

MINI MCR-SL-CVS-24-5-10-SP-NC - Constant voltage source



2902823

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Constant voltage source, input voltage: 9.6 V DC ... 30 V DC, output voltage: 10 V, 7.5 V, 5 V, 2.5 V DC, electrically isolated, can be configured via DIP switches, spring-cage connection technology, standard configuration. Replacement part: 2902065 MINI MCR-2-CVCS-PT.

Product description

The 6.2 mm wide configurable MINI MCR-SL-CVS-24-10-5 constant voltage source is used to generate high precision constant voltages.

The input voltage can fall between 9.6 V DC and 30 V DC.

The DIP switches accessible from the side of the housing enable configuration of the 10 V DC, 5 V DC, 7.5 V DC, and 2.5 V DC output voltages.

The input voltage can be applied either via connection terminal blocks on the modules or in conjunction with the DIN rail connector.

Commercial data

Item number	2902823
Packing unit	1 pc
Note	Made to order (non-returnable)
Sales key	C403
Product key	DK1139
GTIN	4046356682435
Weight per piece (including packing)	78.7 g
Weight per piece (excluding packing)	78.7 g
Customs tariff number	85437090
Country of origin	DE

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Technical data

Product properties

Product type	Constant voltage source
Product family	MINI Analog

Insulation characteristics

Overvoltage category	II
Pollution degree	2

Electrical properties

Rated insulation voltage	50 V AC/DC
Setting range comparison	± 300 mV
Electrical isolation between input and output	yes
Test voltage input/output	1.5 kV AC (50 Hz, 60 s)
Maximum temperature coefficient	< 0.01 %/K
Temperature coefficient, typical	< 0.002 %/K
Maximum transmission error	≤ 0.1 % (of final value)
	≤ 0.5 % (Without adjustment)

Electrical isolation Input/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

Nominal supply voltage	24 V DC
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	< 25 mA (10 V output with 30 mA load at 24 V DC IN)
	< 65 mA (10 V output with 30 mA load at 9.6 V DC IN)
	< 50 mA (10 V voltage output with 30 mA load at 12 V DC IN)
	< 20 mA (10 V voltage output with 30 mA load at 30 V DC IN)
Power consumption	< 600 mW (at 24 V IN)
	< 624 mW (at 9.6 V IN)
	< 564 mW (At 12 V IN)
	< 540 mW (at 30 V IN)

Input data

Signal: Voltage

Voltage input signal	9.6 V DC ... 30 V DC
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Output data

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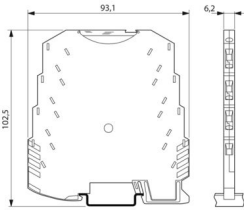
Signal: Voltage

Configurable/programmable	Yes, preconfigured
Max. voltage output signal	10 V DC
	7.5 V DC
	5 V DC
	2.5 V DC
Short-circuit current	approx. 32 mA
Output current	≤ 30 mA
Ripple	< 20 mV _{PP}

Connection data

Connection method	Spring-cage connection
Stripping length	8 mm
Conductor cross-section rigid	0.2 mm ² ... 2.5 mm ²
Conductor cross-section flexible	0.2 mm ² ... 2.5 mm ²
Conductor cross-section AWG	24 ... 12

Dimensions

Dimensional drawing	
Width	6.2 mm
Height	93.1 mm
Depth	102.5 mm

Material specifications

Color	green (RAL 6021)
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
Ambient temperature (operation)	-20 °C ... 65 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C

Approvals

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CE

Certificate	CE-compliant
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ATEX

Identification	Ex II 3 G Ex nA IIC T4 Gc X
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UL, USA/Canada

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

Shipbuilding approval

Identification	D, EMC1
Certificate	DNV GL 14085-15HH

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
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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	3 %

Electromagnetic HF field

Comments	Criterion A
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Fast transients (burst)

Designation	Fast transients (burst)
Standards/regulations	EN 61000-4-4
Typical deviation from the measuring range final value	3 %

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
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

