

## Switching amplifier - MINI MCR-SL-NAM-2RNO-SP - 2810269

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NAMUR switching amplifier for proximity sensors, can be configured, floating switching contacts and switching contacts with a resistance circuit. Output-side 2 N/O contact, with spring-cage connection, can be configured. Replacement part: 2902005 MINI MCR-2-NAM-2RO-PT.

### Your advantages

- ✓ Floating contacts and contacts with resistance circuit can be connected
- ✓ Power supply possible via the foot element (TBUS)
- ✓ Highly compact isolation amplifier for electrical isolation, amplification, and duplication of proximity sensor signals
- ✓ For proximity sensors according to IEC 60947-5-6 and EN 50227
- ✓ Error indication via diagnostic LED and analog signal
- ✓ Second output can be used as a duplicator or error signaling output
- ✓ N/O contacts at output
- ✓ Input and output signals can be configured via DIP switches
- ✓ 3-way isolation
- ✓ Operating current/closed circuit current switch-over (inverted switching behavior)



### Key Commercial Data

Packing unit	1 pc
GTIN	 4 017918 996086
GTIN	4017918996086
Weight per Piece (excluding packing)	69.200 g
Custom tariff number	85437090
Country of origin	Germany

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## Technical data

### Dimensions

Width	6.2 mm
Height	93.1 mm
Depth	102.5 mm

### Ambient conditions

Ambient temperature (operation)	-20 °C ... 65 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Maximum altitude	≤ 2000 m
Permissible humidity (operation)	5 % ... 95 % (non-condensing)
Degree of protection	IP20
Noise immunity	EN 61000-6-2 When being exposed to interference, there may be minimal deviations.

### Power supply

Designation	Supply
Nominal supply voltage	24 V DC
Supply voltage range	19.2 V DC ... 30 V DC
Max. current consumption	< 25 mA
Power consumption	< 600 mW

### Connection data

Connection method	Spring-cage connection
Stripping length	8 mm
Conductor cross section solid	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 ... 12

### General

No. of channels	1
Electrical isolation	Reinforced insulation according to EN 61010-1
Overvoltage category	II
Degree of pollution	2
Rated insulation voltage	150 V AC (Input/relay outputs (reinforced insulation))
Test voltage, input/output/supply	1.5 kV (50 Hz, 1 min.)
Electromagnetic compatibility	Conformance with EMC directive
Noise emission	EN 61000-6-4
Noise immunity	EN 61000-6-2 When being exposed to interference, there may be minimal deviations.
Color	green

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## Technical data

### General

Housing material	PBT
Mounting position	any
Conformance	CE-compliant
ATEX	# II 3 G Ex nA nC IIC T4 Gc X
UL, USA/Canada	UL 508 Recognized
	Class I, Div. 2, Groups A, B, C, D T4
Certificate of classification	DNV GL TAA00000N1
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

### EMC data

Designation	Electromagnetic RF field
Standards/regulations	EN 61000-4-3
Evaluation criterion	A
Designation	Fast transients (burst)
Standards/regulations	EN 61000-4-4
Evaluation criterion	A
Designation	Conducted interferences
Standards/regulations	EN 61000-4-6
Evaluation criterion	A

### Standards and Regulations

Electromagnetic compatibility	Conformance with EMC directive
Noise emission	EN 61000-6-4
Connection in acc. with standard	CUL
Designation	Electromagnetic RF field
Standards/regulations	EN 61000-4-3
Evaluation criterion	A
Standards/regulations	EN 61000-4-4
Designation	Conducted interferences
Standards/regulations	EN 61000-4-6
Evaluation criterion	A
Electrical isolation	Reinforced insulation according to EN 61010-1
Conformance	CE-compliant
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## Technical data

