

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



2902961

<https://www.phoenixcontact.com/us/products/2902961>

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The fault monitoring module is used to evaluate and report group errors from the fault monitoring system and to monitor the supply voltages. The error is reported via an N/O contact. Screw connection, standard configuration.

## 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	2902961
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	C403
Product key	CK12ZZ
Catalog page	Page 524 (C-5-2017)
GTIN	4046356702850
Weight per piece (including packing)	95.2 g
Weight per piece (excluding packing)	81.7 g
Customs tariff number	85369010
Country of origin	DE

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## Technical data

### Notes

#### Utilization restriction

EMC note	EMC: class A product, see manufacturer's declaration in the download area
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### Product properties

Product type	Evaluation unit
Product family	MINI Analog
Configuration	DIP switches

#### Insulation characteristics

Overvoltage category	II
Pollution degree	2

### System properties

#### Functionality

Configuration	DIP switches
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### Electrical properties

Maximum temperature coefficient	< 0.01 %/K
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#### Electrical isolation Input/output

Electrical isolation	Input, power supply and output to the switching output
Rated insulation voltage	50 V AC/DC
Test voltage	1.5 kV AC (50 Hz, 60 s)
Insulation	Basic insulation in accordance with IEC/EN 61010

#### 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

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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

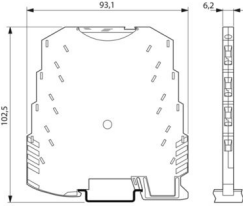
## Connection data

Connection method	Screw connection
Stripping length	12 mm
Screw thread	M3
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	26 ... 12

## Signaling

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

## Dimensions

Dimensional drawing	
Width	6.2 mm
Height	93.1 mm
Depth	101.2 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
Altitude	≤ 2000 m
Permissible humidity (operation)	5 % ... 95 % (non-condensing)

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## Approvals

### CE

Certificate	CE-compliant
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### UKCA

Certificate	UKCA-compliant
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### UL, USA/Canada

Identification	UL 508 Listed
	Class I, Div. 2, Groups A, B, C, D T4
	Class I, Zone 2, Group IIC

### Shipbuilding approval

Certificate	DNV GL TAA00002R0
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### DNV GL data

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

## 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

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Typical deviation from the measuring range final value	2 %
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## 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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## Mounting

Mounting type	DIN rail mounting
Mounting position	any

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## Classifications

### ECLASS

ECLASS-11.0	27371392
ECLASS-12.0	27371392
ECLASS-13.0	27371392

### ETIM

ETIM 9.0	EC002498
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### UNSPSC

UNSPSC 21.0	39121100
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## Environmental product compliance

REACH SVHC	Lead 7439-92-1
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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