

# Loop-powered isolators - MINI MCR-2-RPS-2I-2I-OLP-PT - 2906449

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's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



Two-channel output loop-powered 2-way repeater power supply with plug-in connection technology for the electrical isolation of analog signals. Input signal = output signal: 0(4) mA ... 20 mA. Push-in connection technology.

## Product Description

Two-channel output loop-powered 2-way repeater power supply with plug-in connection technology for the electrical isolation and filtering of analog signals. The output loop-powered isolator enables operation at an active analog input card with a supply voltage of 6 V DC ... 30 V DC. The isolator and the connected sensors are supplied via the current loop of the controller. Input signal = output signal: 0(4) mA to 20 mA. The measuring transducer supports NFC communication.



## Key Commercial Data

Packing unit	1 pc
GTIN	
GTIN	4055626077956

## Technical data

### Dimensions

Width	6.2 mm
Height	109.81 mm
Depth	119.2 mm

### Ambient conditions

Ambient temperature (operation)	-40 °C ... 70 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Permissible humidity (operation)	5 % ... 95 % (non-condensing)
Degree of protection	IP20 (not assessed by UL)
Noise immunity	EN 61000-6-2 When being exposed to interference, there may be minimal deviations.

### Input data

Description of the input	Current input
Number of inputs	2

# Loop-powered isolators - MINI MCR-2-RPS-2I-2I-OLP-PT - 2906449

## Technical data

### Input data

Configurable/programmable	no
Current input signal	0 mA ... 20 mA
	4 mA ... 20 mA
Voltage dissipation	3.1 V (I = 20 mA)
Transmitter supply voltage	U <sub>A</sub> - 5 V

### Output data

Output name	Current output
Number of outputs	2
Configurable/programmable	no
Voltage output signal	5 V ... 30 V
Current output signal	0 mA ... 20 mA
	4 mA ... 20 mA
Max. output voltage	30 V
Transmission Behavior	1:1 to input signal
Load/output load current output	600 Ω

### Power supply

Supply voltage range	9.6 V DC ... 30 V DC (no separate supply voltage necessary)
Power consumption	600 mW (25 mA)

### Connection data

Connection method	Push-in connection
Stripping length	10 mm
Conductor cross section solid	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup> (with ferrule)
	0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup> (without ferrule)
Conductor cross section flexible	0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section AWG	24 ... 12 (flexible)

### General

No. of channels	2
Maximum transmission error	≤ 0.1 % (At 5 V)
Maximum temperature coefficient	≤ 0.001 %/K
Additional error, depending on the input voltage	(U <sub>A</sub> - 5 V) x 0.06 %
Limit frequency (3 dB)	100 Hz
Electrical isolation	Reinforced insulation in accordance with IEC 61010-1
Overvoltage category	II
Degree of pollution	2
Rated insulation voltage	300 V (effective)
Test voltage, input/output/supply	3 kV (50 Hz, 1 min.)
Test voltage channel/channel	3 kV (50 Hz, 1 min.)
Electromagnetic compatibility	Conformance with EMC directive
Noise emission	EN 61000-6-4

# Loop-powered isolators - MINI MCR-2-RPS-2I-2I-OLP-PT - 2906449

## Technical data

### General

Noise immunity	EN 61000-6-2 When being exposed to interference, there may be minimal deviations.
Color	gray
Housing material	PBT
Mounting position	any
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

### Standards and Regulations

Electromagnetic compatibility	Conformance with EMC directive
Noise emission	EN 61000-6-4
Electrical isolation	Reinforced insulation in accordance with IEC 61010-1

### Conformance/approvals

Designation	CE
Identification	CE-compliant
Designation	ATEX
Identification	# II 3 G Ex ec IIC T4 Gc
Certificate	BVS 19 ATEX E 079 X
Designation	UL, USA/Canada
Identification	UL 508 Listed
	Class I, Div. 2, Groups A, B, C, D T6
	Class I, Zone 2, Group IIC T6
Designation	GL
Identification	applied for
Designation	IECEX
Identification	Ex ec IIC T4 Gc
Certificate	IECEX BVS 19.0068X

