

# Monitoring relay - EMD-SL-PTC - 2866093

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Monitoring relay for temperature monitoring of the motor winding (maximum 6 PTC) with error memory for temperature sensors in acc. with DIN 44081, test function with integrated test/reset button, supply voltage can be selected using power module, 2 PDTs

## 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.

## Why buy this product

- Test function with integrated test/reset button
- Short-circuit and open-circuit monitoring
- Variable supply voltage range



## Key Commercial Data

Packing unit	1 STK
GTIN	
GTIN	4017918952716
Weight per Piece (excluding packing)	142.700 g
Custom tariff number	85364900
Country of origin	Austria

## Technical data

### Note

Utilization restriction	EMC: class A product, see manufacturer's declaration in the download area
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### Dimensions

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## Technical data

### Dimensions

Width	22.5 mm
Height	90 mm
Depth	113 mm

### 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

Maximum temperature coefficient	< 0.1 %/K
Function	Winding temperature monitoring
Basic accuracy	± 10 % (of scale end value)
Repeat accuracy	≤ 2 %
Total cold resistance	< 1.5 kΩ
Response value	≥ 3.6 kΩ (Relay drops out)
Release value	≤ 1.8 kΩ (Relay picks up)
Short-circuit detection	< 20 Ω
Voltage influence	≤ 1 %
Recovery time	500 ms

### Contact side

Contact type	2 floating PDT contacts
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. $2 \times 10^7$ 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
Overvoltage category	III, basic insulation (as per EN 50178)
Housing insulation material	Polyamide PA, self-extinguishing
Color	green
Rated insulation voltage	300 V (acc. to EN 50178)
Conformance	CE-compliant

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## Technical data

### General

UL, USA/Canada	UL/C-UL listed UL 508
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### Connection data

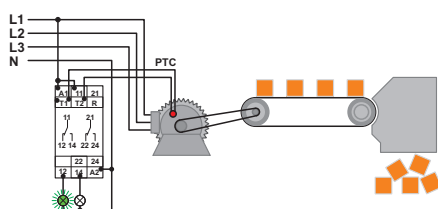
Conductor cross section flexible min.	0.25 mm <sup>2</sup>
Conductor cross section flexible max.	2.5 mm <sup>2</sup>
Conductor cross section solid min.	0.5 mm <sup>2</sup>
Conductor cross section solid max.	2.5 mm <sup>2</sup>
Conductor cross section AWG min.	20
Conductor cross section AWG max.	14
Stripping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

### Standards and Regulations

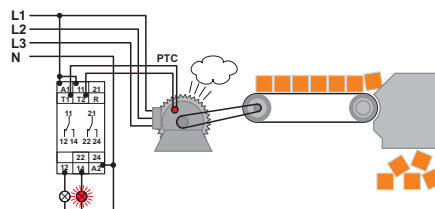
Electromagnetic compatibility	Conformance with EMC Directive 2004/108/EC
Noise emission	EN 61000-6-3
Noise immunity	EN 61000-6-2
Low Voltage Directive	Conformance with LV directive 2006/95/EC
Conformance	CE-compliant
UL, USA/Canada	UL/C-UL listed UL 508

## Drawings

Application drawing



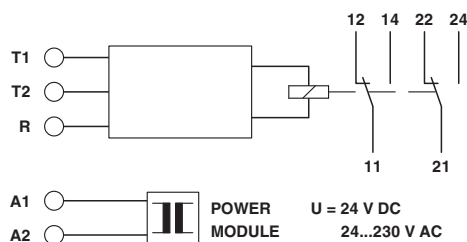
Application drawing



Monitoring of motor winding temperatures

Shutdown and message in case of overload

Block diagram



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## Classifications

### eCl@ss

eCl@ss 4.0	27210120
eCl@ss 4.1	27210120
eCl@ss 5.0	27210120
eCl@ss 5.1	27210120
eCl@ss 6.0	27210120
eCl@ss 7.0	27210120
eCl@ss 8.0	27371810
eCl@ss 9.0	27210129

### ETIM

ETIM 2.0	EC001446
ETIM 3.0	EC001446
ETIM 4.0	EC001446
ETIM 5.0	EC001446
ETIM 6.0	EC002919

### UNSPSC

UNSPSC 6.01	30211506
UNSPSC 7.0901	39121008
UNSPSC 11	39121008
UNSPSC 12.01	39121008
UNSPSC 13.2	41112105

## Approvals

### Approvals

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#### Approvals

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

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#### Ex Approvals

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### Approval details

UL Listed		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 172140
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# Monitoring relay - EMD-SL-PTC - 2866093

## Approvals

cUL Listed		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 172140
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EAC		EAC-Zulassung
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EAC		RU C- DE.A*30.B.01082
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cULus Listed		
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## Accessories

### Additional products

Power module - EMD-SL-PS- 24DC - 2885359



Power modules, pluggable, for EMD-SL-..., supply voltage: 20 V DC ... 30 V DC

Power module - EMD-SL-PS- 24AC - 2866103



Power modules, pluggable, for EMD-SL-..., supply voltage: 20.2...26.4 V AC

Power module - EMD-SL-PS-110AC - 2866116



Power modules, pluggable, for EMD-SL-..., supply voltage: 88...121 V AC

## Monitoring relay - EMD-SL-PTC - 2866093

### Accessories

Power module - EMD-SL-PS-120AC - 2885731



Power modules, pluggable, for EMD-SL-..., supply voltage: 108 V AC ... 132 V AC

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Power module - EMD-SL-PS-230AC - 2866129



Power modules, pluggable, for EMD-SL-..., supply voltage: 195...264 V AC

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