

MINI MCR-SL-FM-RC-SP-NC - Monitoring block



2902962

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The fault monitoring module is used to evaluate and report group errors from the fault monitoring system and monitor supply voltages. Spring-cage connection, standard configuration. Replacement part: 2904508 MINI MCR-2-FM-RC-PT.

Product description

The MINI MCR-SL-FM-RO-(SP) fault monitoring module is used to evaluate and report group errors from the fault monitoring system. It can be used to monitor the supply voltages of a MINI MCR-SL-PTB-FM-(-SP) power terminal block (Item No. 2902958, 2902959). It also offers the option of detecting and reporting errors from MINI Analog measuring transducers which support fault monitoring and are connected to the fault monitoring module via the ME 6,2 TBUS-2 DIN rail connector (Item No. 2869728). Drawing off the supply is also possible. The error message is reported via an N/C contact. A maximum of 80 measuring transducers can be monitored as a group.

Commercial data

Item number	2902962
Packing unit	1 pc
Note	Made to order (non-returnable)
Sales key	C403
Product key	CK12ZZ
Catalog page	Page 116 (C-7-2015)
GTIN	4046356702843
Weight per piece (including packing)	79.1 g
Weight per piece (excluding packing)	73.3 g
Customs tariff number	85369010
Country of origin	DE

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Technical data

Product properties

Product type	Evaluation unit
Product family	MINI Analog

Insulation characteristics

Overvoltage category	II
Pollution degree	2

Electrical properties

Rated insulation voltage	50 V AC/DC
Electrical isolation	Basic insulation in accordance with EN 61010
Test voltage input/output	1.5 kV AC (50 Hz, 60 s)
Maximum temperature coefficient	< 0.01 %/K

Electrical isolation

Electrical isolation	Input, power supply and output to the switching output
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Supply

Supply voltage range	9.6 V DC ... 30 V DC (The DIN rail connector (ME 6,2 TBUS-2 1,5/5-ST-3,81 GN, item no. 2869728) can be used to bridge the supply voltage. It can be snapped onto a 35 mm DIN rail in accordance with EN 60715)
Max. current consumption	< 5 mA (at 24 V DC)
Power consumption	< 120 mW (at 24 V DC)

Input data

Signal: Voltage

Description of the input	Voltage input for redundancy monitoring
Voltage input signal	9.6 V DC ... 30 V DC

Output data

Switching: Relay

Maximum switching voltage	30 V AC/DC
Max. switching current	50 mA

Signal

Voltage output signal	8.8 V DC ... 29.2 V DC
Max. current output signal	2 A

Connection data

Connection method	Spring-cage connection
Stripping length	8 mm
Conductor cross section rigid	0.2 mm ² ... 2.5 mm ²

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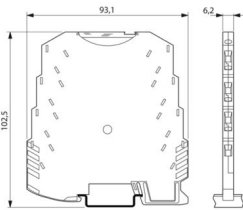
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Conductor cross section flexible	0.2 mm ² ... 2.5 mm ²
Conductor cross section AWG	24 ... 12

Signaling

Status display	Yellow LED (switching output)
Error indication	Red LED

Dimensions

Dimensional drawing	
Width	6.2 mm
Height	93.1 mm
Depth	102.5 mm

Material specifications

Color	green (RAL 6021)
Fire protection for rail vehicles (DIN EN 45545-2) R22	HL 1 - HL 2
Fire protection for rail vehicles (DIN EN 45545-2) R23	HL 1 - HL 2
Fire protection for rail vehicles (DIN EN 45545-2) R24	HL 1 - HL 2
Housing material	PBT

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-20 °C ... 65 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C

Approvals

CE

Certificate	CE-compliant
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ATEX

Identification	⊕ II 3 G Ex nA nC IIC T4 Gc X
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UL, USA/Canada

Identification	UL 508 Listed
	Class I, Div. 2, Groups A, B, C, D T5 pending
	Class I, Zone 2, Group IIC

Shipbuilding approval

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Identification	D, EMC1
Certificate	DNV GL 14085-15HH

EMC data

Noise immunity	EN 61000-6-2
Note	When being exposed to interference, there may be minimal deviations.
Electromagnetic compatibility	Conformance with EMC directive
Noise emission	EN 61000-6-4

