

# System solutions for every lift. Everywhere.

The compact bp408 lift control module



**SCHMERSAL**  
BÖHNKE + PARTNER

## Lift control module bp408

# One system for all



### The benefits at a glance:

- Compact form factor for all installation locations
  - Door frames
  - Systems without machine room
  - Machine room
- Type tested safety circuit in accordance with **EN 81-20/-50**
- Applicable for cable and hydraulic systems
- Sophisticated group algorithm without separate controller
- Supports all types of shaft (hoistways) and cabin doors
- Includes the common interfaces (CANopen LIFT, DCP, USB)
- Supports absolute positioning copying systems (linear and rotary encoder)
- **Many functions already equipped as standard::**
  - Safety circuit monitoring in accordance with EN 81-20
  - Collective controller
  - Self-driver
  - Priority and guest calls
  - Functions for freedom from barriers in accordance with EN 81-70
  - Fire fighter lift in accordance with EN81-72
  - Fire alarm in accordance with EN81-73
  - etc.

# cases



- **Special functions on request:**  
Solutions for car lifts, Ex systems, special systems for ships
- **Modular extendable:**
  - Additional inputs and outputs
  - CANopen LIFT components
  - Load measurement, displays, operation panel
  - Special gateways (e.g. Modbus)
  - Access control systems
  - Zones, transponder and card reader connection
- Possibility of remote diagnosis and on-demand maintenance with WinMOS®300

## Applications



## bp408 – Compact and universal use ability

It is extremely compact and at the same time doesn't have to hide behind the "big ones". A high functional equipment gives the new lift controller bp408 a profile which allows its universal usability for various individual disciplines on lift systems.

The features of the control system at a glance:

- Compact high-quality design
- For universal use
- Easy to use
- Reliable, extensive software

## Application usage

The heart of a lift system is the controller. It is used to monitor and control the entire lift system and cares for safe transport of persons and loads.

The variety of possible applications meets the controller bp408 by its compact design and extensive functions. It can be used both for cable and hydraulic systems and for all common installation locations:

- Door frames
- Cabinet of machine room less lift system
- Machine room cabinet

The controller includes a safety circuit which is type tested and already meets the requirements of the new standard **EN 81-20/50**.

## System components



## Modularly expandable

The controller bp408 is the enhancement of the reliable bp-control system concept of Schmersal Böhnke + Partner. The adaptability to meet the most demanding customer requirements is supported by known add-on modules.

### **CIO-01A – CANopen - Input/Output Module**

With the CIO module the bp408 control system can be extended with 32 inputs, outputs or calls.

### **CLK-03A – CANopen - Power PCB - Car/Cabin**

With 16 inputs, 8 outputs, 8 calls and 7 relays, the CLK lift car control PCB offers a wide range of options for the lift car installation.

### **CLE-01A – CANopen - Power PCBs - Extension**

With the CLE extension PCB the CLK lift car control PCB can be extended via CANopen with 32 inputs, outputs or calls.

### **CSI-01C – CANopen - Serial - Interface**

The CSI module is a CANopen bus node used to connect two bus lines.

### **CAP-02A – CANopen - External Panel - PCB**

The CAP is used to control external panels via the CANopen bus (CiA 417).

### **CWI – CANopen - Wireless - Interface**

The CWI module enables wireless connection for operating the controller with a PC or a mobile phone (by using WinMOS®300 PC software or WinMOS®300 app.).

# Connections and Interfaces



- 1** USB-B port:  
Connection of a PC for diagnosis and/or software updates
- 2** USB-A port:  
Can be used for analogue USB modems, USB sticks, Böhne + Partner Bluetooth or Böhne + Partner WiFi adapter
- 3** LAN port:  
Ethernet 10/100 Mbit for monitoring systems
- 4** Programmable relay
- 5** 24 V, PTC resistor inputs
- 6** Programmable inputs, special inputs
- 7** Display
- 8** Operating buttons
- 9** CAN 1 + CAN2:  
Interfaces for communication with all components (CANopen Lift)
- 10** DCP port:  
Communication to inverter via DCP protocol
- 11** RS232:  
Interface for monitoring
- 12** 8 Inputs
- 13** 8 Outputs
- 14** 16 inputs/outputs
- 15** Preselection relays
- 16** Safety circuit query
- 17** Door bypass

# Technical data

Technical data	bp408
<b>General data</b>	
Standards:	EN 81 -1/-2; EN 81 -20/-50
Application:	Persons and freight lifts
Stops:	up to 127
Operating mode:	<ul style="list-style-type: none"> <li>- Cable lifts controlled/uncontrolled</li> <li>- Hydraulic lifts controlled/uncontrolled</li> </ul>
Control type:	<ul style="list-style-type: none"> <li>- Self-driver</li> <li>- One-button collective control (1 KS) independent of/dependent on direction</li> <li>- Two -button collective control</li> <li>- Self-driver with call memory</li> <li>- Integrated group controller up to 8 lifts</li> </ul>
Copying mechanism:	- Digital with absolute encoder system
<b>Electrical data</b>	
Supply voltage:	24 VDC
Ports:	<ul style="list-style-type: none"> <li>- 8 inputs, 24 VDC, input current 10 mA</li> <li>- 8 outputs , 24 VDC, overcurrent protected 280 mA</li> <li>- 16 inputs/outputs (calls), 24 VDC, overcurrent and short-circuit protected</li> <li>- PTC resistor input</li> <li>- Safety circuit inputs, 230 VAC, 110 VAC or 48 VAC</li> <li>- Safety switching inputs, 230 VAC, 110 VAC or 48 VAC</li> <li>- 3 preselection relays (NO contacts)</li> <li>- 4 freely programmable relays (changeover contacts)</li> </ul>
Interfaces:	<ul style="list-style-type: none"> <li>- CAN 1 (booth), CANopen Lift (CiA 417)</li> <li>- CAN 2 (duct/group) CANopen Lift (CiA 417)</li> <li>- USB Host</li> <li>- USB Device</li> <li>- Ethernet 10/100 MBit, full-duplex (network connection)</li> <li>- RS-485 (DCP)</li> <li>- RS-232 (gateways, e.g. for Profibus, Modbus, etc.)</li> </ul>
Display and operating elements:	<p>Graphic display with navigation buttons:</p> <ul style="list-style-type: none"> <li>- Second menu level and separate call menu</li> <li>- Permanent display of door status (max. 3), safety circuit, moving signal, lift status and direction (menu-dependent)</li> </ul>
<b>Software</b>	
Memory:	Fault, maintenance and message stack with max. 128 entries
Language settings:	German, English, French, Italian, Swedish, Dutch
Groups:	Highly developed group algorithm adaptable to customer requirements without higher-level group computer
Functions:	<p>Extensive standard and special functions such as:</p> <ul style="list-style-type: none"> <li>- Group control/self-driver</li> <li>- Priority and guest calls</li> <li>- Functions for freedom from barriers</li> <li>- Fire brigade</li> <li>- In case of fire</li> <li>- Maintenance assistant</li> </ul> <p>etc.</p>
Control menu remote-controllable:	via WLAN/Ethernet with mobile device or PC with the WinMOS®300 software as monitoring software
Backup/update:	Backup and update via USB stick
<b>Dimensions</b>	
Dimensions (L x W x H):	315 x 100 x 80 mm



## 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 2,000 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 systems



### Components for lift construction



### Control system assembly



The details and data referred to have been carefully checked.  
Technical amendments and errors possible.

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