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### DESCRIPTION

Electromagnetic relays may be used in various applications where load current increase is needed. The relays assure voltaic insulation between a control unit and a load circuit. The relays are fitted with NO / NC dead contacts. It is possible to connect voltage of  $0 \div 250$  V AC to the contacts.

### FEATURES

- Load current increase,
- Applicable together with typical control systems powered with typical voltages: 12, 24, 48, 110 V AC/DC, 230 V AC,
- Maximum load current  $1 \times 16$  A,
- Relay state indicator.



The device should be connected to a one-phase network in accordance with legally binding standards. The connection method is described in this manual. Any activities related to installation, connection, and adjustment should be performed by qualified electricians who have read this user's manual and familiarised themselves with device functions. Removing the enclosure voids the warranty and poses a risk of electric shock. Before installation, make sure that there is no voltage on connection cables. To install the device, use a cross-head screwdriver with a diameter of 3.5 mm. The proper operation of the device is affected by how the device is transported, stored, and used. It is not advisable to install the device in the following cases: lack of any components, damage to or deformation of the device. If the device operates improperly, please contact the manufacturer.

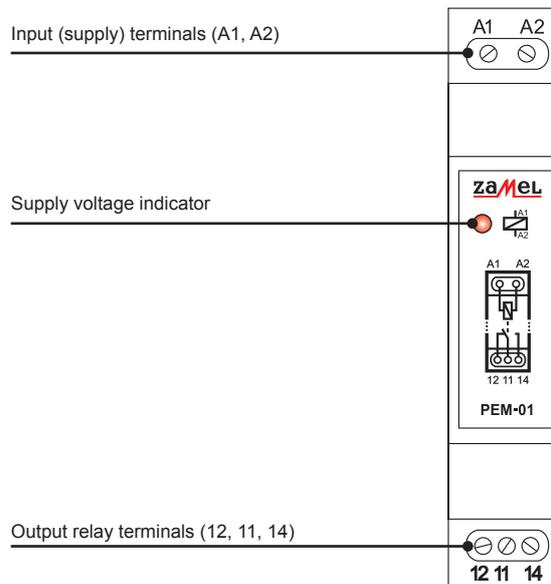


Do not dispose of this device with other waste! In order to avoid harmful effects on the environment and human health, the used device should be stored in designated areas. For this purpose, you can dispose of household waste free of charge and in any quantity to a collection point set up, as well as to the shop when you buy new equipment.

### TECHNICAL DATA

	PEM-01				
	/012	/024	/048	/110	/230
Input (supply) terminals:	A1, A2				
Input rated voltage:	12 V AC/DC	24 V AC/DC	48 V AC/DC	110 V AC/DC	230 V AC
Input voltage tolerance:	-15 + 10 %				
Nominal frequency:	50 / 60 Hz				
Rated current:	33 mA AC	15 mA AC	8,2 mA AC	4,6 mA AC	23,2 mA AC
Output switch on indicator:	LED red				
Output (load) terminals:	11, 12, 14				
Control element:	1 NO/NC - 16 A / 250 V AC				
Numer of terminal clamps:	5				
Section of connecting cables:	0,2 + 2,5 mm <sup>2</sup>				
Ambitne temperature range:	-20 + +45 °C				
Operating position:	free				
Mounting:	TH 35 rail				
Protection degree:	IP20				
Protective class:	II				
Overvoltage category:	II				
Pollution degree:	2				
Dimensions:	monomodular (17,5 mm) 90x17,5x66 mm				
Weight:	0,07 kg				

### APPERANCE

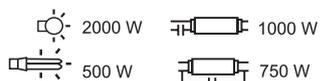


## MOUNTING, FUNCTIONING

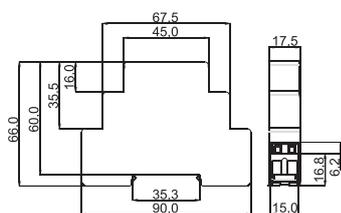
1. Disconnect the electric network by means of appropriate cut-off, current-limiting circuit-breaker or separator.
2. Check if there is no any voltage between power leads by means of an appropriate gauge.
3. Mount the device on TH 35 rail.
4. Connect the system leads according to the electrical diagram.
5. Connect power supply circuit.

After power supply has been connected to A1, A2 terminals, the device, via the control circuit, makes the relay output contacts 11, 14 closed. When power supply has been OFF, the relay will be OFF and the output contacts 11, 12 will be closed.

## RELAY CAPACITY



## DIMENSIONS



## PRODUCT FAMILY

The PEM-01 electromagnetic relay is a member of the PEM-xx family.

