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## DESCRIPTION

The bistable relay PBM-02 is used to control lighting or other devices by means of monomodular pushbuttons connected in a parallel way. Pushing any button causes switching on or switching off the devices connected to output terminals. The controlling impulse can be L or N line signal. The Set and Rest control inputs allow central control of a relay group. Using the inner relay memory allows to remember its current mode in cases of power supply loss.

## FEATURES

- ☞ Bistable lighting control,
- ☞ input rated indicator – LED green,
- ☞ relay mode indicator – LED red,
- ☞ central control function,
- ☞ relay mode memory,
- ☞ system releasing from the L or N cable,
- ☞ cooperation with monostable pushbuttons equipped with illumination lamps,
- ☞ TEST function,
- ☞ double-wire controll installation,
- ☞ voltage relay output - one NO (norma closed) contact max 16 A capacity.

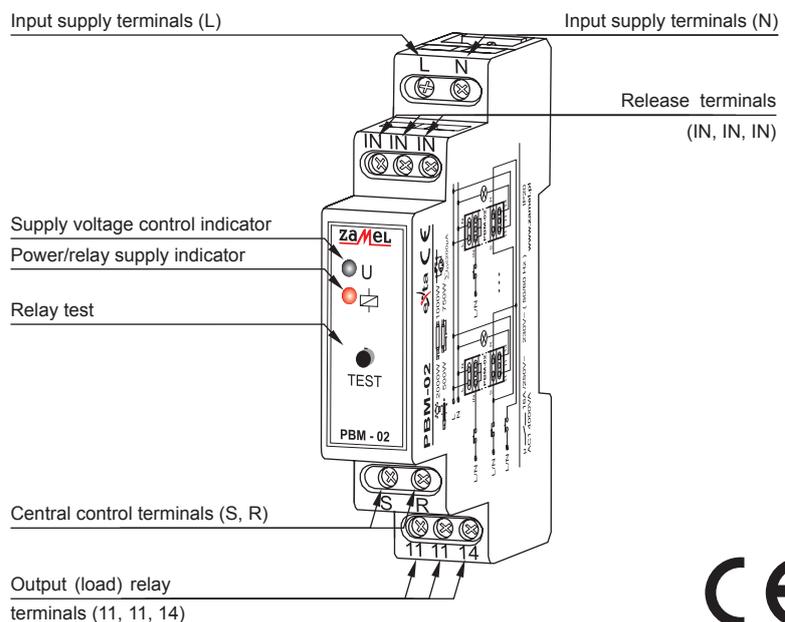


The device is designed for one-phase installation and must be installed in accordance with standards valid in a particular country. The device should be connected according to the details included in this operating manual. Installation, connection and control should be carried out by a qualified electrician staff, who act in accordance with the service manual and the device functions. Disassembling of the device is equal with a loss of guarantee and can cause electric shock. Before installation make sure the connection cables are not under voltage. The cruciform head screwdriver 3,5 mm should be used to instal the device. Improper transport, storage, and use of the device influence its wrong functioning. It is not advisable to instal the device in the following cases: if any device part is missing or the device is damaged or deformed. In case of improper functioning of the device contact the producer.

## TECHNICAL PARAMETERS

PBM - 02	
Input (supply) terminals :	L, N
Input rated voltage:	230 V~
Input voltage tolerance:	from -15 to +10 %
Nominal frequency:	50 / 60 Hz
Rated power consumption:	24 mA
Supply voltage control indicator:	LED green
Release terminals:	IN, IN, IN
Release control current:	930 µA
Central control terminals:	Set, Reset
Power/relay supply indicator:	LED red
Relay operating indicator:	TEST button
Output relay parameters:	1NO - 16 A / 250 V AC1 4000 VA
Number of terminal clamps:	10
Section of connecting cables:	from 0,2 to 2,50 mm <sup>2</sup>
Ambient temperature range:	from -20 to +45 °C
Operating position:	free
Mounting:	TH35 rail (PN-EN 60715)
Protection degree:	IP20 (PN-EN 60529)
Protection class:	II
Overvoltage category:	II
Pollution degree:	2
Rated impulse withstand voltage:	1 kV (PN-EN 61000-4-5)
Dimensions (height / width / depth):	monomodular (17,5 mm) 90x17,5x66 mm
Weight:	80 g
Reference standards:	PN-EN 60669-1; PN-EN 60669-2-1 PN-EN 61000-4-2,3,4,5,6,11