### Standards and Regulations

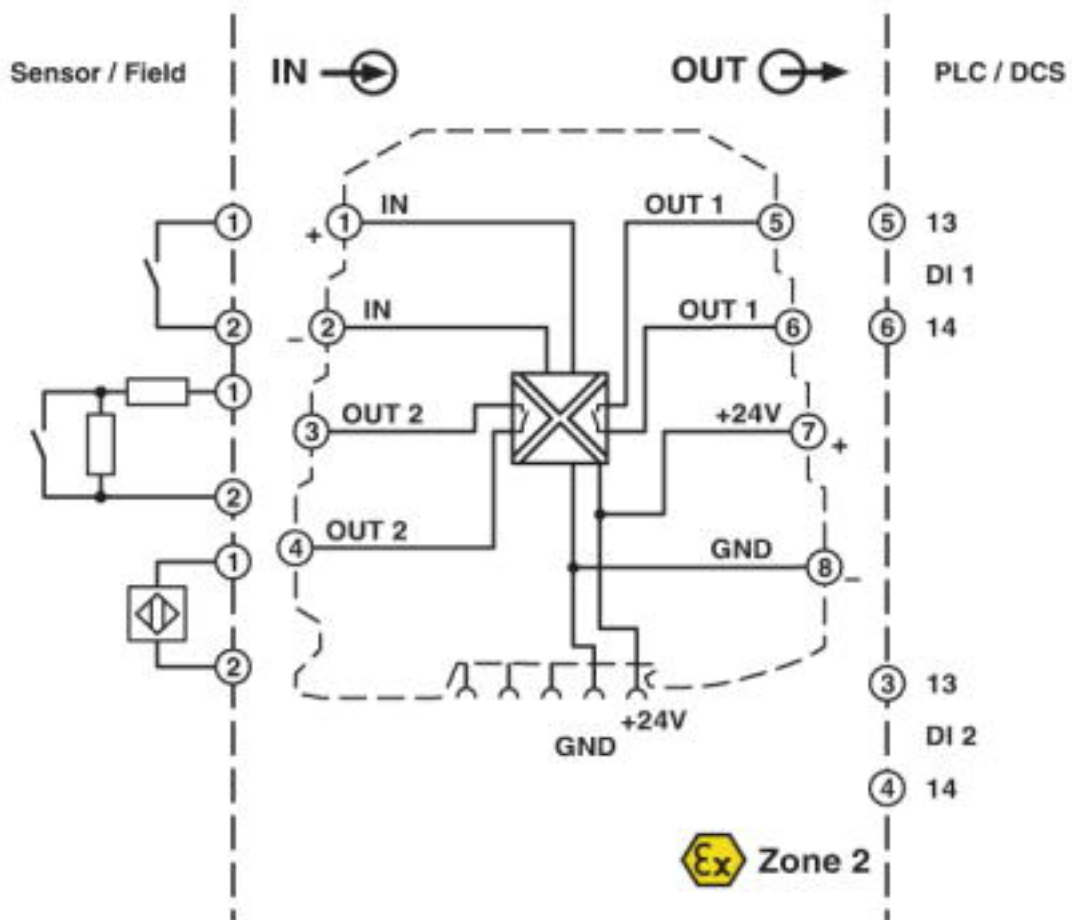
Fire protection for rail vehicles (DIN EN 45545-2) R22	HL 1 - HL 2
Fire protection for rail vehicles (DIN EN 45545-2) R23	HL 1 - HL 2
Fire protection for rail vehicles (DIN EN 45545-2) R24	HL 1 - HL 2