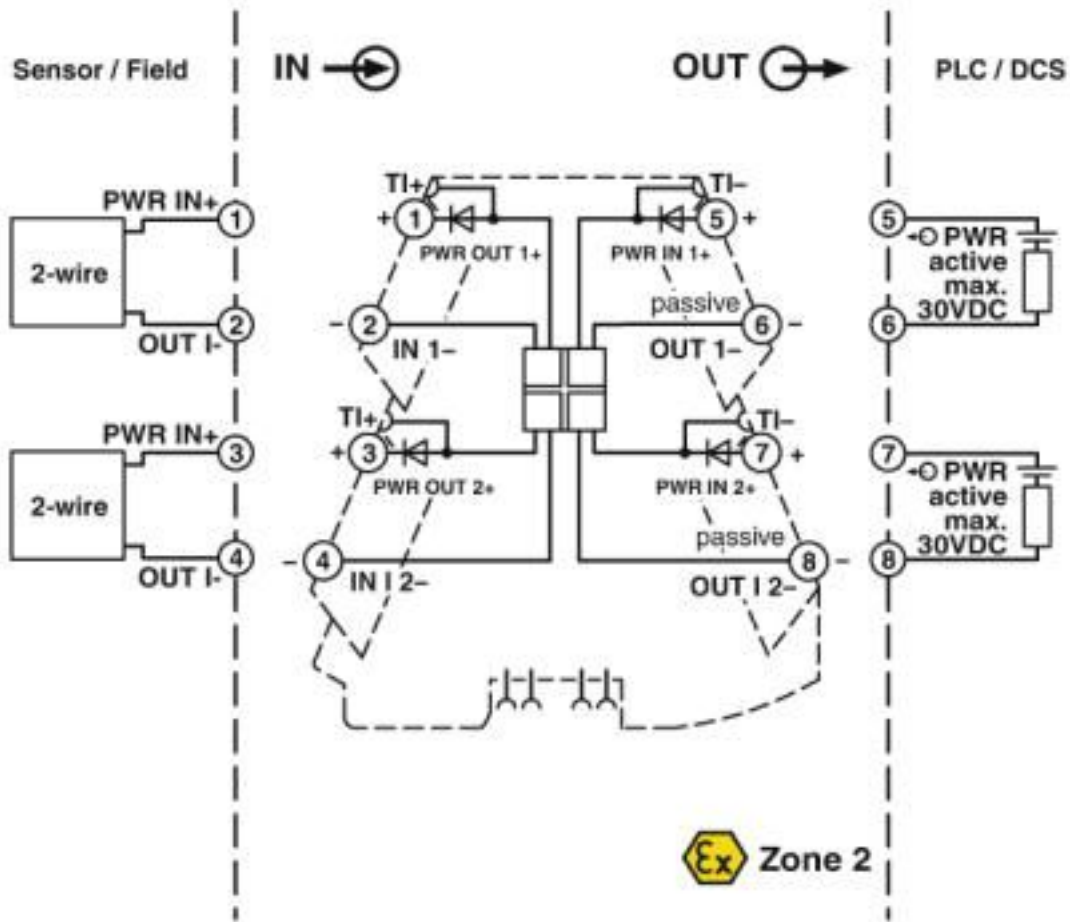
### Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

