

Monitoring relay - EMD-BL-V-230-PT - 2903524

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Monitoring relay for monitoring 1-phase voltages of 24 V AC/DC or 230 V AC, undervoltage or window, 1 PDT, with push-in connection

Product Description

Safety and system availability requirements are constantly on the increase – across all industries. Processes are becoming more and more complex, not only in machine building and the chemical industry but also in building technology. The demands placed on energy technology are also constantly on the rise.

It is only by continuously monitoring key network and system parameters that error-free and therefore cost-effective operation can be achieved. Electronic monitoring relays from the EMD series are available for a wide range of monitoring tasks so that the consequences of errors can be avoided or kept within limits.

The operating states are signaled via color LEDs and any errors that occur can be sent to a controller via a floating contact or can shut down a section of the system. All device versions are equipped with response delays so that measured values outside the set monitoring range can be briefly tolerated.



Key Commercial Data

| | |
|--------------------------------------|---------------|
| Packing unit | 1 pc |
| GTIN | |
| GTIN | 4046356747288 |
| Weight per Piece (excluding packing) | 72.000 g |
| Custom tariff number | 85364900 |
| Country of origin | Austria |

Technical data

Dimensions

| | |
|--------|---------|
| Width | 17.5 mm |
| Height | 88 mm |
| Depth | 65.5 mm |

Ambient conditions

| | |
|---|------------------|
| Ambient temperature (operation) | -25 °C ... 55 °C |
| Ambient temperature (storage/transport) | -25 °C ... 70 °C |
| Permissible humidity (operation) | 15 % ... 85 % |

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Technical data

Ambient conditions

| | |
|----------------------|-----------------------------------|
| Degree of protection | IP40 (Housing) |
| | IP20 (Connection terminal blocks) |
| Noise immunity | EN 61000-6-2 |

Input data

| | |
|----------------------------------|--|
| Input voltage range | 0 V DC ... 24 V DC (connection terminal blocks: U1 and GND) |
| | 0 V AC ... 24 V AC (connection terminal blocks: U2 and GND) |
| | 0 V AC ... 230 V AC (connection terminal blocks: U3 and GND) |
| Maximum temperature coefficient | ≤ 0.05 % |
| Function | Undervoltage, window |
| Min. setting range | 75 % ... 115 % (From U _N) |
| Max. setting range | 80 % ... 120 % (From U _N) |
| Setting range for response delay | 0.1 s ... 10 s |
| Basic accuracy | ≤ 5 % (of scale end value) |
| Setting accuracy | ± 5 % (of scale end value) |
| Repeat accuracy | ≤ 2 % |
| Recovery time | > 500 ms |

Contact side

| | |
|---------------------------------------|-------------------------------------|
| Contact type | 1 floating PDT |
| Maximum switching voltage | 250 V AC (in acc. with IEC 60664-1) |
| Interrupting rating (ohmic load) max. | 1250 VA (5 A / 250 V AC) |
| Output fuse | 5 A (fast-blow) |

Power supply

| | |
|----------------|---------------------------------------|
| Supply voltage | -25 % ... +20 % (= measuring voltage) |
|----------------|---------------------------------------|

General

| | |
|-------------------------------|--|
| Mechanical service life | 15x 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 |
| Housing insulation material | Polyamide PA 6.6, self-extinguishing |
| Color | gray |

Connection data

| | |
|----------------------------------|--|
| Connection method | Push-in connection |
| Stripping length | 8 mm |
| Conductor cross section solid | 0.14 mm ² ... 2.5 mm ² |
| Conductor cross section flexible | 0.14 mm ² ... 2.5 mm ² |
| Conductor cross section AWG | 26 ... 14 |

