System solutions for every lift.
Everywhere.

SMARTline
MODULAR SYSTEM SOLUTION FOR LIFT MODERNISATION



SCHMERSAL
BÖHNKE+PARTNER

SMARTline
MODULAR SYSTEM SOLUTION
FOR LIFT MODERNISATION



SMART sets the standard.

line is the path.

SMARTline stands for clarity, guidance and a structured, modular approach. The modular design connects components in a continuous, efficient process.

THE SYSTEM CRITERIA – SMART

S – SAFE	Consistently meets all applicable standards and safety requirements.
M – MODULAR	Modular design for needs-based implementation.
A – ACCESSIBLE	Easy to plan and implement.
R – RELIABLE	Durable components for reliable operation.
T – TIMELY	Defined delivery times for reliable project planning.

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SMARTline
MODULAR SYSTEM SOLUTION FOR LIFT MODERNISATION

SMARTbasic

READY ON STOCK!

- Residential traction lift
- With machine room
- Up to 8 stops
- One cabin door
- Synchronous/asynchronous drive up to 32 A



SMARTflex

READY ON STOCK!

- Commercial traction lift
- With machine room
- Up to 16 stops
- Two cabin doors
- Synchronous/asynchronous drive up to 63 A



SMARTbasicHYD

READY ON STOCK!

- Hydraulic lift for residential buildings
- With machine room
- Up to 8 stops
- One cabin door
- Hydraulic power units up to 34 A



SMARTflexHYD

READY ON STOCK!

- Hydraulic lifts for public and commercial buildings
- With machine room
- Up to 16 stops
- Two cabin doors
- Hydraulic power units up to 61 A



SMARTspace

UPCOMING PRODUCT LINE

- Machine room less

SMARTline
CONCEPT

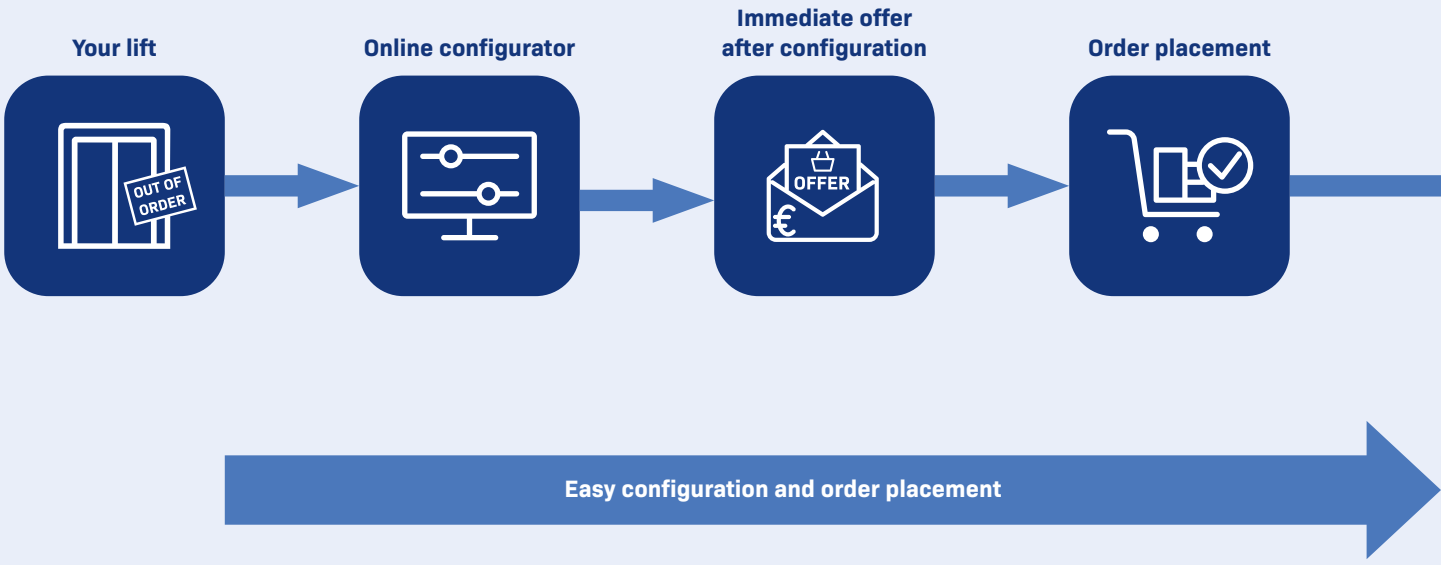
MARKET CHALLENGES AT A GLANCE

- **Downtime and disruptions** – Lifts out of service for extended periods.
- **Supply chain delays** – Long lead times and part shortages.
- **System complexity** – Many components, high coordination effort.
- **Compliance pressure** – Meeting current safety and accessibility standards.
- **Lack of skilled labour** – Shortage of experienced technicians.

