

Monitoring current relay PRI-51

1M



- to monitor heating rods in shunts, heating cables, to indicate current flow, to monitor consumption of one-phase engines
- fluent adjusting actualing current via potentiometer, choice of 5 ranges: AC 0.1-1 A, AC 0.2-2 A, AC 0.5-5 A, AC 0.8-8 A, AC 1.6-16 A
- adjustable delay 0.5 - 10 s to eliminate short current peaks
- possible to use for current scanning from current transformer - up to 600 A!
- universal supply AC 24 - 240 V and DC 24 V
- supply is not galvanically separated from measured current, it must be in the same phase
- output contact: 1x changeover 8 A
- 1-phase, 1-MODULE, DIN rail mounting, replacement for PRI-31

Technical parameters

PRI-51

Supply circuit

Supply terminals:	A1 - A2
Supply voltage:	AC 24 - 240 V a DC 24 V (AC 50 - 60 Hz)
Consumption:	max. 1.5 VA
Supply voltage tolerance:	-15 %; +10 %

Measuring circuit

Load:	between B1 - B2				
Current range:	PRI-51/1 AC 0.1-1A	PRI-51/2 AC 0.2-2A	PRI-51/5 AC 0.5-5A	PRI-51/8 AC 0.8-8A	PRI-51/16 AC 1.6-16A
	↑ applicable also for current transformer				

Recommended current transformers:

more information page 99

Max. permanent current:	1 A	2 A	5 A	8 A	16 A
Inrush overload <1ms:	100 A				
Current adjustment:	potentiometer				
Time delay:	adjustable 0.5-10 s				

Accuracy

Setting accuracy (mechanical):	5 %
Repeat accuracy:	<1 %
Temperature dependancy:	< 0.1 % / °C
Limit values tolerance:	5 %
Hysteresis (fault to OK):	5 %

Output

Number of contacts:	1x changeover (AgNi)
Rated current:	8 A / AC1
Breaking capacity:	2500 VA / AC1, 240 W / DC
Output indication:	green / red LED

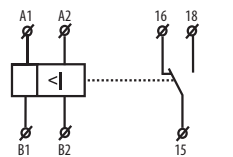
Other information

Operating temperature:	-20.. +55 °C
Storage temperature:	-30.. +70 °C
Electrical strength:	4 kV (supply - output)
Operating position:	any
Mounting:	DIN rail EN 60715
Protection degree:	IP 40 from front panel
Overvoltage category:	III.
Pollution degree:	2
Max. cable size (mm ²):	solid wire max. 2x2.5 or 1x4, with sleeve max. 1x2.5 or 2x1.5
Dimensions:	90 x 17.6 x 64 mm, see page 157-159
Weight:	58 g
Standards:	EN 60255-6, EN 61010-1

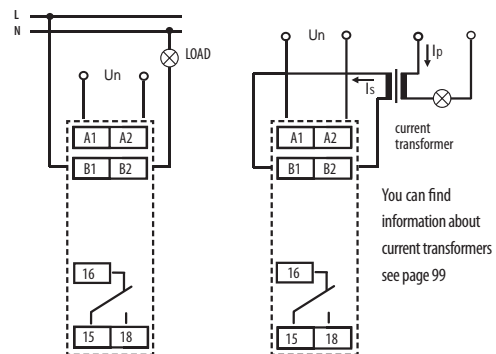
Fuktion description

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 open. After the set current level is reached, relay closes after the set delay (0.5-10s). 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.

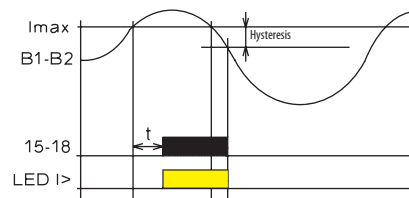
Symbol



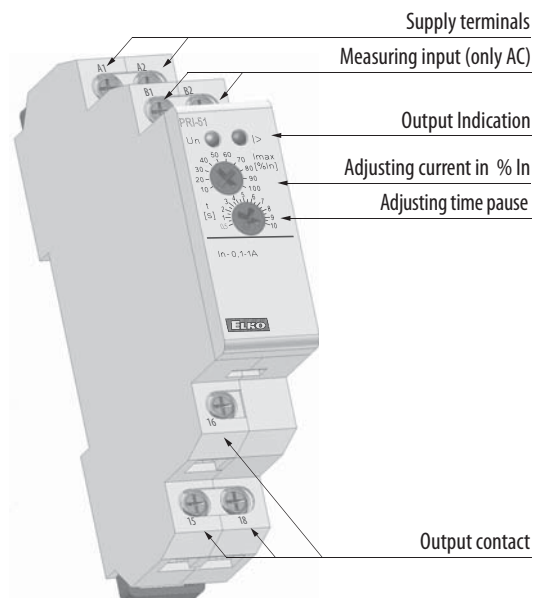
Connection



Function



Description



Example of an order

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