



**Zakład Mechaniki i Elektroniki
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zamel

DESCRIPTION

The two functional time relay PCM-06 is used for realizing a delay shutting down function in mode A and a delay switching on function in mode B. The relay is released by the power supply voltage. The relay will operate up to ten minutes after current decay in mode A, therefore, this type of mode can be used for operating the bath fans. The relay will be switched on when the time setting "t" is elapsed in mode B, therefore, this type of mode can be used in sound signaling of the motor start-up.

After a signal (of t length) the engine will be started. A range of power supply for this device is 12 ÷ 240 V AC/DC.

FEATURES

- Working mode: switch on delay
- Switch off delay,
- Power supply indicator: LED green
- Relay indicator - LED red,
- Time measure accuracy,
- Relay output – two change over contacts with max. 8A capacity,
- Mono modular casing
- TH35 rail installation.



The device is designed for single-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.

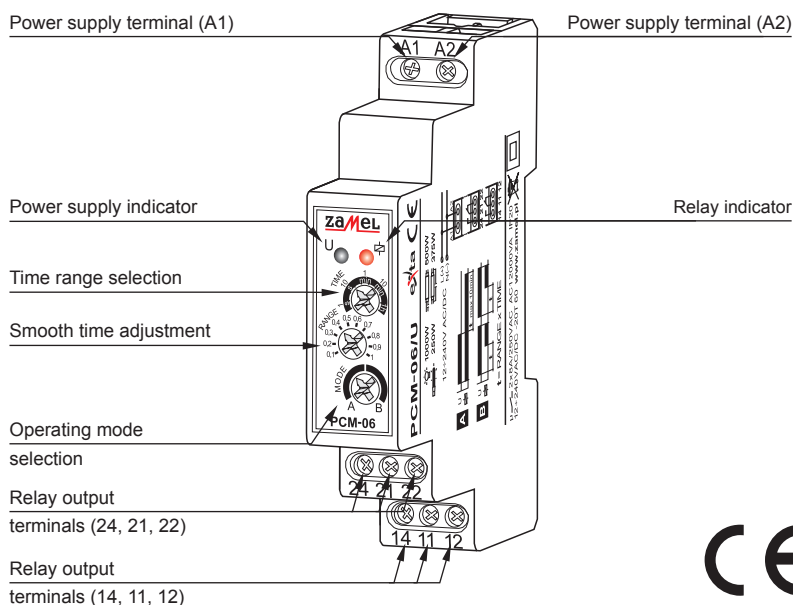


The symbol means selective collecting of electrical and electronic equipment. It is forbidden to put the used equipment together with other waste

TECHNICAL DATA

PCM-06/U	
Input terminals:	A1, A2
Input rated voltage:	12 ÷ 240 V AC/DC
Input voltage tolerance:	-5 ÷ +10 %
Supply voltage control indicator:	LED green
Nominal frequency:	50 / 60 Hz
Rated power consumption:	6 mA (850 mW)
Operating modes number:	2 (A, B)
Time adjustment range t:	0,1 s ÷ 1 hour
Time adjustment accuracy:	5 %
Time measure repeatability:	0,2 %
Time adjustment:	2x potentiometer (rotary and jumping)
Relay indicator and time measure:	LED red
Output relay parameters:	2 x NO/NC - 8 A / 250 V AC
Number of terminal clamps:	8
Section of connecting cables:	0,2 ÷ 2,50 mm ²
Ambient temperature range:	-20 ÷ +60 °C
Operating position:	freely
Mounting:	rail TH 35 (PN-EN 60715)
Protection degree:	IP20 (PN-EN 60529)
Protection level:	II
Overvoltage category:	II
Pollution degree:	2
Rated impulse with stand voltage:	1,5 kV (PN-EN 60730-1), 1 kV (PN-EN 61000-4-5)
Dimensions:	monomodular case (17,5 mm) 90x17,5x66 mm
Weight:	72 g
Reference standards:	PN-EN 60730-1 PN-EN 60730-2-7 PN-EN 61000-4-2,3,4,5,6,11

APPEARANCE



MOUNTING

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 **PCM-06** device in the switch-board on the TH35 DIN rail.
4. Connect the cables with the terminals in accordance with the installing diagram.
5. Select one of the operating mode with a **MODE** knob.
6. Adjust the time using **TIME** and **RANGE** knobs where $t = \text{TIME} \times \text{RANGE}$.
7. Switch on the power supply from the mains.

