

ACT20M ACT20M-CI-CO-S

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
 D-32758 Detmold
 Germany
 Fon: +49 5231 14-0
 Fax: +49 5231 14-292083
 www.weidmueller.com

Product image, Similar to illustration



ACT20M: The slim solution

- Safe and space-saving (6 mm) isolation and conversion
- Quick installation of the power supply unit using the CH20M mounting rail bus
- Easy configuration via DIP switch or FDT/DTM software
- Extensive approvals such as ATEX, IECEx, GL, DNV
- High interference resistance

General ordering data

| | |
|------------|---|
| Type | ACT20M-CI-CO-S |
| Order No. | 1175980000 |
| Version | Signal converter/insulator, Signal converter/insulator, Input : 4-20 mA, Output : 4-20 mA |
| GTIN (EAN) | 4032248970131 |
| Qty. | 1 pc(s). |

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Catalogue status 17.04.2020 / We reserve the right to make technical changes.

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Technical data**Dimensions and weights**

| | | | |
|------------|----------|-----------------|------------|
| Width | 6.1 mm | Width (inches) | 0.24 inch |
| Height | 112.5 mm | Height (inches) | 4.429 inch |
| Depth | 114.3 mm | Depth (inches) | 4.5 inch |
| Net weight | 87 g | | |

Temperatures

| | | | |
|-----------------------------|--|-----------------------------|----------------|
| Humidity | 40 °C / 93 % rel. humidity, no condensation | Operating temperature, max. | 70 °C |
| Operating temperature, min. | -25 °C | Storage temperature, max. | 85 °C |
| Storage temperature, min. | -40 °C | Operating temperature | -25 °C...70 °C |
| Ambient temperature | -25 °C...+70 °C | Storage temperature | -40 °C...85 °C |

Probability of failure

| | |
|------|-----------|
| MTBF | 284 Years |
|------|-----------|

Environmental Product Compliance

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

Rated data UL

| | |
|----------------|-------------|
| UL certificate | E337701.pdf |
|----------------|-------------|

Input

| | | | |
|---------------------------|---------------------|-----------------------------|---|
| Number of inputs | 1 | Sensor | Current source, Sensor with own supply, 4-wire sensor |
| Input current | 0...20 mA, 4...20mA | Voltage drop, current input | < 1.5 V |
| Input resistance, current | 70 Ω | | |

Output

| | | | |
|---------------------------|--------|------------------------|----------------------|
| Number of outputs | 1 | Output current | 0...20 mA, 4...20 mA |
| Cut-off frequency (-3 dB) | 100 Hz | Load impedance current | ≤ 600 Ω, @ max 23mA |

General data

| | | | |
|-------------------------|--------------------------------|-------------------------|---------------|
| Accuracy | < 0.05 % of measuring range | Configuration | none |
| Galvanic isolation | 3-way isolator | Power consumption, max. | 0.65 W |
| Power consumption, typ. | 0.46 W | Rail | TS 35 |
| Step response time | ≤ 7 ms | Temperature coefficient | ≤ 0.01 % / °C |
| Voltage supply | 24 V DC ± 30 % | | |

Insulation coordination

| | | | |
|--------------------|--------------------------------|------------------------|----------------|
| EMC standards | IEC 61326-1, NE 21 | Galvanic isolation | 3-way isolator |
| Insulation voltage | 2.5 kV _{eff} / 1 min. | Pollution severity | 2 |
| Rated voltage | 300 V _{eff} | Surge voltage category | II |

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Technical data**Data for Ex applications (ATEX)**

| | |
|---------|------------------------|
| Marking | II 3 G Ex nA IIC T4 Gc |
|---------|------------------------|

Connection data

| | | | |
|---|---------------------|---|---------------------|
| Type of connection | Screw connection | Tightening torque, min. | 0.4 Nm |
| Tightening torque, max. | 0.6 Nm | Clamping range, rated connection | 2.5 mm ² |
| Clamping range, min. | 0.5 mm ² | Clamping range, max. | 2.5 mm ² |
| Wire connection cross section AWG, min. | AWG 30 | Wire connection cross section AWG, max. | AWG 14 |

Classifications

| | | | |
|-------------|-------------|------------|-------------|
| ETIM 6.0 | EC002653 | ETIM 7.0 | EC002653 |
| eClass 9.0 | 27-21-01-20 | eClass 9.1 | 27-21-01-20 |
| eClass 10.0 | 27-21-01-20 | | |

Product information

Product information

The non-adjustable DC isolating amplifier ACT20M-CI-CO-S isolates analogue standard current signals. An analogue input current signal is linearly converted to an analogue output current signal and is galvanically isolated. The power supply is galvanically isolated from the input and output (3-way isolation) by means of direct wiring or the Weidmüller rail bus.

The non-adjustable DC isolation amplifier ACT20M CI-2CO-S offers the same functionality, but has 2 galvanically isolated outputs (4-way isolation).

Approvals

Approvals



| | |
|------|---------|
| ROHS | Conform |
|------|---------|

Downloads

| | |
|---|---|
| Approval/Certificate/Document of Conformity | DNV-GL certificate EAC certificate FM certificate IECEX certificate ATEX certificate Declaration of Conformity |
| Brochure/Catalogue | CAT 4.1 ELECTR 16/17 EN |
| Engineering Data | EPLAN, WSCAD, Zuken E3.S |
| Engineering Data | STEP |
| User Documentation | Instruction sheet |

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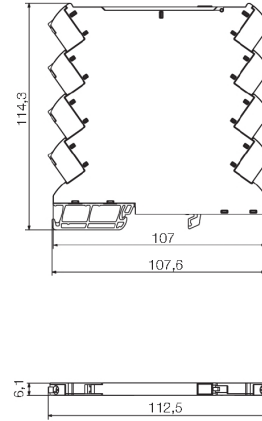
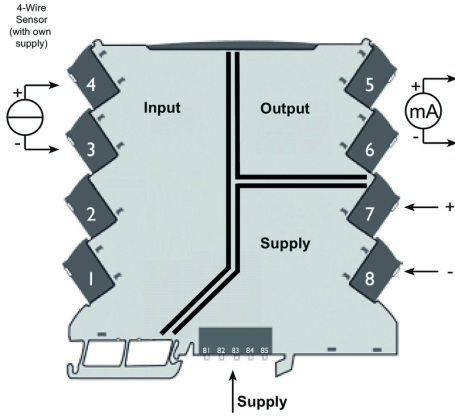
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Drawings

Connection diagram



Power supply via the rail bus