

Relay module LSM6-REL

Data sheet

Relay module LSM6-REL
with 4 digital inputs and
4 potential-free
normally open contacts



Content

1.	Functional Description.....	2
1.1.	Scope of Functions	Fehler! Textmarke nicht definiert.
1.2.	Applications	2
1.3.	Technical data I.....	3
1.4.	Technical data II.....	4
2.	Dimensions	5
3.	Connection diagram / connection assignment	6
4.	Installation, connection, and commissioning.....	Fehler! Textmarke nicht definiert.
5.	Revision overview.....	7
6.	Document revision	7

1. Functional Overview

The LSM6-REL is a configurable digital input and output device used as an extension for the light scene module LSM6 or LSM6-K (referred to as LSM6 below). It expands the LSM6 as the main device by 4 digital inputs and outputs each. The potential-free digital outputs are power relays for switching loads, such as electronic ballasts (EB), power supplies, or motors. The power supply and communication with the main device LSM6 are carried out via the H-BUS, which is located on the back in the area of the DIN rail.

The specific function of the inputs and outputs can be easily configured using the Protronic multifunction tool (MFT) in conjunction with the Protronic light control system LSM6 for DALI electronic ballasts. The MFT is available as a free download on the website <https://mft.protronic-gmbh.com/> and can be used both online and offline.

1.1. Features

- 4 digital outputs (potential-free normally open contacts for switching loads)
- 4 digital inputs
- Mounting on the DIN rail in conjunction with LSM6
- Power supply via H-BUS (H-BUS connector included in delivery)
- Configuration via multifunction tool (MFT) in conjunction with light scenes via LSM6

1.2. Applications

- Switching various loads according to technical data for AC/DC switching capacity for power supplies, electronic ballasts (EB), LED drivers, motors
- Relays applicable for controlling 2 blinds.

1.3. Technical data I

General	
Supply voltage	DC 24 V via H-BUS
Working range	
Current consumption	0,10 A
Power consumption	approx. 2,4 W
Digital inputs 1 bis 4	
Input voltage	DC 24 V
Current consumption per input	3 mA
External wiring (also installation push-buttons/switches)	Switching contact
Logical status display	-
Input level (H level)*	> 16 V
Input level (L-level)*	< 8 V
*between not defined	
Digital outputs 1 to 4	
Switching elements	1 normally open contact
contact rated voltage	AC250V / DC 24 V
Switching capacity AC1	4 KW
Switching capacity AC15	0,75 KW
Capacitive switching capacity	120 W
Switching capacity motors	0,55 KW
Switching capacity DC24V	16 A
Logical status display	-
Lifetime	30*10 ³ switching cycles
Ambient conditions	
Ambient temperature (during operation)	0°C... +40 °C
Ambient temperature (during storage)	-25°C ... +70 °C
Climatic class acc. to IEC 60721-3-3	3K5, without condensation and icing up
Relative humidity (during operation)	max. 80 %
Altitude	up to 2000 m

1.4. Technical data II

Electromagnetic compatibility (EMC)	
	EN 55011:2009, limit class B
Displays	
LEDs	-
Installation conditions/general data	
Operating mode	continuous operation
Mounting position	vertical/horizontal
Mounting as rail-mounted unit	on DIN rail according to DIN EN 60715
Unit dimensions in mm (WxHxD)	53.6 x 89.2 x 60.8 / 3HP
Connection type/cable	Terminal blocks aluminium or copper
Connection cross-section digital outputs rigid	0,2 mm ² ... 4 mm ² *
Connection cross-section digital outputs flexible	0,2 mm ² ... 2,5 mm ² *
Connection cross-section digital inputs rigid	0,2 mm ² ... 4 mm ² *
Connection cross-section digital inputs flex	0,2 mm ² ... 2,5 mm ² *
Protection class according to DIN EN 60529 for built-in components/terminals	IP30/IP20
Flammability class	
Weight	
Ordering data LSM6 relay module	
Art. No.:	1017000039

* The specifications apply without wire end sleeves, stranded wire are usually processed with end sleeves.

