car Call – F2	I/O Car Call – F2	
IC-2	I/O	I/O Car Call – F3	I/O Car Call – F3	I/O Car Call – F3	I/O Car Call – F3	
IC-3	I/O	I/O Car Call – F4	I/O Car Call – F4	I/O Car Call – F4	I/O Car Call – F4	

IC-4	I/O	I/O Car Call – F5	I/O Car Call – F5	I/O Car Call – F5	I/O Car Call – F5	
IC-5	I/O	I/O Car Call – F6	I/O Car Call – F6	I/O Car Call – F6	I/O Car Call – F6	
IC-6	I/O	I/O Car Call – F7	I/O Car Call – F7	I/O Car Call – F7	I/O Car Call – F7	
IC-7	I/O	I/O Car Call – F8	I/O Car Call – F8	I/O Car Call – F8	I/O Car Call – F8	
ID-0	I/O	I/O Car Call – F9	I/O Car Call – F9	I/O Car Call – F9	I/O Car Call – F9	
ID-1	I/O	I/O Car Call - F10	I/O Car Call - F10	I/O Car Call - F10	I/O Car Call - F10	
ID-2	I/O	I/O Car Call - F11	I/O Car Call - F11	I/O Car Call - F11	I/O Car Call - F11	
ID-3	I/O	I/O Car Call - F12	I/O Car Call - F12	I/O Car Call - F12	I/O Car Call - F12	
ID-4	I/O	I/O Car Call - F13	I/O Car Call - F13	I/O Car Call - F13	I/O Car Call - F13	
ID-5	I/O	I/O Car Call - F14	I/O Car Call - F14	I/O Car Call - F14	I/O Car Call - F14	
ID-6	I/O	I/O Car Call - F15	I/O Car Call - F15	I/O Car Call - F15	I/O Car Call - F15	
ID-7	I/O	I/O Car Call - F16	I/O Car Call - F16	I/O Car Call - F16	I/O Car Call - F16	
IE-0	Input	I-Door-1 Open	I-Door-1 Open	I-Door-1 Open	I-Door-1 Open	
IE-1	Input	I-Door-1 Close	I-Door-1 Close	I-Door-1 Close	I-Door-1 Close	
IE-2	Input	I-Door-2 Open	I-Door-2 Open	I-Door-2 Open	I-Door-2 Open	
IE-3	Input	I-Door-2 Close	I-Door-2 Close	I-Door-2 Close	I-Door-2 Close	
IE-4	Input	I-Control& Light Off	I-Control& Light Off	I-Control& Light Off	I-Control& Light Off	
IE-5	Input	I-Car Priority	I-Car Priority	I-Car Priority	I-Car Priority	
IE-6	Input	I-Button Fan	I-Button Fan	I-Button Fan	I-Button Fan	
IE-7	Input	I-Ramp Travel	I-Ramp Travel	I-Ramp Travel	I-Ramp Travel	
Expansion Unit ZG-1						
21g	I/O	O-Car in drive	O-Car in drive	O-Car in drive	O-Car in drive	
22g	I/O	O-D.&Block contact	O-D.&Block contact	O-D.&Block contact	O-D.&Block contact	
23g	I/O	O-S. circuit switcher	O-S. circuit switcher	O-S. circuit switcher	O-S. circuit switcher	
24g	I/O	A-Ready for Use	A-Ready for Use	A-Ready for Use	A-Ready for Use	
25g	I/O	O-Calls are present	O-Calls are present	O-Calls are present	O-Calls are present	
26g	I/O	Com. Door1 open	Com. Door1 open	Com. Door1 open	Com. Door1 open	
27g	I/O	Com. Door1 close	Com. Door1 close	Com. Door1 close	Com. Door1 close	
28g	I/O	Drive without door opening	Drive without door opening	Drive without door opening	Drive without door opening	
29g	I/O	/normal operation/	/normal operation/	/normal operation/	/normal operation/	
30g	I/O	Com. Door2 open	Com. Door2 open	Com. Door2 open	Com. Door2 open	
31g	I/O	Com. Door2 close	Com. Door2 close	Com. Door2 close	Com. Door2 close	
32g	I/O	free	free	free	free	
33g	I/O	free	free	free	free	
34g	I/O	free	free	free	free	
35g	I/O	free	free	free	free	
36g	I/O	free	free	free	free	
Remote Station ER-2004						
2xA	I/O	I/O Land. Call Up D1	I/O Land. Call Up D1	I/O Land. Call Up D1	I/O Land. Call Up D1	
2xB	I/O	I/O Land. Call Down D1	I/O Land. Call Down D1	I/O Land. Call Down D1	I/O Land. Call Down D1	
2xC	I/O	I/O Land. Call Up D2	Landing Priority O1	I/O-Call Up 1	Landing Priority O1	
2xD	I/O	I/O Land. Call Down D2	Landing Priority O2	I/O- Call Up 2	Landing Priority O2	
97A	I/O	O-Floor Arror Up D1	O- Arror Up D1	O-Floor Arror Up D1	O- Arror Up D1	
98A	I/O	O-Floor Arror Down D1	O- Arror Down D1	O-Floor Arror Down D1	O- Arror Down D1	
97B	I/O	O-Floor Arror Up D2	O- Arror Up D2	O-Floor Arror Up D2	O- Arror Up D2	
98B	I/O	O-Floor Arror Down D1	O- Arror Down D1	O-Floor Arror Down D1	O- Arror Down D1	
Remote Station ER-2005						
2xA	I/O	I/O Land. Call Up D1	I/O Land. Call Up D1	I/O Land. Call Up D1	I/O Land. Call Up D1	
2xB	I/O	I/O Land. Call Down D1	I/O Land. Call Down D1	I/O Land. Call Down D1	I/O Land. Call Down D1	
2xC	I/O	I/O Land. Call Up D2	I/O Land. Call Up D2	I/O Land. Call Up D2	I/O Land. Call Up D2	
2xD	I/O	I/O Land. Call Down D2	I/O Land. Call Down D2	I/O Land. Call Down D2	I/O Land. Call Down D2	
97A	I/O	O-Floor Arror Up D1	O- Arror Up D1	O-Floor Arror Up D1	O- Arror Up D1	
98A	I/O	O-Floor Arror Down D1	O- Arror Down D1	O-Floor Arror Down D1	O- Arror Down D1	
97B	I/O	O-Floor Arror Up D2	O- Arror Up D2	O-Floor Arror Up D2	O- Arror Up D2	
98B	I/O	O-Floor Arror Down D1	O- Arror Down D1	O-Floor Arror Down D1	O- Arror Down D1	
EA-0	I/O	Landing Priority D1	Landing Priority O1	Landing Priority D1	Landing Priority O1	
EA-1	I/O	Landing Priority D2	Landing Priority O2	Landing Priority D2	Landing Priority O2	
EA-2	I/O	O- Out of Use	O-Out of Use O1	O- Out of Use	O-Out of Use O1	
EA-3	I/O	O- Special Drive	O-Out of Use O2	O- Special Drive	O-Out of Use O2	
EA-4	I/O	O-Cont.& Light off	O-Special Drive-O1	O-Cont.& Light off	O-Special Drive-O1	
EA-5	I/O	free	O-Special Drive-A2	free	O-Special Drive-A2	
EA-6	I/O	free	O-Controll& Light Off O1	free	O-Controll& Light Off O1	
EA-7	I/O	free	O-Control & Light Off O2	free	O-Control & Light Off O2	
21h	I/O	O-Car Pos.Indicator1	O-Car P.Indicator1-O1	O-Car Pos.Indicator1	O-Car P.Indicator1-O1	

