System solutions for every lift. Everywhere.

SMART FLEX - MRTEMODULAR CONCEPT





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- MRTE = Machine Room Traction External Modular concept for traction lift machine room installations with external inverter drive
- High performance control system for basic passenger lifts includes robust and reliable bp408
- User-friendly interface
- Sophisticated group algorithm without separate controller
- Type tested safety circuit in accordance to EN 81-1/-2 for modernisation
- Includes the common interfaces (CANopen LIFT, DCP and USB)
- Inputs and Outputs extendable:
 - CANopen LIFT components
 - Special gateways (e.g. Modbus and BACnet)
 - Access control systems
 - Zones, transponder and card reader connection
- Supports absolute positioning systems (linear and rotary encoder)
- Possibility of remote diagnosis and on-demand maintenance with WinMOS® 300 and Lift2CLOUD®







SMART FLEX - MRTE MODULAR CONCEPT

MACHINE ROOM TRACTION EXTERNAL

FEATURES

- Compact controller for modernization traction lifts for asyn.-/synchronous motors with machine room
- External inverter drive/ wall Mounting: Ziehl Abegg 4Cx or Fuji Frenic LM2 (STO/CAN)
- Power supply 3 x 400 +N+PE maximum 16 mm²
- Power up to 63A 30kW
- Lighting circuit 230 VAC with separate cabin light and shaft light
- Safety circuit 230 V
- Multi-language settings: German, English, Dutch, French and Spanish





MAIN BENEFITS

- Elementary functions are on board
- Additional function can be added by pre-defined extra modules
- Pre-defined extra modules can be assembled on the controller by yourself
- Short delivery time
- Possibility to keep some units on stock for urgent cases, like lift "Out of Order."
- Easy adjustable for different doors, brakes, inverters, etc.
- Easy to order
- High performance on a simple concept

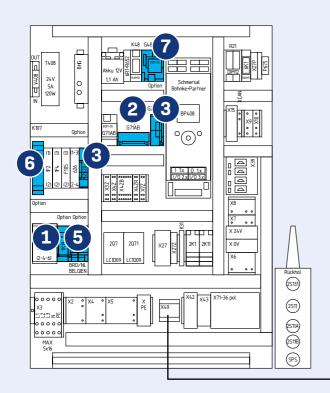


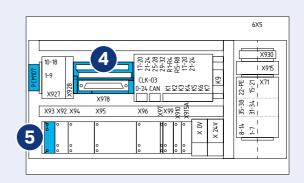
SMART FLEX - MRTE TECHNICAL DATA

| Technical data | SMART FLEX - MRTE | | | |
|---------------------------------|--|--|--|--|
| Control type: | bp408 + SMZ Machine Room | | | |
| Blue Modus: | Basic | | | |
| Standards: | EN 81-1/-2 | | | |
| Application: | Persons | | | |
| Stops: | Up to 08 – 1 KS – Conventional Wiring Up to 16 – 1 KS or 2 KS – CANopen Lift | | | |
| Operating mode: | Traction Lifts Asynchronous motors or synchronous | | | |
| Inverter: | Prepared for External Ziehl Abegg 4Cx or Fuji Frenic LM2* (STO/CANopen Lift DS417) * Fuji Frenic only for Asynchronous Motor | | | |
| Shaft Positioning System: | Digital with absolute encoder system Limax or AWG In the Shaft or Cabine | | | |
| Supply voltage: | 3 x 400 + N + PE maximum 6 mm ² Up to 30 kW Up to 63 A Lighting circuit 230 VAC / 220 A separate cabin light and shaft light | | | |
| Brake | 180 VDC - 207 VDC (see option) | | | |
| Door Operator | 230 V, 4 A | | | |
| Door Lock | 230 V (see option) | | | |
| Safety: | Safety circuit inputs, 230 VAC | | | |
| Light Curtain: | 230 VAC or 24 VDC | | | |
| Controller Inspection Box: | Cable length 3 m With connector | | | |
| Ventilator: | Cabin 230 VAC, max. 2 A Motor 230 VAC, max. 2 A | | | |
| Shaft Signals: | CANopen Lift 417 Conventional wiring | | | |
| Functions: | - PTC thermistor motor - Brake monitoring BGM - Overload on the Cabin - Ventilator 230 VAC, max. 2 A - Trip counter on bp408 - Hour meter on bp408 | | | |
| Display and operating elements: | Graphic display with navigation buttons: Second menu level and separate call menu Permanent display of door status (max. 3), safety circuit, moving signal, lift status and direction (menu-dependent) | | | |
| Language Settings: | German, Englisch, Dutch, Spanish, Portuguese, French | | | |
| Backup/Update: | Backup and update via USB stick | | | |
| Memory: | Fault, maintenance, and message stack with max. 128 entries | | | |
| Controller Cabinet Size: | 600 x 800 x 250 mm, RAL7035 | | | |
| Car top BOX: | 500 x 300 x 120 mm, RAL7035 | | | |