OUR SOLUTION

A consistently modular concept that simplifies planning and implementation from a technical perspective:

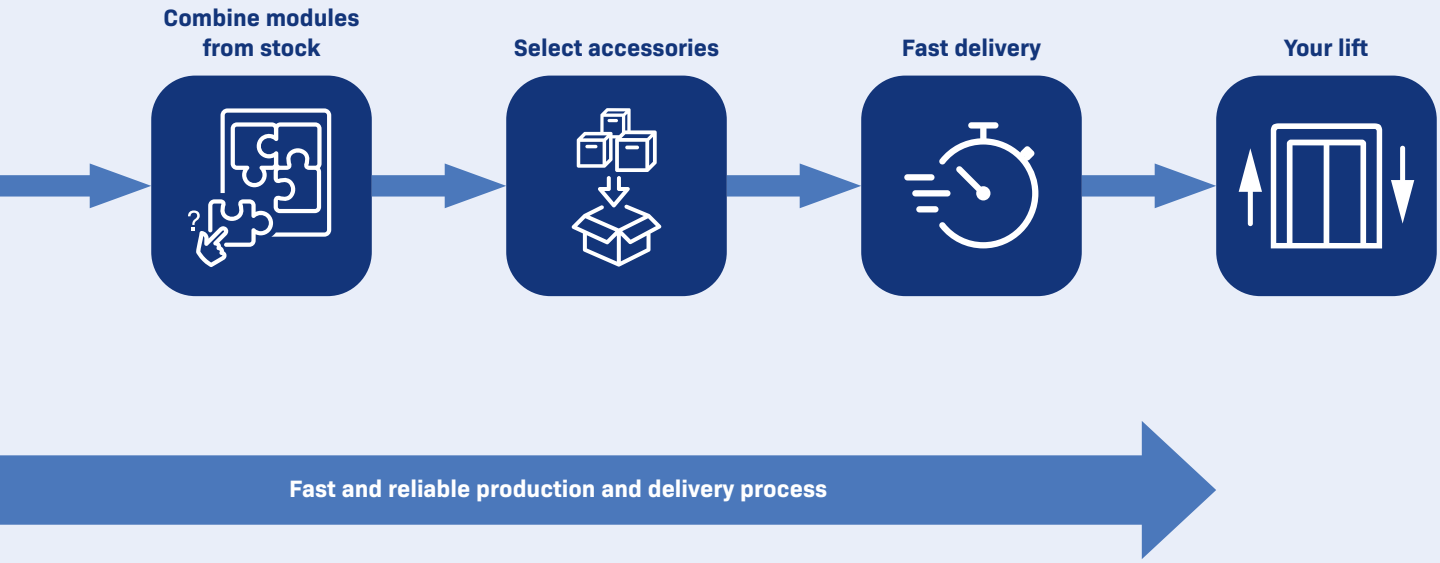
- Uniform structure
- Clearly defined processes
- Rapid availability
- Low project risk
- Less planning effort



SMARTline
CONCEPT

KEY VALUES

1. **Fast delivery**
   Fully coordinated system configurations enable short delivery times.
2. **Simple configurator**
   Easy selection and immediate price information.
3. **Complete package**
   Additional components can be ordered directly with the control system.
4. **Quality and compliance**
   All solutions comply with applicable safety and quality standards.
5. **Technical project support**
   Support from our experts and services throughout the entire modernisation process.



SMARTline
CONCEPT

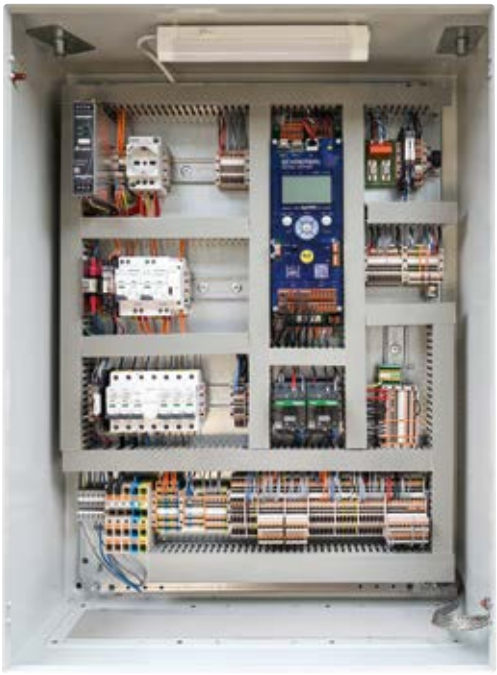
SMARTline FEATURES
APPLICABLE ACROSS ALL PRODUCT LINES

The SMARTline concept stands for a unified, modular approach to lift control systems. Whether you're working with SMARTbasic, SMARTflex, or future variants such as SMARTbasicHYD, SMARTflexHYD, or SMARTspace, the following features and benefits apply across the entire portfolio.