21h	I/O	O-Car Pos.Indicator2	O-Car P.Indicator2-O1	O-Car Pos.Indicator2	O-Car P.Indicator2-O1	
23h	I/O	O-Car Pos.Indicator3	O-Car P.Indicator3-O1	O-Car Pos.Indicator3	O-Car P.Indicator3-O1	
24h	I/O	O-Car Pos.Indicator4	O-Car P.Indicator4-O1	O-Car Pos.Indicator4	O-Car P.Indicator4-O1	
25h	I/O	O-Car Pos.Indicator5	O-Car P.Indicator5-O2	O-Car Pos.Indicator5	O-Car P.Indicator5-O2	
26h	I/O	O-Car Pos.Indicator6	O-Car P.Indicator6-O2	O-Car Pos.Indicator6	O-Car P.Indicator6-O2	
27h	I/O	O-Car Pos.Indicator7	O-Car P.Indicator7-O2	O-Car Pos.Indicator7	O-Car P.Indicator7-O2	
28h	I/O	O-Car Pos.Indicator8	O-Car P.Indicator8-O2	O-Car Pos.Indicator8	O-Car P.Indicator8-O2	

		Frame-1	Frame-2	Frame-3	Frame-4	Frame-5
		1KS-8HS	1KS-16HS	2KS-07HS	2KS-13HS	2KS-ER-BV
K301	Relay	O-/Collecting Fault/	O-/Collecting Fault/	O-/Collecting Fault/	O-/Collecting Fault/	O-/Collecting Fault/
K302	Relay	O-Door-controlling D1 open	O-Door-controlling D1 open	O-Door-controlling D1 open	O-Door-controlling D1 open	O-Door-controlling D1 open
K303	Relay	O-Door-controlling D1 close	O-Door-controlling D1 close	O-Door-controlling D1 close	O-Door-controlling D1 close	O-Door-controlling D1 close
K304	Relay	O-Door-controlling D2 open	O-Door-controlling D2 open	O-Door-controlling D2 open	O-Door-controlling D2 open	O-Door-controlling D2 open
K305	Relay	O-Door-controlling D2 close	O-Door-controlling D2 close	O-Door-controlling D2 close	O-Door-controlling D2 close	O-Door-controlling D2 close
K306	Relay	O-Locked Magnet	O-Locked Magnet	O-Locked Magnet	O-Locked Magnet	O-Locked Magnet
K307	Relay	O- Emer.Power oper.	O- Emer.Power oper.	O- Emer.Power oper.	O- Emer.Power oper.	O- Emer.Power oper.
K308	Relay	I- No Function	I- No Function	I- No Function	I- No Function	I- No Function
K309	Relay	I- No Function	I- No Function	I- No Function	I- No Function	I- No Function
K310	Relay	O- Arror Up D1	O- Arror Up D1	O- Arror Up D1	O- Arror Up D1	O- Arror Up D1
K311	Relay	O- Arror Down D1	O- Arror Down D1	O- Arror Down D1	O- Arror Down D1	O- Arror Down D1
K312	Relay	I-Out of Use	O-Out of Use	O-Out of Use	O-Out of Use	O-Out of Use
K401	Relay	Com. Door1 open	Com. Door1 open	Com. Door1 open	Com. Door1 open	Com. Door1 open
K402	Relay	Com. Door1 close	Com. Door1 close	Com. Door1 close	Com. Door1 close	Com. Door1 close
K403	Relay	Com. Door2 open	Com. Door2 open	Com. Door2 open	Com. Door2 open	Com. Door2 open
K404	Relay	Com. Door2 close	Com. Door2 close	Com. Door2 close	Com. Door2 close	Com. Door2 close
K405	Relay	O-Lobby monitor	O-Lobby monitor	O-Lobby monitor	O-Lobby monitor	O-Lobby monitor
K406	Relay	O-Cab Fan	O-Cab Fan	O-Cab Fan	O-Cab Fan	O-Cab Fan
ZA-0	Input	I-Safety Circuit	I-Safety Circuit	I-Safety Circuit	I-Safety Circuit	I-Safety Circuit
ZA-1	Input	E-Brake FU	E-Brake FU	E-Brake FU	E-Brake FU	E-Brake FU
ZA-2	Input	E-Distrubance FU	E-Distrubance FU	E-Distrubance FU	E-Distrubance FU	E-Distrubance FU
ZA-3	Input	E-Si-Zone	E-Si-Zone	E-Si-Zone	E-Si-Zone	E-Si-Zone
ZA-4	Input	O-Overlaod	O-Overlaod	O-Overlaod	O-Overlaod	O-Overlaod
ZB-0	Input	I-ContactorMonitoring	I-ContactorMonitoring	I-ContactorMonitoring	I-ContactorMonitoring	I-ContactorMonitoring
ZB-1	Input	I-Landing control Off	I-Landing control Off	I-Landing control Off	I-Landing control Off	I-Landing control Off
ZB-2	Input	I-Control& Light Off	I-Control& Light Off	I-Control& Light Off	I-Control& Light Off	I-Control& Light Off
ZB-3	Input	I-Brake open monitor	I-Brake open monitor	I-Brake open monitor	I-Brake open monitor	I-Brake open monitor
ZB-4	Input	I-Brake shoe monitor	I-Brake shoe monitor	I-Brake shoe monitor	I-Brake shoe monitor	I-Brake shoe monitor
ZB-5	Input	I-Fire evac. F. prior.1	I-Fire evac. F. prior.1	I-Fire evac. F. prior.1	I-Fire evac. F. prior.1	I-Fire evac. F. prior.1
ZB-6	Input	I-Fire evac. F. prior.2	I-Fire evac. F. prior.2	I-Fire evac. F. prior.2	I-Fire evac. F. prior.2	I-Fire evac. F. prior.2
ZB-7	Input	E-FW-Anholung	E-FW-Anholung	E-FW-Anholung	E-FW-Anholung	E-FW-Anholung
ZC-0	Output	A-Nachholen	A-Nachholen	A-Nachholen	A-Nachholen	A-Nachholen
ZC-1	Output	O-Continued Travel Up F01	I- No Function	O-Car P. Indicator-1	O-Car P. Indicator-1	I- No Function
ZC-2	Output	O-Continued Travel Up F02	I- No Function	O-Car P. Indicator-2	O-Car P. Indicator-2	I- No Function
ZC-3	Output	O-Continued Travel Up F03	I- No Function	O-Car P. Indicator-3	O-Car P. Indicator-3	I- No Function
ZC-4	Output	O-Continued Travel Up F04	I- No Function	O-Car P. Indicator-4	O-Car P. Indicator-4	I- No Function
ZC-5	Output	O-Continued Travel Up F05	I-not in use	O-Car P. Indicator-5	O-Car P. Indicator-5	I-Not in Use
ZC-6	Output	O-Continued Travel Up F06	I-Overload	O-Car P. Indicator-6	O-Car P. Indicator-6	I-Overload
ZC-7	Output	O-Continued Travel Up F07	O-Collecting fault signal	O-Car P. Indicator-7	O-Car P. Indicator-7	O-Collecting fault signal
ZD-0	I/O	I/O Car Call - F1	I/O Car Call - F1	I/O Car Call Up- F1	I/O Car Call Up- F1	I-Case of Fire Detector-F01
ZD-1	I/O	I/O Car Call – F2	I/O Car Call – F2	I/O Car Call Up– F2	I/O Car Call Up– F2	I-Case of Fire Detector –F02
ZD-2	I/O	I/O Car Call – F3	I/O Car Call – F3	I/O Car Call Up– F3	I/O Car Call Up– F3	I-Case of Fire Detector – F03
ZD-3	I/O	I/O Car Call – F4	I/O Car Call – F4	I/O Car Call Up– F4	I/O Car Call Up– F4	I-Case of Fire Detector – F04
ZD-4	I/O	I/O Car Call – F5	I/O Car Call – F5	I/O Car Call Up– F5	I/O Car Call Up– F5	I-Case of Fire Detector –F05
ZD-5	I/O	I/O Car Call – F6	I/O Car Call – F6	I/O Car Call Up– F6	I/O Car Call Up– F6	I-Case of Fire Detector – F06
ZD-6	I/O	I/O Car Call – F7	I/O Car Call – F7	I/O Car Call Down– F2	I/O Car Call Up– F7	I-Case of Fire Detector –F07
ZD-7	I/O	I/O Car Call – F8	I/O Car Call – F8	I/O Car Call Down– F3	I/O Car Call Up– F8	I-Case of Fire Detector –F08
ZE-0	I/O	I- No Function	I/O Car Call – F9	I/O Car Call Down– F4	I/O Car Call Up– F9	I-Case of Fire Detector – F09
ZE-1	I/O	I- No Function	I/O Car Call - F10	I/O Car Call Down– F5	I/O Car Call Up- F10	I-Case of Fire Detector –F10
ZE-2	I/O	I- No Function	I/O Car Call - F11	I/O Car Call Down– F6	I/O Car Call Up- F11	I-Case of Fire Detector –F11

