

## Monitoring relay - EMD-BL-3V-400-PT - 2903526

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Monitoring relay for monitoring 3-phase voltages of 400 V AC  $\pm 30\%$ , window or window with phase sequence, 1 changeover contact, 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	 4 046356 747226
GTIN	4046356747226

### Technical data

#### Dimensions

Width	17.5 mm
Height	89.5 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 %
Degree of protection	IP40 (Housing)
	IP20 (Connection terminal blocks)

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## Technical data

### Ambient conditions

Noise immunity	EN 61000-6-2
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### Input data

Nominal input voltage $U_N$	$\pm 30\%$ (3~ 400/230 V)
Maximum temperature coefficient	$\leq 0.05\%$
Function	Window
	Phase sequence
Min. setting range	70 % ... 120 % (From $U_N$ )
Max. setting range	80 % ... 130 % (From $U_N$ )
Min setting range of the voltage threshold value	280 V AC ... 480 V AC
Max. setting range of the voltage threshold value	320 V AC ... 519 V AC
Setting range for response delay	0.1 s ... 10 s
Basic accuracy	$\leq 5\%$ (of the nominal value)
Setting accuracy	$\pm 5\%$ (of scale end value)
Repeat accuracy	$\leq 2\%$
Recovery time	> 500 ms

### Contact side

Contact type	1 floating changeover contact
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	$\pm 30\%$ (= measuring voltage)
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### General

Mechanical service life	$15 \times 10^6$ 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
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 <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section flexible	0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section AWG	26 ... 14

### Standards and Regulations

Low Voltage Directive	Conformance with Low Voltage Directive
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## Technical data

### Standards and Regulations

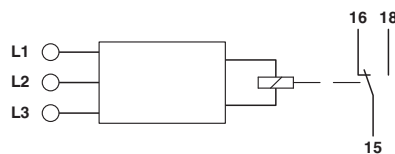
Electromagnetic compatibility	Conformance with EMC directive
Noise emission	EN 61000-6-3
Noise immunity	EN 61000-6-2
Standards/regulations	DIN EN 60947-5-1
Rated insulation voltage	519 V (Supply circuit)
	250 V (Output circuit)
Rated surge voltage	4 kV
Insulation	Basic insulation
Pollution degree	2
Overvoltage category	III

### 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 10.0.1	27371801
eCl@ss 11.0	27371801
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 9.0	27371801

### ETIM

ETIM 2.0	EC001438
ETIM 3.0	EC001438
ETIM 4.0	EC001438
ETIM 6.0	EC001438

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## Classifications

### ETIM

ETIM 7.0	EC001438
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### 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

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Approvals

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

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Ex Approvals

### Approval details

UL Listed		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 172140
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cUL Listed		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 172140
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EAC		TR_TS_D_00573_c
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EAC		RU*C- DE.*08.B.00010
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## Monitoring relay - EMD-BL-3V-400-PT - 2903526

### Approvals

cULus Listed



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