At the heart of the SMARTline is a streamlined configuration process that simplifies planning and adapts effortlessly to different lift types and project requirements. Combined with flexible integration and efficient modernisation capabilities, SMARTline ensures consistent performance and reduced complexity – for both traction and hydraulic lift systems.

FEATURES

- **User-friendly, browser-based configurator**
  Intuitive operation with clear, step-by-step instructions
- **Instant price transparency**
  Real-time BOM and pricing for quick decision-making
- **Preconfigured core setup** for quick delivery
- **Pre-engineered flexibility**
  Additional functions can be easily added with ready-made modules.
- **Self-installable add-ons**
  Mount additional modules on the controller without external support
- **Adaptable design**
  Easily adjustable for different doors, brakes, panels, etc.
- **Plug & play installation**
  Quick and easy installation thanks to pre-configured interfaces



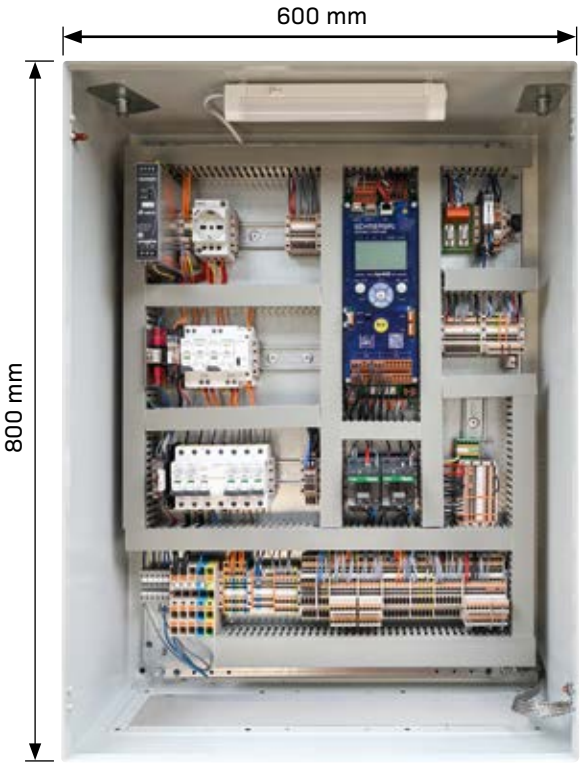
MAIN BENEFITS

- **Short delivery times** thanks to **standardised** system configurations.
- **Less planning effort** thanks to clearly defined and practical options.
- **Complete solution from a single source** – reduces the technical coordination effort
- **Future-proof** for modernisation requirements
- **Reliable quality** with comprehensive documentation for planning, installation and operation.
- **Option for warehousing** – provision of replacement systems for ‘out of order’ situations.



SMARTbasic
WHEN SPEED MATTERS

CORE DESIGN



General information

- Residential and simple commercial lifts
- Single lift
- Cabinet dimensions: 600 × 800 mm
- Cabinet design up to 32 A, 14 kW
- Input terminals: 16 mm²
- Lift speed up to 1.6 m/s
- Max. 8 stops
- One cabin door with 230 VAC
- One-button or two-button collective control

Control system

- Proven control module bp408
- RCDs for the control system, cabin and safety circuit
- FI/LS circuit breakers for shaft and cabin lighting
- Impulse relay for shaft lighting incl. pushbuttons (cabin, pit, cabinet)
- Mains filter for control system
- CANopen interface for frequency inverter
- Cold conductor monitoring for motor and brake resistor
- Contactor monitoring for brake contactors
- Recall control unit (plug-in) incl. holding magnet, alignment indicator, and 5 m cable
- Motor fan (230 VAC)
- Control cabinet lighting with switch
- Control power supply 5 A
- Safety circuit for doors that open early and readjustment
- Connection option for load measurement (CANopen and conventional)
- Door locking magnet 230 VAC
- Static fire scenario
- 230 VAC socket



