

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (http://phoenixcontact.com/download)



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

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

09/10/2019 Page 1 / 4



## Technical data

#### Input data

Nominal input voltage $U_N$	±30 % (3~ 400/230 V)	
Maximum temperature coefficient	≤ 0.05 %	
Function	Window, phase sequence	
Min. setting range	70 % 120 % (From U <sub>N</sub> )	
Max. setting range	80 % 130 % (From U <sub>N</sub> )	
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	± 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)	

# 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	±30 % (= measuring voltage)
----------------	-----------------------------

#### General

Mechanical service life	15x 10 <sup>6</sup> 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 2014/30/EU		
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 mm² 2.5 mm²
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

Electromagnetic compatibility	Conformance with EMC Directive 2014/30/EU
Noise emission	EN 61000-6-3
Noise immunity	EN 61000-6-2
Standards/regulations	DIN EN 60947-5-1



## Technical data

#### Standards and Regulations

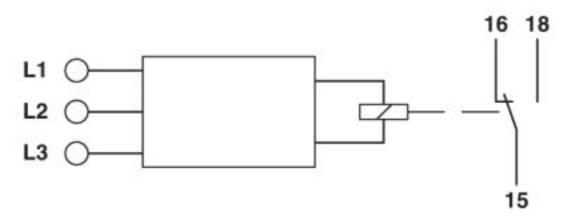
d insulation voltage 519 V (Supply circuit)		
	250 V (Output circuit)	
Rated surge voltage 4 kV		
Insulation	Basic insulation	
Pollution degree	2	
Overvoltage category	<b>II</b>	
Low Voltage Directive         Conformance with Low Voltage Directive 2006/95/EC (valid 2016-04-19) / 2014/35/EU (valid from 2016-04-20)		

#### **Environmental Product Compliance**

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

## Drawings





## Approvals

#### Approvals

#### Approvals

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

#### Ex Approvals

Approval details



## Approvals

UL Listed	LISTED	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 172140
cUL Listed	CUL LISTED	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 172140
EAC	EAC		TR_TS_D_00573_c
EAC	EAC		TR_TS_S_00010_c
cULus Listed	CUL US LISTED		
Phoenix Contact 2019 © - all	rights reserved		

Phoenix Contact 2019 © - all rights reserved http://www.phoenixcontact.com

PHOENIX CONTACT GmbH & Co. KG Flachsmarktstr. 8 32825 Blomberg Germany Tel. +49 5235 300 Fax +49 5235 3 41200 http://www.phoenixcontact.com