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# FLM-420-RLV8-S Octo-relay Interface Module Low Voltage



The FLM-420-RLV8-S Octo-relay Interface Module Low Voltage features eight changeover contact relays for providing potential-free output contacts.

It is a 2-wire LSN element. When connected to the fire panels FPA-5000 and FPA-1200, the interface module offers the enhanced functionality of LSN improved technology.

## Functions

### Relay function

The eight changeover contact relays of the FLM-420-RLV8-S allow for a separate connection of up to eight single external elements.

The maximum contact load (resistive load) is 2 A / 30 V DC or 0.5 A / 42.4 V AC.

### Address switches

The addresses of the interface modules are set by rotary switches.

In case of a connection to the Local Security Network LSN improved version, the operator can select automatic or manual addressing with or without auto-detection. In LSN mode classic, connection to the fire panels BZ 500 LSN, UEZ 2000 LSN and UGM 2020 is possible.

- ▶ **Maximum switching capacity of the relays**  
2 A / 30 V DC or 0.5 A / 42.4 V AC
- ▶ **Low current consumption**
- ▶ **Maintains LSN loop functions in the event of wire interruption or short-circuit thanks to two integrated isolators**
- ▶ **Easy wiring thanks to pluggable terminal blocks**

Address	Mode
0 0 0	Loop/stub in improved version LSN mode with automatic addressing (T-taps not possible)
0 0 1 ... 2 5 4	Loop/stub/T-taps in improved version LSN mode with manual addressing
CL 0 0	Loop/stub in LSN mode classic

### LSN features

Integrated isolators ensure that function is maintained in the event of a short circuit or line interruption in the LSN loop. A fault indication is sent to the fire panel.

### Features of LSN improved version

The interface modules of the 420 Series have all features of the improved LSN technology:

- Flexible network structures including T-tapping without additional elements
- Up to 254 LSN improved elements per loop or stub line
- Unshielded cable can be used
- Downwards compatible with existing LSN systems and control panels.

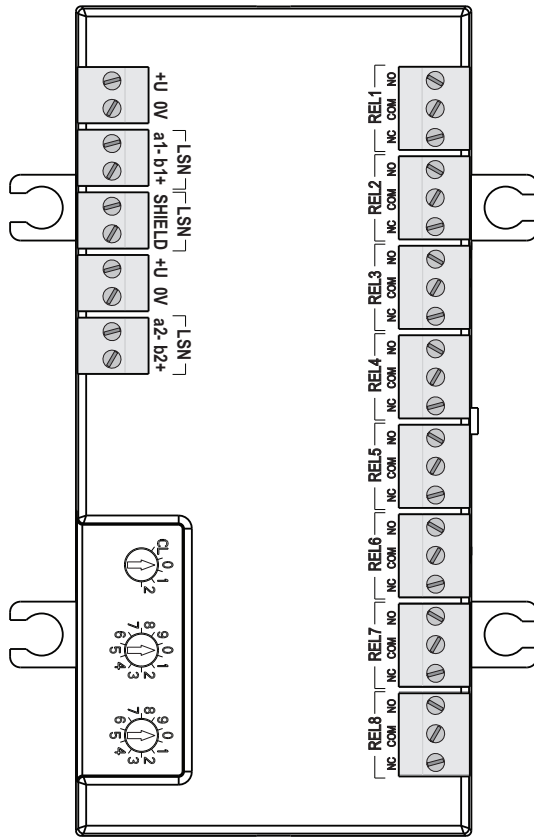
## Certifications and Approvals

Complies with

- EN54-17:2005
- EN54-18:2005

Region	Certification	
Germany	VdS	G 208183 FLM-420-RLV8-S
Europe	CE	FLM-420-RLV8-S
	CPD	0786-CPD-20559 FLM-420-RLV8-S
	MOE	UA1.016-0070264-11 FLM-420-RLV8-S

**Installation/Configuration Notes**



Description	Connection	Connection
+U   0V	Auxiliary power supply (support points to loop through)	
LSN	a1-   b1+	LSN incoming
LSN	SHIELD	Cable shielding (if available)
LSN-POWER	+U   0V	Auxiliary power supply (support points to loop through)
LSN	a2-   b2+	LSN outgoing
REL1 ... REL8	NC   COM   NO	Relay 1 to relay 8 (NC contact / COM / NO contact)

- Can be connected to the fire panels FPA-5000 and FPA-1200 and the classic LSN fire panels BZ 500 LSN, UEZ 2000 LSN and UGM 2020.
- Programming is done with the programming software of the fire panel.
- The LSN connection is established by the two wires of the LSN line.

- The interface module has terminals blocks to allow a second pair of wires to be looped through to an auxiliary power to supply downstream connected elements.
- The cables are fed through rubber bushings or PG cable glands
- The pluggable terminal blocks allow for an easy wiring even if the interface module is built in.
- Use included spacers when mounting on uneven surface.
- For a fire system operation according to EN 54-2, the interface modules used for the activation of fire protection equipment and whose outputs are not monitored, must be installed directly next to or within the device which shall be activated.

**Parts Included**

Type	Qty.	Component
FLM-420-RLV8-S	1	Octo-relay Interface Module Low Voltage, in housing for surface mounting

**Technical Specifications**

**Electrical**

LSN	
• LSN input voltage	15 V DC to 33 V DC (min. to max.)
• Max. current consumption from LSN	3.55 mA
8 relays (low voltage)	(NC contact / COM / NO contact)
Contact load (resistive load)	
• Max. switching current and voltage	• 2 A / 30 V DC • 0.5 A / 42.4 V AC
• Min. switching current and voltage	• 0.01mA / 10 mV DC • 0.01 mA / 10 mV AC
• Max. AC frequency	100 Hz

**Mechanical**

Connections	Screw terminals
Wire diameter	0.6 to 3.3 mm <sup>2</sup>
Address setting	3 rotary switches
Material	ABS + PC-FR
Housing color	Signal white, RAL 9003
Dimensions	Approx. 140 x 200 x 48 mm (W x H x D)
Weight (without/with packing)	Approx. 490 g / 810 g

**Environmental conditions**

Permissible operating temperature	-20 °C to +65 °C
Permissible storage temperature	-25 °C to +80 °C
Permissible rel. humidity	< 96% (non-condensing)
Classes of equipment as per IEC 60950	Class III equipment
Protection class as per IEC 60529	IP 54

**Ordering Information**

**FLM-420-RLV8-S Octo-relay Interface      FLM-420-RLV8-S**

**Module Low Voltage**

2-wire LSN element with eight changeover contact relays for providing potential-free output contacts, in housing for surface mounting

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