Control cabinet terminal box

- Prepared for emergency call system (24 VDC cabin + GSM module 230 VAC)
- Inspection control unit on cabin incl. 3 m cable
- Load measurement interface
- Light voltage monitoring
- Cabin fan (230 VAC) and cabin lighting (230 VAC)
- Light barrier (24 VDC/230 VAC)
- 230 VAC socket

External

- UPS (uninterruptible power supply) 800 VA for emergency lighting + bp408
- Absolute positioning system
- 36-pin suspension cable
- Alarm button under the cabin with 5 m cable



CONTROL CABINET PLUGGABLE OPTIONS

1. External isolating transformer in a 400/230 VAC enclosure (without neutral conductor)
2. Various brake controls (180 ... 207 VDC / 42 VDC / 60 VDC / 80 VDC / 110 VDC / 230 VAC)
3. Bypass-function according to EN 81-20
4. Selection of socket type (country-specific) for control cabinet/cabin terminal box

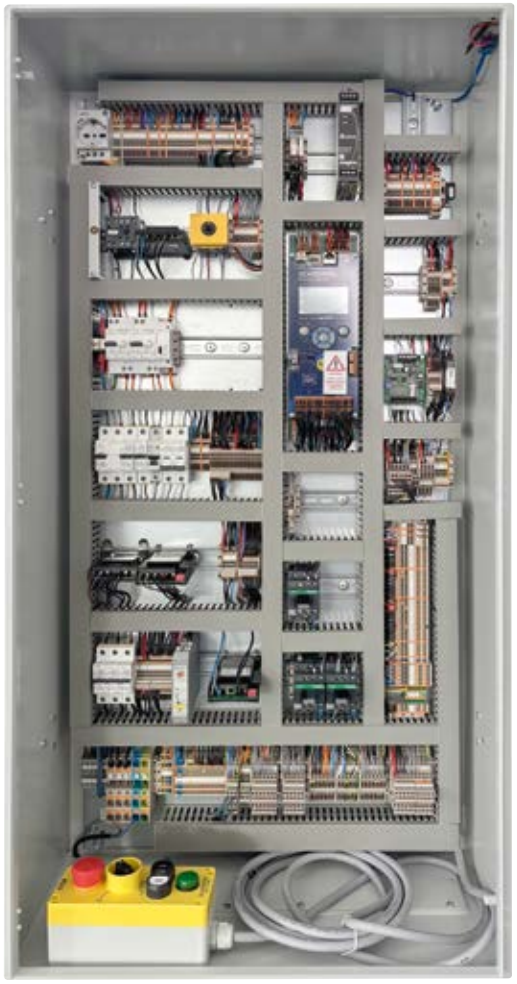
EXTERNAL OPTIONS

5. External sub-distribution with main switch
6. Frequency converter
7. Inspection control in accordance with DIN EN 81-20/-50
8. Cabin control panel (CANopen or conventional, up to 8 calls) from Schmersal Böhnke + Partner
9. External call panels (CANopen or conventional up to 8 calls) from Böhnke + Partner
10. Cabin door contact
11. Cabin door control 230 VAC (CANopen or conventional, e.g. AT40)
12. Installation material for cabin, shaft and machine room
13. Shaft mounting kit with pit control unit, door cables and connection options for safety circuit contacts
14. Shaft cable harness CANopen
15. CANopen modules for connecting external call panels provided by the customer
16. Acoustic and visual signalling for bypass function in accordance with EN 81-20/-50
17. EN 81-20 emergency lighting for cabin with 2 m cable
18. LED shaft lighting
19. External main switch in housing
20. Motor incremental encoder 1024 I/R + 10 m cable + flexible coupling
21. Lift monitoring EYELEVATE

SMARTflex
FLEXIBILITY MEETS PERFORMANCE

SMARTflex expands the possibilities of the SMARTline. Designed for commercial buildings and mid-range hotels, this solution offers more options, higher travel heights, and flexible configurations – without compromising the benefits of standardisation. Fast availability, tailored to your needs.

CORE DESIGN



General information

- Lift for public and commercial use
- Single lift and group with two lifts
- Cabinet dimensions: 600 × 1200 mm
- Cabinet design up to 62 A, 30 kW (motor current limitation)
- Input terminals: 16 mm²
- Lift speed up to 1.6 m/s
- Max. 16 stops
- Two cabin doors
- One-button or two-button collective control