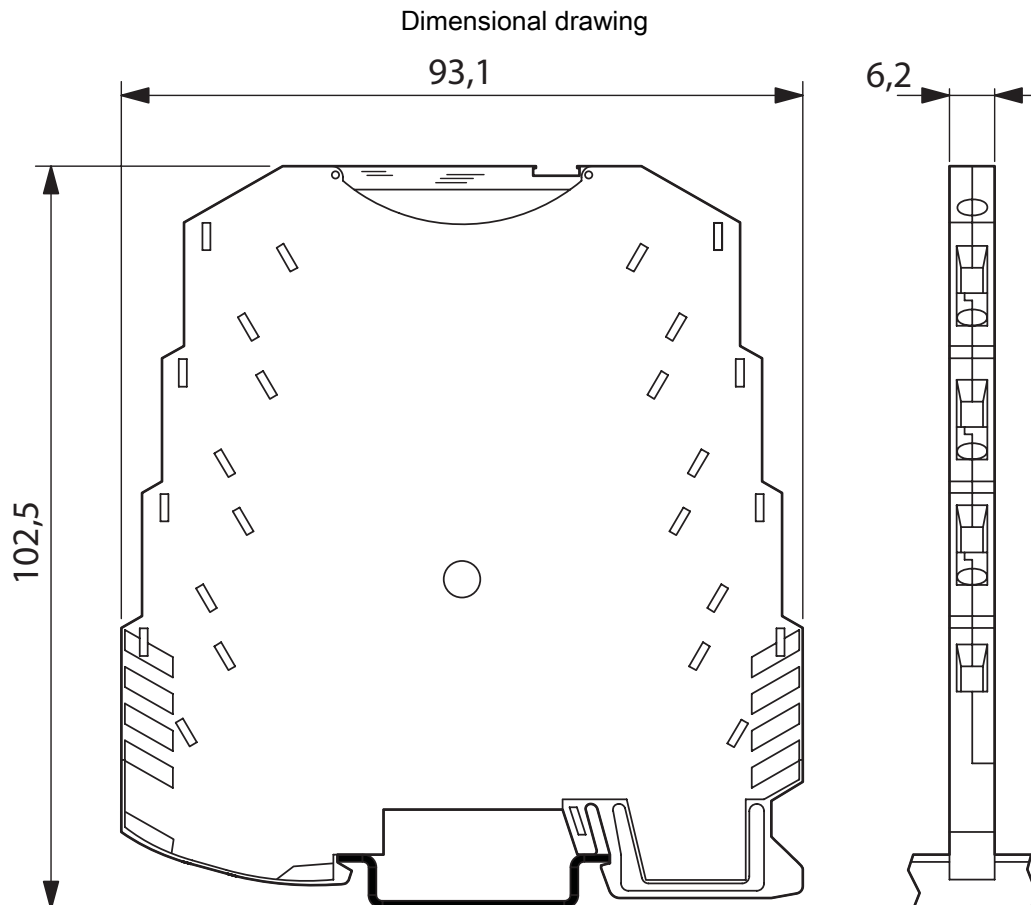
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Drawings



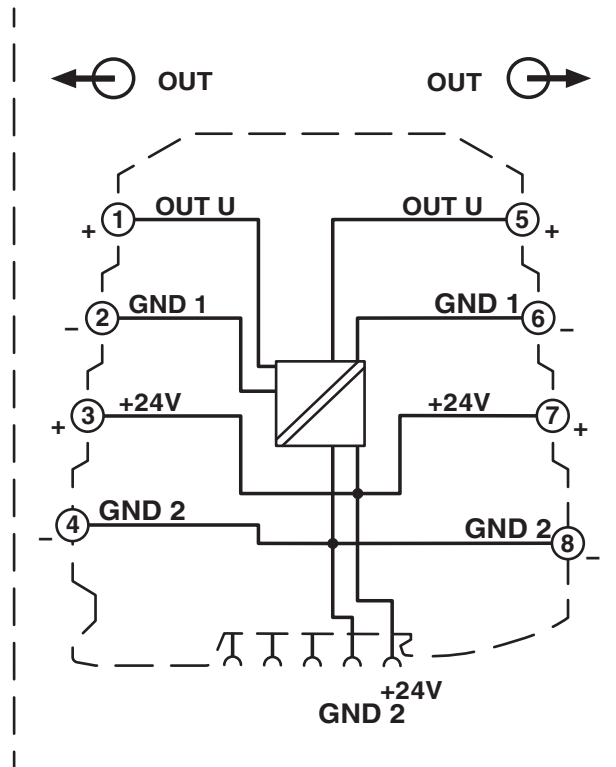
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Block diagram



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Environmental product compliance

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.)	No substance above 0.1 wt%
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Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com