2. Dimensions

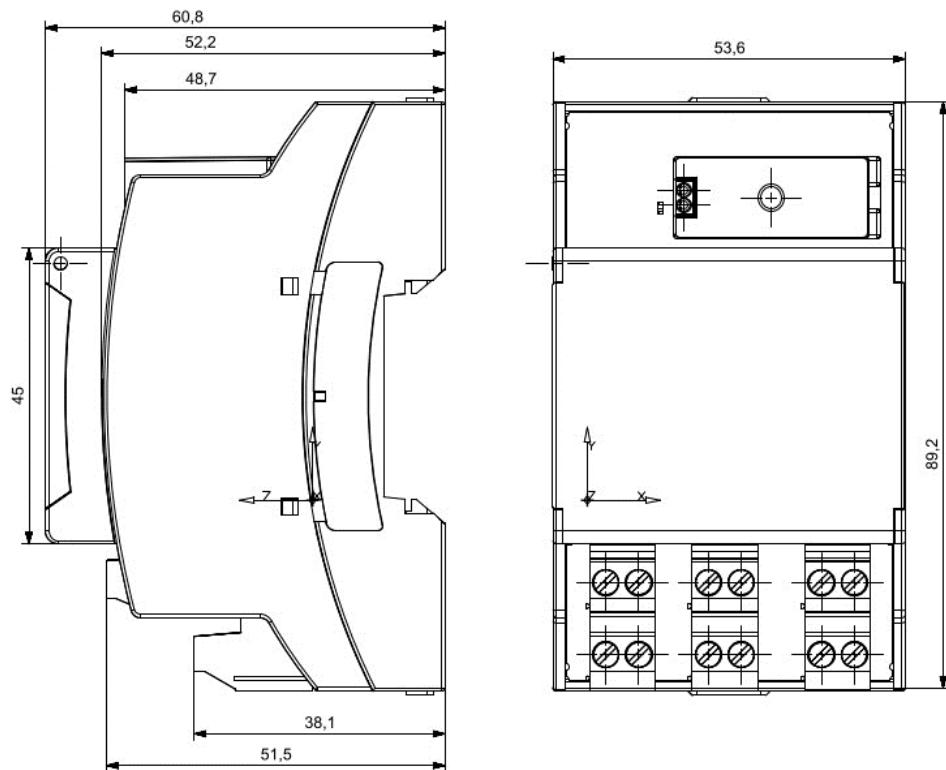


Fig. 1: Unit view and unit dimensions in mm

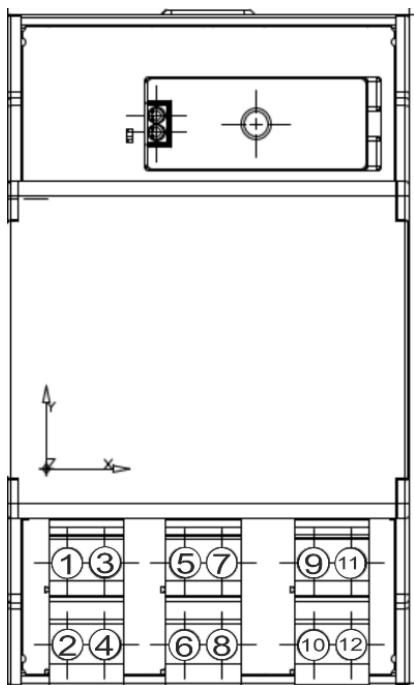


Fig. 2: Device view with connection designations

3. Connection diagram / connection assignment

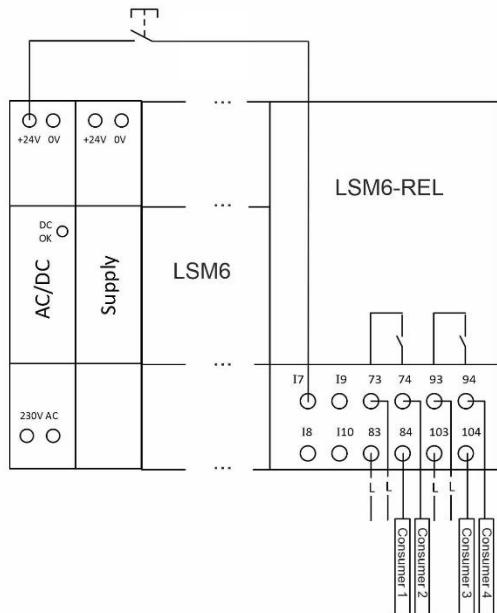


Fig. 3: Connection diagram LSM6-REL

Digital inputs - DC 24 V, GND		
PIN	Labelling on LSM6-REL	Assignment
1	I7	Digital input 1
2	I8	Digital input 2
3	I9	Digital input 3
4	I10	Digital input 4
Digital outputs - relays, potential-free contacts		
5	73	Digital output 1
7	74	
6	83	Digital output 2
8	84	
9	93	Digital output 3
11	94	
10	103	Digital output 4
12	104	

4. Revision overview

Revision	Article number	Designation	Change	Active
1.0	1017000039	Relay module LSM6_REL		yes

5. Document revision

Revision	Article number	Designation	Change	Date
1.0	1017000039	Relay module LSM6_REL		