Control system

- Proven control module bp408
- RCDs for the control system, cabin and safety circuit
- FI/LS circuit breakers for shaft and cabin lighting
- Impulse relay for shaft lighting incl. pushbuttons (cabin, pit, cabinet)
- Mains filter for control system
- CANopen interface for frequency inverter
- Cold conductor monitoring for motor and brake resistor
- Contactor monitoring for brake contactors
- Recall control unit (plug-in) incl. holding magnet, alignment indicator, and 5 m cable
- Motor fan (230 VAC)
- Control cabinet lighting with switch
- Control power supply 5 A
- Safety circuit for door-open travel, re-levelling and UCM
- Connection option for load measurement (CANopen and conventional)
- Door locking magnet 230 VAC
- Static fire scenario
- 230 VAC socket

Control cabinet terminal box

- Prepared for emergency call system (24 VDC cabin + GSM module 230 VAC)
- Inspection control unit on cabin incl. 3 m cable
- Load measurement interface
- Light voltage monitoring
- Cabin fan (230 VAC) and cabin lighting (230 VAC)
- Light barriers for doors A/B (24 VDC/230 VAC)
- 230 VAC socket

External

- UPS (uninterruptible power supply) 800/1600 VA for emergency lighting + bp408 + electrical emergency release function
- Absolute positioning system
- 36-pin suspension cable
- Alarm button under the cabin with 5 m cable



CONTROL CABINET PLUGGABLE OPTIONS

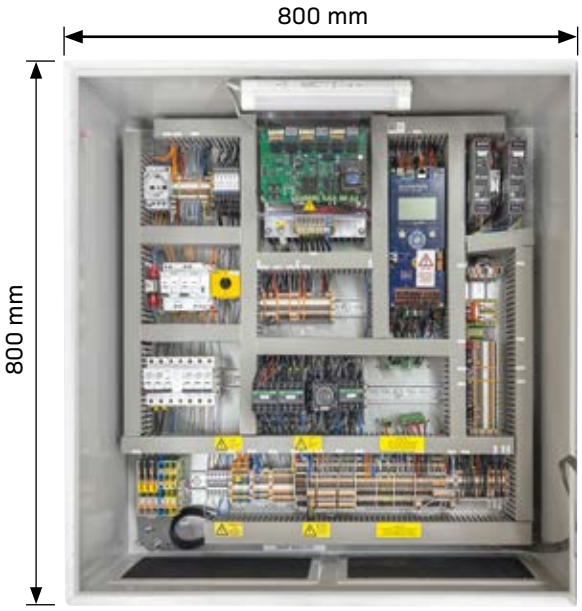
1. External isolating transformer in a housing, 400/230 VAC, for networks without a neutral conductor.
2. Various brake controls (180 ... 207 VDC / 42 VDC / 60 VDC / 80 VDC / 110 VDC / 230 VAC)
3. Components for Unintended Cabin Movement (UCM) control
4. Bypass-function according to EN 81-20
5. Selection of socket type (country-specific) for control cabinet/cabin terminal box
6. Motor fan 400 VAC
7. Door motor control 400 VAC (door side A only)
8. Group of two lifts with two CAN-bus-lines
9. 230 VAC door control unit for doors A and B
10. Locking magnet 42, 60, 80, 110, 180 ... 207 VDC, 230 VAC
11. Control of additional brake for UCM
12. Control of electric emergency release rescue function for synchronous motor
13. Control of electrical brake test
14. Dynamic fire scenario with up to eight fire detectors and fire alarm control panel

EXTERNAL OPTIONS

15. External sub-distribution
16. Frequency converter
17. Inspection control for shaft pit in accordance with DIN EN 81-20/-50
18. Cabin control panel (CANopen or conventional, up to 8 calls) from Schmersal Böhnke + Partner
19. External call panels (CANopen or conventional) from Schmersal Böhnke + Partner
20. Acoustic and visual signalling for door bypass function
21. Cabin door control 230 VAC
22. Installation material for cabin, shaft and machine room
23. Shaft mounting kit with pit control unit, door cables and connection options for safety circuit contacts
24. Shaft cable harness CANopen
25. CANopen modules for connecting external call panels provided by the customer
26. EN 81-20 emergency lighting for cabin with 2 m cable
27. LED shaft lighting
28. External main switch in housing
29. Motor incremental encoder 1024 I/R + 10 m cable + flexible coupling
30. Lift monitoring EYELEVATE

SMARTbasicHYD
WHEN SPEED MATTERS

CORE DESIGN



General information

- Residential and simple commercial lifts
- Single lift
- Cabinet dimensions: 800 × 800 mm
- Cabinet design up to 34 A, 16 kW
- Input terminals: 10 mm²
- Lift speed up to 1.6 m/s
- Max. 8 stops
- One cabin door with 230 VAC
- One-button or two-button collective control

