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Monitoring relay for monitoring 1-phase currents of 0...10 A AC/DC, overcurrent, supply voltage can be selected using power module, 1 PDT

#### **Product Description**

Increasingly higher demands are being placed on safety and system availability - across all sectors. Processes are becoming more and more complex, not only in mechanical engineering and the chemical industry, but also in plant and automation technology. Demands on power engineering are also increasing constantly.

Error-free and therefore cost-effective operation can only be achieved through continuous monitoring of important network and system parameters. Electronic monitoring relays in the EMD series are available for a wide range of monitoring tasks to avoid the consequences of errors or to keep them within limits.

The operating states are indicated using colored LEDs, errors that may occur can be sent to a control system via a floating contact or can shut down a part of the system. Some device versions are equipped with startup and response delays in order to briefly tolerate measured values outside the set monitoring range.

### Your advantages

- Adjustable via potentiometer on the front
- Separately adjustable startup and response delays
- ✓ Variable supply voltage range



## **Key Commercial Data**

Packing unit	1 pc
GTIN	4 017918 952662
GTIN	4017918952662

### Technical data

#### **Dimensions**

Width	22.5 mm
Height	90 mm
Depth	113 mm

### Ambient conditions

Ambient temperature (operation)	-25 °C 55 °C
	-25 °C 40 °C (corresponds to UL 508)

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## Technical data

## Ambient conditions

Ambient temperature (storage/transport)	-25 °C 70 °C
Permissible humidity (operation)	15 % 85 %
Degree of protection	IP40 (Housing)
	IP20 (Connection terminal blocks)
Noise immunity	EN 61000-6-2

## Input data

Input current range	0 mA 100 mA (Connection terminals: I1 and GND)
	0 A 1 A (Connection terminals: I2 and GND)
	0 A 10 A (Connection terminals: I3 and GND)
Overload capacity	800 mA (at I <sub>N</sub> = 100 mA)
	3 A (at I <sub>N</sub> = 1 A)
	12 A (at I <sub>N</sub> = 10 A)
Maximum temperature coefficient	< 0.1 %/K
Function	Overcurrent
Min. setting range	5 % 95 % (from I <sub>N</sub> )
Max. setting range	10 % 100 % (from I <sub>N</sub> )
Setting range for response delay	0.2 s 10 s
Basic accuracy	± 5 % (of scale end value)
Setting accuracy	≤ 5 % (of scale end value)
Repeat accuracy	≤ 2 %
Recovery time	500 ms

## Contact side

Contact type	1 floating PDT		
Maximum switching voltage 250 V AC (in acc. with IEC 60664-1)			
Interrupting rating (ohmic load) max. 750 VA (3 A/250 V AC, module aligned, ≤ 5 mm spacing)			
	1250 VA (5 A/250 V AC, module not aligned, ≥ 5 mm spacing)		
Output fuse	5 A (fast-blow)		

### Power supply

Supply voltage range	24 V AC 230 V AC (see Power modules)
	24 V DC (see Power modules)

## General

Mechanical service life	approx. 2x 10 <sup>7</sup> cycles
Operating mode	100% operating factor
Mounting position	any
Assembly instructions	on standard DIN rail NS 35 in accordance with EN 60715
Electromagnetic compatibility	Conformance with EMC Directive 2004/108/EC
Housing insulation material	Polyamide PA, self-extinguishing
Color	green



## Technical data

## Connection data

Connection method	Screw connection
Stripping length	8 mm
Conductor cross section solid	0.5 mm² 2.5 mm²
Conductor cross section flexible	0.25 mm² 2.5 mm²
Conductor cross section AWG	20 14
Tightening torque	1 Nm

## Standards and Regulations

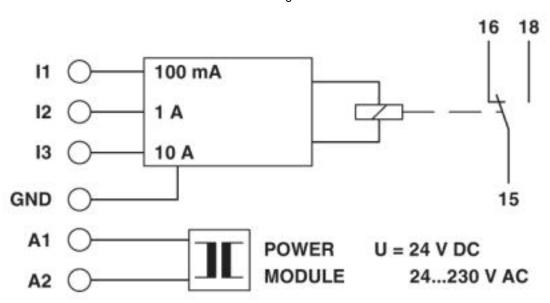
Electromagnetic compatibility	Conformance with EMC Directive 2004/108/EC
Noise emission	EN 61000-6-3
Noise immunity	EN 61000-6-2
Standards/regulations	EN 50178
Rated insulation voltage	300 V
Insulation	Basic insulation
Pollution degree	2
Overvoltage category	III
Low Voltage Directive	Conformance with LV directive 2006/95/EC

## **Environmental Product Compliance**

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

# Drawings

### Block diagram





Approvals			
Approvals			
Approvals			
UL Listed / cUL Listed / EAC	/ EAC / cULus Listed		
Ex Approvals			
Approval details			
UL Listed	LISTED	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 172140
cUL Listed	CUL	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 172140
EAC	EAC		TR_TS_D_00573_c
EAC	EAC		TR_TS_S_00010_c
cULus Listed	C (UL) US		

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