Electrostatic discharge

Standards/regulations	EN 61000-4-2
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Electrostatic discharge

Comments	Safety measures must be taken to prevent electrostatic discharge.
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Electromagnetic HF field

Designation	Electromagnetic RF field
Standards/regulations	EN 61000-4-3
Typical deviation from the measuring range final value	0.5 %

Electromagnetic HF field

Comments	Criterion A
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Fast transients (burst)

Designation	Fast transients (burst)
Standards/regulations	EN 61000-4-4
Typical deviation from the measuring range final value	2 %

Fast transients (burst)

Comments	Criterion B
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Surge current load (surge)

Standards/regulations	EN 61000-4-5
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Surge current load (surge)

Comments	Criterion B
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Conducted interference

Designation	Conducted interferences
Standards/regulations	EN 61000-4-6
Typical deviation from the measuring range final value	0.5 %

Conducted interference

Comments	Criterion A
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Standards and regulations

Electrical isolation	Basic insulation in accordance with EN 61010
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Mounting

Mounting type	DIN rail mounting
Mounting position	any

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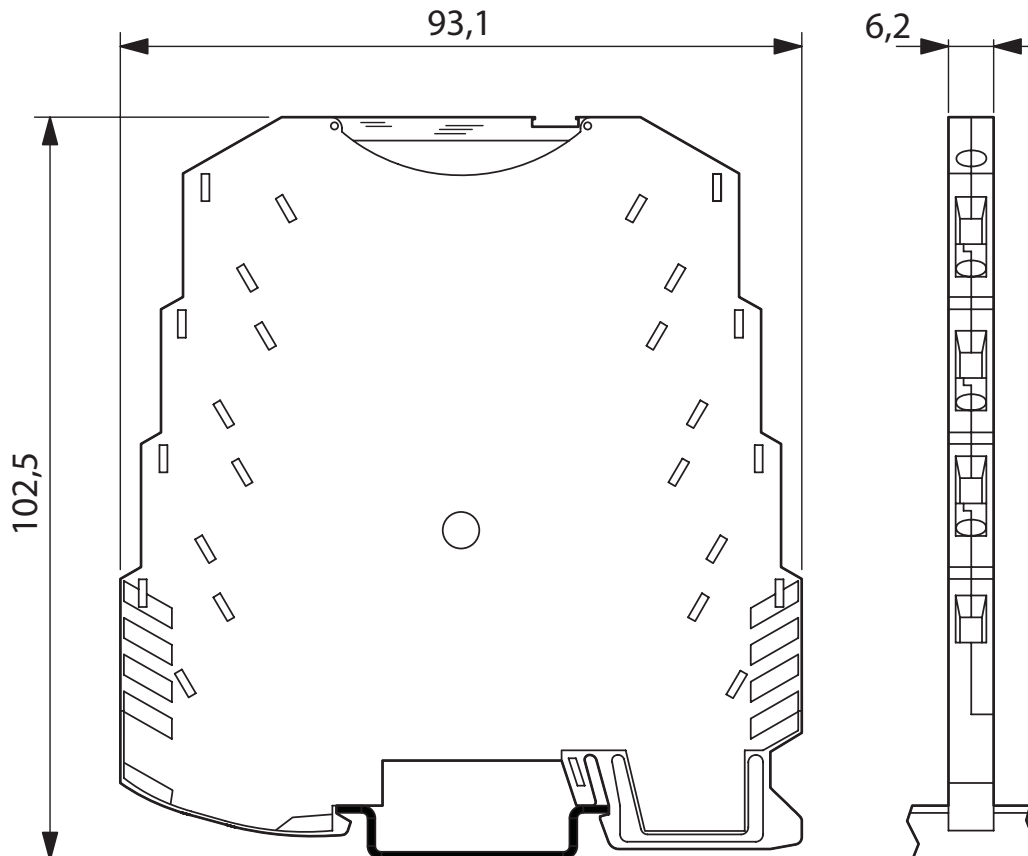