### Environmental Product Compliance

China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

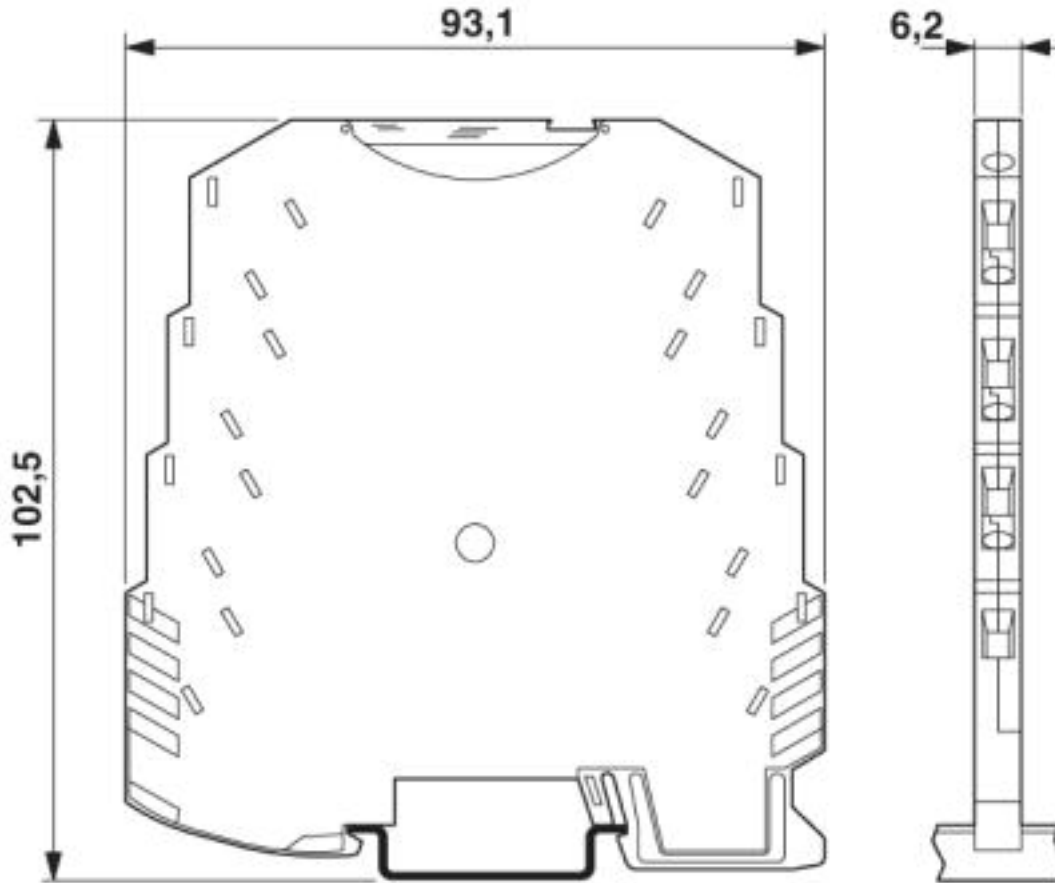
## Drawings

Block diagram



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Dimensional drawing



## Classifications

eCl@ss

eCl@ss 4.0	27210100
eCl@ss 4.1	27210100
eCl@ss 5.0	27210100
eCl@ss 5.1	27210100
eCl@ss 6.0	27210100
eCl@ss 7.0	27210120
eCl@ss 8.0	27210120
eCl@ss 9.0	27210120

ETIM

ETIM 4.0	EC002653
ETIM 5.0	EC002653

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## Classifications

### ETIM

ETIM 6.0	EC002653
ETIM 7.0	EC002653

### UNSPSC

UNSPSC 6.01	30211506
UNSPSC 7.0901	39121008
UNSPSC 11	39121008
UNSPSC 12.01	39121008
UNSPSC 13.2	39121008

## Accessories

### Accessories

#### DIN rail connector

DIN rail bus connectors - ME 6,2 TBUS-2 1,5/5-ST-3,81 GN - 2869728



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

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## Marking material

Transparent cover - MINI MCR DKL - 2308111



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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Marking label - MINI MCR-DKL-LABEL - 2810272



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

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## Power module

## Switching amplifier - MINI MCR-SL-NAM-2RNO-SP - 2810269

### Accessories

Power terminal block - MINI MCR-SL-PTB - 2864134



MCR power terminal block for supplying several MINI Analog modules via the DIN rail connector, with screw connection, maximum current consumption of up to 2 A

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Power terminal block - MINI MCR-SL-PTB-SP - 2864147



MCR feed-in terminal for supplying several MINI Analog modules via a DIN rail connector, with spring-cage connection, maximum current consumption of up to 2 A. Replacement part: 2902067 MINI MCR-2-PTB-PT.

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### Power supply

Power supply unit - MINI-SYS-PS-100-240AC/24DC/1.5 - 2866983



Primary-switched MINI POWER supply for DIN rail mounting, input: 1-phase, output: 24 V DC/1.5 A

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Power supply unit - MINI-PS-100-240AC/24DC/1.5/EX - 2866653



Primary-switched power supply MINI POWER for DIN rail mounting, input: 1-phase, output: 24 V DC/1,5 A, for the potentially explosive area

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