

https://www.phoenixcontact.com/us/products/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 via power module, 1 changeover contact

## 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

## Commercial data

Item number	2885278
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	C440
Product key	CK4111
Catalog page	Page 253 (C-5-2019)
GTIN	4017918996512
Weight per piece (including packing)	137.8 g
Weight per piece (excluding packing)	133.3 g
Customs tariff number	85364900
Country of origin	AT



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# Technical data

Product properties

Product type	Voltage monitoring relay
Operating mode	100% operating factor
Mechanical service life	approx. 2x 10 <sup>7</sup> cycles
Insulation characteristics	
Insulation	Basic insulation
Insulation characteristics	
Insulation	Basic insulation
Overvoltage category	III
Pollution degree	2
ectrical properties	
ectrical properties Service life electrical	2x 10 <sup>5</sup> cycles at ohmic load, 1000 VA
	2x 10 <sup>5</sup> cycles at ohmic load, 1000 VA 3-phase
Service life electrical	
Service life electrical Mains type	3-phase
Service life electrical Mains type Rated insulation voltage	3-phase 300 V
Service life electrical Mains type Rated insulation voltage Rated surge voltage	3-phase 300 V
Service life electrical Mains type Rated insulation voltage Rated surge voltage Supply	3-phase   300 V   4 kV

### Input data

Input name	Measuring input
Measured value	AC sine (48 Hz 63 Hz)
Nominal input voltage U <sub>N</sub>	3 N ~ 400/230 V
Maximum input voltage	3 N ~ 600/346 V
Input resistance of voltage input	1 ΜΩ
Frequency range	50 Hz 60 Hz
Maximum temperature coefficient	< 0.1 %/K
Setting range for response delay	0.2 s 10 s
Min. setting range	-30 % 20 % (From U <sub>N</sub> )
Max. setting range	-20 % 30 % (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 520 V AC
Function	Window, with neutral conductor connection
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

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### 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.	750 VA (3 A/250 V AC, module aligned, ≤ 5 mm spacing)	
	1250 VA (5 A/250 V AC, module not aligned, $\geq$ 5 mm spacing)	
Output fuse	5 A (fast-blow)	

#### Connection data

Connection method	Screw connection
Stripping length	8 mm
Conductor cross section rigid	0.5 mm² 2.5 mm²
Conductor cross section flexible	0.25 mm <sup>2</sup> 2.5 mm <sup>2</sup>
Conductor cross section AWG	20 14

#### Dimensions

Width	22.5 mm
Height	90 mm
Depth	113 mm

#### Material specifications

Color	green (RAL 6021)
Housing insulation material	Polyamide PA, 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	
	-25 °C 40 °C (corresponds to UL 508)	
Ambient temperature (storage/transport)	-25 °C 70 °C	
Climatic class	3K3 (in acc. with EN 60721)	
Permissible humidity (operation)	15 % 85 %	

### Approvals

Low Voltage Directive

CE	
Certificate	CE-compliant
UL, USA/Canada	
Identification	UL/C-UL Listed UL 508
EMC data	

Conformance with Low Voltage Directive



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Noise immunity	EN 61000-6-2	
Electromagnetic compatibility	Conformance with EMC directive	
Noise emission	EN 61000-6-3	
Standards and regulations		
Standards/regulations	EN 50178	
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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# Classifications

### ECLASS

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

### ETIM

	ETIM 9.0	EC001438
UN	NSPSC	
	UNSPSC 21.0	41113600

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## Environmental product compliance

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

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