

Data sheet

JSLC - modules

Control and safety device for SLC fire dampers, smoke control dampers, smoke exhaust dampers, smoke exhaust dampers with ventilation function and RMS.2-SLC smoke detectors



Range of application

For motor-driven fire dampers, smoke control dampers, smoke exhaust dampers, smoke dampers with ventilation function and smoke detectors type RMS.2-SLC. The SPMa-1 modules can control and monitor one damper with SLC motor drive from Joventa or one SLC smoke detector type RMS.2-SLC from Strulik.

Each damper or smoke detector is connected by means of SLC technology to only one two-wire circuit. The SLC components are controlled by potential-free contacts (by installer). Optionally, the building automation system (GA) can control and monitor all dampers via RS 485 interface.

Mode of operation

The SPMa-1 modules have been designed especially for controlling and monitoring fire dampers and smoke exhaust dampers. They determine the current status of the dampers and can communicate via RS 485 interface with the GA. Optionally they constantly communicate via RS 485 interface and ModBus RTU protocol with the GA. Thus the mainframe computer has all information on the damper status. Each damper can be opened and closed individually. Run time and position of the dampers as well as short circuit or cable break of the SLC lines are recognized and signalled. In case of communication failure, the dampers move into the safety position (it is possible to disable this function). Five potential-free contacts can be used for the message or for the direct control of the conventional components.

For test purposes on site, each damper can be operated manually. The GA can lock the manual operation. A detailed description is given in the software manual.

Key:

GA	= Building management system
RM	= Smoke detector
BSK	= Fire damper
ERK	= Smoke exhaust damper
ERK-K	= Smoke exhaust damper with ventilation function
DI	= Digital input
AI	= Analog input (guard circuit)
DO	= Digital output (potential-free contact)
SLC	= Schnittstellen-Bezeichnung der Fa. Joventa
LED	= Light-emitting diode

JSLC types:

JSLC-B	for 1 SLC fire damper BSK
JSLC-R	for 1 SLC smoke exhaust damper ERK
JSLC-K	for 1 SLC smoke exhaust damper with ventilation function ERK-K
JSLC-RM	for 1 SLC smoke detector RMS.2-SLC
JSLC-xx Mod	Optionally, all types as above with serial RS 485 interface and ModBus RTU Protocol

Technical data

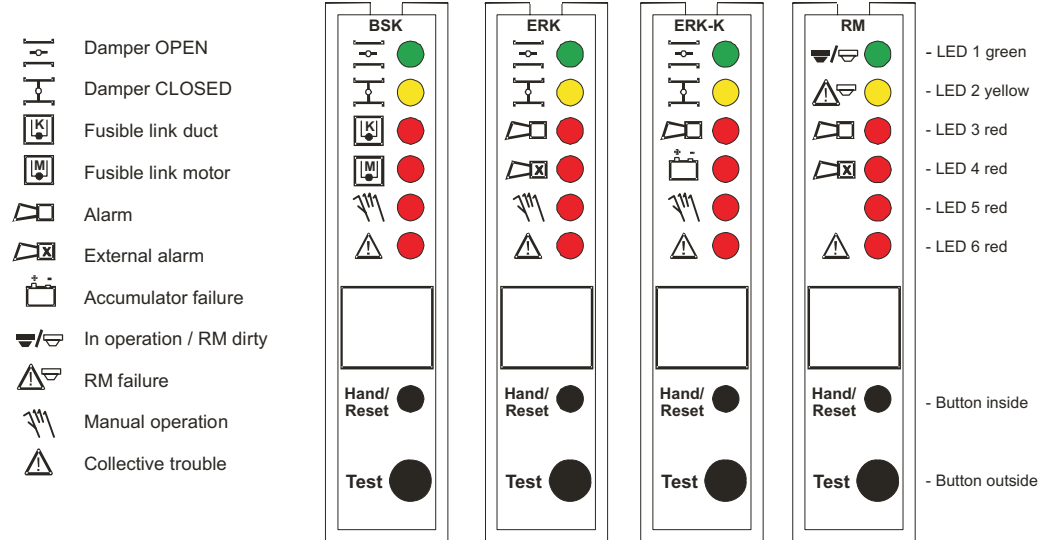
Power supply	20-26 V AC, 29-37 V DC
Power consumption (with SLC components)	Depending on the damper type and status, 6-15 VA
SLC port	Depending on the type, one SLC damper or one SLC smoke detector The circuit length within the field measure up to 400 m
Status indication for dampers, depending on the type	OPEN, CLOSED, OPENING, CLOSING, alarm 1, alarm 2, accumulator failure, manual operation, collective trouble
Status indication for RMS.2-SLC smoke detector	In operation, RM dirty, airflow, RM fault, RM alarm, system fault
Serial interface (physically separated) only for types with the addition Mod	RS 485 9600 Baud 8E1 ModBus RTU protocol Direct address range or as a group 1-254 External supply RS 485: 18-25V AC/DC ca. 60 mA
Potential-free contacts	5 locks contacts 230 V AC 2 A / 30 V DC 2 A
Ambient temperature	0 °C to +40 °C
Ambient humidity	20 - 90 % rF non- condensing
Protection class	IP 20
Terminals (plug-in type)	Control and supply side max. 1,5 mm ² , potential-free contacts max. 2,5 mm ²
Installation dimensions (width x height x depth)	26 x 107 x 90 mm
Mounting	Standard rail 35mm DIN EN 50022-35
CE	The unit meets the relevant requirements of the CE marking

