



EAN code
 PRI-51/0.5A: 8595188142885
 PRI-51/1A: 8595188124904
 PRI-51/2A: 8595188124911
 PRI-51/5A: 8595188124928
 PRI-51/8A: 8595188124935
 PRI-51/0.1-10A: 8595188155717
 PRI-51/16A: 8595188124942

Technical parameters PRI-51

Supply circuit

Supply terminals:	A1 - A2
Voltage range:	AC 24 - 240 V and DC 24 V (AC 50-60 Hz)
Burden:	max. 25 VA/1.6 W
Max. dissipated power (U _n + terminals):	2.5 W
Supply voltage tolerance:	-15 %; +10 %

Measuring circuit

Load:	between B1 - B2
Current range:	PRI-51/0.5 A: AC 0.05-0.5 A PRI-51/8 A: AC 0.8-8 A PRI-51/1 A: AC 0.1-1 A PRI-51/0.1-10 A: AC 0.1-10 A PRI-51/2 A: AC 0.2-2 A PRI-51/16 A: AC 1.6-16 A PRI-51/5 A*: AC 0.5-5 A (AC 50-60 Hz)
Max. permanent current:	PRI-51/0.5 A: 2 A PRI-51/1 A: 4 A PRI-51/2 A: 8 A PRI-51/0.1-10 A: 10 A PRI-51/5 A, PRI-51/8 A, PRI-51/16 A: 17 A
Inrush overload <1ms:	50 A
Current adjustment:	potentiometer
Time delay:	adjustable 0.5 - 10 s

Accuracy

Setting accuracy (mechanical):	5 %
Repeat accuracy:	< 1 %
Temperature dependency:	< 0.1 %/°C (°F)
Limit values tolerance:	5 % (10 % for 0.05 - 0.5 A and 0.1 - 10 A range)
Hysteresis (fault to OK):	5 %
Mechanical life:	60.000.000 op.
Electrical life (AC1):	150.000 op.

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

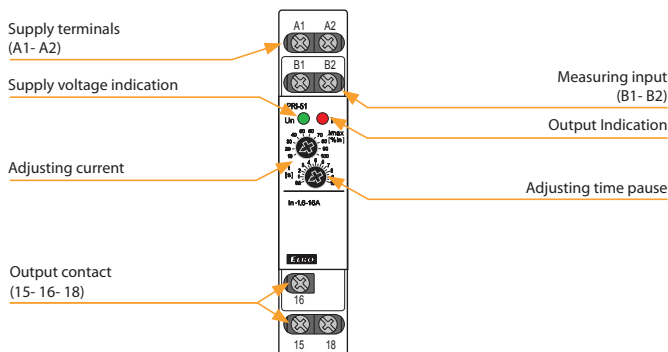
Other information

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 category:	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:	72 g (2.5 oz.)
Standards:	EN 60255-1, EN 60255-26, EN 60255-27

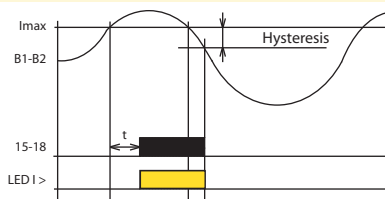
* applicable also for current transformer

- It serves for monitoring of heating in rail-switches, heating cables, consumption of 1-phase motors, indicates current flow.
- Flexible adjustment by potentiometer.
- Adjustable delay 0.5 - 10 s to eliminate short current peaks.
- It is possible to use for current scanning from current transformer.
- Supply is galvanically separated from measured current, it must be in the same phase.

Description



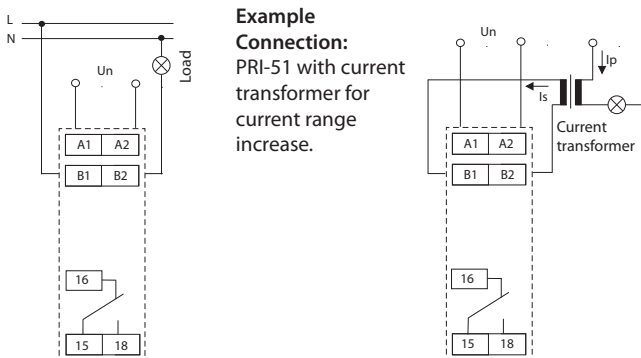
Function



Monitoring relay PRI-51 serves to monitor current level in one-phase AC circuits. Gradual setting of actuating current of monitoring relay enables many different applications. Output relay is in normal state opened. After the set current level is reached, relay closes after the set delay (0.5 - 10 s). When returning from faulty to normal state there is a hysteresis (5 %). Multi-voltage of this relay is an advantage. It is possible to monitor load which doesn't have the same supply as monitoring relay PRI-51.

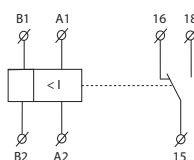
Range of PRI-51 can be increased by an external current transformer.

Connection



Example Connection: PRI-51 with current transformer for current range increase.

Symbol



Example of an order

Always specify all reference name of current relay according to required range, for example PRI-51/5.