

Voltage measuring transducers - MCR-VDC-UI-B-DC - 2811116

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MCR voltage measuring transducer, for direct current voltages from 0..(+/-)20 V DC to 0..(+/-)660 V DC, output signal (+/-)10 V/(+/-)20 mA

Your advantages

- Adjustable voltage ranges
- Bidirectional output signals
- 3-way isolation
- ZERO/SPAN adjustment $\pm 20\%$
- Tool-free parameterization of measured values
- Teach-in configuration of the measured value range



Key Commercial Data

Packing unit	1 pc
GTIN	 4 017918 125394
GTIN	4017918125394
Weight per Piece (excluding packing)	157.400 g
Custom tariff number	85437090
Country of origin	Germany

Technical data

Note

Utilization restriction	EMC: class A product, see manufacturer's declaration in the download area
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Dimensions

Width	22.5 mm
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Dimensions

Height	99 mm
Depth	114.5 mm

Ambient conditions

Ambient temperature (operation)	-25 °C ... 50 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C (non-condensing)

Input data

Input voltage range	-550 V DC ... 550 V DC
Input resistance	550 k Ω
Input voltage range	-370 V DC ... 370 V DC
Input resistance	370 k Ω
Input voltage range	-250 V DC ... 250 V DC
Input resistance	250 k Ω
Input voltage range	-170 V DC ... 170 V DC
Input resistance	170 k Ω
Input voltage range	-120 V DC ... 120 V DC
Input resistance	120 k Ω
Input voltage range	-80 V DC ... 80 V DC
Input resistance	80 k Ω
Input voltage range	-54 V DC ... 54 V DC
Input resistance	54 k Ω
Input voltage range	-36 V DC ... 36 V DC
Input resistance	36 k Ω
Input voltage range	-24 V DC ... 24 V DC
Input resistance	24 k Ω
Nom. voltage	\pm 660 V DC (ungrounded)
	\pm 100 V DC (to earth)

Output data

Output name	Voltage output
Voltage output signal	-10 V ... 10 V
Max. output voltage	\pm 15 V
Load/output load voltage output	> 10 k Ω
Ripple	< 50 mV _{pp}
Output name	Current output
Current output signal	-20 mA ... 20 mA
Max. output current	\pm 30 mA
Load/output load current output	< 500 Ω

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Output data

Ripple	< 50 mV _{PP}
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Power supply

Supply voltage range	18.5 V DC ... 30.2 V DC
Max. current consumption	< 50 mA

General

Maximum transmission error	< 1 % (of final value)
Maximum temperature coefficient	< 0.015 %/K
Limit frequency (3 dB)	40 Hz
Frequency measuring range	40 Hz ... 70 Hz
Alignment zero	± 20 %
Alignment span	± 20 %
Step response (10-90%)	12 ms
Overvoltage category	II
Degree of pollution	2
Test voltage input/output	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
Color	green
Housing material	Polyamide PA non-reinforced
Configuration	INTERBUS
Conformance	CE-compliant
UL, USA/Canada	cULus

Standards and Regulations

Electromagnetic compatibility	Conformance with EMC directive
Noise emission	EN 61000-6-4
Noise immunity	EN 61000-6-2
Connection in acc. with standard	CUL
Conformance	CE-compliant
UL, USA/Canada	cULus

