

PRI-41, PRI-42 | Monitoring current relay



EAN code
 PRI-41/110V: 8595188140508
 PRI-41/230V: 8595188140485
 PRI-41/400V: 8595188140485
 PRI-41/24V: 8595188140492
 PRI-42/110V: 8595188140539
 PRI-42/230V: 8595188140515
 PRI-42/400V: 8595188147484
 PRI-42/24V: 8595188140522

Technical parameters

PRI-41

PRI-42

Supply circuit

	A1 - A2
Voltage range:	AC 110 V, AC 230 V, AC 400 V or AC / DC 24 V (AC 50 - 60 Hz)

Burden max.:	2.5 W / 5 VA (AC 110 V, AC 230 V, AC 400 V), 1.4 W / 2 VA (AC/DC 24 V)
Operating range:	-15 %; +10 %

Measuring circuit

Ranges:*	AC/DC 3.2 - 16 A (AC 50 - 60 Hz)	AC/DC 1 - 5 A (AC 50 - 60 Hz)	AC/DC 0.32 - 1.6 A (AC 50 - 60 Hz)
Terminals:	C - B1	C - B2	C - B3
Input resistance:	2.3 mΩ	11 mΩ	23 mΩ
Max. permanent current:	16 A	8 A	3 A
Inrush overload <1ms:	20 A	16 A	6 A
Time delay for I _{max} :	adjustable 0.1-10 s		
Time delay for I _{min} :		adjustable 0.1-10 s	

Accuracy

Measuring accuracy:	5 %
Repeat accuracy:	< 1 %
Temperature dependancy:	< 0.1 % / °C
Limit values tolerance:	5 %
Hysteresis (fault to OK):	selectable 5 % / 10 % from range

Output

Number of contacts:	2x 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
Output indication:	yellow LED
Mechanical life:	3x10 ⁷
Electrical life (AC1):	0.7x10 ⁵

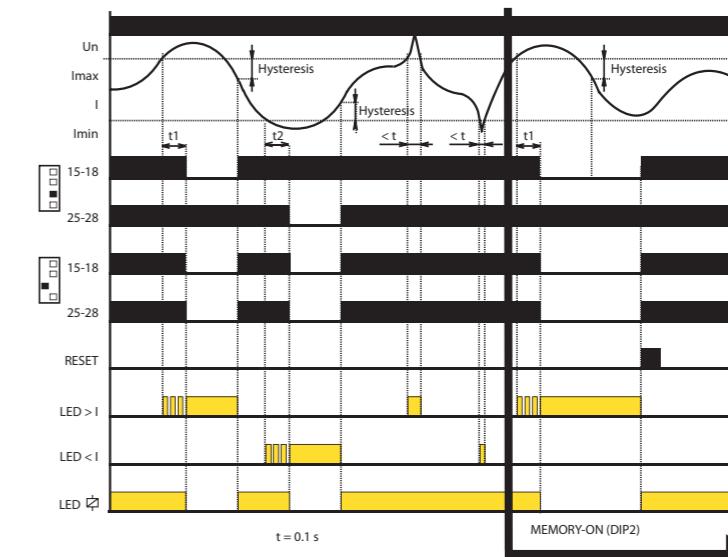
Other information

Operating temperature:	-20 °C to 55 °C (-4 °F to 131 °F)
Storage temperature:	-30 °C to 70 °C (-22 °F to 158 °F)
Electrical strength:	4 kV (supply - output)
Operating position:	any
Mounting:	DIN rail EN 60715
Protection degree:	IP40 from front panel / IP20 terminals
Overvoltage category:	III.
Pollution degree:	2
Max. cable size (mm ²):	solid wire max. 1x 2.5 or 2x 1.5 / with sleeve max. 1x 1.5 (AWG 12)
Dimensions:	90 x 52 x 65 mm (3.5" x 2" x 2.6")
Weight:	250 g (8.8 oz) (110V, 230 V, 400 V); 153 g (5.4 oz) (24 V)
Standards:	EN 60255-6, EN 61010-1

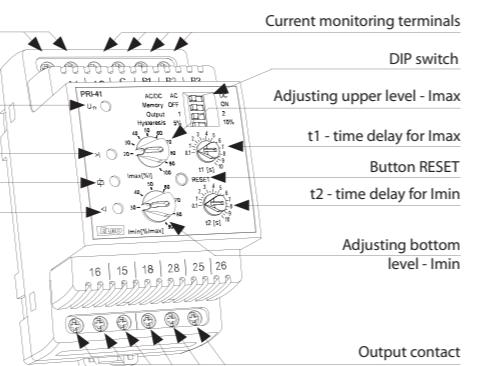
* Only one of the inputs can be connected.

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Function



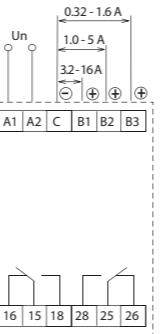
- if the value of the monitored current is in the zone between the set upper and lower levels, the status OK occurs - both relays are closed and the yellow LED illuminates. If the value of the monitored current is outside the set limits (> I_{max} or < I_{min}), an error state occurs.
- when moving to an error state I > I_{max}, it times the delay t₁ and a red LED > I simultaneously flashes. After the t₁ time elapses, the red LED > I illuminates and the relevant relay opens.
- when moving to an error state I < I_{min}, it times the delay t₂ and a red LED < I simultaneously flashes. After the time t₂ elapses, the red LED < I illuminates and the relevant relay opens.
- when moving from the error status to the OK status, the relevant red LED immediately goes out, and the corresponding relay closes.



Description and importance of DIP switches

AC/DC	DC	Measured AC / DC voltage
Memory OFF	ON	Memory error state
Output 1	2	Relay function setting
Hysteresis 5%	10%	Hysteresis setting

Connection



Symbol

