

MINI MCR-2-CVCS - Constant voltage source



2902064

<https://www.phoenixcontact.com/us/products/2902064>

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 documentation. Our general terms of use for downloads are valid.



Constant voltage/current source with plug-in connection technology, input voltage: 9.6 V DC ... 30 V DC. Output voltage: 1.25 V ... 10 V DC or output current: 2.5 mA ... 20 mA can be set. Configurable via DIP switch. Screw connection technology.

Product description

Constant voltage/current source with plug-in connection technology for generating high-precision constant voltages and constant currents. The input voltage can be in a range between 9.6 and 30 V DC and optionally applied via the connection terminal blocks of the modules or grouped via the DIN rail connector. The following voltage and current values can be set on the output side: 1.25 V, 2.5 V, 3.75 V, 5 V, 6.25 V, 7.5 V, 8.75 V, 10 V DC, 2.5 mA, 5 mA, 7.5 mA, 10 mA, 12.5 mA, 15 mA, 17.5 mA, 20 mA. You can configure the device via DIP switches. The device supports fault monitoring and NFC communication.

Commercial data

Item number	2902064
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	C404
Product key	DK1129
GTIN	4046356652124
Weight per piece (including packing)	114.3 g
Weight per piece (excluding packing)	107.1 g
Customs tariff number	85437090
Country of origin	DE

MINI MCR-2-CVCS - Constant voltage source



2902064

<https://www.phoenixcontact.com/us/products/2902064>

Technical data

Notes

Utilization restriction

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

Product properties

Product type	Constant voltage source
Product family	MINI Analog Pro
Configuration	DIP switches

Insulation characteristics: GB Standard

Overvoltage category	II
Pollution degree	2

System properties

Functionality

Configuration	DIP switches
---------------	--------------

Electrical properties

Electrical isolation between input and output	yes
Maximum temperature coefficient	< 0.01 %/K
Maximum transmission error	≤ 0.1 % (of final value)

Electrical isolation Input/output/power supply

Rated insulation voltage	300 V _{rms}
Test voltage	3 kV AC (50 Hz, 60 s)
Insulation	Reinforced insulation according to IEC/EN 61010-1

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)
Typical current consumption	< 42 mA (24 V DC) < 85 mA (12 V DC)
Power consumption	< 1.1 W (9.6 V DC)

Input data

Signal: Voltage

Voltage input signal	9.6 V DC ... 30 V DC
----------------------	----------------------

Output data

MINI MCR-2-CVCS - Constant voltage source



2902064

<https://www.phoenixcontact.com/us/products/2902064>

Signal: Voltage/current

Configurable/programmable	Yes
Max. voltage output signal	10 V DC
	8.75 V DC
	7.5 V DC
	6.25 V DC
	5 V DC
	3.75 V DC
	2.5 V DC
	1.25 V DC
Max. current output signal	20 mA
	17.5 mA
	15 mA
	12.5 mA
	10 mA
	7.5 mA
	5 mA
	2.5 mA
Short-circuit current	> 32 mA
Output voltage with wire break	13.5 V
Output current	≤ 30 mA
Load/output load current output	≤ 600 Ω (20 mA)
Ripple	< 20 mV _{PP} (at 600 Ω)
Ripple current	40 μA _{PP}

Connection data

Connection method	Screw connection
Stripping length	10 mm
Screw thread	M3
Conductor cross-section rigid	0.2 mm ² ... 1.5 mm ² (with ferrule)
	0.14 mm ² ... 2.5 mm ² (without ferrule)
Conductor cross-section flexible	0.14 mm ² ... 2.5 mm ²
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)
----------------	----------------------------

Dimensions

Width	6.2 mm
-------	--------

MINI MCR-2-CVCS - Constant voltage source



2902064

<https://www.phoenixcontact.com/us/products/2902064>

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	Ⓜ 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 TAA000021E Rev. 1
-------------	--------------------------

Shipbuilding data

Temperature	B
Humidity	B
Vibration	A
EMC	A

MINI MCR-2-CVCS - Constant voltage source



2902064

<https://www.phoenixcontact.com/us/products/2902064>

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
-----------------------	--------------

Standards and regulations

GB Standard

Standards/regulations	GB/T 3836.1
	GB/T 3836.3

Mounting

Mounting type	DIN rail mounting
Assembly note	The DIN rail connector can be used for bridging the supply voltage. It can be snapped onto a 35 mm EN 60715 DIN rail.
Mounting position	any

