

# MACX-MR-PTC - Monitoring relay



1336523

<https://www.phoenixcontact.com/us/products/1336523>

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.



Temperature monitoring relay of the motor winding (max. 2x3 PTCs) for temperature sensors according to DIN 44081 and DIN 44082 with short-circuit monitoring of the PTC thermistor circuit, dynamic line break monitoring, 2-channel detection circuit.

It can be read using smart phone app via NFC wireless communication function, 1x2 PDT dry contact outputs, closed circuit principle, manual reset, optional screw connection and plug-in connection.

## Commercial data

Item number	1336523
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	C443
Product key	CK4741
GTIN	4063151637118
Weight per piece (including packing)	196.8 g
Weight per piece (excluding packing)	195 g
Customs tariff number	85364900
Country of origin	CN

# MACX-MR-PTC - Monitoring relay



1336523

<https://www.phoenixcontact.com/us/products/1336523>

## Technical data

### Product properties

Product type	Temperature monitoring relay
No. of channels	2
Number (PTC sensor)	6 (2x 3 PTCs)
Operating mode	Closed circuit
Mechanical service life	Approx. $3 \times 10^7$ cycles

### Insulation characteristics

Overvoltage category	III
Pollution degree	3

### Electrical properties

Rated impulse withstand voltage	6 kV
Service life electrical	approx. $1 \times 10^5$ cycles, resistive load 2000 V A
Maximum power dissipation for nominal condition	15 W
Sensor type	PTC type A
Rated insulation voltage	690 V

### Electrical isolation

Electrical isolation	300 V
----------------------	-------

### Supply

Supply voltage range	24 V AC ... 240 V AC -15 % ... +10 %
	24 V DC ... 240 V DC -25 % ... +30 %
Nominal power consumption	15 VA (1.5 W)

### Input data

Input name	Measuring input
Frequency range	48 Hz ... 400 Hz
Maximum temperature coefficient	0.05 %/K
Response value	$\geq 2.8 \text{ k}\Omega$ (Over-temperature test, relay drops out)
Function	Winding temperature monitoring
Basic accuracy	1 %
Repeat accuracy	0.5 %
Total cold resistance	$< 750 \Omega$ (per channel)
Release value	$\leq 1.1 \text{ k}\Omega$ (Over-temperature test, relay picks up)
Voltage influence	0.5 %
Recovery time	200 ms
Max. probe voltage	3.3 V DC

### Control

Connection name	N/O dry contact
Cable length	2x 100 m (0.75 mm <sup>2</sup> )

# MACX-MR-PTC - Monitoring relay



1336523

<https://www.phoenixcontact.com/us/products/1336523>

Maximum control voltage	3.3 V DC
Maximum short-circuit current	0.33 mA

## Output data

### Switching

Contact switching type	2 floating changeover contacts
Contact material	AgNi
Maximum switching voltage	250 V AC
Interrupting rating (ohmic load) max.	2000 VA (8 A/250 V AC)
Output fuse	8 A (fast-blow)

## Connection data

Connection method	Screw connection
Stripping length	10 mm
Conductor cross section rigid	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section flexible	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section AWG	24 ... 14
Tightening torque	0.5 Nm ... 0.6 Nm (5 lb in ... 7 lb in)

## Dimensions

Width	22.5 mm
Height	109 mm
Depth	114 mm

## Material specifications

Flammability rating according to UL 94	V0
Housing insulation material	PBT

## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP40 (Housing) IP20 (Connection terminal blocks)
Ambient temperature (operation)	-25 °C ... 70 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Altitude	2000 m
Permissible humidity (operation)	10 % ... 95 %

## Approvals

### CE

Identification	CE-compliant
----------------	--------------

### UL, USA/Canada

Identification	UL/C-UL Listed UL 508
----------------	-----------------------

# MACX-MR-PTC - Monitoring relay



1336523

<https://www.phoenixcontact.com/us/products/1336523>

## CCC

Identification	GB/T 14048.5
----------------	--------------

## EMC data

Electromagnetic compatibility	Conformance with EMC directive
Low Voltage Directive	Conformance with Low Voltage Directive
Noise immunity	EN 61000-6-2
Noise emission	EN 61000-6-4

