

# exta

ZAMEL Sp. z o.o.

# zameL

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## DESCRIPTION

The PBM-07 bistable relay is used to control lighting or any other device by means of unipolar push buttons connected in a parallel way. The relay is equipped with two outputs activated by means of impulses given to the (IN) input. It allows to control two circuits / branches simultaneously. The control impulse must be the "L" line signal. The trigger input structure enables cooperation with backlit push buttons (including LED backlight). The total current of backlight for the (IN) input can not exceed 1,5 mA. The device is designed to be mounted in distribution boards (TH35 rail). LEDs on the front panel indicate power supply (green LED) and the output status (2 x red LED).

## FEATURES

- control of lighting and other devices according to a defined sequence,
- output status indicated by red LEDs (2 x red LED),
- power supply indication (1 x green LED),
- system release only from the "L" line,
- possibility of cooperation with unipolar backlit push buttons,
- two-wire control installation,
- two independent relay outputs – (dry contacts) 2 NO /NC contacts with a maximum load of 16 A,
- mounting in distribution boards (TH35 rail).



**CAUTION** Connect this product to a single-phase power system according to applicable electrical and safety standards and regulations. See this Manual for the wiring instructions. Installation, wiring and adjustment/setting shall only be done by qualified electricians who have read and understood this User Manual and the functions of the product. Do not open or otherwise disassemble the product housing; otherwise the product warranty will be void and an electrocution hazard may occur. Prior to installing and wiring this product, make sure that the wiring to be connected is not live. The conditions and methods of transport, storage and operation of this product may affect its performance. Do not install the product if any of its components are missing, the product is damaged or deformed in any way. If any malfunctions are found, consult the manufacturer.

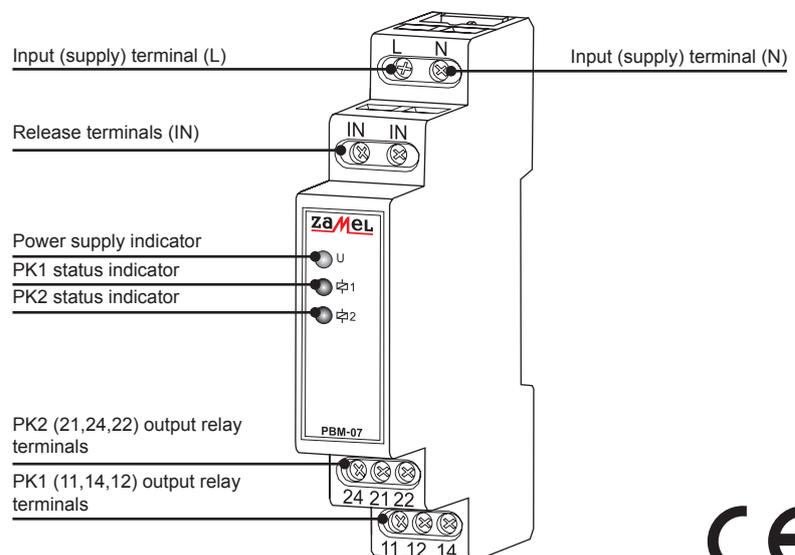


Do not dispose of this device with other waste! In order to avoid harmful effects on the environment and human health, the used device should be stored in designated areas. For this purpose, you can dispose of household waste free of charge and in any quantity to a collection point set up, as well as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

## TECHNICAL DATA

Input (supply) terminals:	L, N
Nominal supply voltage:	230 V AC
Nominal supply voltage tolerance:	-15 ÷ +10 %
Nominal frequency:	50 Hz
Nominal power consumption:	stand-by: 0,4 W 2 active outputs: 1,1 W
Optical signalling of relay status:	2x red LED
Release terminals:	IN, IN
Release control current:	7,5 mA
Cooperation with backlit push buttons:	yes
Total current of the push button backlight:	< 1,5 mA
Minimum impulse release time:	70 ms
Output devices:	2 x relays
Relay contact parameters:	NO/NC – 16 A / 250 VAC
Number of connection terminals:	10
Cross-section of connection cables:	0,2 ÷ 2,5 mm <sup>2</sup>
Operating temperature range:	-20 ÷ +45 °C
Operating position:	free
Casing mounting:	TH35 rail
Casing protection degree:	IP20
Overvoltage category:	II
Pollution degree:	2
Dimensions:	90 x 17,5 x 66 mm
Weight:	0,090 kg

## APPEARANCE



## MOUNTING, FUNCTIONING

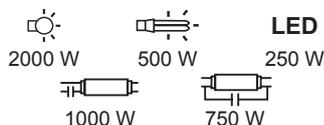
1. Disconnect power supply by the phase fuse, the circuit-breaker or the switch-disconnector combined to the proper circuit.
2. Check if there is no voltage on the connection cables by means of a special measuring equipment.
3. Install PBM-07 on a TH35 rail in the distribution board.
4. Connect the device cables with the terminals in accordance with the installing diagram.
5. Switch on the power supply from the mains.
6. Press a push button connected to the (IN) release input a few times to check if the device operates properly.