ZE-3	I/O	I- No Function	I/O Car Call - F12	I/O Car Call Down– F7	I/O Car Call Up- F12	I- Case of Fire Detector –F12
ZE-4	I/O	I- No Function	I/O Car Call - F13	O-Continued Travel Up F01	I/O Car Call Down– F2	I-Floor blockade F01
ZE-5	I/O	O-Continued Travel Down F06	I/O Car Call - F14	O-Continued Travel Up F02	I/O Car Call Down– F3	I-Floor blockade F02
ZE-6	I/O	O-Continued Travel Down F07	I/O Car Call - F15	O-Continued Travel Up F03	I/O Car Call Down– F4	I-Floor blockade F03
ZE-7	I/O	O-Continued Travel Down F08	I/O Car Call - F16	O-Continued Travel Up F04	I/O Car Call Down– F5	I-Floor blockade F04
ZF-0	I/O	O-Car P. Indicator-1	O-Car P. Indicator-1	O-Continued Travel Up F05	I/O Car Call Down– F6	I-Floor blockade F05
ZF-1	I/O	O-Car P. Indicator-2	O-Car P. Indicator-2	O-Continued Travel Up F06	I/O Car Call Down– F7	I-Floor blockade F06
ZF-2	I/O	O-Car P. Indicator-3	O-Car P. Indicator-3	O-Continued Travel Down F02	I/O Car Call Down– F8	I-Floor blockade F07
ZF-3	I/O	O-Car P. Indicator-4	O-Car P. Indicator-4	O-Continued Travel Down F03	I/O Car Call Down– F9	I-Floor blockade F08
ZF-4	I/O	O-Car P. Indicator-5	O-Car P. Indicator-5	O-Continued Travel Down F04	I/O Car Call Down– F10	I-Floor blockade F09
ZF-5	I/O	O-Car P. Indicator-6	O-Car P. Indicator-6	O-Continued Travel Down F05	I/O Car Call Down- F11	I-Floor blockade F10
ZF-6	I/O	O-Car P. Indicator-7	O-Car P. Indicator-7	O-Continued Travel Down F06	I/O Car Call Down- F12	I-Floor blockade F11
ZF-7	I/O	O-Car P. Indicator-8	O-Car P. Indicator-8	O-Continued Travel Down F07	I/O Car Call Down- F13	I-Floor blockade F12