## APPEARANCE

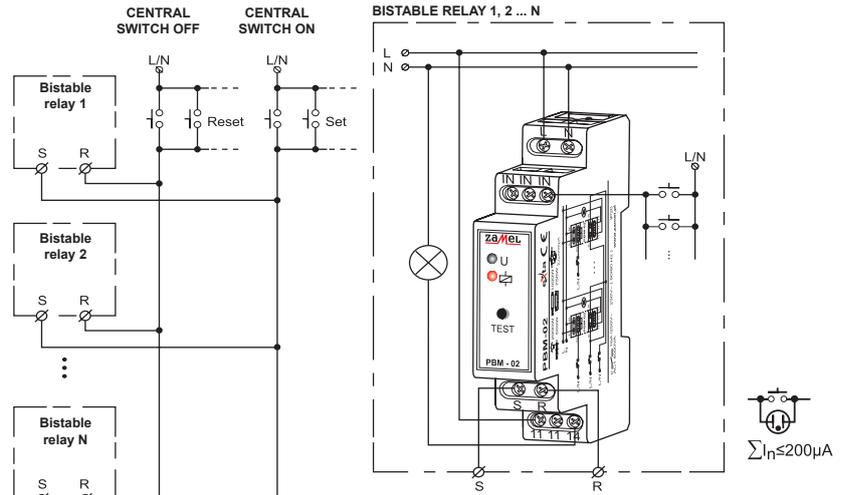


## MOUNTING, FUNCTIONING

1. Disconnect the power supply from the mains by the phase fuse, the circuit-breaker or the switch-disconnector that are joined to the proper circuit,
2. **Check if there is no voltage on connection cables by means of a special measure equipment,**
3. Install PBM-01 device in the switchboard on TH-35 DIN rail,
4. Connect the cables with the terminals according to installing diagram,
5. Switch on the power supply from the mains,
6. Push the TEST button several times to check the relay operation correctness.

The device is ready to work after switching on power supply. The relay operation correctness can be checked by pushing the TEST button placed on the front panel. The system should switch on and off the load connected to its output terminals. Mono modular pushbuttons connected in a parallel way are available with backlit. Using the Set-Reset function there is a possibility of relay group central control. After voltage fading the relay mode is remembered in the inner device memory.

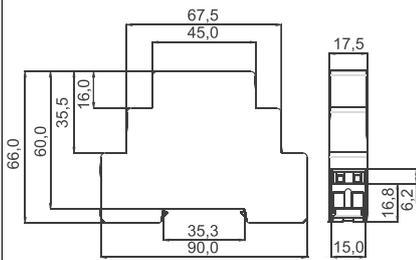
## CONNECTING



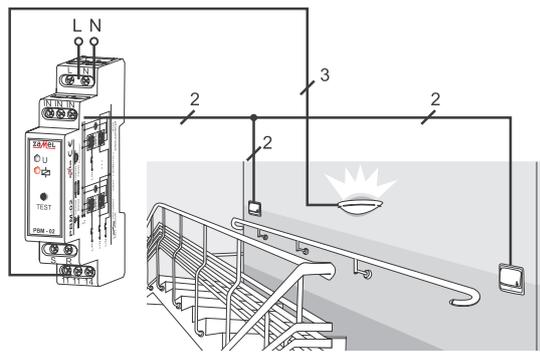
### Signal separator coordination SEM-01:

In the bistable control systems signal separators can be used to divide control signals into particular relay groups.

## DIMENSIONS



## EXAMPLE OF INSTALLATION



### Typical use:

The bistable relay operating the staircase lighting (e.g. staircase lighting) are controlled by means of mono modular pushbuttons that can be connected in a parallel way.

The buttons can be placed in different places which gives the possibility of creating universal lighting systems control.

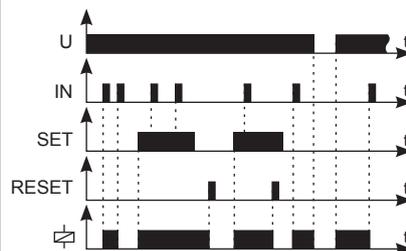
## PRODUCT FAMILY

The bistable relay PBM-02 belongs to bistable relay PBM product family.

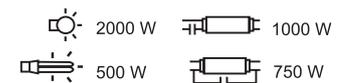
### PBM - xx (/24V)

Supply version 24 V AC/DC
Product symbol: 01 - basic 02 - additionally with functions: Set, Reset, Mode Memory
Symbol

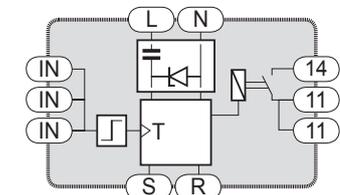
## TIME COURSE



## RELAY CAPACITY



## INNER DIAGRAM



## GUARANTEE 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.