Control system

- Proven control module bp408
- RCDs for the control system, cabin and safety circuit
- FI/LS circuit breakers for shaft and cabin lighting
- Impulse relay for shaft lighting incl. pushbuttons (cabin, pit, cabinet)
- Mains filter for control system
- Soft starter in the control cabinet
- PTC thermistor monitoring for engine and oil temperature
- Contactor monitoring for travelling contactors
- Recall control unit (plug-in) incl. holding magnet, alignment indicator, and 3 m cable
- Oil cooler/oil heater (230 VAC)
- Control cabinet lighting with switch
- Control power supply 5 A
- Safety circuit for doors that open early and readjustment
- Connection option for load measurement (CANopen and conventional)
- Door locking magnet 230 VAC
- Static fire scenario
- 230 VAC socket



Control cabinet terminal box

- Prepared for emergency call system (24 VDC cabin + GSM module 230 VAC)
- Inspection control unit on cabin incl. 3 m cable
- Load measurement interface
- Light voltage monitoring
- Cabin fan (230 VAC) and cabin lighting (230 VAC)
- Light barrier (24 VDC/230 VAC)
- 230 VAC socket

External

- UPS (uninterruptible power supply) 800 VA for emergency lighting + bp408
- Absolute positioning system
- 36-pin suspension cable
- Alarm button under the cabin with 5 m cable



CONTROL CABINET PLUGGABLE OPTIONS

1. External isolation transformer in housing 400/230 1000 VA and circuit breaker cabin door (without neutral conductor)
2. Control of various unregulated hydraulic valve blocks: 2 – 4 valves (180 ... 207 42 VDC / 60 VDC / 80 VDC / 110 VDC / 230 VAC)
3. Control of various hydraulic control panels: BUCHER iValve with icon, Bucher LRV, ALGI AZRS 1.0 and 2.0. Depending on the card, UCM is included.
4. Components for Unintended Cabin Movement (UCM) control
5. Bypass-function according to EN 81-20
6. Selection of socket type (country-specific) for control cabinet/cabin terminal box

EXTERNAL OPTIONS

7. External sub-distribution with main switch
8. Inspection control shaft pit
9. Cabin control panel (CANopen or conventional, up to 8 calls) from Schmersal Böhnke + Partner
10. External call panels (CANopen or conventional up to 8 calls) from Schmersal Böhnke + Partner
11. Cabin door contact
12. Cabin door control 230 VAC (CANopen or conventional, e.g. AT40)
13. Installation material for cabin, shaft and machine room
14. Shaft mounting kit with pit control unit, door cables and connection options for safety circuit contacts
15. Shaft cable harness CANopen
16. CANopen modules for connecting external call panels provided by the customer
17. Acoustic and visual signalling for bypass function in accordance with EN 81-20/-50
18. EN 81-20 emergency lighting for cabin with 2 m cable
19. LED shaft lighting
20. External main switch in housing
21. Inspection control in accordance with DIN EN 81-20/-50
22. Lift monitoring EYELEVATE

SMARTflexHYD
FLEXIBILITY MEETS PERFORMANCE

SMARTflexHYD expands the capabilities of the SMARTline. Designed for commercial buildings and mid-range hotels, this solution offers more options, higher travel heights, and flexible configurations – without compromising the benefits of standardisation. Fast availability, tailored to your needs.

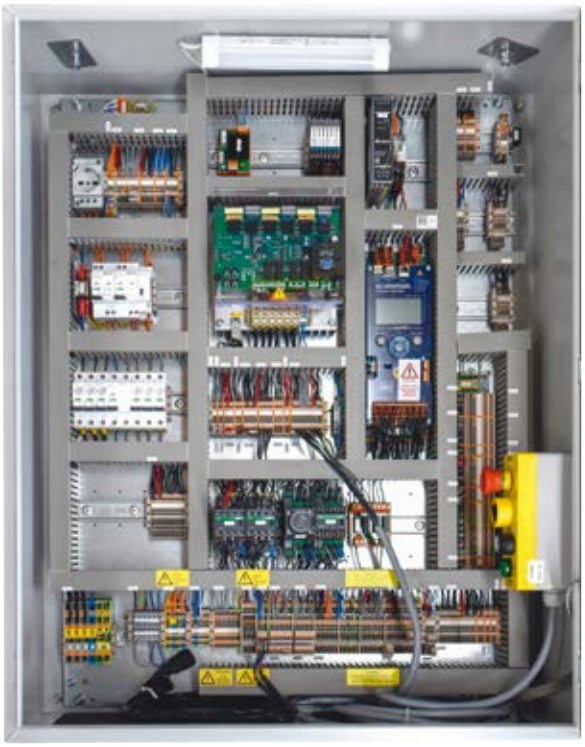
CORE DESIGN

General information

- Lift for public and commercial use
- Single lift and group with two lifts
- Cabinet dimensions: 800 × 1000 mm
- Control cabinet version up to 61 A, 30 kW
- Input terminals: 16 mm²
- Lift speed up to 1.6 m/s
- Max. 16 stops
- Two cabin doors
- One-button or two-button collective control

