

Monitoring relay - EMD-FL-C-10 - 2866022

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Monitoring relay for monitoring 1-phase currents of 0...10 A AC/DC, overcurrent/undercurrent or window, error memory, wide-range power supply unit, 2 PDTs

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.

Why buy this product

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



Key Commercial Data

Packing unit	1 pc
GTIN	
GTIN	4017918975005

Technical data

Note

Utilization restriction	EMC: class A product, see manufacturer's declaration in the download area
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Dimensions

Width	22.5 mm
Height	90 mm
Depth	113 mm

Monitoring relay - EMD-FL-C-10 - 2866022

Technical data

Ambient conditions

Ambient temperature (operation)	-25 °C ... 55 °C
	-25 °C ... 40 °C (corresponds to UL 508)
Ambient temperature (storage/transport)	-25 °C ... 70 °C

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 $I_N = 100$ mA)
	3 A (at $I_N = 1$ A)
	12 A (at $I_N = 10$ A)
Maximum temperature coefficient	< 0.1 %/K
Function	Overcurrent, undercurrent, window, error memory
Min. setting range	5 % ... 95 % (from I_N)
Max. setting range	10 % ... 100 % (from I_N)
Setting range for response delay	0.1 s ... 10 s
Setting range for starting delay	0 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	2 floating PDT contacts
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 ... 240 V AC -15 % ... +10 %
	24 V DC ... 240 V DC -20 % ... +25 %

General

Mechanical service life	approx. 2×10^7 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
Overvoltage category	III, basic insulation (as per EN 50178)
Housing insulation material	Polyamide PA, self-extinguishing
Color	green

Monitoring relay - EMD-FL-C-10 - 2866022

Technical data

General

Rated insulation voltage	300 V (acc. to EN 50178)
Conformance	CE-compliant
UL, USA/Canada	UL/C-UL listed UL 508

Connection data

Conductor cross section flexible min.	0.25 mm ²
Conductor cross section flexible max.	2.5 mm ²
Conductor cross section solid min.	0.5 mm ²
Conductor cross section solid max.	2.5 mm ²
Conductor cross section AWG min.	20
Conductor cross section AWG max.	14
Stripping length	8 mm
Connection method	Screw connection

Standards and Regulations

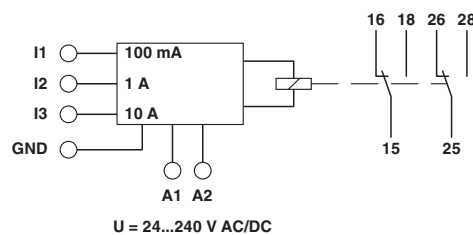
Electromagnetic compatibility	Conformance with EMC Directive 2004/108/EC
Noise emission	EN 61000-6-4
Noise immunity	EN 61000-6-2
Low Voltage Directive	Conformance with LV directive 2006/95/EC
Conformance	CE-compliant
UL, USA/Canada	UL/C-UL listed UL 508

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 / cULus Listed


Monitoring relay - EMD-FL-C-10 - 2866022


Approvals


Ex Approvals

Approval details

UL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 172140
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cUL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 172140
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EAC			RU C- DE.A*30.B.01082
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cULus Listed			
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