

MACX MCR-PTB-SP - Power and error message module



2924184

<https://www.phoenixcontact.com/us/products/2924184>

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.



Power and fault signaling module with Push-in connection, including corresponding ME 17,5 TBUS 1,5/ 5-ST-3,81 GY DIN rail connector

Your advantages

- Simple or redundant supply, decoupled from diode, protected against polarity reversal
- Installation in zone 2 permitted
- Replaceable fuse
- Error message in the event of power supply failure or fuse fault
- Bus cable error message for MACX MCR-...(2)NAM... devices connected via DIN rail connectors
- Relay output (changeover contact) and blinking LED for error messages
- Supply current up to 3.75 A

Commercial data

Item number	2924184
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	C402
Product key	DK111Z
GTIN	4046356342766
Weight per piece (including packing)	156.9 g
Weight per piece (excluding packing)	151 g
Customs tariff number	85437090
Country of origin	DE

MACX MCR-PTB-SP - Power and error message module



2924184

<https://www.phoenixcontact.com/us/products/2924184>

Technical data

Product properties

Product type	Feed-in module
Product family	MACX Analog

Electrical properties

Electrical isolation

Overvoltage category	II
Pollution degree	2

Electrical isolation Input/switching output

Rated insulation voltage	50 V AC/DC
--------------------------	------------

Supply

Nominal supply voltage	24 V DC
------------------------	---------

Input data

Signal

Voltage input signal	19.2 V DC ... 30 V DC (24 V DC, -20 % ... +25 %)
Fuse	5 A (replaceable), slow-blow 250 V AC
Polarization and surge protection	Yes

Output data

Switching: Relay

Contact switching type	1 changeover contact
Contact material	Gold (Au)
Maximum switching voltage	50 V AC (2 A)
	30 V DC (2 A)
	50 V DC (0.22 A)

Signal

Max. current output signal	3.75 A
Output voltage	Input voltage - max 0.8 V at 3.75 A

Connection data

Connection method	Push-in connection
Stripping length	10 mm
Conductor cross-section rigid	0.2 mm ² ... 2.5 mm ²
Conductor cross-section flexible	0.2 mm ² ... 2.5 mm ²
Conductor cross-section flexible (2 conductors with same cross section)	0.25 mm ² ... 0.34 mm ² (TWIN ferrule without plastic sleeve)
	0.5 mm ² ... 1.5 mm ² (TWIN ferrule with plastic sleeve)
Conductor cross-section AWG	24 ... 14
	24 ... 22 (TWIN ferrule without plastic sleeve)

MACX MCR-PTB-SP - Power and error message module



2924184

<https://www.phoenixcontact.com/us/products/2924184>

	20 ... 16 (TWIN ferrule with plastic sleeve)
--	--

Ex data

Ex installation (EPL)	Gc
	Div. 2

Signaling

Status display	1 x red LED (error)
	2x green LEDs (PWR1 and PWR2)

Dimensions

Dimensional drawing	
Width	17.5 mm
Height	107.9 mm
Depth	113.7 mm
Depth NS 35/7,5	114.5 mm (Snapped onto DIN rail NS 35/7,5 in accordance with EN 60715)

Material specifications

Color	gray (RAL 7042)
Flammability rating according to UL 94 (Housing)	V0 (Housing)
Housing material	PA 6.6

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP20 (not assessed by UL)
Ambient temperature (operation)	-40 °C ... 60 °C (Any mounting position)
Ambient temperature (storage/transport)	-40 °C ... 80 °C
Permissible humidity (operation)	5 % ... 95 % (non-condensing)

Altitude range (≤ 2000 m)

Altitude	≤ 2000 m (The technical data refers to altitudes ≤2000 m above mean sea level. For altitudes >2000 m above mean sea level, refer to the data sheet.)
Ambient temperature (operation)	-40 °C ... 60 °C
Rated insulation voltage	50 V AC/DC

Altitude range (≤ 3000 m)

Height range	> 2000 m ... 3000 m
Ambient temperature (operation)	-40 °C ... 54 °C

MACX MCR-PTB-SP - Power and error message module



2924184

<https://www.phoenixcontact.com/us/products/2924184>

Rated insulation voltage	40 V AC/DC
--------------------------	------------

Altitude range (≤ 4000 m)

Height range	> 3000 m ... 4000 m
Ambient temperature (operation)	-40 °C ... 48 °C
Rated insulation voltage	30 V AC/DC

Altitude range (≤ 5000 m)

Height range	> 4000 m ... 5000 m
Ambient temperature (operation)	-40 °C ... 42 °C
Rated insulation voltage	30 V AC/DC