Standards and Regulations

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Technical data

Standards and Regulations

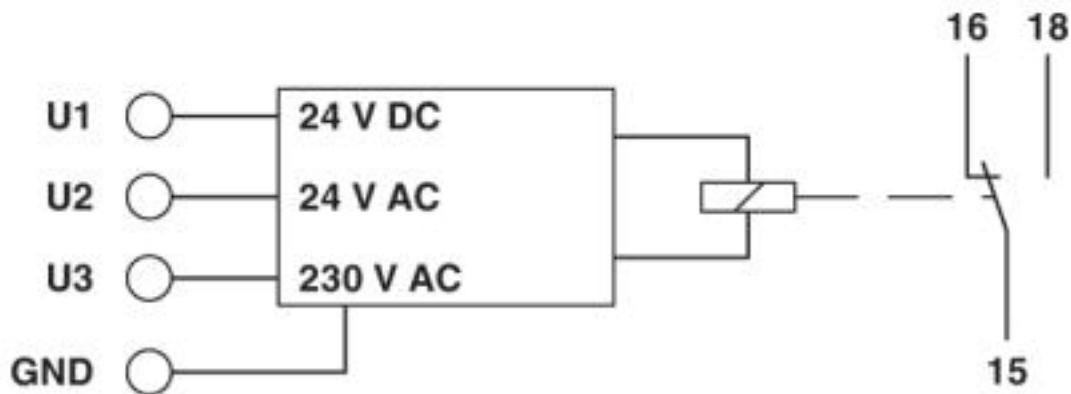
| | |
|-------------------------------|--|
| Electromagnetic compatibility | Conformance with EMC Directive 2004/108/EC |
| Noise emission | EN 61000-6-3 |
| Noise immunity | EN 61000-6-2 |
| Standards/regulations | DIN EN 60947-5-1 |
| Rated insulation voltage | 300 V (Supply circuit) 250 V (Output circuit) |
| Rated surge voltage | 4 kV |
| Insulation | Basic insulation |
| Pollution degree | 2 |
| Overvoltage category | III |
| Low Voltage Directive | Conformance with LV directive 2006/95/EC |

Environmental Product Compliance

| | |
|------------|---|
| China RoHS | Environmentally friendly use period: unlimited = EFUP-e |
| | No hazardous substances above threshold values |

Drawings

Block diagram



Classifications

eCl@ss

| | |
|------------|----------|
| eCl@ss 4.0 | 27371100 |
| eCl@ss 4.1 | 27371100 |
| eCl@ss 5.0 | 27371800 |
| eCl@ss 5.1 | 27371800 |
| eCl@ss 6.0 | 27371800 |
| eCl@ss 7.0 | 27371801 |
| eCl@ss 8.0 | 27371801 |
| eCl@ss 9.0 | 27371801 |

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Classifications

ETIM

| | |
|----------|----------|
| ETIM 2.0 | EC001438 |
| ETIM 3.0 | EC001438 |
| ETIM 4.0 | EC001438 |
| ETIM 5.0 | EC001438 |
| ETIM 6.0 | EC001438 |
| ETIM 7.0 | EC001438 |

UNSPSC

| | |
|---------------|----------|
| UNSPSC 6.01 | 30211916 |
| UNSPSC 7.0901 | 39121535 |
| UNSPSC 11 | 39121535 |
| UNSPSC 12.01 | 39121535 |
| UNSPSC 13.2 | 41113620 |
| UNSPSC 18.0 | 41113620 |
| UNSPSC 19.0 | 41113620 |
| UNSPSC 20.0 | 41113620 |
| UNSPSC 21.0 | 41113620 |

Approvals


Approvals

Approvals


UL Listed / cUL Listed / EAC / EAC / cULus Listed

Ex Approvals

Approval details


| | | | |
|-----------|---|---|---------------|
| UL Listed |  | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 172140 |
|-----------|---|---|---------------|


| | | | |
|------------|---|---|---------------|
| cUL Listed |  | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 172140 |
|------------|---|---|---------------|

| | | |
|-----|---|-----------------|
| EAC |  | TR_TS_D_00573_c |
|-----|---|-----------------|

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Approvals

| | | |
|-----|---|-------------------------|
| EAC |  | RU*C- DE.*08.B.00010 |
|-----|---|-------------------------|

| | | |
|--------------|---|--|
| cULus Listed |  | |
|--------------|---|--|