

## 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	 4 017918 975005
Weight per Piece (excluding packing)	168.7 g
Custom tariff number	85364900
Country of origin	Austria

### 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
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## Technical data

### Dimensions

Height	90 mm
Depth	113 mm

### 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 AC/DC (Connection terminals: I1 and GND)
	0 A ... 1 A AC/DC (Connection terminals: I2 and GND)
	0 A ... 10 A AC/DC (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, undercurrent, window, error memory
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	0.1 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 x 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

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## Technical data

### General

Overvoltage category	III, basic insulation (as per EN 50178)
Housing insulation material	Polyamide PA, self-extinguishing
Color	green
Rated insulation voltage	300 V (According 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 <sup>2</sup>
Conductor cross section flexible max.	2.5 mm <sup>2</sup>
Conductor cross section solid min.	0.5 mm <sup>2</sup>
Conductor cross section solid max.	2.5 mm <sup>2</sup>
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

## Classifications

### eCl@ss

eCl@ss 4.0	27371105
eCl@ss 4.1	27371105
eCl@ss 5.0	27371802
eCl@ss 5.1	27371802
eCl@ss 6.0	27371802
eCl@ss 7.0	27371802
eCl@ss 8.0	27371802

### ETIM

ETIM 2.0	EC001440
ETIM 3.0	EC001440
ETIM 4.0	EC001440
ETIM 5.0	EC001440

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## Classifications

### UNSPSC

UNSPSC 6.01	30211916
UNSPSC 7.0901	39121535
UNSPSC 11	39121535
UNSPSC 12.01	39121535
UNSPSC 13.2	39121535

## Approvals

### Approvals

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#### Approvals

UL Listed / cUL Listed / EAC / EAC / cULus Listed

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#### Ex Approvals

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#### Approvals submitted

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### Approval details

UL Listed

cUL Listed

EAC

EAC

cULus Listed

## Drawings

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

Block diagram

