

# EMD-BL-PTC-PT - Monitoring relay



2906253

<https://www.phoenixcontact.com/au/products/2906253>

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Temperature monitoring of the motor winding (maximum 6 PTCs) for temperature sensors according to DIN 44081 and DIN 44082 with short-circuit monitoring of the thermistor circuit, with push-in 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.

## Commercial data

Item number	2906253
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	DK6481
Product key	DK6481
Catalog page	Page 248 (C-5-2019)
GTIN	4055626053745
Weight per piece (including packing)	72 g
Weight per piece (excluding packing)	72 g
Customs tariff number	85364900
Country of origin	AT

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## Technical data

### Product properties

Product type	Temperature monitoring relay
Number (PTC sensor)	6 (1 x 6 PTCs)
Operating mode	100% operating factor
Mechanical service life	15x 10 <sup>6</sup> cycles

### Insulation characteristics

Overvoltage category	III
Pollution degree	2

### Electrical properties

Service life electrical	1x 10 <sup>5</sup> cycles
Rated surge voltage	4 kV

### Supply

Supply voltage	230 V AC (-15 % ... +10 %)
Supply voltage range	195.5 V AC ... 253 V AC
Nominal power consumption	3.5 VA (0.5 W)

### Input data

Input name	Measuring input
Maximum input voltage	4 V DC (Connection terminal blocks: T1 and T2)
Frequency range	50 Hz ... 60 Hz
Maximum temperature coefficient	< 0.05 %/K
Response delay	< 100 ms
Switch-on delay	< 450 ms
Response value	≥ 3.6 kΩ (Relay drops out)
Function	Winding temperature monitoring
Basic accuracy	± 10 % (of scale end value)
Total cold resistance	≤ 1.5 kΩ
Release value	≤ 1.6 kΩ (Relay picks up)
Short-circuit detection	< 20 Ω
Recovery time	> 300 ms

### Control

Reset	Autoreset
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### Output data

#### Switching

Contact switching type	1 floating changeover contact
Maximum switching voltage	250 V AC (in acc. with IEC 60947-5-1)
Interrupting rating (ohmic load) max.	1250 VA (5 A / 250 V AC)

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Output fuse	5 A (fast-blow)
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## Connection data

Connection method	Push-in connection
Stripping length	8 mm
Conductor cross section rigid	0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section flexible	0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section AWG	26 ... 14

## Dimensions

Width	17.5 mm
Height	89.5 mm
Depth	65.5 mm

## Material specifications

Color	gray (RAL 7042)
Housing insulation material	Polyamide PA 6.6, 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
Ambient temperature (storage/transport)	-25 °C ... 70 °C
Permissible humidity (operation)	15 % ... 85 %

## Approvals

### CE

Certificate	CE-compliant
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## 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
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## Standards and regulations

Standards/regulations	IEC 60947-5-1
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## Mounting

Mounting type	DIN rail mounting
Assembly note	on standard DIN rail NS 35 in accordance with EN 60715
Mounting position	any

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## Drawings

### Block diagram



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## Approvals

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**EAC**

Approval ID: RU\*C-DE.\*08.B.00010

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## Classifications

### ECLASS

ECLASS-13.0

27371810

### ETIM

ETIM 9.0

EC001446

### UNSPSC

UNSPSC 21.0

39121100

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## Environmental product compliance

### EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
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### 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%
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