JSLC modules

Control instruments for BSK, ERK, ERK-K , RMS.2 with SLC interface

Front plate:

Fire damper (BSK), smoke exhaust damper (ERK), smoke exhaust damper with ventilation function (ERK-K), smoke detector (RM)

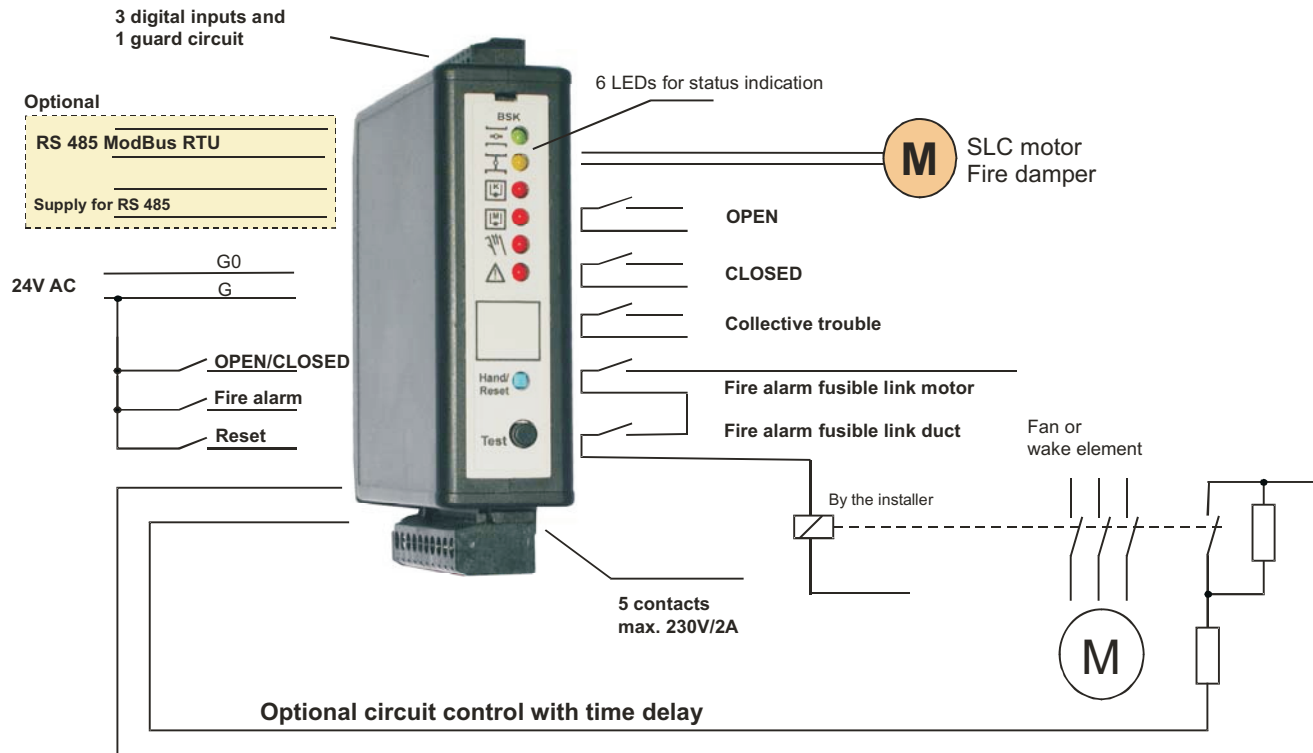


Element	Damper type BSK	Damper type ERK	Damper type ERK-K	Smoke detector type RM	Comment
LED 1 green	OPEN Blinking = OPENING On = OPEN	OPEN Blinking = OPENING On = OPEN	OPEN Blinking = OPENING On = OPEN	Smoke detector dirty Blinking = RM dirty On = In operation	
LED 2 yellow	CLOSED Blinking = CLOSING On = CLOSED	CLOSED Blinking = CLOSING On = CLOSED	CLOSED Blinking = CLOSING On = CLOSED	Airflow failure Blinking = Airflow On = RM failure	
LED 3 red	Alarm fusible link duct Blinking = Alarm ongoing On = Alarm stored (In case of an alarm external, LED3 and LED4 are on at the same time)	External alarm via DI Blinking = Alarm ongoing On = Alarm stored	Internal/external alarm Dark = Exhaust ventilation (In case of a failure, the damper closes automatically after 60 s) On = Exhaust ventilation (The damper does not change its position, ERK mode)	Alarm at the smoke detector (Alarm is stored until reset) Blinking = Alarm ongoing On = Alarm stored	Stored (not anymore active) failures and alarms have to be accepted with the test/reset button, external reset or via RS 485 interface
LED 4 red	Alarm fusible link motor Blinking = Alarm ongoing On = Alarm stored (In case of an external alarm, LED3 and LED4 are on at the same time)	External alarm via AI control Blinking = Alarm ongoing On = Alarm stored	Accumulator failure Flashing = Accumulator failure	External alarm via AI or DI (Alarm is stored until reset) Blinking = Alarm ongoing On = Alarm stored	
LED 5 red	Manual operation active OPEN/CLOSE by touching the test button	Manual operation active OPEN/CLOSE by touching the test button	Manual operation active OPEN/CLOSE by touching the test button	No function	Manual operation on/off by touching the button hand/reset < 10 s
LED 6 red	Collective failure Blinking = Failure ongoing On = Failure stored	Collective failure Blinking = Failure ongoing On = Failure stored	Collective failure Blinking = Failure ongoing On = Failure stored	Collective failure Blinking = Failure ongoing On = Failure stored	Stored (not anymore active) failures and alarms have to be accepted with the test/reset button, external reset or via RS 485 interface
Hand/reset button	< 10s = Manual operation on/off > 10s = Program reset	< 10s = Manual operation on/off > 10s = Program reset	< 10s = Manual operation on/off > 10s = Program reset	Program reset	Touch with pen or other sharp object
Test button	Test and manual operation motor, acceptance of stored faults and alarms	Test and manual operation motor, acceptance of stored faults and alarms	Test and manual operation motor, acceptance of stored faults and alarms	Test and manual operation motor, acceptance of stored faults and alarms	

