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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



Technical data

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) |
|----------------|-----------------------------|
| 11.5 | , , , |

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 mm ² |
| Conductor cross section AWG min. | 20 |
| Conductor cross section AWG max. | 14 |
| Stripping length | 8 mm |



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 |
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Approvals

Approvals

Approvals

UL Listed / cUL Listed / cULus Listed

Ex Approvals

Approvals submitted

Approval details

UL Listed

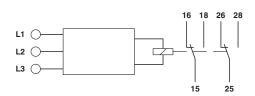
cUL Listed •



Drawings



Block diagram



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