MPK411

411

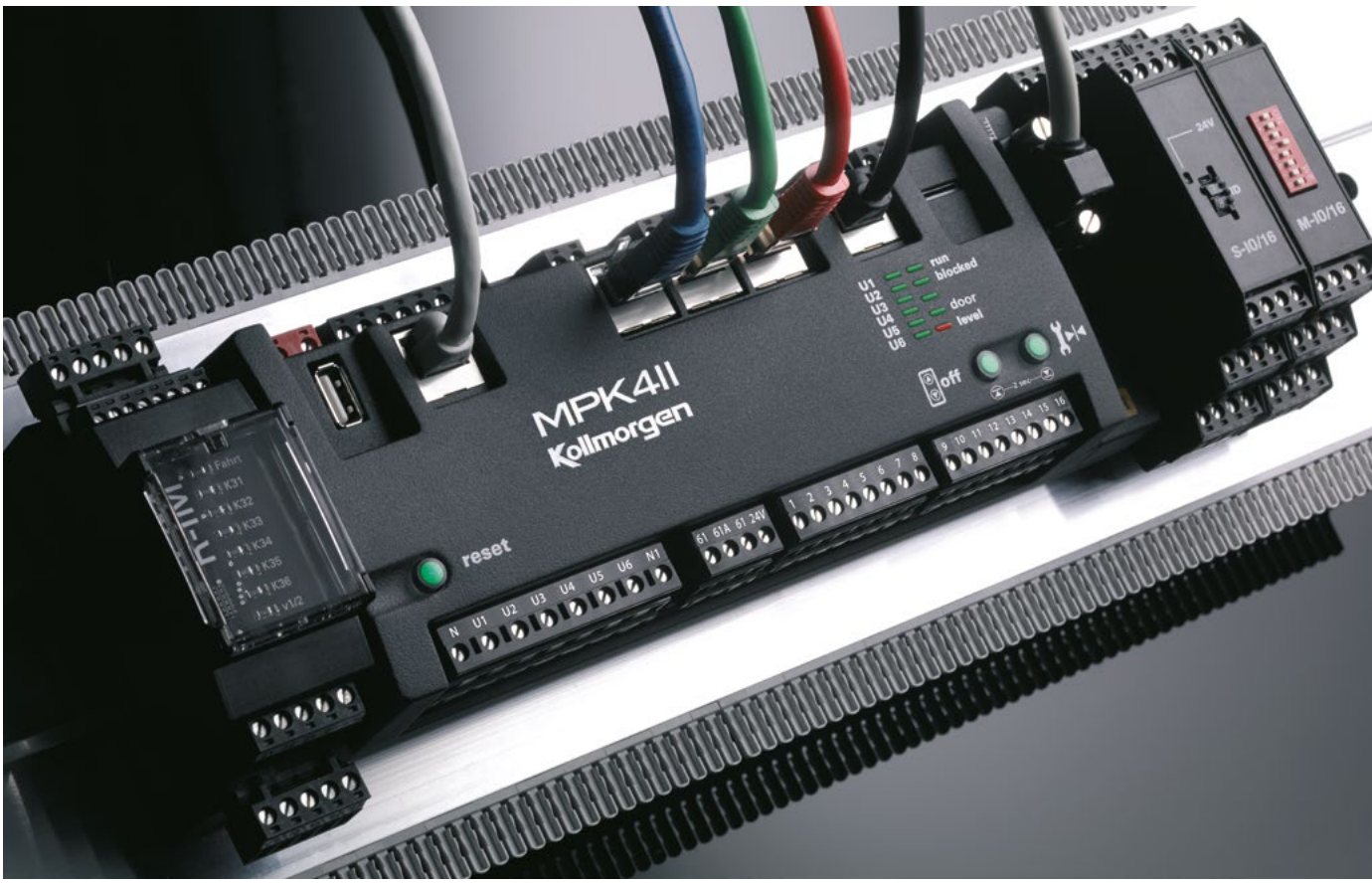
TECHNOLOGY
SIMPLIFIED

Kollmorgen

THE MULTITALENT

POWERFUL AND SIMPLE

The MPK411 is characterized by its compact design and pioneering operating concept. In order to cover the widest possible range of applications, the control processor is equipped with a large number of interfaces. Groups with up to 8 lifts, 100 stops or travel speeds of up to 8 m/s can be realised effortlessly.

