

# Monitoring current relay PRI-51

1M



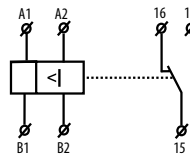
- to monitor heating rods in shunts, heating cables, to indicate current flow, to monitor consumption of one-phase engines
- fluent adjusting actualing current via potentiometer, choice of 5 ranges: AC 0.1-1 A, AC 0.2-2 A, AC 0.5-5 A, AC 0.8-8 A, AC 1.6-16 A
- adjustable delay 0.5 - 10 s to eliminate 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										
<b>Supply circuit</b>											
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 %										
<b>Measuring circuit</b>											
Load:	between B1 - B2										
Current range:	<table border="1"> <tr> <td>PRI-51/1</td> <td>PRI-51/2</td> <td>PRI-51/5</td> <td>PRI-51/8</td> <td>PRI-51/16</td> </tr> <tr> <td>AC 0.1-1A</td> <td>AC 0.2-2A</td> <td>AC 0.5-5A</td> <td>AC 0.8-8A</td> <td>AC 1.6-16A</td> </tr> </table>	PRI-51/1	PRI-51/2	PRI-51/5	PRI-51/8	PRI-51/16	AC 0.1-1A	AC 0.2-2A	AC 0.5-5A	AC 0.8-8A	AC 1.6-16A
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Recommended current transformers:	applicable also for current transformer										
Max. permanent current:	more information page 67										
Inrush overload <1ms:	1 A   2 A   5 A   8 A   16 A										
Current adjustment:	100 A										
Time delay:	potentiometer										
Accuracy	adjustable 0.5-10 s										
Setting accuracy (mechanical):											
Repeat accuracy:	5 %										
Temperature dependency:	<1 %										
Limit values tolerance:	< 0.1 % / °C										
Hysteresis (fault to OK):	5 %										
<b>Output</b>	5 %										
Number of contacts:											
Rated current:	1x changeover (AgNi)										
Breaking capacity:	8 A / AC1										
Output indication:	2500 VA / AC1, 240 W / DC										
<b>Other information</b>	green / red LED										
Operating temperature:											
Storage temperature:	-20.. +55 °C										
Electrical strength:	-30.. +70 °C										
Operating position:	4 kV (supply - output)										
Mounting:	any										
Protection degree:	DIN rail EN 60715										
Overvoltage category:	IP 40 from front panel										
Pollution degree:	III.										
Max. cable size (mm <sup>2</sup> ):	2										
Dimensions:	solid wire max. 2x2.5 or 1x4, with sleeve max. 1x2.5 or 2x1.5										
Weight:	90 x 17.6 x 64 mm, see page 90-92										
Standards:	58 g EN 60255-6, EN 61010-1										

## Function description

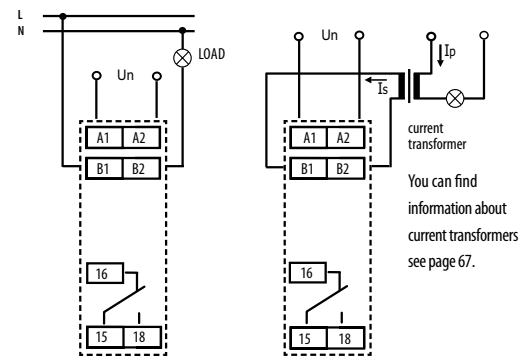
Monitoring relay PRI-51 serves to monitor current level in one-phase AC circuits. Gradual setting of actuating current of monitoring relay enables many different applications. Output relay is in normal state open. After the set current level is reached, relay closes after the set delay (0.5-10s). When 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

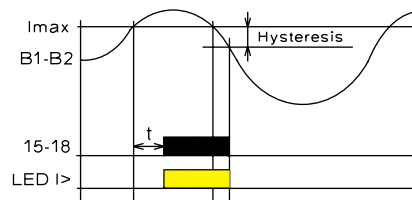


## Connection

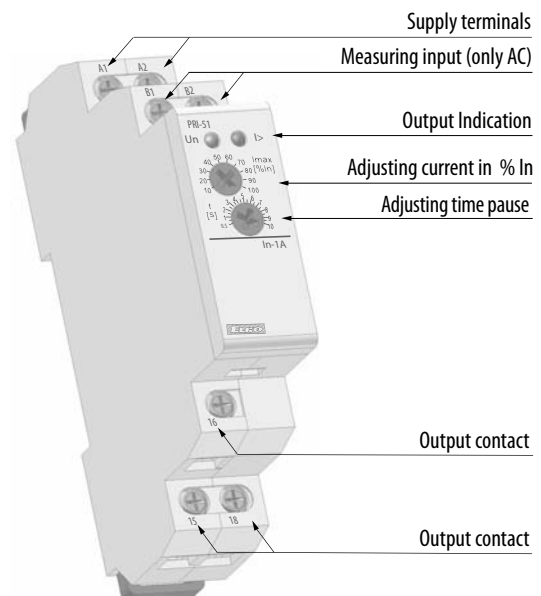
Example Connection: PRI-51 with current transformer for current range increase



## Function



## Description



## Example of an order

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