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EN

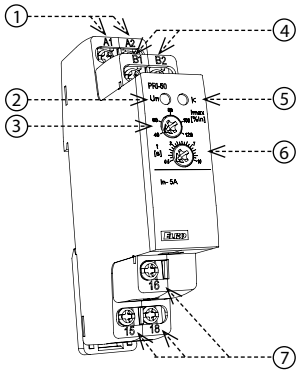
PRI-50

AC current monitoring relay

Characteristics

- it is used, for example, to monitor the operation of pumps, interruptions of radiators or lighting
- continuous setting of tripping current by potentiometer from 2 to 6A AC
- monitors the decrease in current magnitude below the level of Imin
- adjustable delay 0.5 - 10 s (eliminat short current peaks, on of short...)
- possible to use for scanning of current from current transformer
- universal supply voltage AC/DC 24 V - 240 V
- power supply galvanically separated from the monitored current circuit
- mains operating frequency 45 - 65 Hz
- output contact: 1x changeover 8 A
- 1-phase version, 1-MODULE, DIN rail mounting

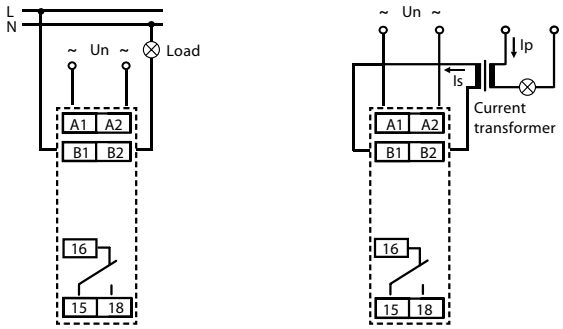
Description



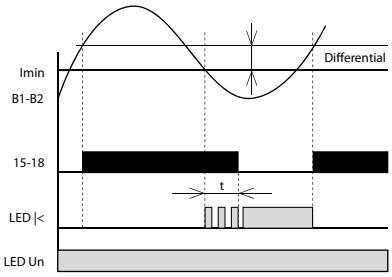
1. Supply voltage terminals
2. Supply voltage indication
3. Imin setting
4. Current monitoring terminals
5. Output indication
6. Setting of delay
7. Output contact

Connection

Example of connection PRI-50 with current transformer for current range increase



Function



When the supply voltage is connected, the green LED lights up.

If the magnitude of the monitored current is higher than the set level Imin, the relay is closed and the red LED is not lit. If the magnitude of the monitored current falls below the Imin level, the relay opens after the set delay has elapsed and the red LED lights up. The red LED flashes during the delay. If the magnitude of the monitored current returns above the level of Imin + hysteresis, the relay closes without delay and the red LED goes out.

Technical parameters

PRI-50	
Supply	
Supply terminals:	A1 - A2
Voltage range:	AC/DC 24 - 240 V (AC 45 - 65 Hz)
Burden:	max. 3 VA / 1.2 W
Max. dissipated power (Un + terminals):	2 W
Supply voltage tolerance:	±10 %
Measuring circuit	
Load:	between B1 - B2
Current range:	AC 2 - 6A
Max. permanent current:	10A
Inrush overload < 3 s:	50 A
Current adjustment:	potentiometer
Time delay:	adjustable, 0.5 - 10 s
Accuracy	
Setting accuracy (mechanical):	5 %
Limit values tolerance:	2.5 %
Hysteresis (fault to OK):	1 %
Output	
Number of contacts:	1x changeover / SPDT (AgNi / Silver Alloy)
Current rating:	8 A / AC1
Breaking capacity:	2000 VA / AC1, 240 W / DC
Output indication:	red LED
Other information	
Operating temperature:	-20 °C to 55 °C (-4 °F to 131 °F)
Storage temperature:	-30 °C to 70 °C (-22 °F to 158 °F)
Dielectrical strength:	4 kV (supply - output)
Operating position:	any
Mounting:	DIN rail EN 60715
Protection degree:	IP40 from front panel / IP10 terminals
Overvoltage cathegory:	III.
Pollution degree:	2
Max. cable size (mm^2):	solid wire max. 2x 2.5 or 1x 4 / with sleeve max. 1x 2.5 or 2x 1.5 (AWG 12)
Dimensions:	90 x 17.6 x 64 mm (3.5˝ x 0.7˝ x 2.5˝)
Weight:	70 g (2.5 oz.)

Warning

Devices are constructed to be connected into AC or DC circuits (according to type, it is necessary to observe voltage ranges) and must be installed in accordance with regulations and standards applicable in a country of use. Installation, connection, setting and servicing can be done only by a person with an adequate qualification who has read and perfectly understood this manual and function of the device. The device contains protections against over-voltage peaks and disturbances in the supply main. To assure correct function of these protections, there must be frontended suitable protections of higher degree (A, B, C) and according to a standard switched devices (contactors, motors, inductive loads etc.) must be screened. before installing it is necessary to make sure that the device is not energized and main switch is in position OFF. Do not install device to sources of excessive electromagnetic disturbances. By correct installation of the device, ensure perfect air circulation so the maximal operational temperature of the device is not exceeded when operated 24 hours a day with higher ambient temperature. Use screwdriver width approx. 2 mm to install and set the device. Please keep in mind that it is a fully electronics device while mounting it. Correct function of the device is also depended on the type of transport, storing and handling. In case you notice any damage, deformation, malfunction or missing piece, do not install the device and claim it at the seller. The device can be dismounted, recycled or stored at protected dumping-place after its lifetime.