MINI MCR-2-FM-RC - Monitoring block

2904504

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CRA-READY



Fault monitoring module with plug-in connection technology for evaluating and reporting group errors from the FM system and for monitoring the supply voltages. Error message via N/C contact. Screw connection technology, standard configuration

Product description

The fault monitoring module with plug-in connection technology is used to evaluate and report group errors from the fault monitoring system of up to 115 connected MINI Analog Pro signal conditioners via the ME 6,2 TBUS-2 DIN rail connector (Item No.: 2869728). You can also monitor the supply voltages of MINI MCR-2-PTB(-PT) power terminals (Item No.: 2902066, 2902067). Drawing off the supply is also possible. The error is reported via an N/C contact. The error reporting module supports NFC communication.

Commercial data

Item number	2904504
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	C404
Product key	DK112Z
GTIN	4046356857406
Weight per piece (including packing)	128 g
Weight per piece (excluding packing)	109 g
Customs tariff number	85437090
Country of origin	DE

Technical data

Notes

Note on application

Note on application	As things stand now, we are preparing the product so that, as of December 11, 2027, it will comply with the requirements of the EU Cyber Resilience Act (CRA) based on the information currently available regarding the CRA.

Utilization restriction

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

Product properties

Product type	Evaluation unit
Product family	MINI Analog Pro
Configuration	DIP switches

System properties

Functionality

Configuration	DIP switches

Electrical properties

Electrical isolation	2-way isolation
Electrical isolation between input and output	yes
Maximum temperature coefficient	< 0.01 %/K

Electrical isolation

Overvoltage category	II
Pollution degree	2

Electrical isolation Input/output IEC/EN 61010

Standards/regulations	IEC/EN 61010
Rated insulation voltage	50 V AC/DC (effective)
Test voltage	1.5 kV AC (50 Hz, 60 s)
Insulation	Basic insulation

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	< 16 mA (24 V DC)
Power consumption	< 410 mW (24 V DC)

Input data

Signal: Voltage

Description of the input	Voltage input for redundancy monitoring
Number of inputs	1
Voltage input signal	9.9 V DC ... 30 V DC

Output data

Switching: Relay

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

Signal: Voltage

Number of outputs	1
Voltage output signal	9.6 V DC ... 29.7 V DC
Max. current output signal	3.2 A

Connection data

Connection method	Screw connection
Stripping length	10 mm
Screw thread	M3
Conductor cross-section rigid	0.2 mm² ... 1.5 mm² (with ferrule)
	0.14 mm² ... 2.5 mm² (without ferrule)
Conductor cross-section flexible	0.14 mm² ... 2.5 mm²
Conductor cross-section AWG	24 ... 12 (flexible)
Tightening torque	0.5 Nm ... 0.6 Nm

Ex data

Ex installation (EPL)	Gc
	Div. 2

Signaling

Status display	Green LED (supply voltage)
	Yellow LED (switching output)
Error indication	Red LED

Dimensions

Width	6.2 mm
Height	109.81 mm
Depth	119.2 mm

Material specifications

Color	gray (RAL 7042)
Housing material	PBT
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

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP20 (not assessed by UL)
Ambient temperature (operation)	-40 °C ... 70 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Altitude	≤ 2000 m
Permissible humidity (operation)	5 % ... 95 % (non-condensing)

Approvals

CE

Certificate	CE-compliant

ATEX

Identification	Ⓔx II 3 G Ex ec IIC T4 Gc
Certificate	BVS 20 ATEX E 014X

IECEx

Identification	Ex ec IIC T4 Gc
Certificate	IECEx BVS 20.0010X

CCC / China-Ex

Identification	Ex ec IIC T4 Gc

UL, USA/Canada

Identification	UL 508 Listed
	Class I, Div. 2, Groups A, B, C, D T6
	Class I, Zone 2, Group IIC T6

Shipbuilding approval

Certificate	DNV GL TAA00002UA

EAC Ex

Identification	Ex ec IIC T4 Gc
Certificate	BY/112 02.01 TP012 103.01 00079

Shipbuilding data

Temperature	B
Humidity	B
Vibration	A
EMC	A
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 deviations.