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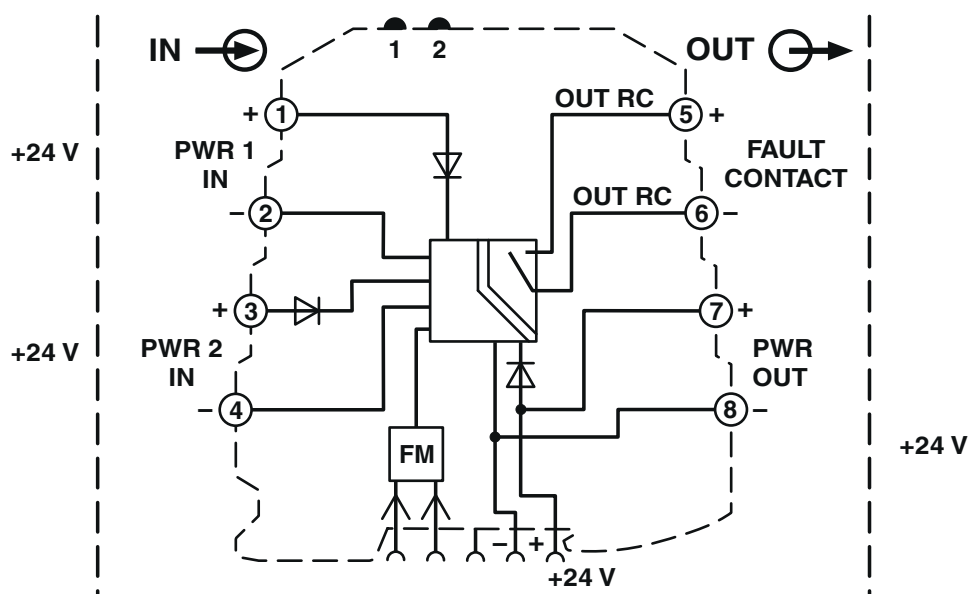
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Drawings

Dimensional drawing



Block diagram



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Environmental product compliance

China RoHS	Environmentally Friendly Use Period = 50 years For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"
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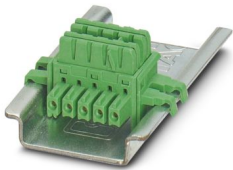
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Accessories

ME 6,2 TBUS-2 1,5/5-ST-3,81 GN - DIN rail bus connectors

2869728

<https://www.phoenixcontact.com/us/products/2869728>



DIN rail connector for DIN rail mounting. Universal for TBUS housing. Gold-plated contacts, 5-pos.

TC-D37SUB-AIO16-M-PS-UNI - Module carrier

2902934

<https://www.phoenixcontact.com/us/products/2902934>



Universal termination carrier for connecting 16 MINI Analog signal conditioners to digital or analog I/O cards, via D-SUB connector, 37-pos. (1:1 connection), with HART multiplexer connection

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TC-D37SUB-ADIO16-M-P-UNI - Module carrier

2902933

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Universal termination carrier for connecting 16 MINI Analog signal conditioners to digital or analog I/O cards, via D-SUB connector, 37-pos. (1:1 connection)

MINI MCR DKL - Transparent cover

2308111

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Fold up transparent cover for MINI MCR modules with additional labeling option using insert strips and flat Zack marker strip 6.2 mm

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MINI MCR-DKL-LABEL - Marking label

2810272

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Label for extended marking of MINI MCR modules in connection with the MINI MCR-DKL



MINI MCR-SL-PTB-FM - Power terminal block

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The MINI MCR-SL-PTB-FM(-SP) power terminal block is used to supply the supply voltage to the DIN rail connector. The FM power terminal block offers the additional function of monitoring in combination with the fault monitoring module. Screw connection.

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QUINT4-SYS-PS/1AC/24DC/2.5/SC - Power supply unit

2904614

<https://www.phoenixcontact.com/us/products/2904614>



Primary-switched power supply, QUINT POWER, screw connection, DIN rail mounting, supply of devices possible via the TBUS DIN rail connector, protective coating, input: single-phase, output: 24 V DC/2.5 A

SZS 0,6X3,5 - Screwdriver

1205053

<https://www.phoenixcontact.com/us/products/1205053>



Actuation tool, for ST terminal blocks, insulated, also suitable for use as a bladed screwdriver, size: 0.6 x 3.5 x 100 mm, 2-component grip, with non-slip grip

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