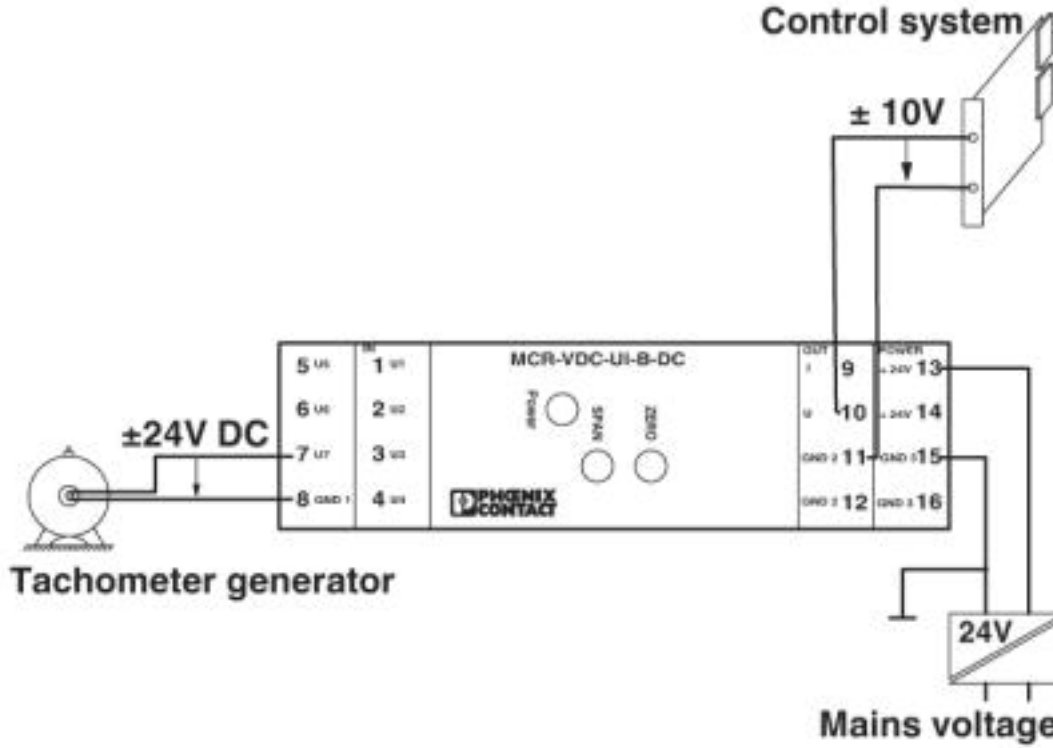
Environmental Product Compliance

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

Drawings

Voltage measuring transducers - MCR-VDC-UI-B-DC - 2811116

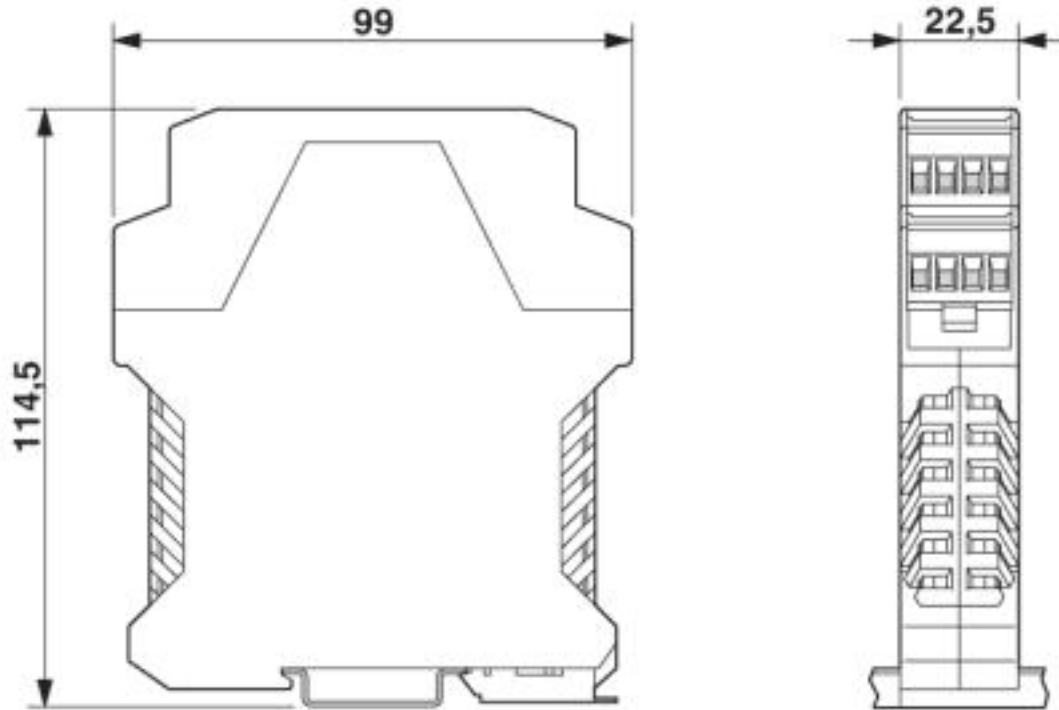
Application drawing



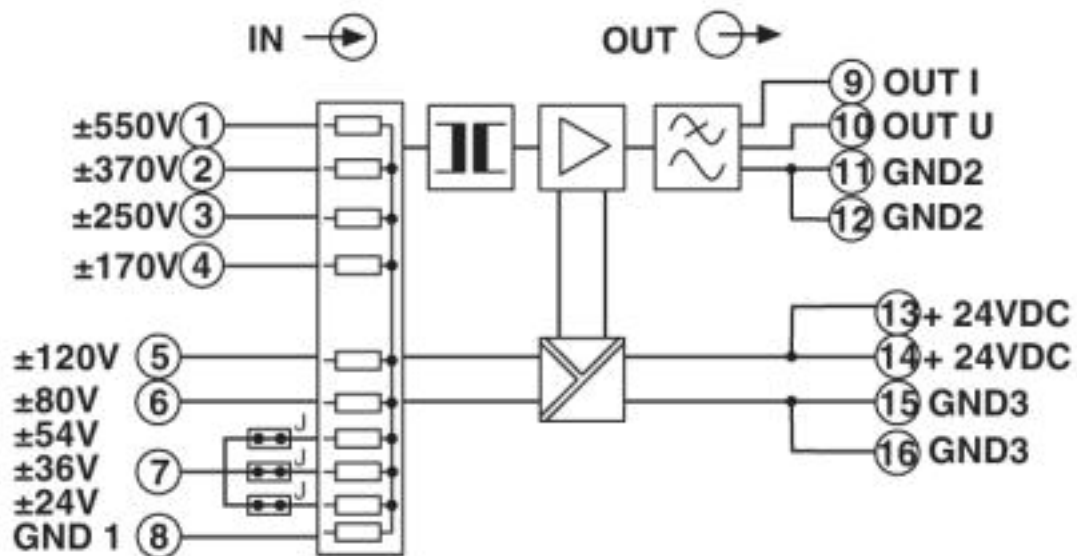
Voltage measurement in case of ungrounded circuits

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Dimensional drawing



Circuit diagram



<https://www.phoenixcontact.com/us/products/2811116>

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Classifications

eCl@ss

eCl@ss 4.0	27200303
eCl@ss 4.1	27200303
eCl@ss 5.0	27200303
eCl@ss 5.1	27200303
eCl@ss 6.0	27200303
eCl@ss 7.0	27142316
eCl@ss 8.0	27210125
eCl@ss 9.0	27210125

ETIM

ETIM 2.0	EC001438
ETIM 3.0	EC001438
ETIM 4.0	EC001438
ETIM 5.0	EC002477

UNSPSC

UNSPSC 6.01	30211504
UNSPSC 7.0901	39121006
UNSPSC 11	39121006
UNSPSC 12.01	39121006
UNSPSC 13.2	39121006

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