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Made in Czech Republic

02-224/2016 Rev.: 1



PRM-91H PRM-92H PRM-2H

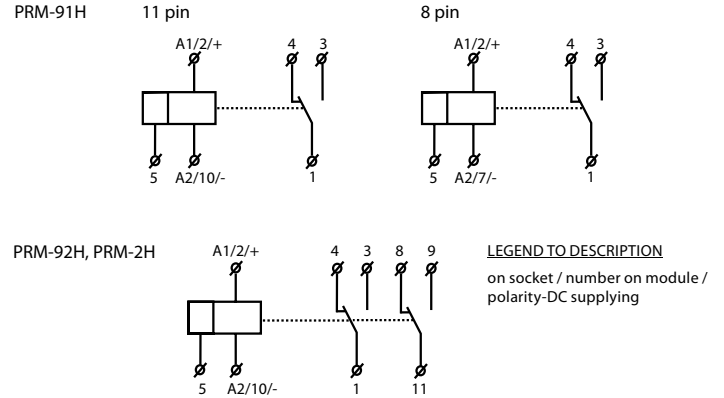
Plug-in time relay



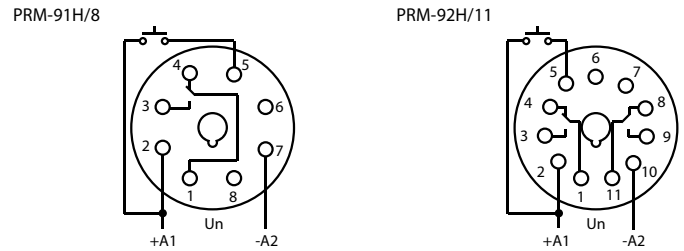
Characteristic

- equivalent of modular types of relays but in versions for 11 or 8 pin standardized socket
- plug-in type enables easy exchange, replacement of older types of relays (pin compatible) or easy exchange of an auxiliary relay for a timer
- Multifunction time relay PRM-91H
 - 11 and 8 pin version
 - 10 time functions, time scale 0.1 s - 10 days divided into 10 ranges: 0.1 s-1 s / 1 s-10 s / 0.1 min-1 min / 1 min-10 min / 0.1 hrs-1 hrs / 1 hrs-10 hrs / 0.1 day-1 day / 1 day-10 days / only ON / only OFF
 - output contact 1x 16 A / 4000 VA, 250 V AC1
- Multifunction time relay PRM-92H
 - 11 pin version
 - 10 time functions, time scale 0.1 s - 10 days divided into 10 ranges: 0.1 s-1 s / 1 s-10 s / 0.1 min-1 min / 1 min-10 min / 0.1 hrs-1 hrs / 1 hrs-10 hrs / 0.1 day-1 day / 1 day-10 days / only ON / only OFF
 - output contact 2x 8 A / 2000 VA, 250 V AC1
- Asymmetric cycler PRM-2H
 - 11 pin version
 - 2 time functions, time scale 0.1 s - 100 days divided into 10 ranges: 0.1 s-1 s / 1 s-10 s / 0.1 min-1 min / 1 min-10 min / 0.1 hrs-1 hrs / 1 hrs-10 hrs / 0.1 day-1 day / 1 day-10 days / 3 days-30 days / 10 days-100 days
 - output contact 2x 8 A / 2000 VA, 250 V AC1
- universal supply voltage AC/DC 12 - 240 V
- output indication: multif. red LED, which is flashing or shining according to an output status
- PLUG-IN version, relays into a socket

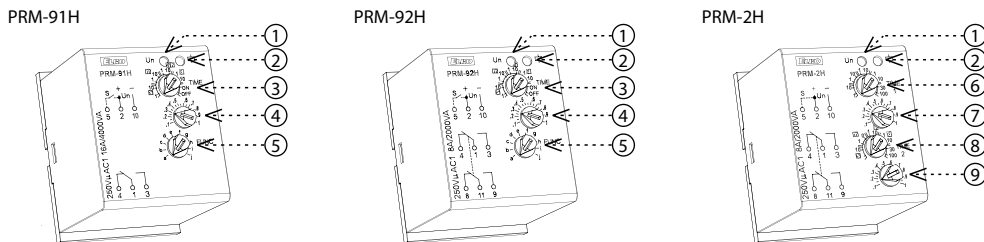
Symbol



Connection



Description



- Supply voltage indication
- Output indication
- Rough adjusting of time
- Slight adjusting of time
- Function setting
- Rough adjusting of time IMPULS
- Slight adjusting of time IMPULS
- Rough adjusting of time PAUSE
- Slight adjusting of time PAUSE