After supply voltage has been applied, the device is ready to operate. Correct operation of the PBM-07 relay can be checked by pressing a push button connected to the release terminal (IN) a few times. The system should switch on / switch off loadings connected to its output terminals (PK1-11,12,14 and PK2-21,22,24). Unipolar push buttons can be connected in a parallel way and provide lighting control of several places. These push buttons are available with backlight.

### CAUTION:

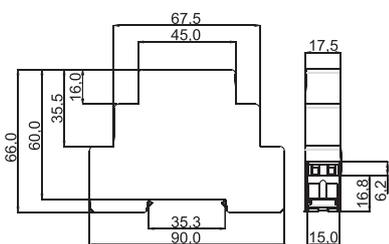
**PBM-07 can cooperate with backlit push buttons. The total current consumption before backlight can not exceed 1,5 mA. The (IN) release input structure is used to a continuous triggering.**

## CAPACITY



The above values are only indicative. They depend, to a large extent, on a particular capacity (mainly it refers to LED bulbs, energy-saving lamps and switched-mode power supplies), switching on frequency and operating conditions.

## CASING DIMENSIONS



## WARRANTY CARD

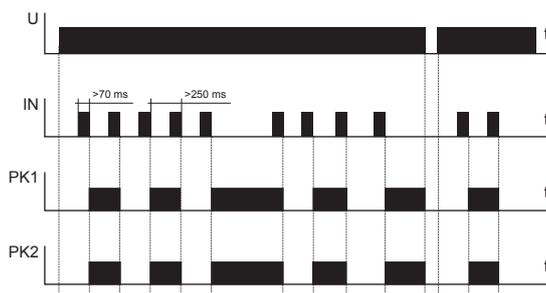
There is a 24 month guarantee on the product

Salesman stamp and signature, date of sale

## OPERATION MODES

After supply voltage has been applied or after its decay both relays PK1 and PK2 are switched off. In case the subsequent impulses are given to the (IN) input, the device will:

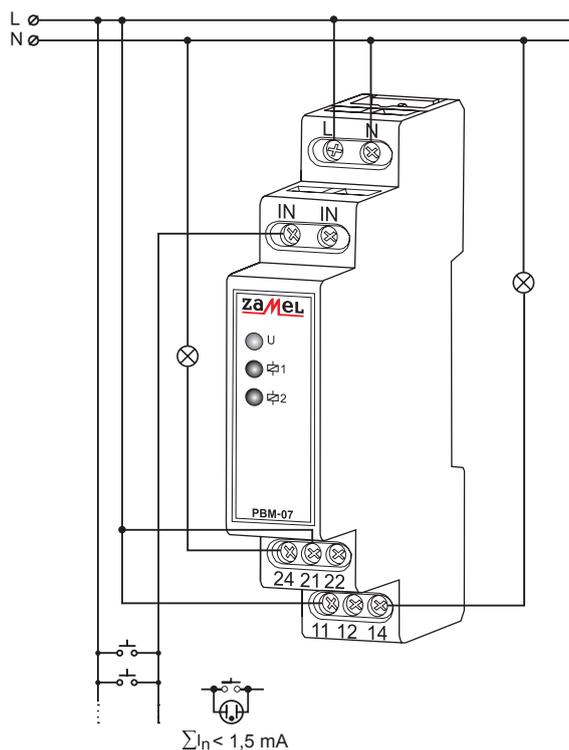
- switch on both output relays,
- switch off both output relays.



### General impulse release requirements:

- The PBM-07 relay reacts to the falling edge of the release impulse (reaction to the button release connected to the (IN) input).
- Minimum duration of impulse release – 70 ms.
- Minimum time interval between subsequent impulses – 250 ms.

## CONNECTION



1. ZAMEL Sp. z o.o. assures a 24 month guarantee for the product.
2. The manufacturer's guarantee does not cover any of the following actions:
  - a) mechanical damage during transport, loading / unloading or under other circumstances,
  - b) damage caused by incorrect product mounting or misuse,
  - c) damage caused by unauthorised modifications made by the PURCHASER or any third parties to the product or any other devices required for the product functioning,
  - d) damage caused by Act of God or any other incidents independent of the manufacturer – ZAMEL Sp z o.o.
3. The PURCHASER shall lay any claims in writing in the place of purchase or to ZAMEL Sp. z o.o.
4. ZAMEL Sp. z o.o. is liable for processing any claim according to current Polish legislation.
5. ZAMEL Sp. z o.o. shall process the claim at its own discretion: product repair, replacement or money return.
6. The PURCHASER's statutory rights in any applicable legislation whether against the retailer arising from the purchase contract or otherwise are not affected by this warranty.