

# RPI-1ZI-D12

## installation relays



RPI-1ZI-D12

RESISTANCE  
TO INRUSH  
CURRENT  
120 A (20 ms)

### • Installation relays - electromagnetic

- Cadmium - free contacts 1 NO
- DC input voltages
- Cover - modular, width 17,5 mm
- Direct mounting on 35 mm rail mount acc. to EN 60715
- Recognitions, certifications, directives: RoHS,

- **Switching lighting circuits**, in cooperation with control timers, switches, push buttons
- Wide range of application in switchgears of modular equipment, in particular for **switching circuits of high inrush current**

### Output circuit - contact data

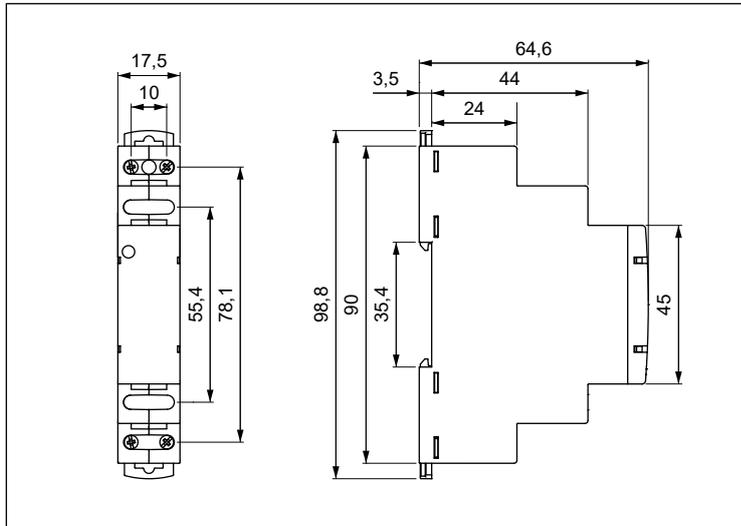
Number and type of contacts		1 NO
Contact material		<b>AgSnO<sub>2</sub></b>
Max. switching voltage		300 V AC / 300 V DC
Min. switching voltage		10 V
Rated load	AC1 DC1	16 A / 250 V AC 16 A / 24 V DC
Min. switching current		10 mA
Max. inrush current		<b>120 A 20 ms</b>
Rated current		16 A
Max. breaking capacity	• AC1 • AC15 • AC3 • DC1	4 000 VA (16 A / 250 V AC) 720 VA (3 A / 240 V AC) 650 W 0,35 A / 230 V DC; 16 A / 24 V DC
	• at fluorescent lamp load • at halogen lamp load • at LED lamp load	<b>800 W</b> <b>2 500 W</b> <b>500 W</b>
Min. breaking capacity		1 W
Contact resistance		≤ 100 mΩ
Max. operating frequency	• at rated load AC1 • no load	600 cycles/hour 72 000 cycles/hour
<b>Input circuit</b>		
Rated voltage	DC	12 V terminals (+)A1, (-)A2
Must release voltage		DC: ≥ 0,05 U <sub>n</sub>
Operating range of supply voltage		0,85...1,1 U <sub>n</sub>
Rated power consumption		≤ 1 W
<b>Insulation according to EN 60664-1</b>		
Insulation rated voltage		250 V AC
Rated surge voltage		4 000 V 1,2 / 50 μs
Overvoltage category		III
Insulation pollution degree		2
Flammability class		V-0 for modular cover, UL 94
Dielectric strength	• input - output • contact clearance	4 000 V AC type of insulation: basic 1 000 V AC type of clearance: micro-disconnection
<b>General data</b>		
Operating / release time (typical values)		15 ms / 20 ms
Electrical life	• resistive AC1	0,5 x 10 <sup>5</sup> 16 A, 250 V AC
Mechanical life (cycles)		10 <sup>7</sup>
Dimensions (L x W x H)		90  x 17,5 x 64,6 mm
Weight		68 g
Ambient temperature	• storage (non-condensation and/or icing) • operating	-40...+70 °C -20...+50 °C
Cover protection category		IP 20 EN 60529
Relative humidity		up to 85%
Shock resistance		15 g
Vibration resistance	(NO)	9 g 10...150 Hz

The data in bold type relate to the standard versions of the relays. Length with 35 mm rail catches: 98,8 mm.

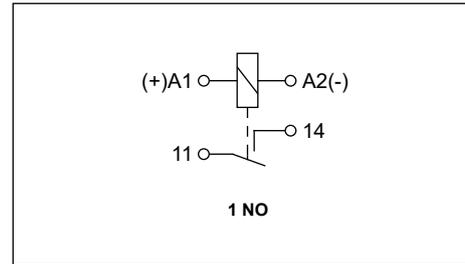
# RPI-1ZI-D12

## installation relays

### Dimensions



### Connection diagram



### Mounting

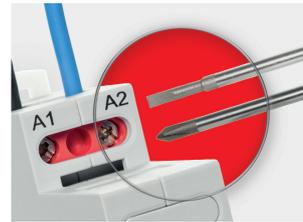
Relays **RPI-1ZI-D12** are designed for direct mounting on 35 mm rail mount acc. to EN 60715. Operational position - any. **Connections:** max. cross section of the cables: 1 x 2,5 mm<sup>2</sup> (1 x 14 AWG), stripping length: 6,5 mm, max. tightening moment for the terminal: 0,5 Nm.



**Green LED:** signalling the operation status of the relay (is illuminated permanently - correct supply).

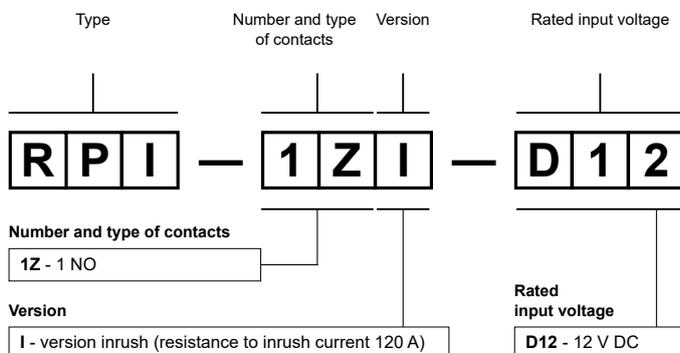


**Two catches:** easy mounting on 35 mm rail, firm hold (top and bottom).



**Mounting wires in clamps:** universal screw (cross-recessed or slotted head).

### Ordering codes



Example of ordering codes:

**RPI-1ZI-D12**  
relay **RPI-1ZI-D12**, cover - modular, width 17,5 mm, one normally open contact, version inrush, contact material AgSnO<sub>2</sub>, rated input voltage 12 V DC

### PRECAUTIONS:

1. Ensure that the parameters of the product described in its specification provide a safety margin for the appropriate operation of the device or system and never use the product in circumstances which exceed the parameters of the product. 2. Never touch any live parts of the device. 3. Ensure that the product has been connected correctly. An incorrect connection may cause malfunction, excessive heating or risk of fire. 4. In case of any risk of any serious material loss or death or injuries of humans or animals, the devices or systems shall be designed so to equip them with double safety system to guarantee their reliable operation.