

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

Product Features

- ✓ Adjustable voltage ranges
- ✓ Bidirectional output signals
- ✓ 3-way isolation
- ✓ ZERO/SPAN adjustment $\pm 20\%$



Key commercial data

Packing unit	1 PCE
GTIN	 4 017918 125394
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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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

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Technical data

Input data

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
Nom. voltage	\pm 660 V DC (ungrounded)
Nom. voltage	\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
Output name	Current output
Current output signal	-20 mA ... 20 mA
Max. output current	\pm 30 mA
Load/output load current output	< 500 Ω

Power supply

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

Connection data

Connection method	Pluggable screw connection
Conductor cross section solid min.	0.2 mm ²
Conductor cross section solid max.	2.5 mm ²
Conductor cross section stranded min.	0.2 mm ²
Conductor cross section stranded max.	2.5 mm ²
Conductor cross section AWG/kcmil min.	24
Conductor cross section AWG/kcmil max.	14
Stripping length	8 mm
Screw thread	M3

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General data

Width	22.5 mm
Height	99 mm
Depth	114.5 mm
Maximum transmission error	< 1 % (of final value)
Maximum temperature coefficient	< 0.015 %/K
Limit frequency (3 dB)	40 Hz
Alignment zero	± 20 %
Alignment span	± 20 %
Step response (10-90%)	12 ms
Ambient temperature (operation)	-25 °C ... 50 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C (without condensation)
Degree of protection	IP20
Surge voltage category	II
Pollution degree	2
Test voltage input/output	1.5 kV (50 Hz, 1 min.)
Color	green
Housing material	Polyamide PA non-reinforced
Conformance	CE-compliant
UL, USA / Canada	cULus

Classifications

ETIM

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

UNSPSC

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

eCl@ss

eCl@ss 4.0	27200303
eCl@ss 4.1	27200303

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Classifications

eCl@ss

eCl@ss 5.0	27200303
eCl@ss 5.1	27200303
eCl@ss 6.0	27200303
eCl@ss 7.0	27142316

Approvals

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UL Recognized / cUL Recognized / GOST / cULus Recognized

Ex Approvals

Approvals submitted

Approval details

UL Recognized 

cUL Recognized 

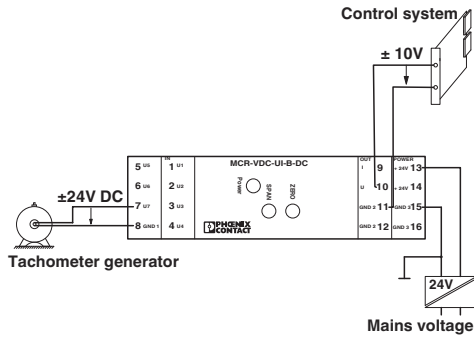
GOST 

cULus Recognized 

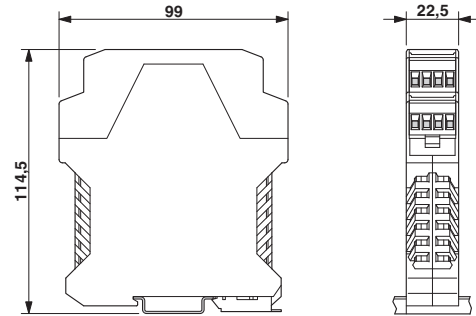
Drawings

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Application drawing



Dimensioned drawing



Voltage measurement in case of ungrounded circuits

Circuit diagram

