



**Zakład Mechaniki i Elektroniki  
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# zAMEL

### DESCRIPTION

PMM-01 power absorption limiter is used to automatic power supply switch off in a supervised circuit, when the output (load) power value has been exceeded. The power value can be smoothly adjusted in the range from 0,2 to 2 kW by means of a potentiometer. The next measure cycles in the case of utput (load) switch off appear every 40 seconds.

### FEATURES

- ⊆ Adjusted power value overload protection,
- ⊆ electric installation overload protection,
- ⊆ supply voltage control indicator,
- ⊆ power value threshold indicator,
- ⊆ smooth power threshold adjustment,
- ⊆ wide range of power adjustment,
- ⊆ resistant to exceeded momentary power value,
- ⊆ TH-35 DIN rail mounting.

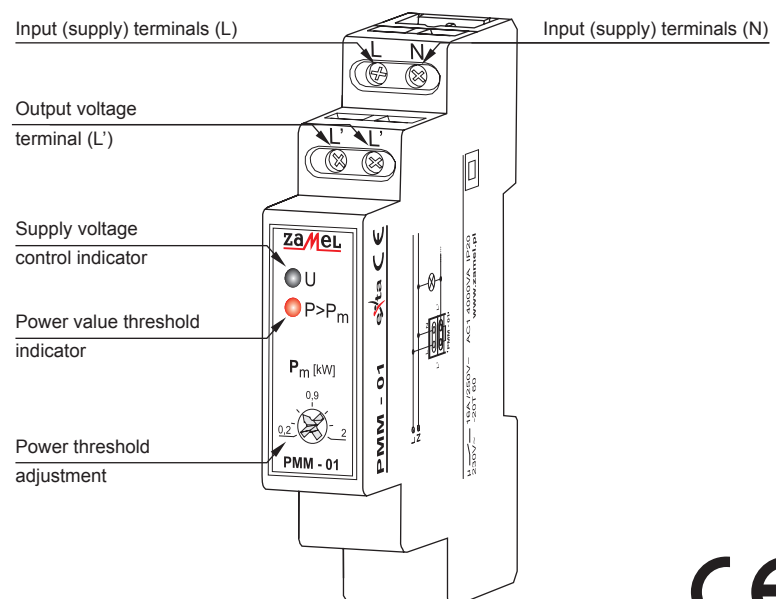


The device is designed for one-phase installation and must be installed in accordance with standards valid in a particular country. The device should be connected according to the details included in this operating manual. Installation, connection and control should be carried out by a qualified electrician 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

PMM - 01	
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:	34 mA
Supply voltage control indicator:	LED green
Power threshold adjustment:	from 0,2 to 2 kW (rotational potentiometer)
Power value indicator:	LED red
Switch on delay:	approx. 2 s
Measure frequency:	maks. 40 s
Output relay parameters:	1NO 16 A / 250 V AC1 4000 VA
Number of terminal clamps:	4
Section of connecting cables:	from 0,2 to 2,50 mm <sup>2</sup>
Ambient temperature range:	from -20 to +60 °C
Operating position:	free
Mounting:	TH35 rail (PN-EN 60715)
Protection degree:	IP20 (PN-EN 60529)
Protective class:	II
Overvoltage category:	II
Pollution degree:	2
Rated impulse withstand voltage:	2 kV (PN-EN 61000-4-5)
Dimensions (height / width / depth):	monomodular (17,5 mm) 90x17,5x66 mm
Weight:	87 g
Reference standards:	PN-EN 60730-1 PN-EN 60730-2-1 PN-EN 61000-4-2,3,4,5,6,11

