

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

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)




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

### Technical data

#### Note

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

#### Dimensions

Width	22.5 mm
Height	99 mm
Depth	114.5 mm

#### Ambient conditions

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

# Voltage measuring transducers - MACX MCR-VAC - 2906239

## Technical data

### 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

### 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>

# Voltage measuring transducers - MACX MCR-VAC - 2906239

## Technical data

### Connection data

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

### Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50

# Voltage measuring transducers - MACX MCR-VAC - 2906239

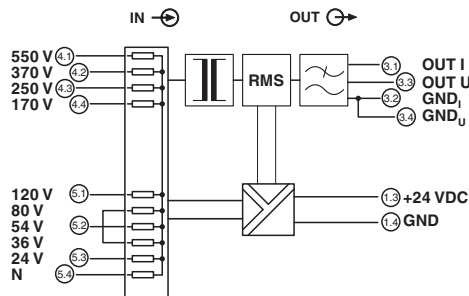
## Technical data

### Environmental Product Compliance

	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"
--	---

## Drawings

Block diagram



## Approvals

### Approvals

#### Approvals

UL Listed / cUL Listed / EAC / cULus Listed

#### Ex Approvals

### 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
-----------	--	---	---------------

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
------------	--	---	---------------

EAC		RU C- DE.A*30.B.01082
-----	--	--------------------------

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

### Approvals

cULus Listed



Phoenix Contact 2018 © - all rights reserved  
<http://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG  
Flachsmarktstr. 8  
32825 Blomberg  
Germany  
Tel. +49 5235 300  
Fax +49 5235 3 41200  
<http://www.phoenixcontact.com>