



**Zakład Mechaniki i Elektroniki
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DESCRIPTION

The PBM-03 bistable relay is designed for lighting and other device control by means of single pole push buttons connected in parallel. Successive pressing of any button causes switching ON / OFF the load alternatively. Either L or N line may be a source of a control impulse. After the impulse has arrived the load is ON. Then, after t preset time has been over the load is OFF. It is possible to create lighting control intelligent systems by means of using the PBM-03 modules..

FEATURES

- ☞ Bistable lighting control,
- ☞ **Time limit function,**
- ☞ Power supply indicator - red LED,
- ☞ Relay state indicator - red LED,
- ☞ Device triggering by means either of the L or N wire,
- ☞ Operation with many single pole push buttons, illuminated,
- ☞ Time limit function,
- ☞ Two-conductor control system,
- ☞ Relay voltage output, maximum 16 A load,
- ☞ Single-module casing.



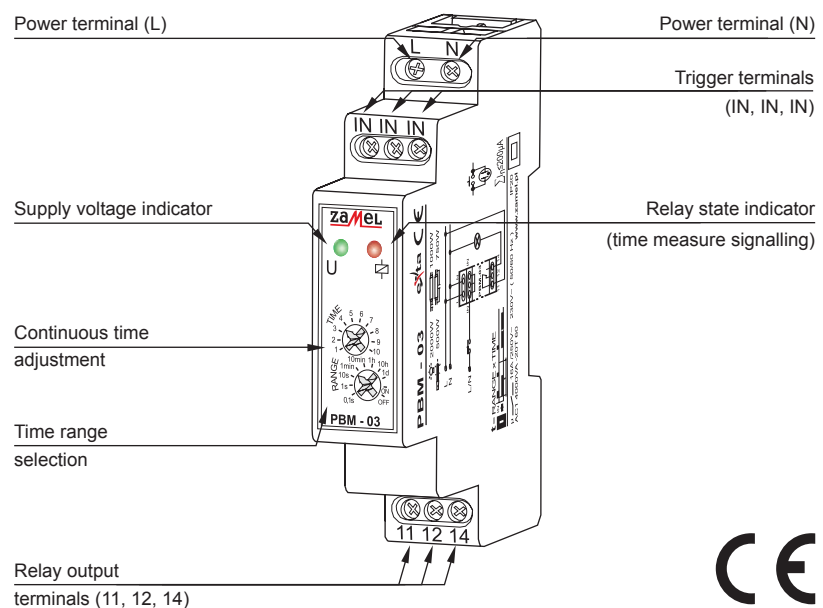
CAUTION

The timer should be connected to a single-phase system accordingly to current standards. The device connections will be described in this manual. Only qualified electricians are allowed to assembly, connect and adjust the timer. It is necessary to read this manual before the timer mounting. Do not disassembly the timer casing or you will lose any warranty rights and expose yourself to the electric shock hazard. Before mounting operation make sure of disconnecting the connection wires from the electric network. The timer should be carried, stored and used in an appropriate way. Do not mount the timer in case of any device parts lack, damage or deformation. In case of malfunction please notify the manufacturer.

TECHNICAL DATA

PBM - 03	
Power terminals:	L, N
Rated voltage:	230 V~
Rated voltage tolerance:	-15 ÷ +10 %
Rated frequency:	50 / 60 Hz
Rated current:	24 mA
t time adjustment range:	0,1 s ÷ 10 dni
Time measure accuracy:	0,2 %
Time setting:	2 x potentiometer (rotary + servo)
Supply voltage indicator:	green LED
Trigger terminals / wires:	IN, IN, IN
Trigger circuit control current:	510 µA
Relay state indicator:	red LED
Relay contacts parameters:	1NO-16 A / 250 V AC1 4000 VA
Connection wires quantity:	8
Connection wire section:	0,2 ÷ 2,50 mm ²
Operating temperature:	-20 ÷ +45 °C
Operating position:	optional
Casing fastening:	TH 35 rail (according to PN-EN 60715)
Casing IP:	IP20 (PN-EN 60529)
Protection class:	II
Overvoltage category:	II
Pollution level:	2
Dimensions:	single-module (17,5 mm) 90x17,5x66 mm
Weight:	75 g
Standard conformity:	PN-EN 60669-1, PN-EN 60669-2-1, PN-EN 61000-4-2,3,4,5,6,11