		Frame-1	Frame-2	Frame-3	Frame-4	Frame-5
		1KS-8HS	1KS-16HS	2KS-07HS	2KS-13HS	2KS-ER-BV
ZR401	Input	O-Emer. Power oper.	O-Emer. Power oper.	O-Emer. Power oper.	O-Emer. Power oper.	O-Emer. Power oper.
ZR402	Input	O-Emer. Power drive	O-Emer. Power drive	O-Emer. Power drive	O-Emer. Power drive	O-Emer. Power drive
ZR404	Input	O-Restarting	O-Restarting	O-Restarting	O-Restarting	O-Restarting
Z-S30	Input	Cab Light Off	Cab Light Off	Cab Light Off	Cab Light Off	Cab Light Off
Car controller FKR						
FE-0	I/O	I-Overload	I-Overload	I-Overload	I-Overload	I-Overload
FE-1	I/O	I- Safety Photocell	I- Safety Photocell	I- Safety Photocell	I- Safety Photocell	I- Safety Photocell
FE-2	I/O	I- Full Load	I- Full Load	I- Full Load	I- Full Load	I- Full Load
FE-3	I/O	I-No Function	I-No Function	I-No Function	I-No Function	I-No Function
FE-4	I/O	I-No Function	I-No Function	I-No Function	I-No Function	I-No Function
FE-5	I/O	I-No Function	I-No Function	I-No Function	I-No Function	I-No Function
FE-6	I/O	I-No Function	I-No Function	I-No Function	I-No Function	I-No Function
FE-7	I/O	I-No Function	I-No Function	I-No Function	I-No Function	I-No Function
Car calling Controller ITR-1						
IA-0	Output	O-Car P. Indicator-1	O-Car P. Indicator-1	O-Car P. Indicator-1	O-Car P. Indicator-1	O-Car P. Indicator-1
IA-1	Output	O-Car P. Indicator-2	O-Car P. Indicator-2	O-Car P. Indicator-2	O-Car P. Indicator-2	O-Car P. Indicator-2
IA-2	Output	O-Car P. Indicator-3	O-Car P. Indicator-3	O-Car P. Indicator-3	O-Car P. Indicator-3	O-Car P. Indicator-3
IA-3	Output	O-Car P. Indicator-4	O-Car P. Indicator-4	O-Car P. Indicator-4	O-Car P. Indicator-4	O-Car P. Indicator-4
IA-4	Output	O-Car P. Indicator-5	O-Car P. Indicator-5	O-Car P. Indicator-5	O-Car P. Indicator-5	O-Car P. Indicator-5
IA-5	Output	O-Car P. Indicator-6	O-Car P. Indicator-6	O-Car P. Indicator-6	O-Car P. Indicator-6	O-Car P. Indicator-6
IA-6	Output	O-Car P. Indicator-7	O-Car P. Indicator-7	O-Car P. Indicator-7	O-Car P. Indicator-7	O-Car P. Indicator-7
IA-7	Output	O-Car P. Indicator-8	O-Car P. Indicator-8	O-Car P. Indicator-8	O-Car P. Indicator-8	O-Car P. Indicator-8
IB-0	Output	O-Car Arrow Up	O-Car Arrow Up	O-Car Arrow Up	O-Car Arrow Up	O-Car Arrow Up
IB-1	Output	O-Car Arrow Down	O-Car Arrow Down	O-Car Arrow Down	O-Car Arrow Down	O-Car Arrow Down
IB-2	Output	O-Overload	O-Overload	O-Overload	O-Overload	O-Overload
IB-3	Output	O-Messagering Fan	O-Messagering Fan	O-Messagering Fan	O-Messagering Fan	O-Messagering Fan
IB-4	I/O	O-Evacuation	O-Evacuation	O-Evacuation	O-Evacuation	O-Evacuation
IB-5	I/O	O- Emer.Power oper.	O- Emer.Power oper.	O- Emer.Power oper.	O- Emer.Power oper.	O- Emer.Power oper.
IB-6	I/O	O-Out Of Operation	O-Out Of Operation	O-Out Of Operation	O-Out Of Operation	O-Out Of Operation
IB-7	I/O	O-Special Drive	O-Special Drive	O-Special Drive	O-Special Drive	O-Special Drive
IE-0	Input	I-Door-1 Up	I-Door-1 Up	I-Door-1 Up	I-Door-1 Up	I-Door-1 Up
IE-1	Input	I-Door-1 Down	I-Door-1 Down	I-Door-1 Down	I-Door-1 Down	I-Door-1 Down
IE-2	Input	I-Door-2 Up	I-Door-2 Up	I-Door-2 Up	I-Door-2 Up	I-Door-2 Up
IE-3	Input	I-Door-2 Down	I-Door-2 Down	I-Door-2 Down	I-Door-2 Down	I-Door-2 Down
IE-4	Input	I-Con.& Light Off	I-Con.& Light Off	I-Con.& Light Off	I-Con.& Light Off	I-Con.& Light Off
IE-5	Input	I-Car Priority	I-Car Priority	I-Car Priority	I-Car Priority	I-Car Priority
IE-6	Input	I-Taster Fan	I-Taster Fan	I-Taster Fan	I-Taster Fan	I-Taster Fan
IE-7	Input	I-Ramp Travel	I-Ramp Travel	I-Ramp Travel	I-Ramp Travel	I-Ramp Travel
Car Calling Controller ITR-2						
IA-0	Output	O-Car P. Indicator-1	O-Car P. Indicator-1	O-Car P. Indicator-1	O-Car P. Indicator-1	O-Car P. Indicator-1
IA-1	Output	O-Car P. Indicator-2	O-Car P. Indicator-2	O-Car P. Indicator-2	O-Car P. Indicator-2	O-Car P. Indicator-2
IA-2	Output	O-Car P. Indicator-3	O-Car P. Indicator-3	O-Car P. Indicator-3	O-Car P. Indicator-3	O-Car P. Indicator-3
IA-3	Output	O-Car P. Indicator-4	O-Car P. Indicator-4	O-Car P. Indicator-4	O-Car P. Indicator-4	O-Car P. Indicator-4
IA-4	Output	O-Car P. Indicator-5	O-Car P. Indicator-5	O-Car P. Indicator-5	O-Car P. Indicator-5	O-Car P. Indicator-5
IA-5	Output	O-Car P. Indicator-6	O-Car P. Indicator-6	O-Car P. Indicator-6	O-Car P. Indicator-6	O-Car P. Indicator-6
IA-6	Output	O-Car P. Indicator-7	O-Car P. Indicator-7	O-Car P. Indicator-7	O-Car P. Indicator-7	O-Car P. Indicator-7
IA-7	Output	O-Car P. Indicator-8	O-Car P. Indicator-8	O-Car P. Indicator-8	O-Car P. Indicator-8	O-Car P. Indicator-8
IB-0	Output	O-Car Arrow Up	O-Car Arrow Up	O-Car Arrow Up	O-Car Arrow Up	O-Car Arrow Up
IB-1	Output	O-Car Arrow Down	O-Car Arrow Down	O-Car Arrow Down	O-Car Arrow Down	O-Car Arrow Down
IB-2	Output	O-Overload	O-Overload	O-Overload	O-Overload	O-Overload
IB-3	Output	O-Messagering Fan	O-Messagering Fan	O-Messagering Fan	O-Messagering Fan	O-Messagering Fan
IB-4	I/O	O-Evacuation	O-Evacuation	O-Evacuation	O-Evacuation	O-Evacuation
IB-5	I/O	O- Emer.Power oper.	O- Emer.Power oper.	O- Emer.Power oper.	O- Emer.Power oper.	O- Emer.Power oper.
IB-6	I/O	O-Out Of Operation	O-Out Of Operation	O-Out Of Operation	O-Out Of Operation	O-Out Of Operation
IB-7	I/O	O-Special Drive	O-Special Drive	O-Special Drive	O-Special Drive	O-Special Drive
IE-0	Input	I-Door-1 Up	I-Door-1 Up	I-Door-1 Up	I-Door-1 Up	I-Door-1 Up
IE-1	Input	I-Door-1 Down	I-Door-1 Down	I-Door-1 Down	I-Door-1 Down	I-Door-1 Down
IE-2	Input	I-Door-2 Up	I-Door-2 Up	I-Door-2 Up	I-Door-2 Up	I-Door-2 Up
IE-3	Input	I-Door-2 Down	I-Door-2 Down	I-Door-2 Down	I-Door-2 Down	I-Door-2 Down
IE-4	Input	I-Con.& Light Off	I-Con.& Light Off	I-Con.& Light Off	I-Con.& Light Off	I-Con.& Light Off
IE-5	Input	I-Car Priority	I-Car Priority	I-Car Priority	I-Car Priority	I-Car Priority
IE-6	Input	I-Taster Fan	I-Taster Fan	I-Taster Fan	I-Taster Fan	I-Taster Fan
IE-7	Input	I-Ramp Travel	I-Ramp Travel	I-Ramp Travel	I-Ramp Travel	I-Ramp Travel

Die Ein- und Ausgänge der Zusatzgruppe ZG und ER sind unbelegt.