Control system

- Proven control module bp408
- RCDs for the control system, cabin and safety circuit
- FI/LS circuit breakers for shaft and cabin lighting
- Impulse relay for shaft lighting incl. pushbuttons (cabin, pit, cabinet)
- Mains filter for control system
- CANopen interface for soft starters in the control cabinet
- PTC thermistor monitoring for engine and oil temperature
- Contactor monitoring for travelling contactors
- Recall control unit (plug-in) incl. holding magnet, alignment indicator, and 3 m cable
- Oil cooler/oil heater (230 VAC)
- Control cabinet lighting with switch
- Control power supply 5 A
- Safety circuit for door-open travel, re-levelling and UCM
- Connection option for load measurement (CANopen and conventional)
- Door locking magnet 230 VAC
- Static fire scenario
- 230 VAC socket



Control cabinet terminal box

- Prepared for emergency call system (24 VDC cabin + GSM module 230 VAC)
- Inspection control unit on cabin incl. 3 m cable
- Load measurement interface
- Light voltage monitoring
- Cabin fan (230 VAC) and cabin lighting (230 VAC)
- Light barrier for door A (24 VDC/230 VAC)
- 230 VAC socket

External

- UPS (uninterruptible power supply) 800/1600 VA for emergency lighting + bp408 + electrical emergency release function
- Absolute positioning system
- 36-pin suspension cable
- Alarm button under the cabin with 5 m cable



CONTROL CABINET PLUGGABLE OPTIONS

1. External isolating transformer in a housing, 400/230 VAC, for networks without a neutral conductor.
2. Control of various unregulated hydraulic valve blocks: 2 – 4 valves (180 ... 207 VDC / 42 VDC / 60 VDC / 80 VDC / 110 VDC / 230 VAC)
3. Control of various hydraulic control panels: BUCHER iValve with icon, Bucher LRV, ALGI AZRS 1.0 and 2.0. Depending on the card, UCM is included.
4. Components for Unintended Cabin Movement (UCM) control
5. Bypass-function according to EN 81-20
6. Selection of socket type (country-specific) for control cabinet/cabin terminal box
7. Oil cooler/oil heater 400 VAC
8. Door motor control 400 VAC (door side A only)
9. Group of two lifts with two CAN-bus-lines
10. 230 VAC door control unit for doors A and B
11. Locking magnet 42, 60, 80, 110, 180 ... 207 VDC, 230 VAC
12. Dynamic fire scenario with up to eight fire detectors and fire alarm control panel

EXTERNAL OPTIONS

13. External sub-distribution
14. Inspection control shaft pit
15. Cabin control panel (CANopen or conventional, up to 16 calls) from Schmersal Böhnke + Partner
16. External call panels (CANopen or conventional) from Schmersal Böhnke + Partner
17. Acoustic and visual signalling for door bypass function
18. Cabin door control 230 VAC
19. Installation material for cabin, shaft and machine room
20. Shaft mounting kit with pit control unit, door cables and connection options for safety circuit contacts
21. Shaft cable harness CANopen
22. CANopen modules for connecting external call panels provided by the customer
23. EN 81-20 emergency lighting for cabin with 2 m cable
24. LED shaft lighting
25. External main switch in housing
26. Inspection control for shaft pit in accordance with DIN EN 81-20/-50
27. Lift monitoring EYELEVATE

SMARTline
CONTROL CABINET – PLUGGABLE OPTIONS

MODULAR EXPANSION. FAST DELIVERY. PERFECTLY TAILORED TO YOUR PROJECT.

SMARTline combines short lead times with an exceptionally high degree of project customisation. The basis for this is a consistent modularisation concept in which additional functions are available as pre-assembled, pluggable control cabinet options. Each of these options is fully pre-assembled, tested, and stored in our warehouse ready for installation – including all necessary wiring.

Due to this modular design, the option modules can be integrated into any SMARTline system as plug-and-play components without any additional wiring effort. Fast, flexible, and error-free. This results in maximum project flexibility combined with predictable, short throughput times – and thus maximum variety, minimum delivery times, and a reproducibly high quality standard for every modernisation situation.