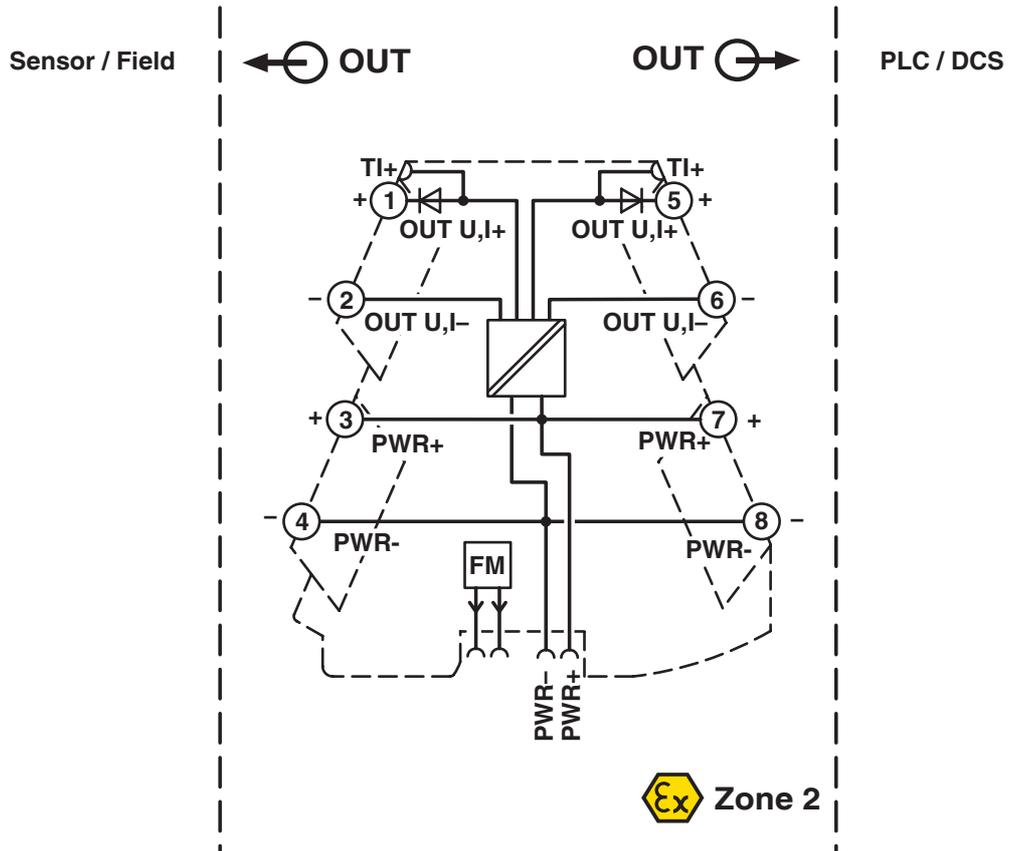
MINI MCR-2-CVCS - Constant voltage source

2902064

<https://www.phoenixcontact.com/us/products/2902064>

Drawings

Block diagram



MINI MCR-2-CVCS - Constant voltage source



2902064

<https://www.phoenixcontact.com/us/products/2902064>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2902064>

 **UL Listed**
Approval ID: E238705

 **cUL Listed**
Approval ID: E238705

DNV
Approval ID: TAA000021E

 **IECEx**
Approval ID: IECEx_BVS_20.0010_X

 **cUL Listed**
Approval ID: E196811

 **UL Listed**
Approval ID: E196811

 **ATEX**
Approval ID: BVS 20 ATEX E 014X

 **CCC**
Approval ID: 2022122303115966

MINI MCR-2-CVCS - Constant voltage source



2902064

<https://www.phoenixcontact.com/us/products/2902064>

Classifications

ECLASS

ECLASS-13.0	27210192
ECLASS-15.0	27210192

ETIM

ETIM 9.0	EC002498
----------	----------

UNSPSC

UNSPSC 21.0	39121000
-------------	----------

MINI MCR-2-CVCS - Constant voltage source



2902064

<https://www.phoenixcontact.com/us/products/2902064>

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)
	2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol(CAS: 79-94-7)
SCIP	370ac747-b3af-4e48-8401-a3122c802c6f

Phoenix Contact 2025 © - all rights reserved
<https://www.phoenixcontact.com>

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