5.0 Diagnose and errow description

C0 Control Reset over the hand programming device

In the **submenu C0 RESET** is to be put back it possible the control computers. Case during the assembly enterprise or error tracing to a condition to come the control should be caused locked can over the HPG60 a control RESET in that. For example it is possible by setting car calls to move the cab again.

C1 Call input over the hand programming device

In the **submenu C1 call input** is to be called it possible the point **C10 car calls**. With the help of the two right key and the enter key car calls can be see, which are then processed of the control.
HPG60 can be attaced at Central-unit, Car-controller and Car-calling-controller. You have the possibility to give inside commands from different places.
The **menu option C11** landing calls is not activable at present.
In the **menu opion C12** of random calls inside the random number generator for car calls an be activated.The function can be scheduled temporally by input of a temporal upper limit of up to 48,0 hours.
In the **menu option C13** of random calls outside the random number generate for landing calls can be activated. The function can be scheduled likewise temporally by input of a temporal upper limit of up to 48,0 hours.

C2 Input and Output signals

In the **submenu C2 of in and output** signals it is possible to regard the lining up signals to recognize as well as the programmed output and input functions on this clamp!

	
Mit den oberen With the upper and lower red button the desired plug e.g. ZA can be selected. With the two right yellow button the bit can be selected e.g. like here ZA0.	In alternating representation the bit and the deposited output and input function are represented. E.G. no output function is however the input function at the clamp ZA0. “ Protection circuit status”. On the terminal is no a clamping.

Connector	Unit	Bit 0 to 7	
ZA	ZR	ZA0 to ZA7	**Legend:**
ZB	ZR	ZB0 to ZB7	
ZC	ZR	ZC0 to ZC7	
ZD	ZR	ZD0 to ZD7	**„ - „ There are no clamping on the terminal**
ZE	ZR	ZE0 to ZE7	**“ * ” There are + 24V clamping on the terminal**
ZF	ZR	ZF0 to ZF7	
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 Event / Fault Log

In the **submenu C3** the error memory is accommodated with C31. The error memory possesses a depth of 100 possible error registrations. The most current entry always stands on position unity and displaes the next to last entry on a deeper position. After return to the highest error position the possibility in the menu C30 exists to clear the error memory.
The error memory is put down in the Akku RAM of the clock component and is so secured against power failure.
If one selects a certain error then can be called up through pressures of the yellow button upward the following additional information for error situation:

Line above	**Floor conditions and driving direction**	**End-switch (Pre-end Up & down, concise up& Down, Zone 1 & Zone 2)**
Line down	**Expenditure of the commands (Up,Down,Vi,Vn,V0,V1,V2,V3)**	**Expenditure of the contactor control (Up, Down, K5, K7)**

C4 Inspector session

In the **submenu C40 run time test** is possible it to limit all running times for the next trip on 1.0 sec.

In the **submenu C41 buffer trip** is possible to drive with the back getting control downward. (without obligation delay by the before-finalswitched 13B on the cab buffers) But only if the limit switch down by technical personal at the strip of passing pressed.

In the **submenu C42 seat sample** is possible to drive with the back getting control downward.
(without obligation delay by the before-finalswitched 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.

In the **submenu C43 catch sample** is possible it the sort-circuit protection and the monitoring function V<0,2 m/s to deactivate.

In the submenu **C44 driving abillity** will spend the speed of the car as well as the number of revolutions of drive.

In the **submenu C45 break test** the processor system DAVID-2005 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>Vnenn activates which braked with exceeding of the nominal speed terminated.(both brake coils become without tension)

In the submenu **C46 remote trigger** of the processor system DAVID-2005 is possible switching on of the function remote release for the cab over the tracer the S50 on operates. After releas in tracer the S50 is again deactivated the function.

In the submenu **C47 Reset remote trigger** of the processor system DAVID-2005 is possible to put back by switching on of the function on with ramble 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 DVID-606 is possible by switching on of the function remote release for the counterweight over the tracer the S50 on to operation. After releasing tracer the S50 is again deactivated the function.

In the submenu **C49 reset remote trigger** of the proseccor system DAVID-2005 is possible it to put back by switching on of the function on with racable remote releases for the counterweight with resetting tracer the S50 is again deacivated the function.

In the **submenu C410** limit switch trip the processor system DAVID-2005 is possible above it o over-drive by switching on of the function on for the upper concise and drive in such a way on the upper limit swich.

The **submenu C411** limit switch trip down the processor system David-2005 is possible it to over-drive by switching on of the function on for the lower concise and drive in such a way on the lower limit switch.

In **submenu C412** switchgear cabinet temperature test of the processor system DAID-606. You can lower through contactors of the function the threshold value of the temperature monitoring in such a way that error registration takes place immediately.

C5 Compactness control

In the submenu **C5 compactness 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 in purchase to the measured position too low. A plus means that it stands too highly.

C6 Equipment control

In the menu **C60 equipment control** is spend 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 adress is correct
"?" remote station at this adress has a defect

In addition the **pulse conditions** can be regarded 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 finds the **revision number** of the individual operating system of blocks there.
For the programming of the ER-2007 remote station serves **the parameter remote station adress program.**
The remote station ER-2007 which can be programmed is connected with 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 choise of the floor number (01 to 32) ER-2007 gets its adress. Afterwards the ER-2007 is installed into the appropriate floor.

C7 Montagefahrt

In the submenu C7 point C70 assembly trip can be activated during active resend control of these parameters.
When the assembling of a lift switches of the safety circuit are not yet set at the beginning. This function makes although the safety entrances are U3 to U12 tension a movement possible with the resend control. A condition is that against U1 and U2 clamping rests.
This reaches automatically use of a KW assembly pear. Becomes if the resend control break this parameter is automatically deactivated.

