

# Current monitoring relay PRI-41, PRI-42

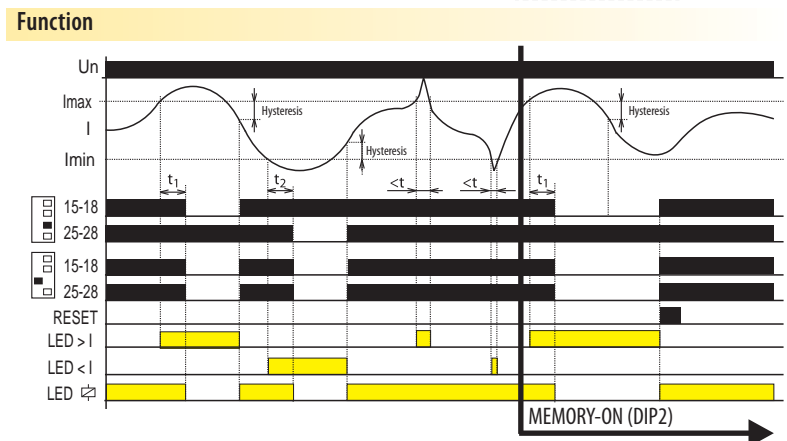
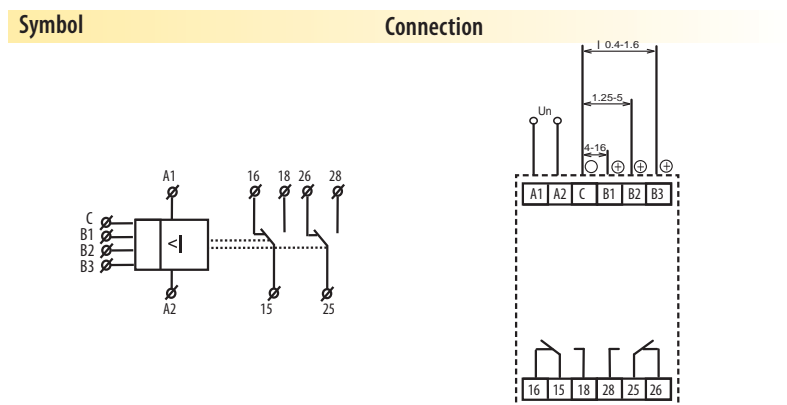
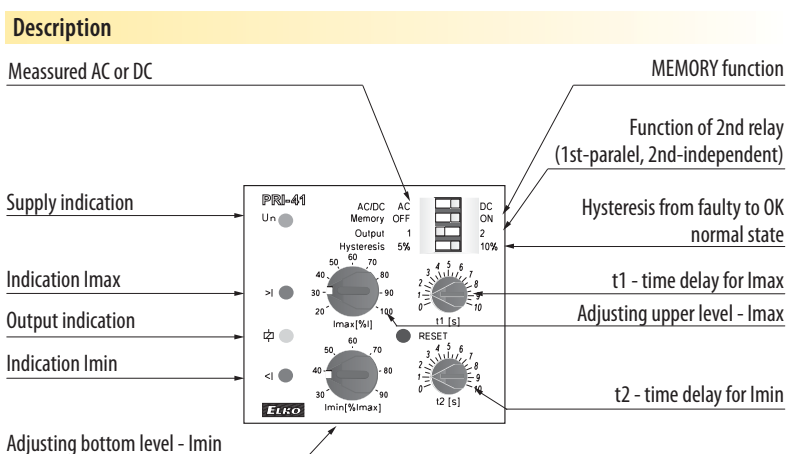