## Mounting

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

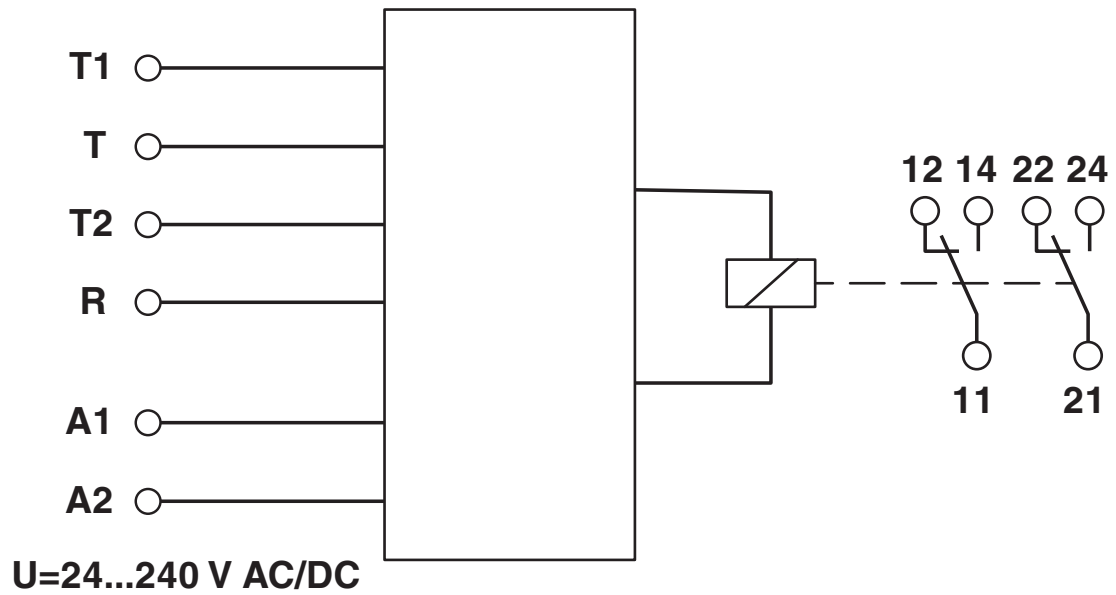
# MACX-MR-PTC - Monitoring relay

1336523

<https://www.phoenixcontact.com/us/products/1336523>

## Drawings

Block diagram



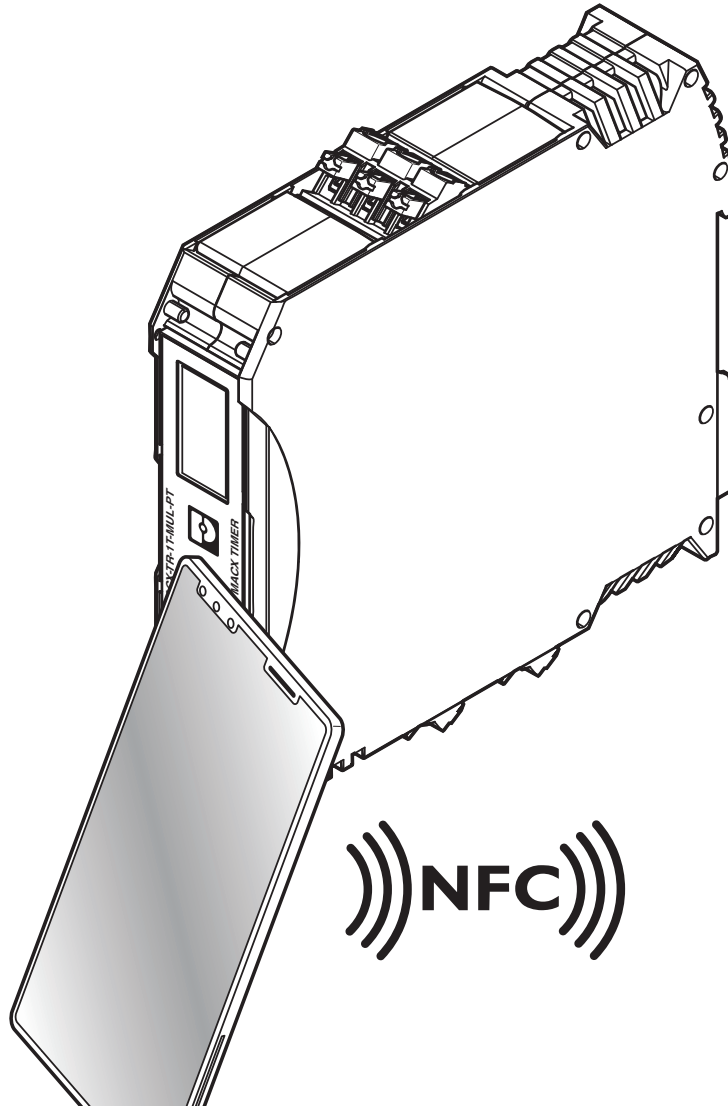
# MACX-MR-PTC - Monitoring relay

1336523

<https://www.phoenixcontact.com/us/products/1336523>



Schematic diagram



# MACX-MR-PTC - Monitoring relay



1336523

<https://www.phoenixcontact.com/us/products/1336523>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1336523>



**CCC**

Approval ID: 2022000303000014



**CCC**

Approval ID: 2024010303656846



**cULus Listed**

Approval ID: E172140

# MACX-MR-PTC - Monitoring relay



1336523

<https://www.phoenixcontact.com/us/products/1336523>

## Classifications

### ECLASS

ECLASS-11.0	27371810
ECLASS-13.0	27371810
ECLASS-12.0	27371810

### ETIM

ETIM 9.0	EC001446
----------	----------



# MACX-MR-PTC - Monitoring relay



1336523

<https://www.phoenixcontact.com/us/products/1336523>

## Environmental product compliance

### EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	7(a), 7(c)-I

### China RoHS

Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.

### EU REACH SVHC

REACH candidate substance (CAS No.)	Lead(CAS: 7439-92-1)
SCIP	a82651da-47d0-4e33-bf06-044e7614c335

Phoenix Contact 2024 © - all rights reserved

<https://www.phoenixcontact.com>

Phoenix Contact USA  
586 Fulling Mill Road  
Middletown, PA 17057, United States  
(+717) 944-1300  
[info@phoenixcon.com](mailto:info@phoenixcon.com)