

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 1-phase voltages of 0...300 V AC/DC, undervoltage, 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.

#### **Product Features**

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



## Key Commercial Data

Packing unit	1 pc
Weight per Piece (excluding packing)	133.2 g
Custom tariff number	85364900
Country of origin	Austria

#### Technical data

#### **Dimensions**

Width	22.5 mm
Height	90 mm
Depth	113 mm



# Technical data

### Ambient conditions

Ambient temperature (operation)	-25 °C 55 °C
	-25 °C 40 °C (corresponds to UL 508)
Ambient temperature (storage/transport)	-25 °C 70 °C

## Input data

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)
< 0.1 %/K
Undervoltage
5 % 95 % (From U <sub>N</sub> )
10 % 100 % (From U <sub>N</sub> )
0.2 s 10 s
± 5 % (of scale end value)
≤ 5 % (of scale end value)
≤ 2 %
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 x 10 <sup>7</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 2004/108/EC
Overvoltage category	III, basic insulation (as per EN 50178)
Housing insulation material	Polyamide PA, self-extinguishing
Color	green
Rated insulation voltage	300 V (According to EN 50178)



# Technical data

### General

Conformance	CE-compliant
UL, USA / Canada	UL/C-UL listed UL 508

## Connection data

Conductor cross section flexible min.	0.25 mm <sup>2</sup>
Conductor cross section flexible max.	2.5 mm <sup>2</sup>
Conductor cross section solid min.	0.5 mm <sup>2</sup>
Conductor cross section solid max.	2.5 mm <sup>2</sup>
Conductor cross section AWG min.	20
Conductor cross section AWG max.	14
Stripping length	8 mm
Connection method	Screw connection

## Standards and Regulations

Electromagnetic compatibility	Conformance with EMC Directive 2004/108/EC
Noise emission	EN 61000-6-3
Noise immunity	EN 61000-6-2
Low Voltage Directive	Conformance with LV directive 2006/95/EC
Conformance	CE-compliant
UL, USA / Canada	UL/C-UL listed UL 508

## Classifications

## eCl@ss

eCl@ss 4.0	27371105
eCl@ss 4.1	27371105
eCl@ss 5.0	27371801
eCl@ss 5.1	27371801
eCl@ss 6.0	27371801
eCl@ss 7.0	27371801
eCl@ss 8.0	27371801

### **ETIM**

ETIM 2.0	EC001438
ETIM 3.0	EC001438
ETIM 4.0	EC001438
ETIM 5.0	EC001438



# Classifications

UNSPSC

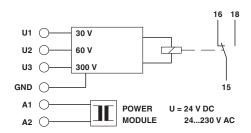
UNSPSC 6.01	30211916
UNSPSC 7.0901	39121535
UNSPSC 11	39121535
UNSPSC 12.01	39121535
UNSPSC 13.2	39121535

UNSPSC 12.01	39121535
UNSPSC 13.2	39121535
Approvals	
Approvals	
Approvals	
UL Listed / cUL Listed / EAC / EAC / cULus Listed	
Ex Approvals	
Approvals submitted	
Approval details	
UL Listed (II)	
cUL Listed ••••	
EAC	
EAC	
cULus Listed ( U)	



# Drawings

## Block diagram



Phoenix Contact 2016 © - all rights reserved http://www.phoenixcontact.com