Approvals

CE

Certificate	CE-compliant
-------------	--------------

ATEX

Identification	Ⓜ II 3 G Ex ec nC IIC T4 Gc
Certificate	PxCIF08ATEX2865625X

IECEX

Identification	Ex ec nC IIC T4 Gc
Certificate	IECEX IBE 08.0004X

CCC / China-Ex

Identification	Ex ec nC IIC T4 Gc
Certificate	2021122303114198

UL, USA/Canada

Identification	UL 61010 Listed
	Class I, Div. 2, Groups A, B, C, D T4
	Class I, Zone 2, Group IIC T4

Shipbuilding approval

Certificate	DNV GL TAA0000AG
-------------	------------------

Shipbuilding data

Temperature	B
Humidity	B
Vibration	A
EMC	B
Enclosure	Required protection according to the Rules shall be provided upon installation on board

EMC data

Electromagnetic compatibility	Conformance with EMC directive
Noise immunity	EN 61000-6-2
Note	When being exposed to interference, there may be minimal

MACX MCR-PTB-SP - Power and error message module



2924184

<https://www.phoenixcontact.com/us/products/2924184>

	deviations.
Noise emission	
Standards/regulations	EN 61000-6-4
Electromagnetic HF field	
Designation	Electromagnetic RF field
Standards/regulations	EN 61000-4-3
Evaluation criterion	A
Fast transients (burst)	
Designation	Fast transients (burst)
Standards/regulations	EN 61000-4-4
Evaluation criterion	A
Conducted interference	
Designation	Conducted interferences
Standards/regulations	EN 61000-4-6
Evaluation criterion	A

Standards and regulations

GB Standard

Standards/regulations	GB/T 3836.1
	GB/T 3836.3
	GB/T 3836.8

Mounting

Mounting type	DIN rail mounting
---------------	-------------------

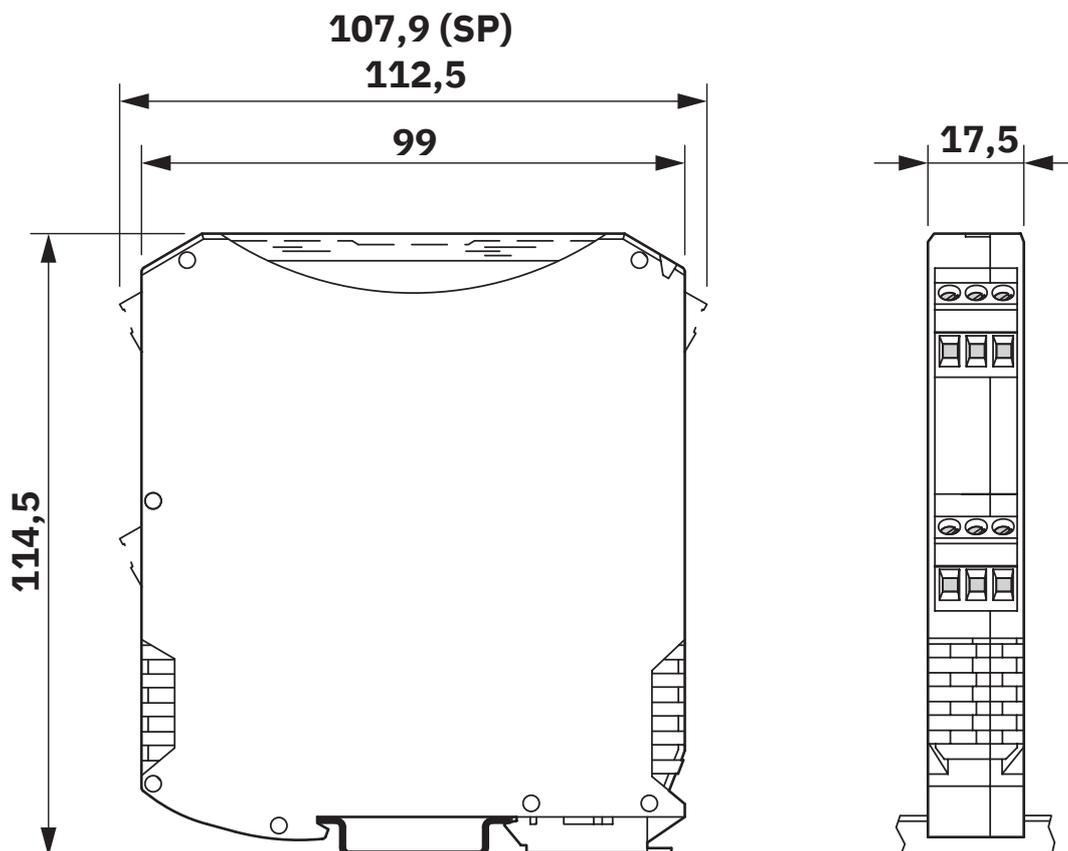
MACX MCR-PTB-SP - Power and error message module

