

https://www.phoenixcontact.com/au/products/2866035

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 documentation. Our general terms of use for downloads are valid.



Monitoring relay for monitoring 1-phase voltages of 0...300 V AC/DC, undervoltage, 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

- · Adjustable via potentiometer on the front
- Variable supply voltage range
- · Separately adjustable startup and response delays

Commercial data

Item number	2866035
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	DK6631
Product key	DK6631
Catalog page	Page 251 (C-5-2019)
GTIN	4017918924331
Weight per piece (including packing)	134.2 g
Weight per piece (excluding packing)	132.3 g
Customs tariff number	85364900
Country of origin	AT



https://www.phoenixcontact.com/au/products/2866035

Technical data

Product properties

Product type	Voltage monitoring relay
Operating mode	100% operating factor
Mechanical service life	approx. 2x 10 ⁷ cycles
Insulation characteristics	
Insulation	Basic insulation
Overvoltage category	III
Pollution degree	2

Service life electrical	$2x \ 10^5$ cycles at ohmic load, 1000 VA
Mains type	1-phase
Rated insulation voltage	300 V
Rated surge voltage	4 kV

Supply

Supply voltage range	24 V AC 230 V AC (see Power modules)
	24 V DC (see Power modules)
Nominal power consumption	2 VA (1.5 W)

Input data

Input name	Measuring input
Measured value	DC, AC sine (48 Hz 63 Hz)
Protection	≤ 20 A
Input voltage range	0 V 30 V AC/DC (Connection terminal blocks: U1 and GND)
	0 V 60 V AC/DC (Connection terminal blocks: U2 and GND)
	0 V 300 V AC/DC (Connection terminal blocks: U3 and GND)
Maximum input voltage	100 V _{rms} (Connection terminal blocks: U1 and GND)
	150 V_{rms} (Connection terminal blocks: U2 and GND)
	440 V_{rms} (Connection terminal blocks: U3 and GND)
Input resistance of voltage input	47 k Ω (Connection terminal blocks: U1 and GND)
	100 k Ω (Connection terminal blocks: U2 and GND)
	470 k Ω (Connection terminal blocks: U3 and GND)
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	5 % 95 % (From U _N)
Max. setting range	10 % 100 % (From U _N)
Function	Undervoltage
Basic accuracy	± 5 % (of scale end value)
Setting accuracy	≤ 5 % (of scale end value)

PHŒNIX CONTACT



2866035

https://www.phoenixcontact.com/au/products/2866035

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.	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)

Connection data

Connection method	Screw connection
Stripping length	8 mm
Conductor cross section rigid	0.5 mm ² 2.5 mm ²
Conductor cross section flexible	0.25 mm² 2.5 mm²
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

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

2866035

https://www.phoenixcontact.com/au/products/2866035



EMC data

Electromagnetic compatibility	Conformance with EMC directive
Low Voltage Directive	Conformance with Low Voltage Directive
Noise immunity	EN 61000-6-2
Noise emission	
Standards/regulations	EN 61000-6-3
tandards and regulations	
Standards/regulations	
	EN 50178
ounting	EN 50178
ounting Mounting type	DIN rail mounting
Ounting Mounting type Assembly note	

2866035

https://www.phoenixcontact.com/au/products/2866035

Drawings





2866035

https://www.phoenixcontact.com/au/products/2866035

Approvals

🌣 To download certificates, visit the product detail page: https://www.phoenixcontact.com/au/products/2866035

ERC	EAC Approval ID: RU*C-DE.*08.B.00010
	UL Listed Approval ID: FILE E 172140
<u>.</u>	CUL Listed Approval ID: FILE E 172140

2866035

https://www.phoenixcontact.com/au/products/2866035



Classifications

ECLASS

	ECLASS-13.0	27371801		
ETIM				
	ETIM 9.0	EC001438		
UNSPSC				
	UNSPSC 21.0	41113600		

2866035

https://www.phoenixcontact.com/au/products/2866035

PHŒNIX CONTACT

Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions		
China RoHS			
Environment friendly use period (EFUP)	EFUP-E		
	No hazardous substances above the limits		
EU REACH SVHC			
REACH candidate substance (CAS No.)	No substance above 0.1 wt%		

Phoenix Contact 2025 © - all rights reserved https://www.phoenixcontact.com

PHOENIX CONTACT PTY Ltd Unit 7, 2-8 South Street Rydalmere NSW 2116 1300 786 411 customerservice@phoenixcontact.com.au