

EMD-FL-RP-480


Order No.: 2900177



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Monitoring relay for effective power monitoring in 1- and 3-phase networks of 0...7.2 kW, underload, overload, window, motor winding temperature, error memory, supply voltage can be selected via power module, 2 PDTs



Commercial data	
EAN	4  046356 522632
sales group	H230
Pack	1 Pcs.
Customs tariff	85364900
Gross weight in pieces	0.3061 KG
Net weight per piece	0.3214 KG
Catalog page information	Page 256 (C-7-2013)

Product notes

WEEE/RoHS-compliant since:
08/05/2009



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Product description

Requirements pertaining to safety and system availability increase constantly – regardless of the industry. Processes are becoming more and more complex, not only in the mechanical engineering and chemical industry but also in system and automation technology. Demands on power engineering are also constantly on the rise.

Error-free and therefore cost-effective operation can only be achieved through continuous monitoring of important network and system parameters. The electronic monitoring relays of the EMD series are available for various monitoring tasks.

The operating states are indicated using colored LEDs, errors that may occur can be sent to a controller 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

Dimensions

Width	45 mm
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

Nominal input voltage U_N	480 V (3 N ~ 480/277 V)
Input voltage range	0 V AC ... 480 V AC (1(N) ~, single-phase load)
	0 V AC ... 480 V AC (3(N) ~, 3-phase load)
Input current range	0.15 A ... 6 A (Range: 0.75 kW and 1.5 kW)
	0.3 A ... 12 A (Range: 3 kW and 6 kW)
Overload capacity	12 A permanent
Maximum temperature coefficient	≤ 0.02 %/K
Function	Underload, overload, window, winding temperature monitoring
Min. setting range	5 % ... 110 % (of P_N)
Max. setting range	10 % ... 120 % (of P_N)
Setting range for response delay	0.1 s ... 50 s
Setting range for starting delay	1 s ... 100 s
Basic accuracy	± 2 % (of scale end value)
Setting accuracy	≤ 5 % (of scale end value)
Repeat accuracy	± 2 %
Total cold resistance	< 1.5 k Ω
Response value	≥ 3.6 k Ω (Relay drops out)
Release value	≤ 1.8 k Ω (Relay picks up)
Recovery time	500 ms

Contact side

Contact type	2 floating PDT contacts
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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	110 V AC ... 500 V AC (see Power modules)
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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
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 applied for

Connection data

Conductor cross section stranded min.	0.25 mm ²
Conductor cross section stranded 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/kcmil min.	20
Conductor cross section AWG/kcmil max	14
Stripping length	8 mm
Connection method	Screw connection

Certificates / Approvals

Certification

Certifications applied for:

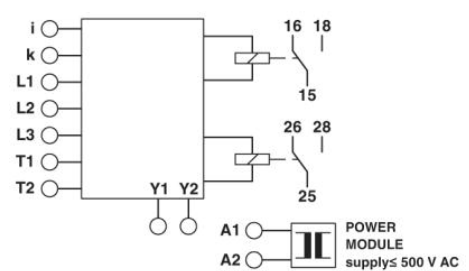
Certification Ex:

Additional products

Item	Designation	Description
General		
2885281	EMD-SL-PS45-110AC	Power modules, pluggable, for EMD-FL-..., supply voltage: 88 V AC ... 121 V AC
2885744	EMD-SL-PS45-120AC	Power modules, pluggable, for EMD-FL-..., supply voltage: 108 V AC ... 132 V AC
2885294	EMD-SL-PS45-230AC	Power modules, pluggable, for EMD-FL-..., supply voltage: 195 V AC ... 264 V AC
2885304	EMD-SL-PS45-400AC	Power modules, pluggable, for EMD-FL-..., supply voltage: 323...456 V AC
2885317	EMD-SL-PS45-500AC	Power modules, pluggable, for EMD-FL-..., supply voltage: 425...550 V AC

Drawings

Block diagram



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