JSLC modules

Control instruments for BSK, ERK, ERK-K , RMS.2 with SLC interface

Configuration of the BSK module

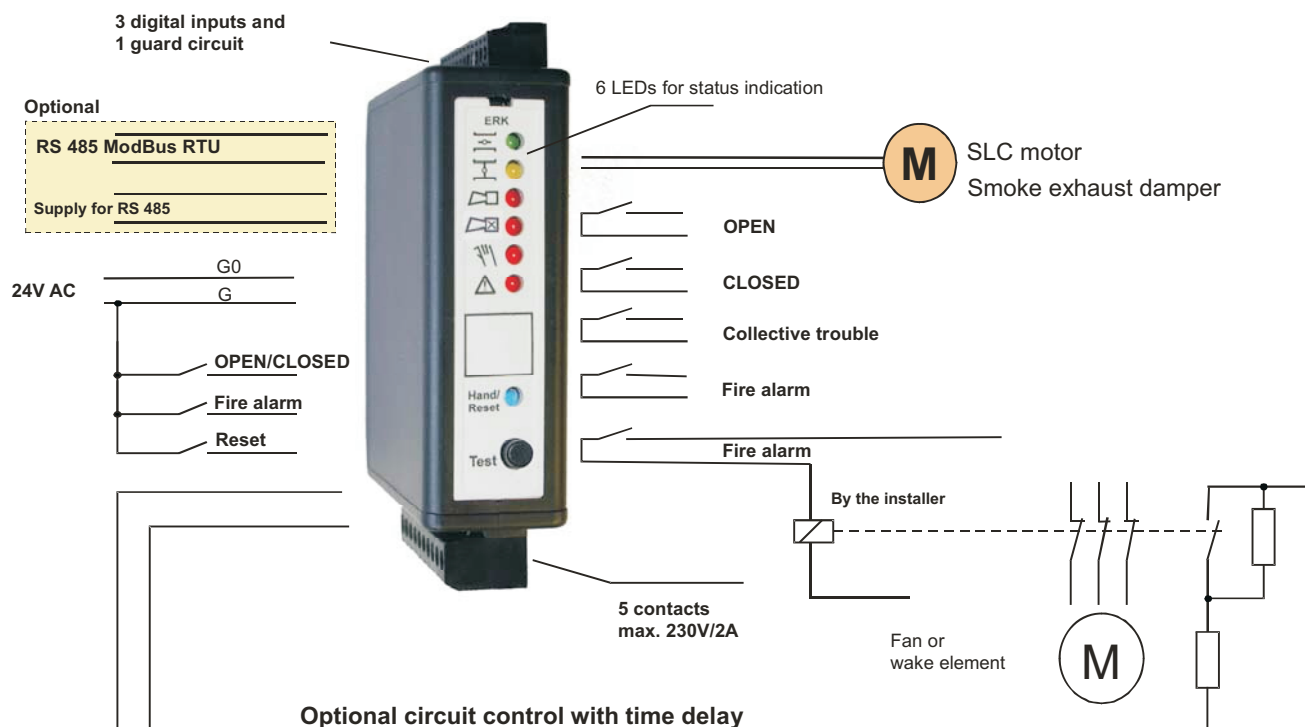


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Control instruments for BSK, ERK, ERK-K , RMS.2 with SLC interface