### APPEARANCE

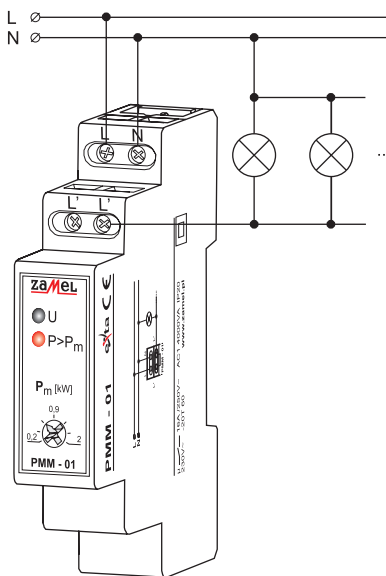


## MOUNTING, FUNCTIONING

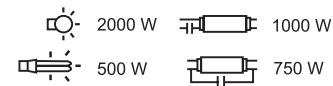
1. Disconnect the power supply from the mains by the phase fuse, the circuit-breaker or the switch-disconnector that are joined to the proper circuit,
2. **Check if there is no voltage on connection cables by means of a special measure equipment,**
3. Install PMM-01 device in the switchboard on TH-35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

The system controls the power value absorption in a controlled circuit. When the total power is absorbed in the measure circuit is smaller than the adjusted value, the output loads are powered by rated voltage. In the situation when the power value is absorbed by the controlled circuit and it exceeds the adjusted value, then the circuit is cut from the power supply (output loads switch off). The next circuit supply to measure the absorbed value takes place after 40 sec. The system "decides" whether the circuit is to be switched on or off after another measure.

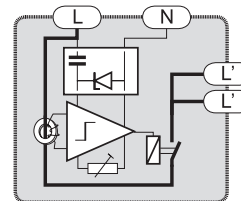
## CONNECTING



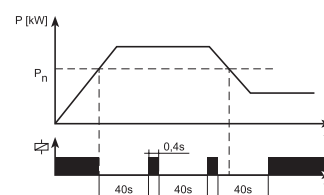
## RELAY CAPACITY



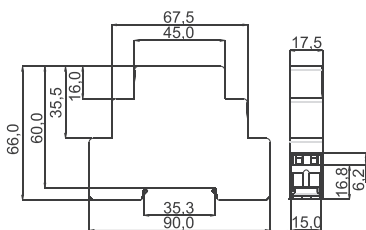
## INNER DIAGRAM



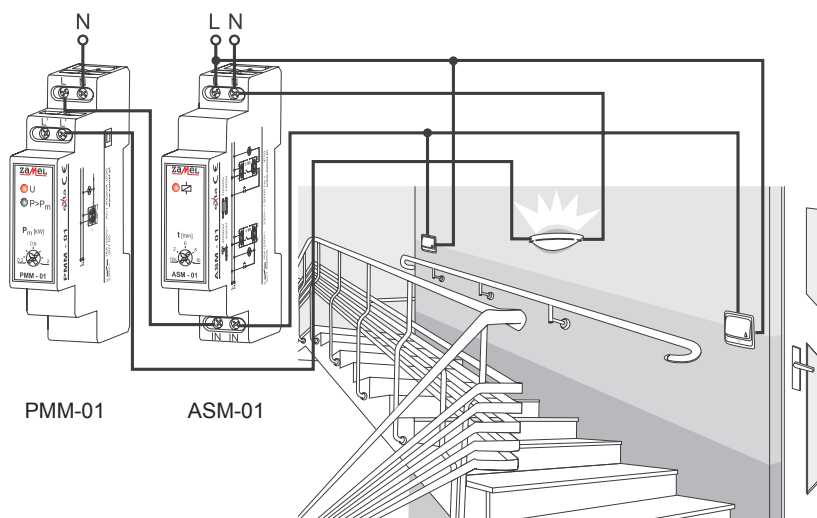
## TIME COURSE



## DIMENSIONS



## EXAMPLE OF INSTALLATION



The power limiter system cooperates with staircase lighting time delay switches and it creates staircase lighting control system with limited power absorption. When the absorbed power value in the system is stated as well as the proper value is adjusted on the power limiter, the system protects the lighting circuit against illegal connections of additional output loads. If the absorbed power is above the adjusted value the power limiter switches off the controlled circuit and checks its power value every 40 seconds.

## PRODUCT FAMILY

PMM-01 power limiter belongs to Pxx power limiters family.

### PXX - xx

Device type:  
01 – basic,

Casing type:  
M – monomodular  
H – hermetic

Device symbol:  
PM – power limiter  
PP – priority relay

## 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.
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.