Noise emission

Standards/regulations	EN 61000-6-4

Electrostatic discharge

Standards/regulations	EN 61000-4-2

Electrostatic discharge

Comments	Safety measures must be taken to prevent electrostatic discharge.

Electromagnetic HF field

Designation	Electromagnetic RF field
Standards/regulations	EN 61000-4-3

Fast transients (burst)

Designation	Fast transients (burst)
Standards/regulations	EN 61000-4-4

Surge current load (surge)

Standards/regulations	EN 61000-4-5

Conducted interference

Designation	Conducted interferences
Standards/regulations	EN 61000-4-6

Standards and regulations

Electrical isolation	2-way isolation

GB Standard

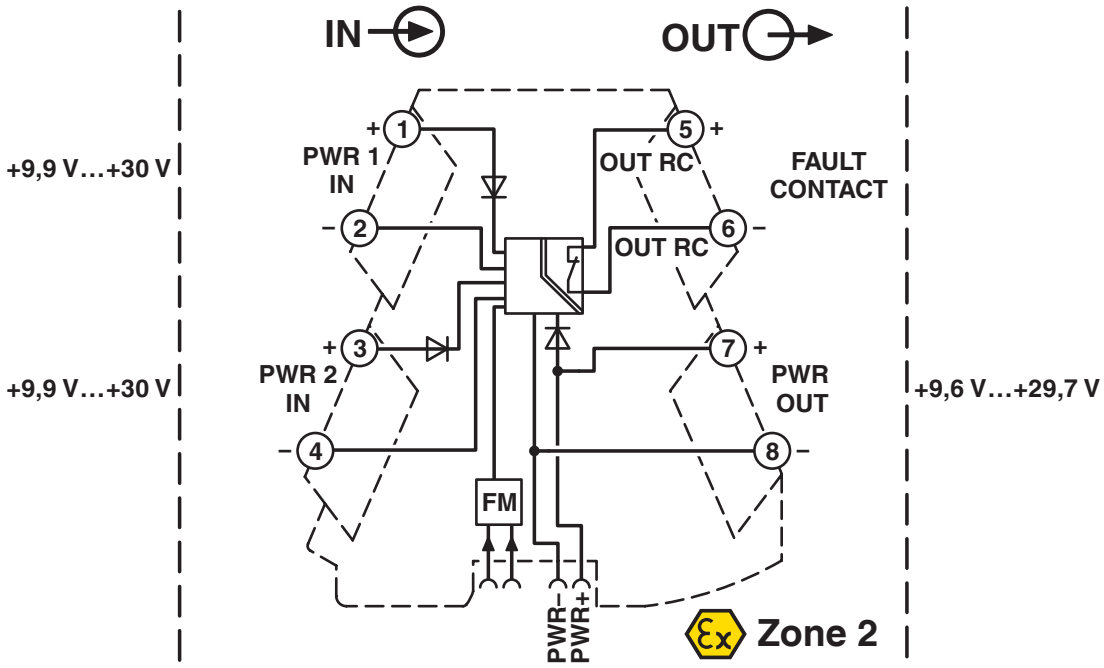
Standards/regulations	GB/T 3836.1
	GB/T 3836.3

Mounting

Mounting type	DIN rail mounting
Mounting position	any

Drawings

Block diagram



Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/2904504

UL Listed
Approval ID: FILE E 238705

cUL Listed
Approval ID: FILE E 238705

DNV
Approval ID: TAA00002UA

IECEx
Approval ID: IECEx BVS 20.0010X

cUL Listed
Approval ID: E196811

UL Listed
Approval ID: E196811

ATEX
Approval ID: BVS 20 ATEX E 014X

CCC
Approval ID: 2022122309115969

Classifications

ECLASS

ECLASS-13.0	27371392
ECLASS-15.0	27371392

ETIM

ETIM 10.0	EC002886

UNSPSC

UNSPSC 21.0	39121100

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	18f90d4b-5e22-4afe-9caf-f196c29734e6

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