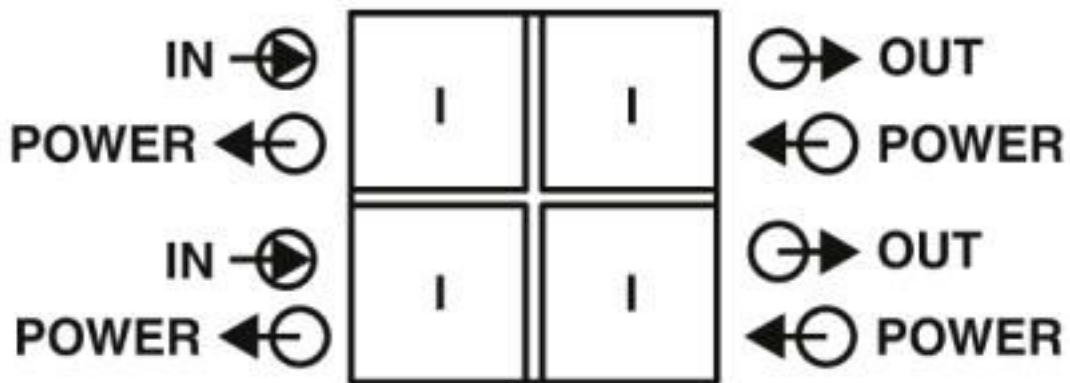
## Drawings

# Loop-powered isolators - MINI MCR-2-RPS-2I-2I-OLP-PT - 2906449

Block diagram



Pictogram



## Classifications

eCl@ss

eCl@ss 10.0.1	27210120
---------------	----------

# Loop-powered isolators - MINI MCR-2-RPS-2I-2I-OLP-PT - 2906449

## 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
ETIM 6.0	EC002653
ETIM 7.0	EC002653

## Approvals

### Approvals

#### Approvals

UL Listed / cUL Listed / EAC / cULus Listed

#### Ex Approvals

UL Listed / cUL Listed / cULus Listed

### Approval details

UL Listed		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 238705
-----------	--	---	---------------

cUL Listed		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 238705
------------	--	---	---------------

EAC		RU C- DE.A*30.B.01082
-----	--	--------------------------

# Loop-powered isolators - MINI MCR-2-RPS-2I-2I-OLP-PT - 2906449

## Approvals

cULus Listed	
--------------	--

## Accessories

### Accessories

#### Device marking

Marker for end clamp - UCT-EM (30X5) - 0801505



Marker for end clamp, Sheet, white, unlabeled, can be labeled with: TOPMARK NEO, TOPMARK LASER, BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, THERMOMARK PRIME, THERMOMARK CARD 2.0, THERMOMARK CARD, mounting type: snapped into marker carrier, lettering field size: 30 x 5 mm, Number of individual labels: 24

Marker for end clamp - UCT-EM (30X5) YE - 0830340



Marker for end clamp, Sheet, yellow, unlabeled, can be labeled with: TOPMARK NEO, TOPMARK LASER, BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, THERMOMARK PRIME, THERMOMARK CARD 2.0, THERMOMARK CARD, mounting type: snapped into marker carrier, lettering field size: 30 x 5 mm, Number of individual labels: 24

Plastic label - UC-EMLP (15X5) - 0819301



Plastic label, Sheet, white, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, PLOTMARK, CMS-P1-PLOTTER, mounting type: adhesive, lettering field size: 15 x 5 mm, Number of individual labels: 10

Plastic label - UC-EMLP (15X5) YE - 0822615



Plastic label, Sheet, yellow, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, PLOTMARK, CMS-P1-PLOTTER, mounting type: adhesive, lettering field size: 15 x 5 mm, Number of individual labels: 10

## Loop-powered isolators - MINI MCR-2-RPS-2I-2I-OLP-PT - 2906449

### Accessories

#### Plastic label - UC-EMLP (15X5) SR - 0828095



Plastic label, Sheet, silver, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, PLOTMARK, CMS-P1-PLOTTER, mounting type: adhesive, lettering field size: 15 x 5 mm, Number of individual labels: 10

---

#### Plastic label - US-EMLP (15X5) - 0828790



Plastic label, Card, white, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, THERMOMARK PRIME, THERMOMARK CARD 2.0, THERMOMARK CARD, mounting type: adhesive, lettering field size: 15 x 5 mm, Number of individual labels: 189

---

#### Plastic label - US-EMLP (15X5) YE - 0828873



Plastic label, Card, yellow, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, THERMOMARK PRIME, THERMOMARK CARD 2.0, THERMOMARK CARD, mounting type: adhesive, lettering field size: 15 x 5 mm, Number of individual labels: 189

---

#### Plastic label - US-EMLP (15X5) SR - 0828874



Plastic label, Card, silver, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, THERMOMARK PRIME, THERMOMARK CARD 2.0, THERMOMARK CARD, mounting type: adhesive, lettering field size: 15 x 5 mm, Number of individual labels: 189

---

### Labeled device marker

#### Marker for end clamp - UCT-EM (30X5) CUS - 0801589



Marker for end clamp, can be ordered: by sheet, white, labeled according to customer specifications, mounting type: snapped into marker carrier, lettering field size: 30 x 5 mm, Number of individual labels: 24

