Monitoring relay - EMD-SL-PH-690 - 2905597

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Monitoring relay for monitoring phase sequence, phase failure, and asymmetry for 208 V AC ... 690 V AC from 3-phase voltages, 2 PDTs, with screw connection

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.

Key Commercial Data

Packing unit	1 pc
GTIN	4 046356 967198
Weight per Piece (excluding packing)	156.4 g
Custom tariff number	85364900
Country of origin	Austria

Technical data

Dimensions

Width	22.5 mm
Height	90 mm
Depth	113 mm

Ambient conditions

Ambient temperature (operation)	-25 °C ... 70 °C (C300)
	-25 °C ... 55 °C (B300)
Ambient temperature (storage/transport)	-25 °C ... 70 °C

Input data

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Input data

Nominal input voltage U_N	690 V (3~ 208 V ... 690 V)
Input voltage range	177 V ... 794 V (3~)
Function	Undervoltage, phase sequence, phase failure
Min setting range of the voltage threshold value	177 V AC
Max. setting range of the voltage threshold value	794 V AC
Setting range for response delay	0.1 s ... 10 s
Basic accuracy	≤ 3 % (of scale end value)
Setting accuracy	≤ 5 % (of scale end value)
Repeat accuracy	≤ 2 %
Asymmetry	25 %
Recovery time	> 500 ms

Contact side

Contact type	2 floating PDT contacts
Maximum switching voltage	400 V AC
Interrupting rating (ohmic load) max.	1250 VA (5 A/250 V AC at +55 °C)
	150 VA (5 A/30 V DC at +55°C)
	75 VA (2.5 A/30 V DC at +70°C)
Output fuse	5 A (fast-blow)

Power supply

Supply voltage	±15 % (= measuring voltage)

General

Mechanical service life	20 x 10^6 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
Surge voltage category	III (IEC 60664-1)
Housing insulation material	Polyamide PA, self-extinguishing
Color	green
Conformance	CE-compliant
UL, USA / Canada	UL/C-UL listed UL 508

Connection data

Conductor cross section flexible min.	0.5 mm²
Conductor cross section flexible max.	2.5 mm²
Conductor cross section solid min.	0.5 mm²
Conductor cross section solid max.	2.5 mm²
Conductor cross section AWG min.	20
Conductor cross section AWG max.	14
Stripping length	8 mm

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Technical data

Connection data

Connection method	Screw connection

Classifications

eCl@ss

eCl@ss 5.1	27371801
eCl@ss 6.0	27371801
eCl@ss 8.0	27371802

ETIM

ETIM 5.0	EC001440

Approvals

Approvals

Approvals

UL Listed / cUL Listed / cULus Listed

Ex Approvals

Approvals submitted

Approval details

UL Listed

cUL Listed

cULus Listed

Drawings

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Block diagram