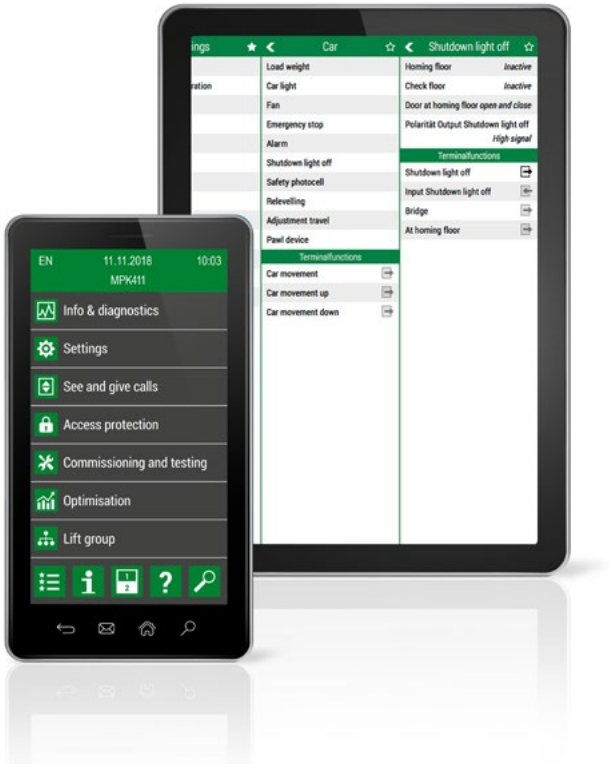


THE USER INTERFACE

Efficient, convenient and intuitive. Even without extensive previous knowledge, the user quickly gets used to the operating concept. The lift software is accessed with the web browser on a smartphone, tablet, laptop or CHT (Control Hand Terminal).

The connection can be made via data line or W-LAN. Internet connection is not required.

The clearly structured user interface with informative texts and symbols enables the user to carry out all activities independently after a brief introduction. Additional convenience functions such as the online help or the option to set bookmarks facilitate working with the lift software.



CHT
SMARTPHONE
TABLET
LAPTOP

TECHNICAL DATA

MPK411

Application	new buildings I modernisation
Controller position	machine room I landing I lift shaft I frame
User interface	MPK control software via smartphone, tablet, laptop or CHT
Lift type	regulated and unregulated cable lifts I hydraulic lifts
Lift speed	maximum 8 m/s.
Stops	up to 100
Group control	up to 8 lifts
Processor	800 MHz Cortex A8 processor with 1600 MIPS
Door control	up to 3 doors CANopen CiA-417
Shaft encoding	digital shaft copying (DSK I APS)
Emergency operation	via UPS, in case of power failure
Standards	EN 81-20 / 50
Emergency rescue	optional lift attendant emergency rescue module
Dimensions	230 x 87.5 x 45.9 mm (W x H x D)

FUNCTIONS

MPK411

Down collective control
Full collective control
Event log with clear text display and error description
Display of maintenance intervals
Trip counter and run timer
Languages German I English I Dutch I Polish
16 freely assignable inputs and outputs for special functions I all outputs monitored
Compatible with VisualLift remote monitoring software
Adaptive, intelligent group algorithm
Processor support for service and maintenance work
Intelligent service interval display
Traffic recording and automatic pattern recognition
Dynamic and configurable parking levels/zones
MPK IQ self-optimising functions
MPK Green energy saving mode
Visitor travel
Integrated elevator attendant service, emergency call detection
Attachable device control
Serial drive protocol via DCP 3 I direct-to-floor approach via DCP 4 I CANopen

INTERFACES

MPK411

2 x	CANopen CiA-417	for shaft connection, lift car electronics, expansion modules and external components I Software terminable
1 x	CAN interface	for fast expansion modules
1 x	PoE	for CHT I Tablet I Laptop
3 x	TCP IP	for group communication, VisualLift, CHT and car connection
1 x	microSD card	for long-term data collection and program update
1 x	USB 2.0	for external storage media
16 x	Input/Output	for special functions - freely configurable
2 x	Maintenance switch	for "maintenance doors closed" and "landing calls off" travel to terminal floors I TÜV certification
1 x	Reset switch	for restarting the controller
2 x	Plug connections	for PTC monitoring device and connection for external temperature sensor
2 x	Plug connections	for safety circuit monitoring 230V AC I 2 inputs for contactor and synchronous monitoring 230V AC
1 x	Plug connection	for connection of the return control
1 x	Plug connection	for Interface for absolute and incremental encoders
•	LED displays	for current status information

COMPONENTS EXCERPT

CHT – CONTROL HAND TERMINAL
The CHT with its capacitive touchscreen (4.3 inches) provides access to all system parameters and functionalities of the MPK411 control software. The connection is made via plug and play using the PoE interface. The terminal can either remain in the switch cabinet or used for several control systems.