EXAMPLES OF SMARTline OPTIONS



Bypass function according to DIN EN 81-20

For systems in accordance with DIN EN 81-20, a possibility of bypassing existing car door, landing door, or bolt contacts must be provided. The switch required for this bypass function is fitted within the control unit, complete with audible and visual indicators, for installation beneath the cabin.

SMARTline thus offers the possibility of implementing conversion concepts in accordance with DIN EN 81-1/2.



Old service brake? No problem!

Regardless of whether the existing asynchronous drive continues to be used or the machine is modernised, we supply the appropriate brake control in every case.

We generate the classic brake voltage of 180–207 VDC via a bridge rectifier that is integrated into the control cabinet. Plug-and-play rectifier plug options are also available for special voltages or brakes with overexcitation function.

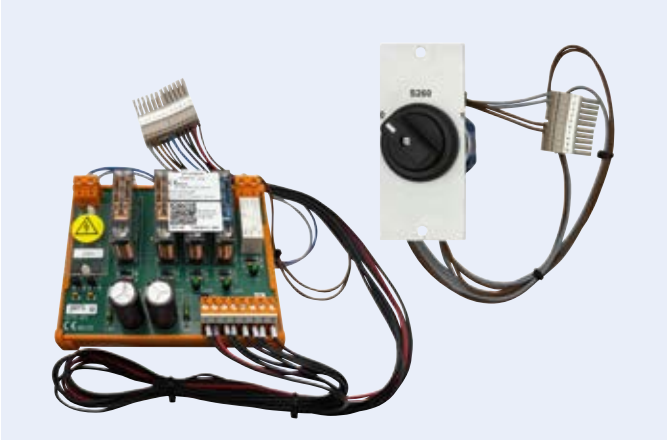


Sub-distribution panel

Compact, functional, safe and expandable: with the SMARTline sub-distribution boards, we supply a fully equipped unit featuring a lockable main switch as well as main and lighting fuses.

The enclosed cable set for connection to the control system is customised for each project and enables quick, precise installation.

SMARTline
CONTROL CABINET – PLUGGABLE OPTIONS



Only one plug-in option for a complete UCM solution

The SMARTline comes factory-equipped with the option of implementing UCM either via a certified holding brake for rope lifts or via a UCM valve for hydraulic lifts.

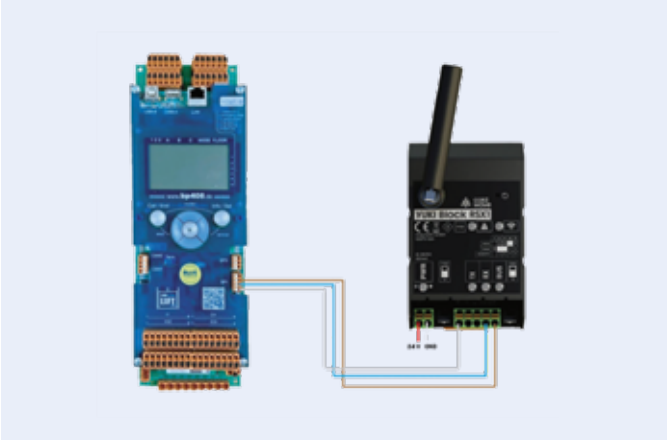
If, on the other hand, the UCM function is implemented via a descent prevention device on the speed limiter, we install our UCM module with integrated emergency release switch as a plug-in option for detection.



400 VAC cabin door motor

SMARTline offers the option of operating 230 VAC door control units with conventional or CANopen control ex works. But what if the existing three-phase door motor is to be retained?

With the 400 VAC door motor control option, we can also open and close cabin doors with older three-phase technology. To do this, we integrate a modern, electronically controlled, low-noise reversing contactor with built-in motor protection directly into the control system. This means that existing cabin door drives can continue to be used without any problems – as can existing 400 VAC drive motor fans.



EYELEVATEline lift monitoring option –
make your SMARTline control system even smarter!

For an even smarter lift and maximum connectivity, the SMARTline control system can be expanded with the EYELEVATE line lift monitoring family. This gives you a live overview of your entire lift portfolio in the cloud, anytime, anywhere.

From remote bp-display mirroring to full access to the lift processor, all functions are available to you. As soon as an irregularity occurs, you are notified in real time and can analyse and actively manage the fault clearance remotely.

Scan the **QR code** or visit **products.schmersal.com** to access the online catalogue and find out more about our wide range of lift components.



Find out more:

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 SYSTEMS



COMPONENTS FOR LIFT CONSTRUCTION



CONTROL SYSTEM ASSEMBLY



SCHMERSAL
BÖHNKE+PARTNER

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

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