

Voltage measuring transducers - MACX MCR-VDC - 2906242

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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 $\pm 20\%$
- Tool-free parameterization of measured values
- Teach-in configuration of the measured value range



Key Commercial Data

| | |
|--------------|---------------|
| Packing unit | 1 pc |
| GTIN | |
| GTIN | 4055626050928 |

Technical data

Note

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

Dimensions

| | |
|--------|---------|
| Width | 22.5 mm |
| | 22.5 mm |
| Height | 113 mm |
| | 113 mm |
| Depth | 114 mm |
| | 114 mm |

Ambient conditions

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Ambient conditions

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

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Power supply

| | |
|--------------------------|---------|
| Max. current consumption | < 60 mA |
|--------------------------|---------|

Connection data

| | |
|----------------------------------|---|
| Connection method | Pluggable screw connection |
| Connection technology | Screw connection |
| Stripping length | 8 mm |
| Screw thread | M3 |
| Conductor cross section solid | 0.2 mm ² ... 2.5 mm ² |
| Conductor cross section flexible | 0.2 mm ² ... 2.5 mm ² |
| Conductor cross section AWG | 24 ... 14 |

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, 1 min.) |
| 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 |

Standards and Regulations

| | |
|-------------------------------|--|
| Electromagnetic compatibility | Conformance with EMC directive |
| Noise emission | EN 61000-6-4 |
| Standards/regulations | IEC 61010-1 |
| | IEC 61010-2-030 |
| Pollution degree | 2 |
| Low Voltage Directive | Conformance with Low Voltage Directive |
| Conformance | CE-compliant |
| UL, USA/Canada | UL 61010 Listed |

Conformance/approvals

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

Environmental Product Compliance

| | |
|------------|----------------|
| REACH SVHC | Lead 7439-92-1 |
|------------|----------------|

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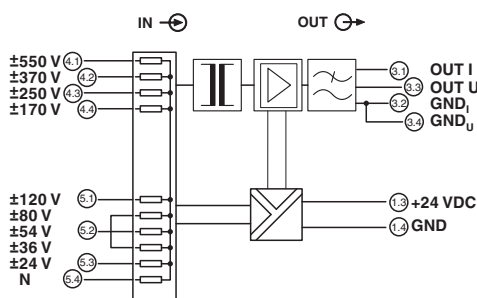
Technical data

Environmental Product Compliance

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

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 |

Approvals

Approvals

Approvals





UL Listed / cUL Listed / EAC / cULus Listed

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Approvals

Ex Approvals

Approval details

| | | | |
|--------------|---|---|----------------------|
| UL Listed |  | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 330267 |
| cUL Listed |  | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 330267 |
| EAC |  | | RU*DE.*08.B.01852-19 |
| cULus Listed |  | | |

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