F01 Error messages - description Controller

Code-No.	Error entry	Description
F00	**Phase cabin light/Emergency power supply**	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	**Safety Circuit U1 Safety Circuit voltage**	Safety Circuit power is missing. Either circuit breaker F7 is activated or L1 of the main power connection is missing.
F03	**Safety Circuit U2 – emergency stop**	The emergency stop has been activated and thus the safety circuit was opened.
F04	**Safety Circuit U3 – shaft door – control strain weight**	The shaft door has been opened or the contact of the control strain weight was activated, which opens the safety circuit.
F05	**Safety Circuit U4 – maintenance door – rope loose**	The maintenance door has been opened or the contact of the rope loose switch was activated, which opens the safety circuit.
F06	**Safety Circuit U5 – speed limiter**	The contact of the speed limiter has been activated, which opens the safety circuit.
F07	**Safety Circuit U6 – emergency stop TOP - BUTTOM**	The emergency stop switch Top or Bottom has been activated, which opens the safety circuit.
F08	**Safety Circuit U7 – buffer cabin –counterweight**	One of the buffer contacts has been activated and opened the safety circuit.
F09	**Safety Circuit U8 – catch cabin**	The catch contact on the cabin has been activated, which opens the safety circuit.
F10	**Safety Circuit U9 – rope loose, hatchway, emergency stop cabin**	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	**Safety Circuit U10 – shaft door**	One of the shaft doors has been opened during travel, which opens the safety circuit.
F12	**Safety Circuit U11 – cabin door**	One of the cabin doors has been opened during the travel, which opens the safety loop.
F13	**Safety Circuit U12 – locking device contact**	One locking device contact has opened during travel and opened the safety circuit.
F14	**Voltage central processor**	The ZKR's +24V DC power supply is in overload conditions, resp. shorted in the system.
F16	**Voltage cabin processor**	The FKR's +24V DC power supply is in overload conditions, resp. shorted in the system.
F18	**Carlight demage**	The carlight in the cabin is out of order
F20	**Pre- end 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	**Pre-end switch Up fault**	The top pre-end-switch S13A is not switching, although the car has reached the top floor.
F22	**Pre-end switch Down fault**	The bottom pre-end-switch S13B is not switching, although the car has reached the lowest floor.
F23	**Pre-end switch Up and Down fault**	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. Pre-end 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. Pre-end switch Up and Down fault**	The second top pre-end-switch S15A is not switching, although the car has reached the top floor.
F26	**2.Pre-end switch Down fault**	The second bottom pre-end-switch S15B is not switching, although the car has reached the lowest floor.
F27	**2. Pre-end switch Down and Up fault**	Der 2.Vorendschalter Oben S15A und Unten S15B schalten nicht, obwohl beide Endetagen angefahren wurden.
F36	**Releveling area**	With the releveling the releveling area was left.
F37	**Releveling- timout**	With the releveling the maximum releveling time wasexceeded.
F38	**Releveling Attemps**	With the releveling the maximum number of attempts was

		exceeded.
F41	**Regulation Fault**	The regulation (inverter) has a problem
F44	**Switchgear cabinet temperature**	The switchgear cabinet temperature became related to which crossedadjusted threshold.
F45	**Motor temperature**	The PTC of the engine has activated. Reaction according configuration.
F46	**Start Time Monitor**	The configured delay for the Start Time Monitor has elapsed. After a configured number of trials, the installation is locked.
F47	**Journey Time Monitor**	The configured delay for the Journey Time Monitor has elapsed. Reaction according configuration.
F48	**Deceleration Time Monitor**	The configured delay for the Deceleration Time Monitor has elapsed. Reaction according configuration.
F49	**Stop Time Monitor**	The configured delay for the Stop Time Monitor has elapsed. Reaction according configuration.
F50	**Contactor monitor**	The monitor for the main and brake relay has been activated. Reaction according configuration.
F51	**Brake opening monitor**	The brake activation monitor has been activated. Reaction according configuration.
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	**Contactor Travel**	The monitor for the main and brake relay has been activated. Reaction according configuration.
F56	**Brake & Block Monitor**	There is no voltage for brake– block-magnet
F61	**Door Monitor – Door Closing**	The door could not be closed within the configured time.
F62	**Door Monitor – Door opening**	The door could not be opened within the configured time.
F63	**Folding apron defectively**	The folding apron does not drive although the lowest Stopp became to leave.
F65	**Tracer landing call up wedges**	Tracer landing call up wedges
F66	**Tracer landing call down wedges**	Tracer landing call down wedges
F67	**Tracer door open wedges**	It takes place an entry if the tracer is operated longer than 45 seconds in the stop and/ or in normal operation.
F68	**Light barrier blocks**	It takes place an entry if the lght barrier is operated longer than 45 seconds in the Stopp and/ or in normal operation.
F69	**Reversing contact wedges**	It takes place an entry if the contact is operated longer than 45 secods in the Stopp and/or in normal operation
F70	**Blocked – End-switch Top**	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 Stopp.
F71	**Closed running time**	The hydraulic elevator lowered after the occurance of a run time arror
F78	**DSK 2.Pre-end.switch Bottom**	The digital shaft copying started that the counted impulse conditions do not agree with the impulse conditions at the pre-end switcher down. A correction was implemented.
F79	**DSK 2.Pre-end-switch Top**	The digital shaft copying 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	**Communication I/O ITR 1**	Communication to the car calling controller 1 is disturbed. Is the hanging cable correctly put or for veins damaged?
F82A	**Communication I/O ITR 2**	Communication to the car calling controller 2 is disturbed. Is the hanging cable put or for veins damages?
F83	**DSK Pulses exchange**	The encoder pulses of the shaft encoder must be exchanged. (Input 81 and 82)
F84	**DSK No pulses**	From the pulse generator of the digital pit copying no impuses come. Are the giver and impuls entry correct?
F85	**DSK Floor number**	The floor number determined by the learning trip does not

		agree with the registered. Examine please enty in the software and zone switch fpr switching gap and function.
F86	**DSK Korrektur ZONE**	Correction trip released by counter deviation the zone.
F87	**DSK Correction pre-end down**	Correction trip released by counter deviation Pre-end-switch down
88	**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 corrigate.
90	**Watchdog-Reset**	Internal reset – damage in the hardware
91	**Gruppenbus Reset**	Interner Reset durch Fehler auf dem Gruppenbus
92	**Protection circuit**	The protection circuit has itself closed. A cause a missing or retarded zone.
F93	**Elevator bus communication**	On the elevator bus (communication regulation STG) an error arose.
F94	**Safery light lattice**	An error was announced of the safety light lattice which was determined with the self check.
F101	**Overcurrent- IPM**	Frequency inverter message- Overcurrent in the power semiconductor.
F102	**Overcurrent- U**	Frequency inverter message- Overcurrent in the engine phase U
F103	**Overcurrent - V**	Frequency inverter message- Overcurrent in the engine phase V
F104	**Overcurrent- W**	Frequency inverter message- Overcurrent in the engine phase W
F105	**Radiator box temperature**	Frequency inverter message- The radiator box temperature is too high.
F106	**ZK- Overvoltage**	Frequency inverter message- The intermediate circuit tension is too high.
F107	**ZK- Untervoltage**	Frequency inverter message- The intermediate circuit tension is too low.
F108	**Driving contactor Start**	Frequency inverter message- The driving drop when starting.
F109	**Driving Contactor Drive**	Frequency inverter message- The driving contactors drop while driving.
F110	**Release miss**	Frequency inverter message- The release is missing i.e. it does not lie close a driving direction.
F111	**Release Up=Down**	Frequency inverter message- The driving directions on and off both.
F112	**Direction fault**	Frequency inverter message- The driving direction is wrongly in relationship with the encoder channels-A & B exchange
F113	**Difference commando values**	Frequency inverter message- The rule difference is too high- is the adjusted impulse number correct, does open the brake duly?
F114	**No encoder pulses**	Frequency inverter message- The encoder pulses come- is pulse generator-attached does tune the adjusted impulse number does open the brake duly?
F115	**ZK- Precharing**	Frequency inverter message- Ground fault- is the braking resistance duly attached?
F116	**Release Up = Down**	Frequency inverter message- Error with the direction of travel choice

W01 Exchange of the processor map

Before you walk for the change of the CPU map, please break all safety device and switches. Turn the car off in the lowest level concisely during activated resend control.(car doors closed)

			
For the change of the CPU map the cover of the ZR-unit must be opened. The map is left down in the body.	**Do not affect other parts on the lare printed circuit board. With two finers you can loosen the prited circuit board.**	**Take new CPU map from the ESD protective plastic film and insert the old one.**	**Use the new CPU map carefully. Convince yourselves that the map sits correctly. Close afterwards the cover again.**

6.0 Information

D1 Zustandsmeldungen

Das **Untermenü D1** ist noch nicht realisiert.

