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Monitoring relay for monitoring single-phase currents of 0 ... 5 A AC or 0 ... 10 A AC, overcurrent/undercurrent or window, 1 PDT, with screw 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 747257
GTIN	4046356747257
Weight per Piece (excluding packing)	80.000 g
Custom tariff number	85364900
Country of origin	Austria

Technical data

Dimensions

Width	17.5 mm
Height	88 mm
Depth	65.5 mm

Ambient conditions



Technical data

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

Input data

Input current range	0 A 5 A
	0 A 10 A
	Configurable via rotary switches
Overload capacity	13 A AC
Maximum temperature coefficient	≤ 0.05 %
Function	Overcurrent, undercurrent, window
Min. setting range	5 % 95 % (from I _N)
Max. setting range	10 % 100 % (from I _N)
Setting range for response delay	0.1 s 10 s
Basic accuracy	\leq 5 % (of the nominal value)
Setting accuracy	± 5 % (of the nominal 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)
Interrupting rating (ohmic load) max.	1250 VA (5 A / 250 V AC)
Output fuse	5 A (fast-blow)

Power supply

Supply voltage	230 V AC ±15 %
Supply voltage range	195.5 V AC 264.5 V AC

General

Mechanical service life	15x 10 ⁶ 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



Technical data

General

Color	gray

Connection data

Connection method	Screw connection
Stripping length	8 mm
Conductor cross section solid	0.5 mm² 2.5 mm²
Conductor cross section flexible	0.5 mm² 2.5 mm²
Conductor cross section AWG	20 14
Torque	1 Nm 1 Nm

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
Rated insulation voltage	300 V (Supply circuit)
	250 V (Output circuit)
	300 V (Measuring circuit)
Rated surge voltage	4 kV
Insulation	Basic insulation
Pollution degree	2
Overvoltage category	III
Low Voltage Directive	Conformance with Low Voltage Directive 2006/95/EC (valid until 2016-04-19) / 2014/35/EU (valid from 2016-04-20)

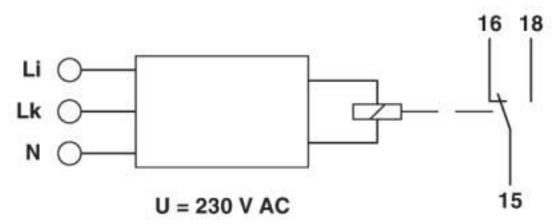
Environmental Product Compliance

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

Drawings



Block diagram



Classifications

eCl@ss

eCl@ss 10.0.1	27371802
eCl@ss 4.0	27371100
eCl@ss 4.1	27371100
eCl@ss 5.0	27371800
eCl@ss 5.1	27371800
eCl@ss 6.0	27371800
eCl@ss 7.0	27371802
eCl@ss 8.0	27371802
eCl@ss 9.0	27371802

ETIM

ETIM 2.0	EC001440
ETIM 3.0	EC001440
ETIM 4.0	EC001440
ETIM 5.0	EC001440
ETIM 6.0	EC001440
ETIM 7.0	EC001440

UNSPSC

UNSPSC 6.01	30211916
UNSPSC 7.0901	39121535
UNSPSC 11	39121535
UNSPSC 12.01	39121535
UNSPSC 13.2	41113620



Classifications

UNSPSC

UNSPSC 18.0	41113637
UNSPSC 19.0	41113637
UNSPSC 20.0	41113637
UNSPSC 21.0	41113637

Approvals

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Approvals

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

Ex Approvals

Approval details

UL Listed	LISTED	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 172140

	cUL Listed	CUL	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 172140
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EAC	t H I	DE.*08.B.00010

cULus Listed CULus Listed



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