PRM-91H

| | | | | | | | | | |
|----------------------------------|--------------------------|-----------|-----------|--------------------|------------------|----------|-----------|-----------|------------|
| Type of load | $\cos \varphi \geq 0.95$ | | | | | | | | |
| mat. contacts AgNi, contact 16 A | AC1 | AC2 | AC3 | AC5a uncompensated | AC5a compensated | AC5b | AC6a | AC7b | AC12 |
| | 250V / 16A | 250V / 5A | 250V / 3A | 230V / 3A (690VA) | x | 800W | x | 250V / 3A | 250V / 10A |
| Type of load | | | | | | | | | |
| mat. contacts AgNi, contact 16 A | AC13 | AC14 | AC15 | DC1 | DC3 | DC5 | DC12 | DC13 | DC14 |
| | 250V / 6A | 250V / 6A | 250V / 6A | 24V / 16A | 24V / 6A | 24V / 4A | 24V / 16A | 24V / 2A | 24V / 2A |

PRM-92H, PRM-2H

| | | | | | | | | | |
|---------------------------------|--------------------------|-----------|-----------|---------------------|------------------|----------|----------|-----------|-----------|
| Type of load | $\cos \varphi \geq 0.95$ | | | | | | | | |
| mat. contacts AgNi, contact 8 A | AC1 | AC2 | AC3 | AC5a uncompensated | AC5a compensated | AC5b | AC6a | AC7b | AC12 |
| | 250V / 8A | 250V / 3A | 250V / 2A | 230V / 1.5A (345VA) | x | 300W | x | 250V / 1A | 250V / 1A |
| Type of load | | | | | | | | | |
| mat. contacts AgNi, contact 8 A | x | AC13 | AC14 | DC1 | DC3 | DC5 | DC12 | DC13 | DC14 |
| | x | 250V / 3A | 250V / 3A | 24V / 8A | 24V / 3A | 24V / 2A | 24V / 8A | 24V / 2A | x |

Technical parameters

| | PRM-91H/8 | PRM-91H/11 | PRM-92H | PRM-2H |
|---|---|---------------|---------------|------------------|
| Number of functions: | 10 | | | 2 |
| Supply: | pins 2 and 7 | pins 2 and 10 | pins 2 and 10 | pins 2 and 10 |
| Voltage range: | AC/DC 12 - 240 V (AC 50 - 60 Hz) | | | |
| Power input (max.): | AC 0.7 - 3 VA / DC 0.5 - 1.7 W | | | |
| Max. dissipated power (Un + terminals): | 8 W | 7 W | 4 W | 2 W |
| Supply voltage tolerance: | -15 %; +10 % | | | |
| Supply indication: | green LED | | | |
| Time ranges: | 0.1 s - 10 days | | | 0.1 s - 100 days |
| Time setting: | rotary switch and potentiometer | | | |
| Time deviation: | 5 % - mechanical setting | | | |
| Repeat accuracy: | 0.2 % - set value stability | | | |
| Temperature coefficient: | 0.01 % / °C, at = 20 °C (0.01 % / °F, at = 68 °F) | | | |

Output

| | | |
|------------------------|--|--|
| Number of contacts: | 1x changeover / SPDT (AgNi / Silver Alloy) | 2x changeover / DPDT (AgNi / Silver Alloy) |
| Current rating: | 16 A / AC1 | 8 A / AC1 |
| Breaking capacity: | 4000 VA / AC1, 384 W / DC | 2000 VA / AC1, 192 W / DC |
| Inrush current: | 30 A / < 3 s | 10 A / < 3 s |
| Switching voltage: | 250 V AC / 24 V DC | |
| Output indication: | multifunction red LED | |
| Mechanical life: | 3x10 ⁷ | |
| Electrical life (AC1): | 0.7x10 ⁵ | |

Controlling

| | |
|---------------------------------|--|
| Control. voltage: | in the supply voltage range |
| Power the control input: | AC 0.025 - 0.2 VA / DC 0.1 - 0.7 W (UNI) |
| Load between 5-10: | Yes |
| Glow tubes connetions: | No |
| Control terminals: | 2 - 5 |
| Max. capacity of cable control: | |
| - without connected glow-lamps: | 0.1 μF |
| Impulse length: | min. 25 ms / max. unlimited |
| Reset time: | max. 150 ms |