D2 Fahrtenzähler

Im **Untermenü D2** ist der **Fahrtenzähler** realisiert. Es stehen zwei Fahrtenzähler zur Verfügung:

Total trip counter	Not erasable
Total trip counter	Erasable for the statistics evaluation
Total trip counter Up	Erasable for the statistics evaluation
Total trip counter Down	Erasable for the statistics evaluation
Floor trip counter for each floor	Erasable for the statistics evaluation

D3 Run time counter

In the submenu D3 the hour meter is realized. Two hour meters are available:

Net hour meter	Time counting since creation of the tension; not erasable
Hour meter	Time counting of the trips, not erasable
Hour meter	erasable for the statistics evaluation

The last point of parameter in this menu is requirement for reset of the hour meter.

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
Delete door transaction counters	Erasable, for the statisics 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

7.0 Start-up of the lift

I00 Assembly trip

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 although the safety entrances are U3 to U12 without tension, a movement possible with the back getting control. A condition is that against U1 and U2 tension rests. Becomes if the back getting control break this parameter is automatically deactivated.

I01-Commissioning 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 stepps:

- O Examination of the software attitudes and input of the raking distance of the lower pre-end switch.
- O Examination of the electrical installations and attitude of the pre-end switch.
- O Execution of the leaning trip.
- O Choice of the driving speeds by adjusting the braking distances
- O Fairs of the level is not ok and correction of the concise values.
- O Optionally: Attitude of the releveling.

2.0 Examination oft 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 linesare to be presented as follows:
-

Incremental encoder		Controller	Description
U_B or U_{Ver}		Terminal 200	Voltage +24V DC
GND or OV		Terminal 500	GND 0V
Channel A		Terminal 83	Pulse-Spur A
Channel B		Terminal 84	Pulse-Spur B

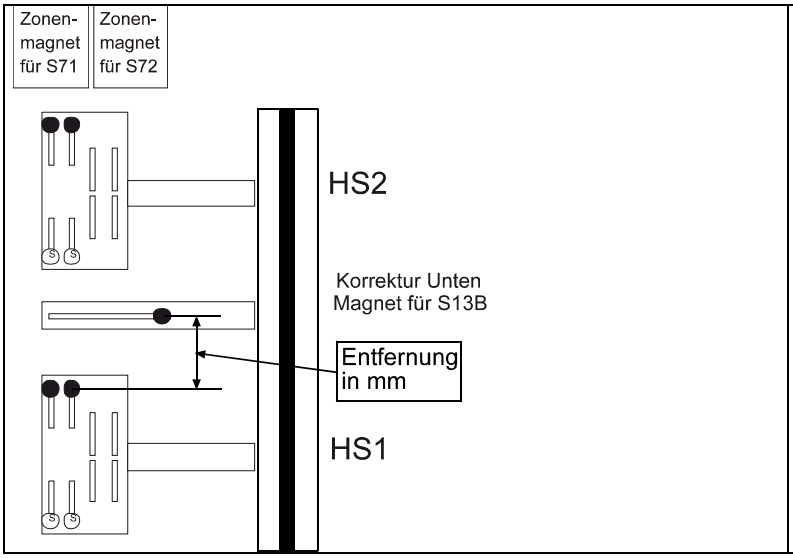
- The zone switches S71 and S72 (for EoT & Releveling) and /or S 71 should be functionally installed. The length of the zone should be symmetrical to the concise line maximally 250 mm into both directions to extend. The more accurately the concise line is met the smaller fails later the concise correction.
- 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
800 mm		0,50 m/s
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 with the learning trip begins you should examine the data in the plant parameters (Stpp 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 numerial value exactly.



Here becomes the distance between the magnet of the lewer pre-end switcher and the first magnet of the zone (request from the center of the magnet to measure in the each case!) reistered. This range reading serves the conversion of impulses on millimeter unit.

4.0 Execution of the leaning trip

A) 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 throuh.

B) Please position the car above the lower pre-end witcher 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 please the learning trip in the menu **learning trip activate-> Yes.**

The learning trip runs off in three phases:

1. Phase: The elevator drives now downward 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 echanges". 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 (oo many or too few zones) during the learning trip the errow 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 disributed on the center of the repsective 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 3. Phase. If the learning trip was broken off, then the elevator for normal operation is closed and in the 4 diplay 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 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.

6.0 Fairs of the level is not ok and correction of te concise values.

The control was now examined i.e. the car not overdrive the stops and drive in the cab is possible. Connect yours HPG60 with the car calling in the car. From there out comfortably the "level is not ok" can measured and directly into the system will enter. Go with the car into the first stop and select yourselves you the parameter concise value level 1. Retaining inaccuracies 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 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.

The determined concise value is corected 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. retriving the length of the retrieving way. The retrieving way should be ever shorter than the half zone range. Consider please the following circumstances: The zone range must as adjusted that it is shorter as 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 unter 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.

I02-Commissioning with digital Absolute copying with pre-end & 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.

- O Examination of the software attitudes and input of the raking distance of the lower pre-end switch.
- O Examination of the electrical installations and attitude of the pre-end switch.
- O Execution of the leaning trip.
- O Choice of the driving speeds by adjusting the braking distances
- O Fairs of the level is not ok and correction of the concise values.
- O Optionally: Attitude of the releveling.

2.0 Examination of the electrical installations and attitude of the pre-end switcher

- All contact switches in the safery 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.

Absolute-Value Encoder		Controller	Description
Shield		Terminal PE	Shielded earth
SSI Clock A		Terminal 81	Clock of Channel A (+)
SSI Clock B		Terminal 82	Clock of Channel B (-)
GND or OV		Terminal 500	GND 0V
U_B or U_{Ver}		Terminal 200	Voltage +24V DC
SSI Data A		Terminal 83	Data of Channel A (+)
SSI Data B		Terminal 84	Data of Channel B (-)

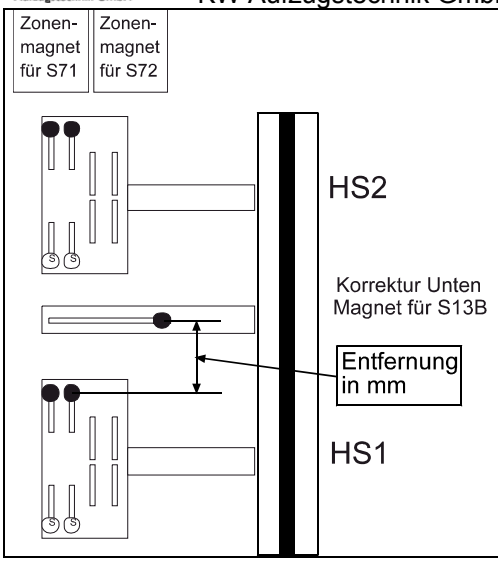
- The zone switches S71 and S72 (for EoT & releveling) and /or S71 should be functionally. The length of the zone should be symmetrical to the concise line maximally 250 mm into both directions to extend. The more accurately the concise line is met the smaller fails later the concise correction.
- The 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 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 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-switch above 13A between the next to last and last floor. This rule is to be kept also with short trip stop!