FUNCTIONING

MODE A

SWITCH OFF DELAY:



When the power of a range of 12÷240 V AC/DC is supplied on the terminals A1-A2, the relay short circuits the contacts 11-14 and 21-24. When the power supplied is out the contacts remain shorted until timing circuit counts the time "t". After the adjusted time is over the device sets itself in the initial position and the terminals 11-12 and 21-22 are short circuited whereas the terminals 11-14 and 21-24 are pulled apart.

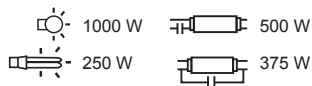
MODE B

SWITCH ON DELAY:

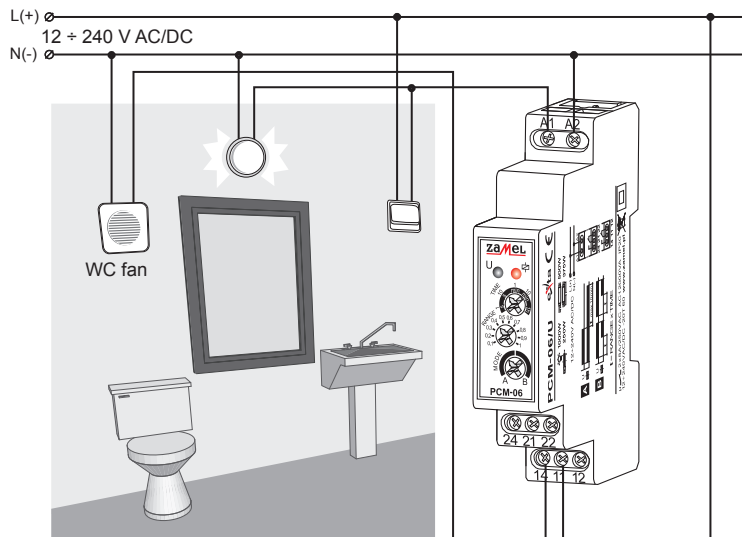


When the power of a range of 12÷240 V AC/DC is supplied on the terminals A1-A2, the device starts timing. When the time "t" is over the device short circuits the terminals 11-14 and 21-24, and pulls apart the terminals 11-12 and 21-22. The relay remains in this position until supply voltage is decayed. Then the terminals 11-14 and 21-24 will be pulled apart, whereas the terminals 11-12 and 21-22 will be short-circuited.

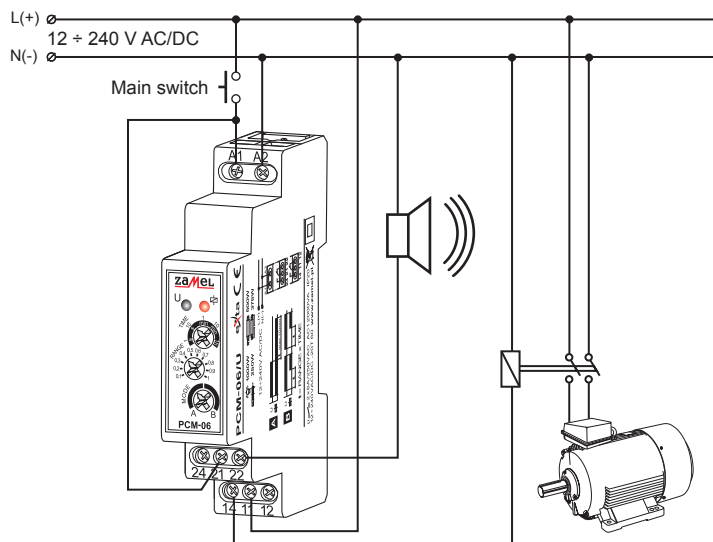
RELAY CAPACITY



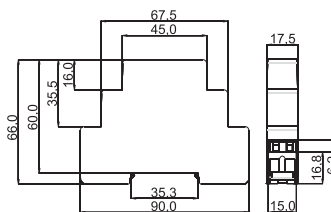
MODE A APPLICATION



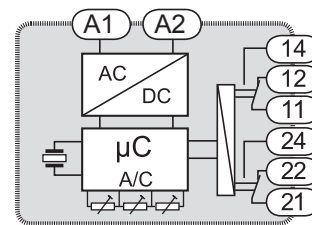
MODE B APPLICATION



DIMENSIONS



INNER DIAGRAM



WARRANTY CARD

There is 24 months guarantee on the product

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.

Salesman stamp and signature, date of sale