

Monitoring relay - EMD-SL-3V-400-N - 2885278

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Monitoring relay for monitoring 3-phase voltages of 280...520 V AC, window, with neutral conductor connection, supply voltage can be selected using power module, 1 PDT

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.

Your advantages

- Variable supply voltage range
- Adjustable via potentiometer on the front
- Adjustable response delay
- Adjustable asymmetry



Key Commercial Data

Packing unit	1 pc
GTIN	 4 017918 996512
GTIN	4017918996512

Technical data

Dimensions

Width	22.5 mm
Height	90 mm
Depth	113 mm

Ambient conditions

Ambient temperature (operation)	-25 °C ... 55 °C
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Technical data

Ambient conditions

	-25 °C ... 40 °C (corresponds to UL 508)
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

Input data

Nominal input voltage U_N	3 N ~ 400/230 V
Maximum temperature coefficient	< 0.1 %/K
Function	Window, with neutral conductor connection
Min. setting range	-30 % ... 20 % (From U_N)
Max. setting range	-20 % ... 30 % (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 ... 520 V AC
Setting range for response delay	0.2 s ... 10 s
Basic accuracy	± 5 % (of scale end value)
Setting accuracy	≤ 5 % (of scale end value)
Repeat accuracy	≤ 2 %
Voltage influence	≤ 0.5 %
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.	750 VA (3 A/250 V AC, module aligned, ≤ 5 mm spacing)
	1250 VA (5 A/250 V AC, module not aligned, ≥ 5 mm spacing)
Output fuse	5 A (fast-blow)

Power supply

Supply voltage range	24 V AC ... 230 V AC (see Power modules)
	24 V DC (see Power modules)

General

Mechanical service life	approx. 2×10^7 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, self-extinguishing
Color	green

Connection data

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Connection data

Connection method	Screw connection
Stripping length	8 mm
Conductor cross section solid	0.5 mm ² ... 2.5 mm ²
Conductor cross section flexible	0.25 mm ² ... 2.5 mm ²
Conductor cross section AWG	20 ... 14
Tightening torque	1 Nm

Standards and Regulations

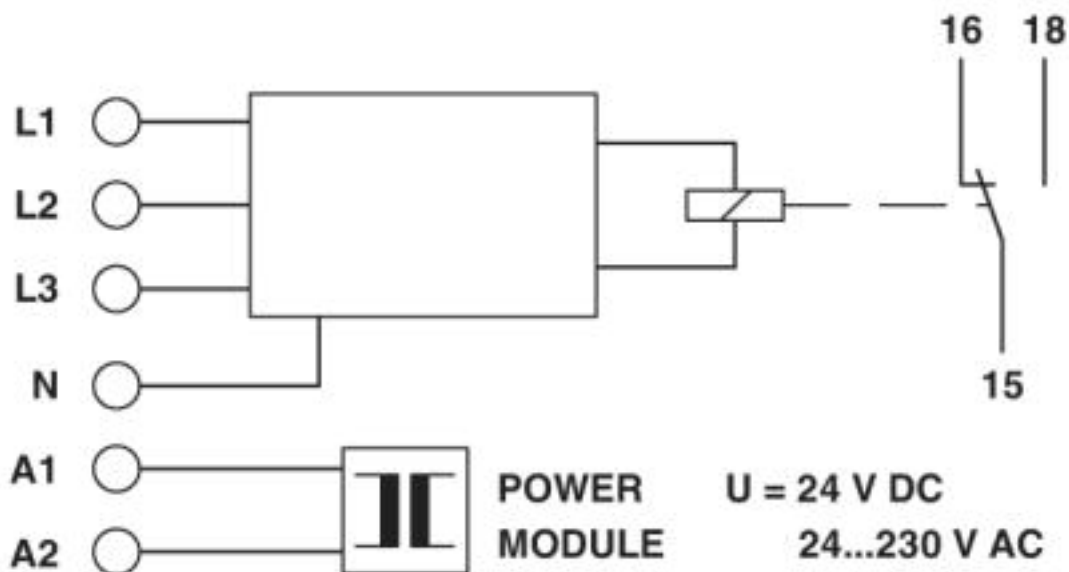
Electromagnetic compatibility	Conformance with EMC Directive 2004/108/EC
Noise emission	EN 61000-6-3
Noise immunity	EN 61000-6-2
Standards/regulations	EN 50178
Rated insulation voltage	300 V
Insulation	Basic insulation
Pollution degree	2
Overvoltage category	III
Low Voltage Directive	Conformance with 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



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Approvals

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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
EAC			TR_TS_S_00010_c
cULus Listed			

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