Extract from the online catalog

EMD-FL-PF-400

Order No.: 2885809

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Monitoring relay for load monitoring (cos φ = 0,1…1) in 1- and 3-phase networks, underload, overload, window, error memory, wide-range power supply unit, 2 PDTs

Product notes

WEEE/RoHS-compliant since: 01/01/2006

Commercial data	
GTIN (EAN)	4 046356 100779
sales group	H233
Pack	1 pcs.
Customs tariff	85364900
Catalog page information	Page 728 (IF-2011)

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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

Nominal input voltage U_N	(3 N ~ 415/240 V)
Input voltage range	1(N) ~ 40 V AC ... 415 V AC
	3 (N) ~ 40 V AC ... 415 V AC
Input current range	0.5 A ... 10 A (Connection terminal blocks: L1i and L1k)
Overload capacity	12 A permanent
Maximum temperature coefficient	≤ 0.1 %/K
Function	Underload, overload, Window
Setting range for response delay	0.1 s ... 40 s
Setting range for starting delay	1 s ... 100 s
Basic accuracy	± 5 % (At cos ϕ = 0.8)
Setting accuracy	≤ 5 % (At cos ϕ = 0.8)
Repeat accuracy	± 1.8 %
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 data

Width	22.5 mm
Height	90 mm
Depth	113 mm
Mechanical service life	Approx. 2 x 10^7 cycles
Operating mode	100% operating factor

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

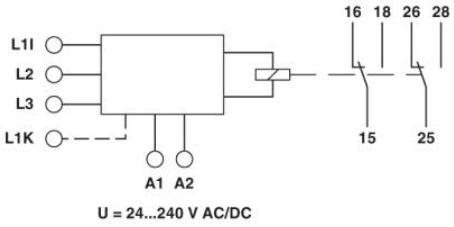
Conductor cross section stranded min.	0.25 mm²
Conductor cross section stranded max.	2.5 mm²
Conductor cross section solid min.	0.5 mm²
Conductor cross section solid max.	2.5 mm²
Conductor cross section AWG/kcmil min.	20
Conductor cross section AWG/kcmil max	14
Stripping length	8 mm
Connection method	Screw connection

Certificates / Approvals

Certification	CUL Listed, UL Listed

Diagrams/Drawings

Block diagram



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