R-IM – RELAY INTERFACE MODULE
The module is connected to the processor unit of the MPK411 with a 10-pin IDC connector. Four relays for motor control and two freely configurable relays are available on the interface module. The current switching state is indicated via LEDs.

S-IO – CAN EXPANSION MODULE
For expansion of digital inputs and outputs of the MPK411 central unit via the CAN interface. Up to eight S-IO/16 modules can be connected to the central unit of the MPK411 via the CAN bus.

M-IO – CANOPEN EXPANSION MODULE
The module is used to expand the digital inputs and outputs of the MPK411 central unit via the CANopen interface. Up to 64 M-IO/16 modules can be connected to the central unit of the MPK411 via the CANopen bus.

C-IM8 | C-BM | C-EM – CAR INTERFACE MODULE
The modules connect the lift car signals with the MPK411 processor unit via the CANopen interface. In contrast to the C-EM, C-IM8 has 6 freely operable relays and the C-BM has 2 freely operable relays for the control of door control units, light shut-off, cabin fans or other components. As well as a PoE interface for connecting the CHT.

F-IM4 AND F-IM8 – FLOOR LEVEL INTERFACE MODULES
The modules are used to connect the floor signals and displays to the processor unit of the MPK411 via CANopen interface. The F-IM4 has 4 I/Os, the F-IM8 has 8 I/Os.

F-DM – FLOOR DISPLAY MODULE
The module F-DM is used to connect parallel-controlled floor displays in the CANopen bus.

DM-24 – DOT MATRIX DISPLAY
The DM-24 can be used as a floor or cabin display. The control takes place via CANopen. The display has 24x24 (576) LEDs on a surface of 60x60mm. Special texts can be configured as running text and edited at any time via the menu of the MPK411.

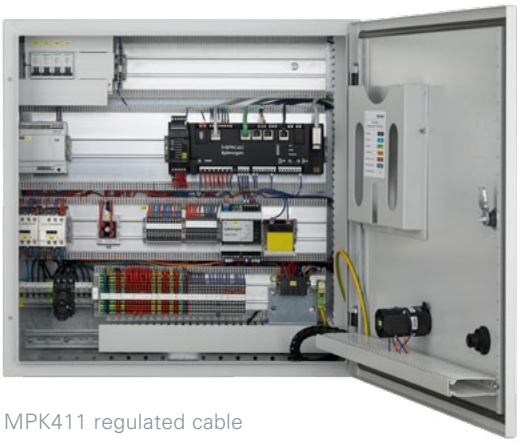
TFT– DISPLAY
The fully graphics-capable TFT display is characterized by its excellent image and graphics reproduction. It has a screen size of 5.6 inches with a maximum resolution of 480 x 640 pixels. The installation can be done both horizontally and vertically.

S-AS – SPEECH ANNOUNCEMENT SYSTEM
The module is used for the acoustic output of outgoing messages. The control is carried out optionally via CANopen or KSB. Self-generated voice announcements can be transferred to the system via micro SD card. The volume is adjustable.

E-OP – EMERGENCY OPERATING PANEL
The module is used for emergency release as well as for testing the brakes and the speed governor. The numerous functions within the module are communicated via CANopen to the MPK411 controller and facilitate commissioning. Thanks to its handy size the module is also suitable for frame controls.

S-EP – SELECT EMERGENCY POWER
In conjunction with the E-OP, the module is used to switch between the mains supply and the UPS. Thanks to its compact design, the S-EP can fit in the smallest of spaces and can therefore also be used for frame controls.

D-CS – DOOR CIRCUIT SUPERVISION
The module is used to monitor the safety circuit for bridged or defective door contacts pursuant to the standard EN 81-20. This significantly increases the diagnostic capability.



MPK411 regulated cable

MPK411 hydraulic

MPK411

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