2924184

<https://www.phoenixcontact.com/us/products/2924184>

Drawings

Dimensional drawing

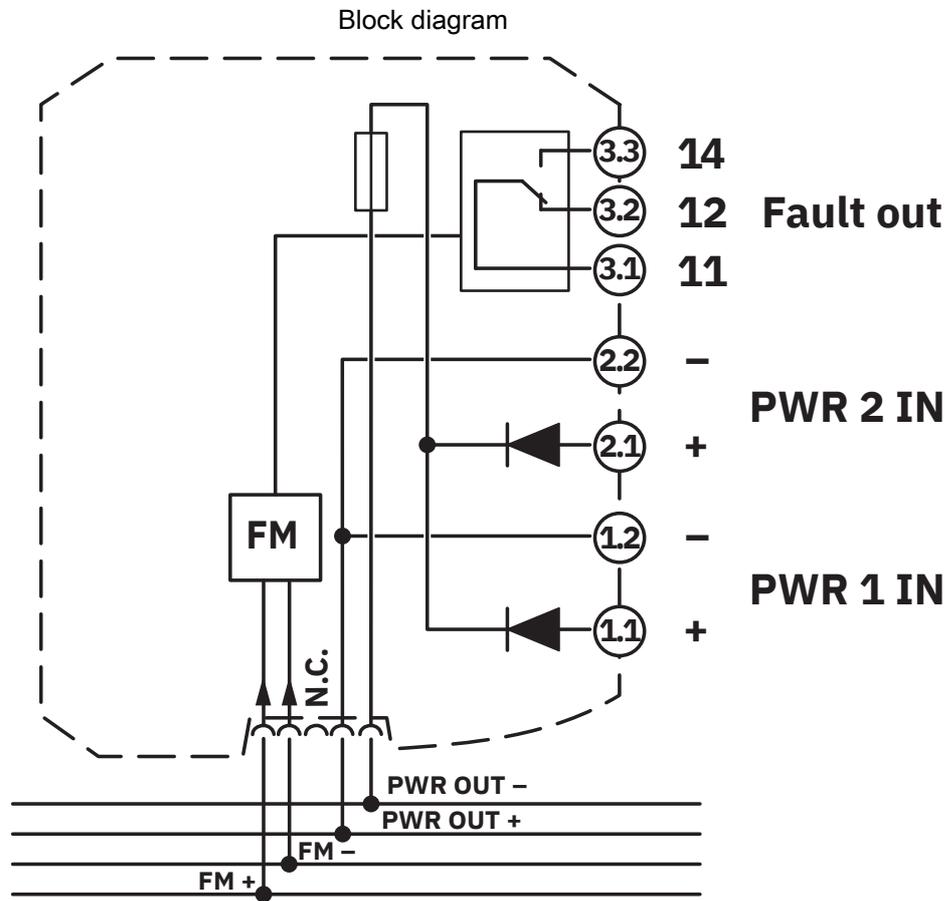


MACX MCR-PTB-SP - Power and error message module



2924184

<https://www.phoenixcontact.com/us/products/2924184>



MACX MCR-PTB-SP - Power and error message module



2924184

<https://www.phoenixcontact.com/us/products/2924184>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2924184>

 **UL Listed**
Approval ID: E330267

 **cUL Listed**
Approval ID: E330267

DNV
Approval ID: TAA00000AG

 **IECEx**
Approval ID: IECEx IBE 08.0004X

 **cUL Listed**
Approval ID: E199827

 **UL Listed**
Approval ID: FILE E 199827

 **CCC**
Approval ID: 2021122303114198

MACX MCR-PTB-SP - Power and error message module



2924184

<https://www.phoenixcontact.com/us/products/2924184>

Classifications

ECLASS

ECLASS-13.0	27242610
ECLASS-15.0	27242610

ETIM

ETIM 9.0	EC001600
----------	----------

UNSPSC

UNSPSC 21.0	32151600
-------------	----------

MACX MCR-PTB-SP - Power and error message module



2924184

<https://www.phoenixcontact.com/us/products/2924184>

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	1ac3de46-9ac0-4d18-a487-6bdb65fdcbb3

Phoenix Contact 2025 © - 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