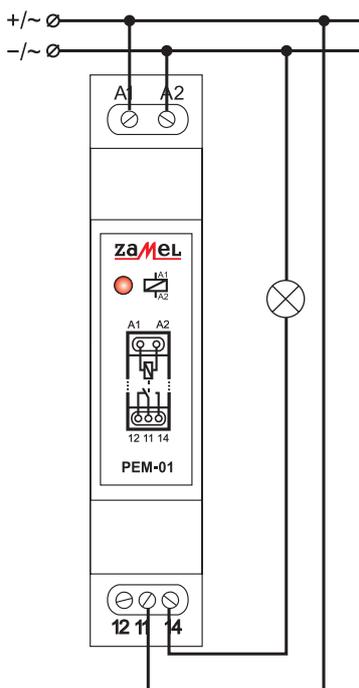
### PEM-xx/xxx

Input voltage:  
12V, 24V, 48V, 110V, 230V

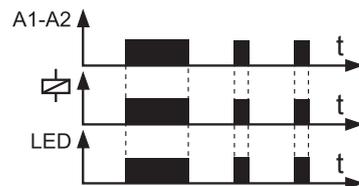
Device version:  
01 – input contacts 1 x 16 A  
02 – input contacts 2 x 8 A

Device type

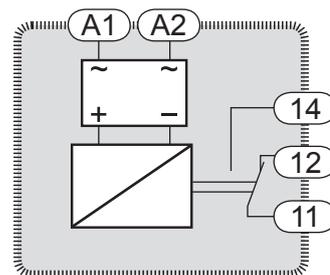
## CONNECTING



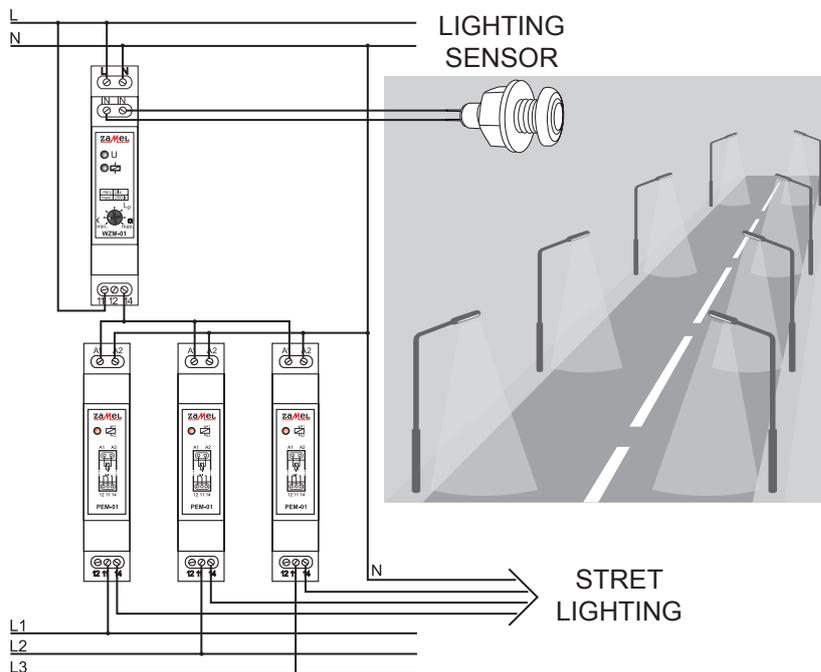
## TIME COURSE



## INNER DIAGRAM



## EXAMPLE OF INSTALLATION



## WARRANTY CARD

There is 24 months guarantee on the product

Salesman stamp and signature, date of sale

1. ZAMEL provides a two-year warranty for its products.
2. The ZAMEL warranty does not cover:
  - a) mechanical defects resulting from transport, loading / unloading or other circumstances;
  - b) defects resulting from incorrect installation or operation of ZAMEL products;
  - c) defects resulting from any changes made by CUSTOMERS or third parties, to products sold or equipment necessary for the correct operation of products sold;
  - d) defects resulting from force majeure or other aleatory events for which ZAMEL is not liable;
  - e) power supply (batteries) to be equipped with a device in the moment of sale (if they appear).
3. All complaints in relation to the warranty must be provided by the CUSTOMER in writing to the retailer after discovering a defect.;
4. ZAMEL will review complaints in accordance with existing regulations.;
5. The way a complaint is settled, e.g. replacement of the product, repair or refund, is left to the discretion of ZAMEL.
6. Guarantee does not exclude, does not limit, nor does it suspend the rights of the PURCHASER resulting from the discrepancy between the goods and the contract.