

## EMD-FL-C-10

Order No.: 2866022



<http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=2866022>

Electronic monitoring relay for single-phase currents, threshold value and delay can be set, with overcurrent and surge current monitoring, window function

Commercial data	
EAN	4017918975005
Pack	1 Pcs.
Customs tariff	85364900
Weight/Piece	0.1779 KG
Catalog page information	Page 552 (IF-2007)

### Product notes

WEEE/RoHS-compliant since:  
01/17/2007



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### 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.

### Technical data

#### 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 $I_N = 100$ 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
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	$\pm 5$ % (of scale end value)
Setting accuracy	$\leq 5$ % (of scale end value)
Repeat accuracy	$\leq 2$ %
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, $\leq 5$ mm spacing)
	1250 VA (5 A/250 V AC, module not aligned, $\geq 5$ mm spacing)
Output fuse	5 A (fast-blow)

#### Power supply

Range of supply voltages	24 V AC ... 240 V AC -15 % ... +10 %
	24 V DC ... 240 V DC -20 % ... +25 %

#### General data

Width	22.5 mm
Height	113 mm
Length	90 mm

Service life mechanical	Approx. $2 \times 10^7$ cycles
Operating mode	100% operating factor
Ambient temperature (operation)	-25 °C ... 55 °C
Ambient temperature (storage/transport)	-25 °C ... 70 °C
Mounting position	Any
Assembly instructions	on TS 35 profile rail acc. to EN 60715
Pollution degree	3
Surge voltage category	III
Housing insulation material	Polyamide PA, self-extinguishing
Color	green
Rated surge voltage	4 kV (basic insulation)
Conformity	CE compliant
UL, USA / Canada	UL/C-UL listed UL 508

**Connection data**

Conductor cross section stranded min.	0.25 mm <sup>2</sup>
Conductor cross section stranded 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/kcmil min.	20
Conductor cross section AWG/kcmil max	14
Stripping length	8 mm
Type of connection	Screw connection

**Certificates / Approvals**

Certification

CUL Listed, UL Listed

## Drawings

### Block diagram

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