APPEARANCE

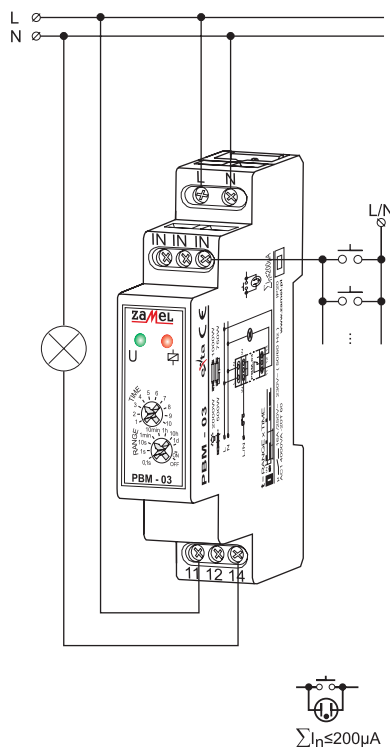


ASSEMBLY, OPERATION

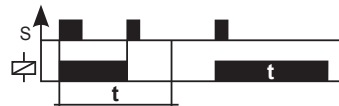
1. Disconnect the electric network by means of an appropriate cut-off, current-limiting circuit-breaker or separator.
2. Check if there is no any voltage between power leads by means of an appropriate gauge.
3. Mount the **PBM-03** device on TH 35 rail.
4. Connect the system leads according to the electrical diagram.
5. Connect power supply circuit.

The device is ready to work just right after its appropriate connecting. The light will be ON for the preset ON-time after the relay is triggered by means of a single pole push button. When the preset time is over, the light will be OFF automatically until the device is triggered once again. The light will be OFF when the device is triggered again during the preset time counting.

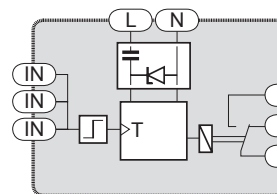
CONNECTIONS



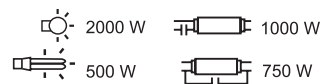
TIME DIAGRAMMS



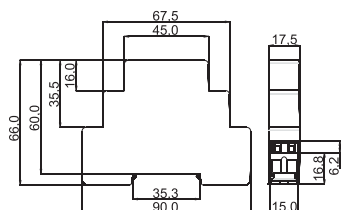
UNIT DIAGRAM



LOAD



CASING DIMENSIONS



PRODUCT FAMILY

The PBM-03 bistable relay is a member of the PBX product family.

PBX - xx (/24V)

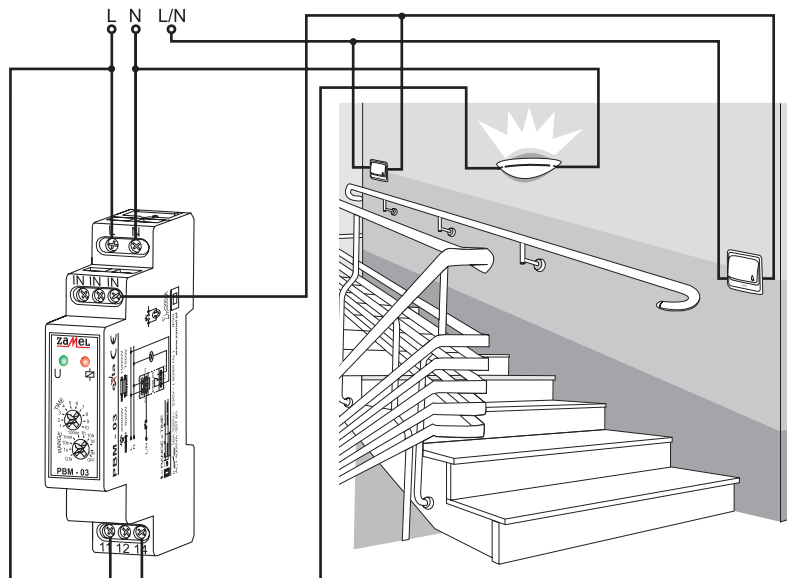
24 V AC/DC supply version available for *PMB-01*, *PMB-02*, *PMB-03*

Device version:
01 – basic
02 – extended: **SET, RESET** functions and state storage
03 – with time limit function

Casing type:
M – single-module
P – for junction box

Device type

APPLICATION



The bistable relay controls the staircase lighting and operates in three-conductor wiring configuration. It is possible to connect the single pole push buttons (e.g. illuminated) in parallel.

WARRANTY

The product warranty is for a period of 24 months

1. ZMIE ZAMEL SP. J. assures 24 months 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 needed for the product functioning,
 - d) damage caused by Act of God or any other incidents independent of the manufacturer.
3. The PURCHASER shall lay any claims in writing to the dealer or ZMIE ZAMEL SP. J.
4. ZMIE ZAMEL SP. J. is liable for processing any claim according to current Polish legislation.
5. ZMIE ZAMEL SP. J. shall process the claim at its own discretion: product repair, replacement or money return.
6. The manufacturer's guarantee is valid in the Republic of Poland.
7. 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.

Dealer signature & stamp, purchase date