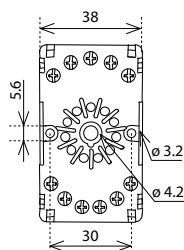
Other information

| | | | | |
|------------------------|----------------------------------|-----------------|-----------------|-----------------|
| Operating temperature: | -20 .. 55 °C (-4 °F .. 131 °F) | | | |
| Storage temperature: | -30 .. 70 °C (-22 °F .. 158 °F) | | | |
| Electrical strength: | 2.5 kV | | | |
| Operating position: | any | | | |
| Mounting / DIN rail: | DIN rail EN 60715 | | | |
| Protection degree: | IP40 from front panel | | | |
| Overvoltage category: | III. | | | |
| Pollution degree: | 2 | | | |
| Dimensions: | 50 x 38 x 51 mm (2" x 1.5" x 2") | | | |
| Weight: | 54 g (1.9 oz.) | 58 g (2.05 oz.) | 58 g (2.05 oz.) | 59 g (2.08 oz.) |
| Standards: | EN 61812-1, EN 61010-1 | | | |

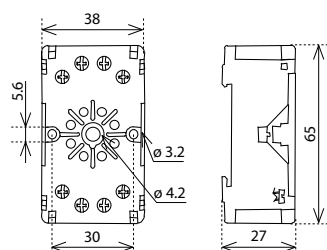
Recommended socket for DIN rail

Max. current: 10 A

ES-11 (11 pin)



ES-8 (8 pin)



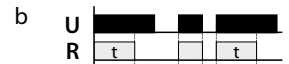
Functions

PRM-91H, PRM-92H

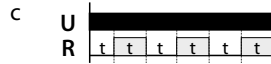
Delay ON after energisation



Delay OFF after energisation



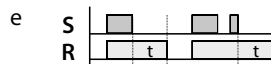
Cycler beginning with pause after energisation



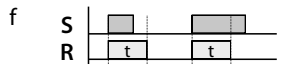
Cycler beginning with impulse after energisation



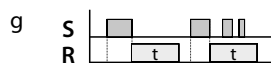
Delay OFF after de-energisation, instant make of output



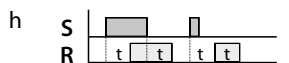
Delay OFF responding to make of control contact regardless its length



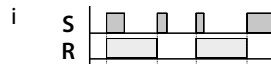
Delay OFF after break of control contact with instant output



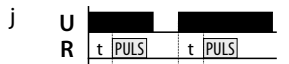
Delay OFF after make and break of control contact



Impulse relay



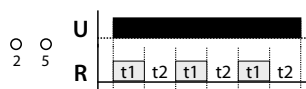
Pulse generator (puls = 0.5s)



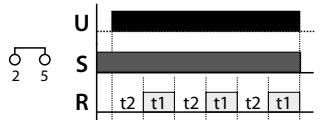
PRM-2H

By PRM-2H function is selected by connecting by terminals 2 and 5.

Cycler beginning with impulse



Cycler beginning with pause



Warning

Device is constructed for connection in 1-phase main alternating current and must be installed according to norms valid in the state of application. Connection according to the details in this direction. Installation, connection, setting and servicing should be installed by qualified electrician staff only, who has learnt these instruction and functions of the device. This device contains protection against overvoltage peaks and disturbances in supply. For correct function of the protection of this device there must be suitable protections of higher degree (A, B, C) installed in front of them. According to standards elimination of disturbances must be ensured. Before installation the main switch must be in position "OFF" and the device should be de-energized. Don't install the device to sources of excessive electro-magnetic interference. By correct installation ensure ideal air circulation so in case of permanent operation and higher ambient temperature the maximal operating temperature of the device is not exceeded. For installation and setting use screw-driver cca 2 mm. The device is fully-electronic - installation should be carried out according to this fact. Non-problematic function depends also on the way of transportation, storing and handling. In case of any signs of destruction, deformation, non-function or missing part, don't install and claim at your seller. In case of any signs of destruction, deformation, non-function or missing part, don't install and claim at your seller. It is possible to dismount the device after its lifetime, recycle, or store in protective dump.