

## Voltage measuring transducers - MACX MCR-VAC - 2906239

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MACX MCR voltage transducer, for AC voltages from 0 V ... 20 V AC to 0 ... 660 V AC, output signal: 0 V ... 10 V/0(4) ... 20 mA

### Why buy this product

- 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 STK
GTIN	 4 055626 051000
GTIN	4055626051000
Weight per Piece (excluding packing)	226.200 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
Height	99 mm
Depth	114.5 mm

#### Ambient conditions

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## Technical data

### Ambient conditions

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

### Input data

Input voltage range	0 V ... 550 V AC
Input resistance	5500 kΩ
Input voltage range	0 V ... 370 V AC
Input resistance	3700 kΩ
Input voltage range	0 V ... 250 V AC
Input resistance	2500 kΩ
Input voltage range	0 V ... 170 V AC
Input resistance	1700 kΩ
Input voltage range	0 V ... 120 V AC
Input resistance	1200 kΩ
Input voltage range	0 V ... 80 V AC
Input resistance	800 kΩ
Input voltage range	0 V ... 54 V AC
Input resistance	800 kΩ
Input voltage range	0 V ... 36 V AC
Input resistance	800 kΩ
Input voltage range	0 V ... 24 V AC
Input resistance	240 kΩ
Nom. voltage	+ 660 V AC

### Output data

Output name	Voltage output
Voltage output signal	0 V ... 10 V
	2 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	0 mA ... 20 mA
	4 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	< 45 mA

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### Connection data

Connection method	Pluggable screw connection
Conductor cross section solid min.	0.2 mm <sup>2</sup>
Conductor cross section solid max.	2.5 mm <sup>2</sup>
Conductor cross section AWG min.	24
Conductor cross section AWG max.	14
Conductor cross section flexible min.	0.2 mm <sup>2</sup>
Conductor cross section flexible max.	2.5 mm <sup>2</sup>
Stripping length	8 mm
Screw thread	M3
Connection technology	Screw connection

### General

Maximum transmission error	< 1 % (from a measuring range final value, 45 ... 65 Hz)
	< 1.3 % (from a measuring range final value, 65 ... 405 Hz)
Maximum temperature coefficient	< 0.015 %/K
Frequency measuring range	45 Hz ... 405 Hz
Alignment zero	± 20 %
Alignment span	± 20 %
Step response (10-90%)	< 180 ms
Test voltage	5.3 kV AC (50 Hz, 1 min.)
Degree of pollution	2
Standards/regulations	IEC 61010-1
	IEC 61010-2-030
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.
Color	gray
Mounting position	any
Assembly instructions	Can be aligned with spacing = 10 mm
Conformance	CE-compliant
UL, USA/Canada	UL 61010 Listed

### Standards and Regulations

Electromagnetic compatibility	Conformance with EMC directive
Noise emission	EN 61000-6-4
Frequency range	45 Hz ... 405 Hz
Standards/regulations	IEC 61010-1
	IEC 61010-2-030
Low Voltage Directive	Conformance with Low Voltage Directive
Conformance	CE-compliant
UL, USA/Canada	UL 61010 Listed

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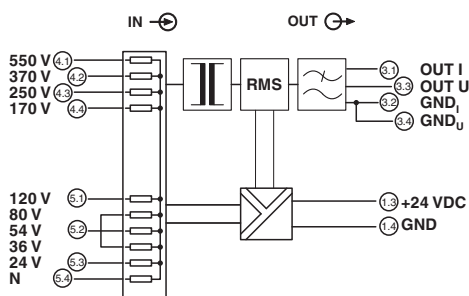
## Technical data

### Environmental Product Compliance

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

## Drawings

Block diagram



## Classifications

eCl@ss

eCl@ss 5.0	27210190
eCl@ss 5.1	27210190
eCl@ss 6.0	27210125
eCl@ss 7.0	27210125
eCl@ss 8.0	27210125
eCl@ss 9.0	27210125

ETIM

ETIM 4.0	EC002477
ETIM 5.0	EC002477
ETIM 6.0	EC002477

## Approvals

Approvals

Approvals

UL Listed / cUL Listed / cULus Listed


Ex Approvals

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## 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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