## EAN code

PRI-41 /230V 8595188140485  
 PRI-41 /24V 8595188140492  
 PRI-42 /230V 8595188140515  
 PRI-42 /24V 8595188140522

- To monitor overloading / discharge ( machine, motor...), load sensing, diagnostics of remote device ( interruption, short circuit, current consumption increase...)
- Monitors AC/DC 1-phase current in 3 ranges
- Monitoring adjusted current in 2 independent levels
- PRI-41: "HYSTERESIS" function and PRI-42: "WINDOW" function
- function of 2nd relay (independent/parallel):  
 "MEMORY" function - manual reset.  
 "RESET" button on the frontal panel
- Adjustable time delay for each level
- Galvanically separated supply
- Output contact: 1x changeover/ SPDT 16 A / 250 V AC1 for each current level
- 3-MODULE, DIN rail mounting

Technical parameters	PRI-41	PRI-42
<b>Supply circuit</b>		
Supply terminals:	A1 - A2	
Voltage range:	AC 230 V or AC / DC 24 V (AC 50 - 60 Hz)	
Burden:	max. 4.5 VA	
Operating range:	-15 %; +10 %	
<b>Measuring circuit</b>		
Ranges:	4 - 16 A (AC50Hz)	1.25 - 5 A (AC50Hz) 0.4 - 1.6 A (AC50Hz)
Terminals:	C - B1	C - B2 C - B3
Input resistance:	5 mΩ	11 mΩ 50 mΩ
Max. permanent current:	16 A	5 A 1.6 A
Inrush overload <1ms:	20 A	6.3 A 2 A
Time delay for I <sub>max</sub> :	adjustable 0-10 sec	
Time delay for I <sub>min</sub> :	adjustable 0-10 sec	
<b>Accuracy</b>		
Measuring accuracy:	5 %	
Repeat accuracy:	<1 %	
Temperature dependency:	< 0.1 % / °C	
Limit values tolerance:	5 %	
Hysteresis (fault to OK):	selectable 5 % / 10 %	
<b>Output</b>		
Number of contacts:	changeover/ SPDT (AgNi / Silver Alloy)	
Current rating:	16 A / AC1	
Breaking capacity:	4000 VA / AC1, 384 W / DC	
Inrush current:	30 A / < 3 s	
Switching voltage:	250 V AC1 / 24 V DC	
Min. breaking capacity DC:	500 mW	
Output indication:	yellow LED	
Mechanical life:	3x10 <sup>7</sup>	
Electrical life (AC1):	0.7x10 <sup>5</sup>	
<b>Other information</b>		
Operating temperature:	-20 °C to +55 °C (-4 °F to 131 °F)	
Storage temperature:	-30 °C to +70 °C (-22 °F to 158 °F)	
Electrical strength:	4 kV (supply - output)	
Operating position:	any	
Mounting:	DIN rail EN 60715	
Protection degree:	IP 40 from front panel / IP20 terminals	
Overvoltage category:	III.	
Pollution degree:	2	
Max. cable size (mm <sup>2</sup> ):	solid wire max. 1x 2.5 or 2x1.5/ with sleeve max. 1x1.5 (AWG 12)	
Dimensions:	90 x 52 x 65 mm (3.5" x 2" x 2.6")	
Weight:	239 g (8.4 oz.)	
Standards:	EN 60255-6, EN 61010-1	



Relay is delivered in two versions - according to setting and level monitoring .

PRI-41 has function hysteresis, which means that you set only upper level ( I<sub>max</sub> ) and lower level is set in % from upper level. Therefore when upper level is changed, lower level changes automatically. PRI-42 has function "WINDOW", which means that you set upper level ( I<sub>max</sub> ) and lower level ( I<sub>min</sub> ) individually in % of rated monitored range.

Both types have selectable function MEMORY. In case the relay gets to faulty state, this function leaves relay in this state until it is reseted by RESET button. DIP switch No. 3 can be used to choose if output relay should switch for each level separately, or in parallel in case any current level is exceeded. DIP switch No. 4 serves to set hysteresis which applies when changing from faulty to normal state. Relay is protected against re-poling of DC current, or wrong AC/DC current ( this fault is indicated by LED <I a LED >I common flashing).