## Loop-powered isolators - MINI MCR-2-RPS-2I-2I-OLP-PT - 2906449

### Accessories

Marker for end clamp - UCT-EM (30X5) YE CUS - 0830348



Marker for end clamp, can be ordered: by sheet, yellow, labeled according to customer specifications, mounting type: snapped into marker carrier, lettering field size: 30 x 5 mm, Number of individual labels: 24

---

Plastic label - UC-EMLP (15X5) CUS - 0824550



Plastic label, can be ordered: by sheet, white, labeled according to customer specifications, mounting type: adhesive, lettering field size: 15 x 5 mm

---

Plastic label - UC-EMLP (15X5) YE CUS - 0824551



Plastic label, can be ordered: by sheet, yellow, labeled according to customer specifications, mounting type: adhesive, lettering field size: 15 x 5 mm

---

Plastic label - UC-EMLP (15X5) SR CUS - 0828099



Plastic label, can be ordered: by sheet, silver, labeled according to customer specifications, mounting type: adhesive, lettering field size: 15 x 5 mm, Number of individual labels: 10

---

Plastic label - US-EMLP (15X5) CUS - 0830076



Plastic label, can be ordered: by card, white, labeled according to customer specifications, mounting type: adhesive, lettering field size: 15 x 5 mm, Number of individual labels: 189



## Loop-powered isolators - MINI MCR-2-RPS-2I-2I-OLP-PT - 2906449

### Accessories

Plastic label - US-EMLP (15X5) YE CUS - 0830077



Plastic label, can be ordered: by card, yellow, labeled according to customer specifications, mounting type: adhesive, lettering field size: 15 x 5 mm, Number of individual labels: 189

Plastic label - US-EMLP (15X5) SR CUS - 0830078



Plastic label, can be ordered: by card, silver, labeled according to customer specifications, mounting type: adhesive, lettering field size: 15 x 5 mm, Number of individual labels: 189

### Terminal marking

Marker strip - SK 5,0 WH:REEL - 0805221



Marker strip, Roll, white, unlabeled, can be labeled with: THERMOMARK ROLL 2.0, THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, mounting type: adhesive, for terminal block width: 5 mm, lettering field size: continuous x 5#mm, Number of individual labels: 90000

Phoenix Contact 2020 © - all rights reserved  
<http://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG  
Flachsmarktstr. 8  
32825 Blomberg  
Germany  
Tel. +49 5235 300  
Fax +49 5235 3 41200  
<http://www.phoenixcontact.com>

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Terminal Block Interface Modules](#) category:*

*Click to view products by [Phoenix Contact](#) manufacturer:*

Other Similar products are found below :

[73-551-6002I](#) [GCN1MX25B](#) [DIN-50P-01](#) [DIN-68H-01](#) [DIN-96DI-01](#) [2291901](#) [2295185](#) [2907794](#) [2M10FCL](#) [FLKM-2I/O](#) [FLKM-4I/O](#)  
[2281759](#) [2906251](#) [2907808](#) [5601749](#) [5541962](#) [1776613-1](#) [GCN1-004A](#) [ADAM-3920R-AE](#) [060-6827-06](#) [2311030](#) [2287708](#) [XW2C-20G6-](#)  
[IO16](#) [GCN1-T](#) [MACX](#) [MCR-VAC](#) [5775235](#) [ADAM-3956-BE](#) [XW6T-COM2.5X20YL](#) [XW6T-COM1.5X8BL](#) [XW6T-COM1.5X16BL](#)  
[XW6T-COM1.5X20YL](#) [XW6T-COM1.5X16YL](#) [XW6T-COM1.5X20RD](#) [XW6T-COM1.5X20BL](#) [XW6T-COM2.5X8BL](#) [1976610000](#) [UM](#)  
[45-D50SUB/B/ZFKDS](#) [5541234](#) [410-261](#) [902056](#) [2906243](#) [2906915](#) [2907706](#) [ADAM-3909-AE](#) [ADAM-3920-AE](#) [ADAM-3925-AE](#)  
[ADAM-3937-BE](#) [ADAM-3950-AE](#) [ADAM-3951-BE](#) [ADAM-3968-AE](#)