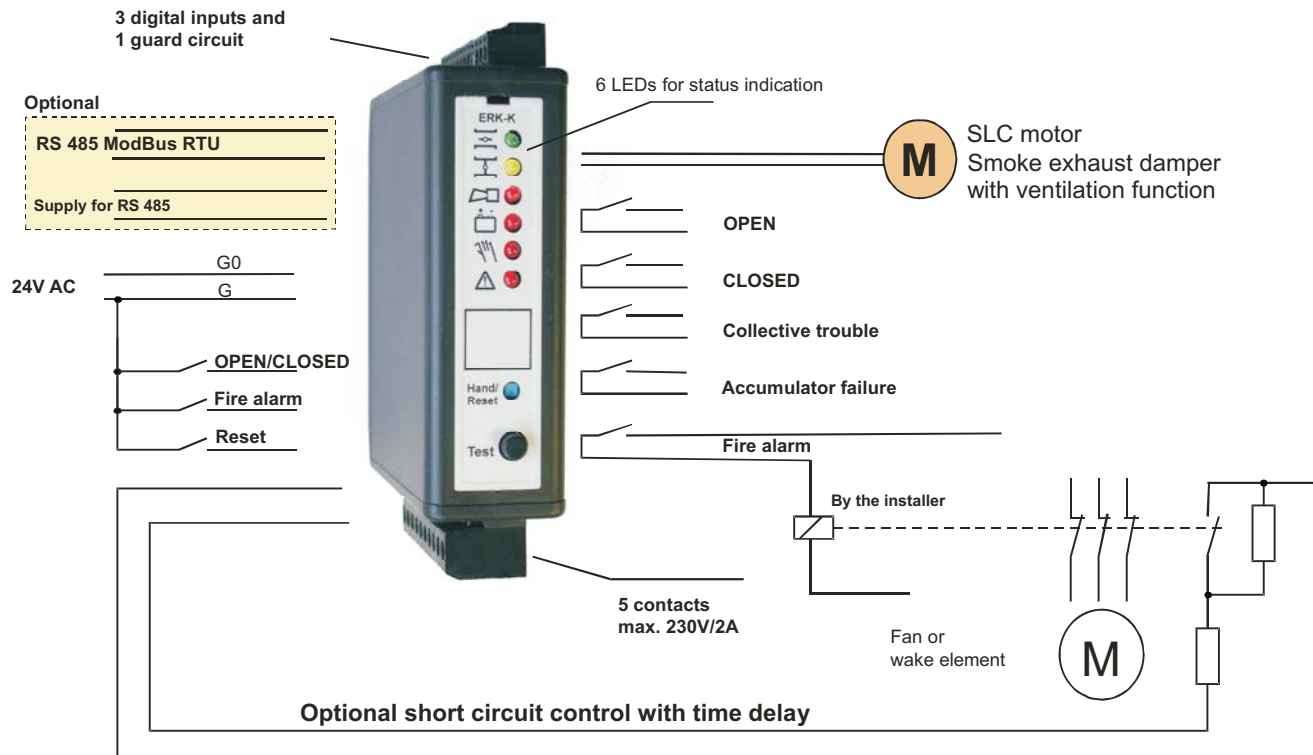
Configuration of the ERK module



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