4.0 Examination of the attitudes and the braking distance of the lower pre-end-switch

Before with 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 numerial value exactly.



Here becomes the distance between the magnet of the lewer pre-end switcher and the first magnet of the zone (request from the center of the magnet to measure in the each case!) reistered. This range reading serves the conversion of impulses on millimeter unit.

4.0 Execution of the leaning trip

a. 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 throuh.
b. 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 please the learning trip in the menu **learning trip activate-> Yes.**

The learning trip runs off in three phases:

1. Phase: The elevator drives now downward 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 echanges". 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 (oo many or too few zones) during the learning trip the errow 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 disributed 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 3. Phase. If the learning trip was broken off, then the elevator for normal operation is closed and in the 4 diplay 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 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.

6.0 Measurement of the level is not ok and correction of the concise values.

The control was now examined i.e. the car not overdrive the stops and drive in the cab is possible. Connect yours HPG60 with the car calling in the car. From there out comfortably the "level is not ok" can measured and directly into the system will enter. Go with the car into the first stop and select yourselves you the parameter concise value level 1. Retaining inaccuracies 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 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.
The determined concise value is corected 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. retriving the length of the retrieving way. The retrieving way should be ever shorter than he half zone range. Consider please the following circumstances: The zone range must be adjusted that it is shorter as 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 unter 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.

I03-Commissioning with digital absolute copying without shaft switches

1.0 Examination 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.

Absolute-Value Encoder		Car Controller FKR	Description
Shield		Terminal PE	Shielded earth
SSI Clock A		Terminal 81	Clock of Channel A (+)
SSI Clock B		Terminal 82	Clock of Channel B (-)
GND or OV		Terminal 500	GND 0V
U_B or U_{Ver}		Terminal 200	Voltage +24V DC
SSI Data A		Terminal 83	Data of Channel A (+)
SSI Data B		Terminal 84	Data of Channel B (-)

2.0 Allocation of the compactness

You scolded "consice input" in the menu on the attitude floor height. Now you can be registered for each floor the value in the millimeter (e.g. HS01-0000mm, HS02-3000mm..). After all floors were reserved you scolded 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 synchronize, that mean 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 not more 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 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 measured and directly into the system will enter. Go with the car into the first stop and select yourselves you the parameter concise value level 1. Retaining inaccuracies 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 manipulation of t he 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.
The determined concise value is corected 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. retriving the length of the retrieving way. The retrieving way should be ever shorter than he half zone range. Consider please the following circumstances: The zone range must be as adjusted that it is sorter as 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 unter 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.

I04 Inspector-session

4.1 BRAKE-TEST – CONTROL THE DECELERATION IN EVERY BRAKE COIL

In the **submenu C45 break test** the processor system DAVID-2005 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>Vnenn 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 irregulaties 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 standarts.

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 an 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) Operate now 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 unter tension. The minimum delay value for a brake circuit amounts to 0.4 m/s2, and/or the maximum stopping distance with Vnenn= 1.0 m/s amounts to 1,8 m and/or with Vnenn= 1. 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.

10) Drive with the back getting control the cab concisely and back getting control S61 switch off. The doors open and the plant are in the normal operation mode.

4.2 Test of the watchingdog timing

In the submenu C40 run time test of the processor system DAVID-2005 is possible it 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-2005. All running times are set on one second
3	Call input by lowest/ highest call at the top side of the DAVID-2005 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 again in normal operation

4.3 Execution of the buffer trip

In the **submenu C41 buffer trip** is to be driven it possible with the back getting control downward. (without obligation delay by the before-finalswitched 13B on the cab buffers) But only if the limit switch down by technical personal at the strip of passing pressed.

1	The back getting control S61 switch on
2	Adjust the menu C-Diagnosis/ Inspection-session, C41 buffer trip in the processor DAVID-2005. 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). Increace 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 releveling 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 releveling control S61 switch off. The control returns to normal operation.

4.4 Execution of the seat sample

In the **submenu C42 seat sample** is to be driven it possible 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, C41 seat sample in the processor DAVID-2005. 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). Increace 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 releveling 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 releveling control S61 switch off. The control returns to normal operation.

4.5 Driving abillity 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-2005. 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 releeling 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 awitch move.
6	The releveling control S61 switch off. The control returns to normal operation.

4.6 Execution of the catch sample of the elevator car

In order to implement the catch sample with the elevator car the car must arrive into the 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 catch sample in the processor system DAVID-2005. 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 subject 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.

4.7 Activation/ Reset of the remote releases car/ Counterweight

In the submenu **C46 remote trigger** of the processor system DAVID-2005 is possible switching on of the function remote release for the cab over the tracer the S50 on operates. After releas in tracer the S50 is again deactivated the function.

In the submenu **C47 Reset remote trigger** of the processor system DAVID-2005 is possible to put back by switching on of the function on with ramble 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 DVID-606 is possible by switching on of the function remote release for the counterweight over the tracer the S50 on to operation. After releasing tracer the S50 is again deactivated the function.

In the submenu **C49 reset remote trigger** of the proseccor system DAVID-2005 is possible it to put back by switching on of the function on with racable remote releases for the counterweight with resetting tracer the S50 is again deacivated the function.

4.8 Execution of the limit switch trip top
In the submenu C410 limit switch trip top the processor system DAVID-2005 is possible above it to over-drive by switching on of the function on for the upper concise and drive in such a way on the upper limit swich.

4.9 Execution of the limit switch trip bottom
The submenu C411 limit switch trip bottom the processor system David-2005 is possible it to over-drive by switching on of the function on for the lower concise and drive in such a way on the lower limit switch.

4.10 Execution the switch gear cabinet temperature test
In submenu C412 switch gear cabinet temperature test of the processor system DAID-606. You can lower through contactors of the function the threshold value of the temperature monitoring in such a way that error registration takes place immediately.

4.11 Execution input monitor test
In the submenu C413 motor PTC test of the processor system DAVID-2005 is possible to switch for a trip the motor PTC off software-technically in order to produce an error response. A condition is natural that in the menu B600 monitoring functions the motor PTC monitoring is active.

4.12 Execution engine PTC resistor test
In the submenu C414 DSK pulse generator test of the processor system DAVID-2005 is possible to switch for a trip the encoder off. The shaft copying software-technically in order to produce an error response. A condition is natural that in the menu B600 monitoring functions the DSK monitoring is active.

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