

# Voltage measuring transducers - MACX MCR-VDC-PT - 2906243

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MACX MCR voltage transducers for DC voltages of 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 ±20%
- Tool-free parameterization of measured values
- Teach-in configuration of the measured value range



## Key Commercial Data

Packing unit	1 pc
GTIN	 4 055626 050935
GTIN	4055626050935

## 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
Height	118 mm
Depth	114 mm

### Ambient conditions

Ambient temperature (operation)	-25 °C ... 60 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C (non-condensing)
Maximum altitude	≤ 2000 m

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## Technical data

### Ambient conditions

Permissible humidity (operation)	10 % ... 95 % (non-condensing)
Degree of protection	IP20
Noise immunity	EN 61000-6-2 When being exposed to interference, there may be minimal deviations.

### Input data

Input voltage range	-550 V DC ... 550 V DC
Input resistance	5500 kΩ
Input voltage range	-370 V DC ... 370 V DC
Input resistance	3700 kΩ
Input voltage range	-250 V DC ... 250 V DC
Input resistance	2500 kΩ
Input voltage range	-170 V DC ... 170 V DC
Input resistance	1700 kΩ
Input voltage range	-120 V DC ... 120 V DC
Input resistance	1200 kΩ
Input voltage range	-80 V DC ... 80 V DC
Input resistance	800 kΩ
Input voltage range	-54 V DC ... 54 V DC
Input resistance	800 kΩ
Input voltage range	-36 V DC ... 36 V DC
Input resistance	800 kΩ
Input voltage range	-24 V DC ... 24 V DC
Input resistance	240 kΩ
Nom. voltage	± 660 V DC

### Output data

Output name	Voltage output
Voltage output signal	-10 V ... 10 V
Max. output voltage	≤ 11 V
Load/output load voltage output	> 10 kΩ
Ripple	50 mV
Output name	Current output
Current output signal	-20 mA ... 20 mA
Max. output current	≤ 22 mA
Load/output load current output	< 500 Ω

### Power supply

Nominal supply voltage	24 V DC (-20 % ... +25 %)
Supply voltage range	19.2 V DC ... 30 V DC
Max. current consumption	< 60 mA

### Connection data

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## Technical data

### Connection data

Connection method	Push-in connection
Stripping length	8 mm
Conductor cross section solid	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section flexible	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section AWG	24 ... 14
pluggable	yes

### General

Maximum transmission error	< 1 % (of measuring range end value)
Maximum temperature coefficient	< 0.015 %/K
Alignment zero	± 20 %
Alignment span	± 20 %
Step response (10-90%)	< 16 ms
Test voltage	5.3 kV AC (50 Hz, 60 s)
Protective circuit	Surge protection 33 V suppressor diode
Electromagnetic compatibility	Conformance with EMC directive
Noise emission	EN 61000-6-4
Noise immunity	EN 61000-6-2 When being exposed to interference, there may be minimal deviations.
Mounting position	any
Assembly instructions	Can be aligned with spacing = 10 mm

### Standards and Regulations

Low Voltage Directive	Conformance with Low Voltage Directive
Electromagnetic compatibility	Conformance with EMC directive
Noise emission	EN 61000-6-4
Standards/regulations	IEC 61010-1
	IEC 61010-2-030
Pollution degree	2

### Conformance/approvals

Designation	CE
Certificate	CE-compliant
Designation	UKCA
Certificate	UKCA-compliant
Designation	UL, USA / Canada
Identification	UL 61010 Listed

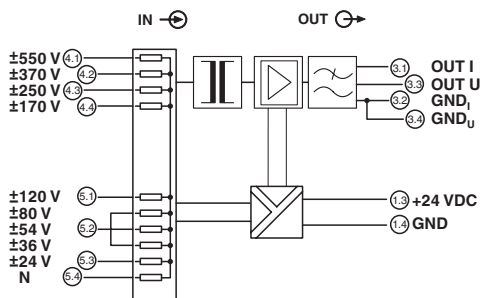
### Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"

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## Drawings

Block diagram



## Classifications

### eCl@ss

eCl@ss 10.0.1	27210125
eCl@ss 11.0	27210125
eCl@ss 4.0	27271100
eCl@ss 5.0	27200300
eCl@ss 5.1	27200300
eCl@ss 6.0	27210100
eCl@ss 7.0	27210125
eCl@ss 9.0	27210125

### ETIM

ETIM 4.0	EC002477
ETIM 6.0	EC002477
ETIM 7.0	EC002477

### UNSPSC

UNSPSC 18.0	39121008
UNSPSC 19.0	39121008
UNSPSC 20.0	39121008
UNSPSC 21.0	39121000

## Approvals

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Approvals

UL Listed / cUL Listed / EAC / cULus Listed

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## Approvals

Ex Approvals

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### 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 330267
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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 330267
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EAC			RU*DE.*08.B.01852-19
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cULus Listed			
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