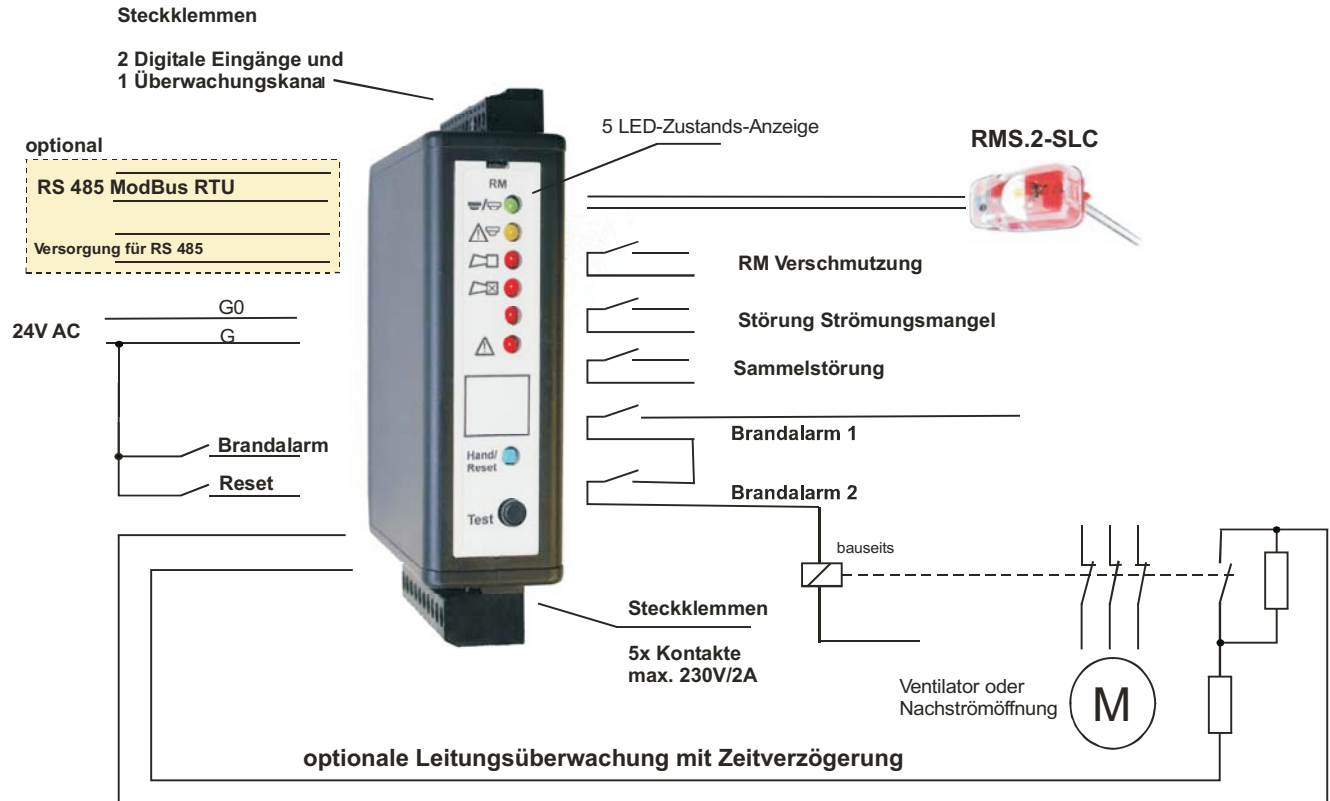
Configuration of the ERK-K module