SMART FLEX - MRTE POSSIBLE OPTIONS

| Option | | | Details | | | | |
|--------|---|-----------|--|--------|--------|--------|--|
| 0 | Phase Relay | | | | | | |
| 2 | Brake | 190 | 2.1 Brake 42 V - 60V - 80 V - 110 V - 180 V 2.2 Brake 103 V / 207 VDC | | | | |
| 3 | Remote release Set/Reset | - | 3.1 Remote release Set / Reset 24 VDC or 230 VAC 3.2 Remote release Set / Reset 42 V - 60 V - 80 V - 110 V - 180 V 3.3 Remote release Set / Reset 180 - 207 VDC 3.4 Remote release Set / Reset 230 VAC | | | | |
| 4 | Sub-D 37 pol. connection COP to Car Top Box | | 4.1 Adapter 37-poles (Sub-D 37 pol. connect COP to Car Top Box) | | | | |
| 6 | Power Socket Car Top Box | 5.1 DE-NL | 5.2 BE-FR | 5.3 CH | 5.4 DK | 5.5 UK | |
| 6 | Door B - 400V | • | | | | | |
| • | Locking bolt magnet | | 7.1 Locking bolt magnet 180 – 207 VDC 7.2 Locking bolt magnet 42 V – 60 V – 80 V – 110 V – 180 V | | | | |
| 8 | Isolation Transformer | | 8.1 Isolation Transformer 1000 VA (Power without Neutral) | | | | |







SYSTEM SOLUTIONS FOR EVERY LIFT. EVERYWHERE.

Our customers lift systems are at the focus of our attention. Regardless if it's a new system or a modernisation – with our years of experience we identify an individual or standardised solution according to your requirements. Our common goal is to guarantee the safe movement of the lift system for the users.

Schmersal Böhnke + Partner is a member of the Schmersal Group. With its products, the ownermanaged Schmersal Group has dedicated itself to the safety of people and machines for many decades. The company was founded in 1945, and is represented by seven manufacturing sites on three continents and with its own companies and sales partners in more than 60 nations. In the demanding field of machine safety, the Schmersal Group is one of the international market and competence leaders. Based on a comprehensive product portfolio, the company's approximately 2000 employees develop and plan complete safety-related system solutions.

For over 50 years we have supplied high-quality components for the lift industry. With the acquisition of Böhnke + Partner to the Schmersal Group, we took over the system concept to our lift area. Since then, the product portfolio – with control systems and components – includes all necessary elements for equipping a lift system from electrical point of view.

We supply lift manufacturers with our products all over the world. The Schmersal Group has four production plants in Germany and one each in Brazil, China and India. We offer the flexibility of a medium-sized company, combined with the international presence of a company group.



CONTROL MODULES



COMPONENTS FOR LIFT CONSTRUCTION



CONTROL SYSTEM ASSEMBLY



