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

2903526

https://www.phoenixcontact.com/us/products/2903526

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Monitoring relay for monitoring 3-phase voltages of 400 V AC ±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.

Commercial Data

Item number	2903526
Packing unit	1 pc
Minimum order quantity	1 pc
Sales Key	C440
Product Key	CK4211
Catalog Page	Page 247 (C-5-2019)
GTIN	4046356747226
Weight per Piece (including packing)	73.18 g
Weight per Piece (excluding packing)	73.18 g
Customs tariff number	85364900
Country of origin	AT

Technical Data

Product properties

Product type	Voltage monitoring relay
Operating mode	100% operating factor
Mechanical service life	$15x\ 10^6$ cycles

Insulation characteristics

Insulation	Basic insulation

Insulation characteristics

Insulation	Basic insulation
Overvoltage category	III
Pollution degree	2

Electrical properties

Service life electrical	$1x\ 10^5$ cycles
Mains type	3-phase
Rated insulation voltage	519 V (Supply circuit)
	250 V (Output circuit)
Rated surge voltage	4 kV

Supply

Supply voltage	±30 % (= measuring voltage)
Supply voltage range	±30 % (= measuring voltage)
Nominal power consumption	10 VA (1 W)

Input data

Input name	Measuring input
Measured value	AC sine (48 Hz ... 63 Hz)
Nominal input voltage U_N	±30 % (3~ 400/230 V)
Frequency range	48 Hz ... 63 Hz
Maximum temperature coefficient	≤ 0.05 %
Setting range for response delay	0.1 s ... 10 s
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
Function	Window
	Phase sequence
Basic accuracy	≤ 5 % (of the nominal value)
Setting accuracy	± 5 % (of scale end value)
Repeat accuracy	≤ 2 %
Recovery time	> 500 ms

Output data

Switching

Contact switching 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)

Connection data

Connection method	Push-in connection
Stripping length	8 mm
Conductor cross section rigid	0.14 mm² ... 2.5 mm²
Conductor cross section flexible	0.14 mm² ... 2.5 mm²
Conductor cross section AWG	26 ... 14

Signaling

Status display	Yellow LED
Error indication	Red LED

Dimensions

Width	17.5 mm
Height	89.5 mm
Depth	65.5 mm

Material specifications

Housing insulation material	Polyamide PA 6.6, self-extinguishing

Environmental and real-life conditions

Ambient conditions

Degree of protection (Housing)	IP40 (Housing)
Degree of protection (Connection terminal blocks)	IP20 (Connection terminal blocks)
Ambient temperature (operation)	-25 °C ... 55 °C
Ambient temperature (storage/transport)	-25 °C ... 70 °C
Climatic class	3K3 (in acc. with EN 60721)
Permissible humidity (operation)	15 % ... 85 %

Approvals

CE

Certificate	CE-compliant

UL, USA/Canada

Identification	UL/C-UL Listed UL 508

EMC data

Low Voltage Directive	Conformance with Low Voltage Directive
Noise immunity	EN 61000-6-2
Electromagnetic compatibility	Conformance with EMC directive
Noise emission	EN 61000-6-3

Standards and regulations

Standards/regulations	DIN EN 60947-5-1

Mounting

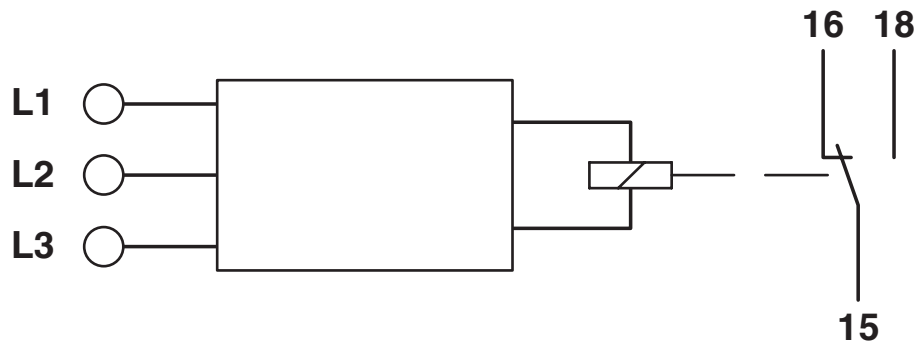|	
Mounting type	DIN rail mounting
Assembly instructions	on standard DIN rail NS 35 in accordance with EN 60715
Mounting position	any

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Drawings

Block diagram

L1
L2
L3

16   18

15

Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/2903526

EAC
Approval ID: TR_TS_D_00573_c

EAC
Approval ID: RU*C-DE.*08.B.00010

UL Listed
Approval ID: FILE E 172140

cUL Listed
Approval ID: FILE E 172140

Classifications

ECLASS

ECLASS-11.0	27371801
ECLASS-12.0	27371801
ECLASS-13.0	27371801

ETIM

ETIM 8.0	EC001438

UNSPSC

UNSPSC 21.0	41113600

Environmental Product Compliance

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

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