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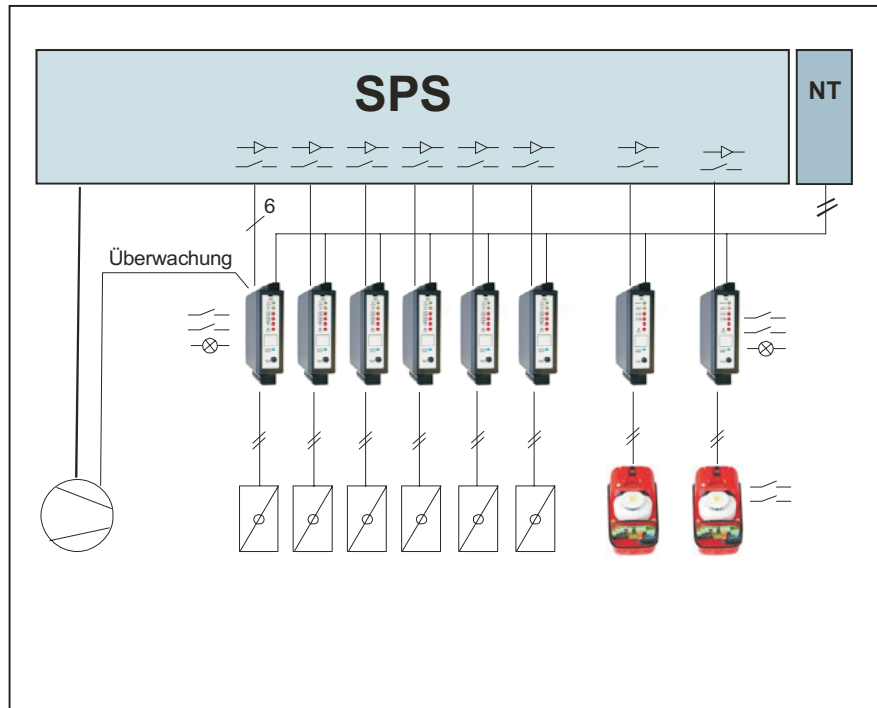
Ausstattung für RMS.2-SLC Kanalrauchmelder Modul



JSLC modules

Control instruments for BSK, ERK, ERK-K , RMS.2 with SLC interface

Example:
Controlling and monitoring with a SPS through DI and DO



Example:
Controlling and monitoring with a SPS with ModBus RTU and connection to the building automation

