

**ACT20M-2CI-2CO-OLP-S****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

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**

|            |   |
|------------|---|
| Version    | Passive isolator, Output current loop powered, 2-channel, Input : 2 x 4-20 mA, Output : 2 x 4-20 mA |
| Order No.  | <a href="#">1176050000</a>  |
| Type       | ACT20M-2CI-2CO-OLP-S  |
| GTIN (EAN) | 4032248969999   |
| Qty.       | 1 pc(s).  |

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## Technical data

### Dimensions and weights

|            |          |                 |            |
|------------|----------|-----------------|------------|
| Depth      | 114.3 mm | Depth (inches)  | 4.5 inch   |
| Height     | 112.5 mm | Height (inches) | 4.429 inch |
| Width      | 6.1 mm   | Width (inches)  | 0.24 inch  |
| Net weight | 96 g     |                 |            |

### Temperatures

|                                   |                            |                       |   |
|-----------------------------------|----------------------------|-----------------------|---|
| Storage temperature               | -40 °C...85 °C             | Operating temperature | -25 °C...70 °C                              |
| Humidity at operating temperature | 0...95 % (no condensation) | Humidity              | 40 °C / 93 % rel. humidity, no condensation |

### Probability of failure

|                                  |      |
|----------------------------------|------|
| SIL in compliance with IEC 61508 | None |
|----------------------------------|------|

### Input

|                             |   |                  |                    |
|-----------------------------|---|------------------|--------------------|
| Input current               | 4...20 mA                                     | Number of inputs | 2                  |
| Sensor                      | 2-wire transmitter (without own power supply) | Sensor supply    | 6...35 V (@ 20 mA) |
| Voltage drop, current input | Typical 2.5 V                                 |                  |                    |

### Output

|                           |          |                        |   |
|---------------------------|----------|------------------------|---|
| Cut-off frequency (-3 dB) | 100 Hz   | Load impedance current | ≤600 Ω (channel 1 + 2), @ max 23mA        |
| Number of outputs         | 2        | Output current         | 4...20 mA                                 |
| Supply voltage (output)   | 6...35 V | Type                   | passive, connected control must be active |

### General data

|                         |   |                         |                     |
|-------------------------|---|-------------------------|---------------------|
| Accuracy                | <0.05 % of measuring range  | Configuration           | none                |
| Galvanic isolation      | 2-way isolator  | Power consumption, max. | 50 mW               |
| Power consumption, typ. | 50 mW   | Protection degree       | IP20                |
| Rail                    | TS 35   | Step response time      | ≤ 5 ms              |
| Temperature coefficient | ≤± 0.07 μA x (Δ °C x V <sub>sup-ply</sub> ) @ Tamb < 25 °C<br>, ≤±0.02 μA x (Δ °C x V <sub>sup-ply</sub> ) @ Tamb > 25 °C | Voltage supply          | Output loop powered |

### Insulation coordination

|                    |                                |                        |                |
|--------------------|--------------------------------|------------------------|----------------|
| EMC standards      | EN 61326-1                     | Galvanic isolation     | 2-way isolator |
| Insulation voltage | 2.5 kV <sub>eff</sub> / 1 min. | Pollution severity     | 2              |
| Rated voltage      | 300 V <sub>eff</sub>           | Surge voltage category | II             |

### Data for Ex applications (ATEX)

|                       |                                       |         |                        |
|-----------------------|---------------------------------------|---------|------------------------|
| Installation location | Device installed in safe area, zone 2 | Marking | II 3 G Ex nA IIC T4 Gc |
|-----------------------|---------------------------------------|---------|------------------------|

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### 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 <sup>2</sup> |
| Clamping range, min.                    | 0.5 mm <sup>2</sup> | Clamping range, max.                    | 2.5 mm <sup>2</sup> |
| Wire connection cross section AWG, min. | AWG 30              | Wire connection cross section AWG, max. | AWG 14              |

### EMC conformity and approvals

|               |            |           |             |
|---------------|------------|-----------|-------------|
| EMC standards | EN 61326-1 | Standards | IEC 61010-1 |
|---------------|------------|-----------|-------------|

### Classifications

|             |             |             |             |
|-------------|-------------|-------------|-------------|
| ETIM 6.0    | EC002653    | ETIM 7.0    | EC002653    |
| ETIM 8.0    | EC002653    | ETIM 9.0    | EC002653    |
| ECLASS 9.0  | 27-21-01-20 | ECLASS 9.1  | 27-21-01-20 |
| ECLASS 10.0 | 27-21-01-20 | ECLASS 11.0 | 27-21-01-20 |
| ECLASS 12.0 | 27-21-01-20 | ECLASS 13.0 | 27-21-01-20 |
| ECLASS 14.0 | 27-21-01-20 |             |             |

### Tender specification sheets

|                    |                                      |   |
|--------------------|--------------------------------------|---|
| Long specification | Short specification                  | <b>Standard signal isolating amplifier<br/>2-channel signal isolating amplifier in 6.1 mm width with output current loop feed, for transmitting and isolating analogue DC current signals from 0/4 to 20 mA</b> |
|                    | <b>Type<br/>ACT20M-2CI-2CO-OLP-S</b> |   |

### Environmental Product Compliance

|                                      |                                      |
|--------------------------------------|--------------------------------------|
| RoHS Compliance Status               | Compliant with exemption             |
| RoHS Exemption (if applicable/known) | 7a, 7cl                              |
| REACH SVHC                           | Lead 7439-92-1                       |
| SCIP                                 | 2f6dd957-421a-46db-a0c2-cf1609156924 |

### Important note

|                     |  |
|---------------------|--|
| Product information | <p>The passive isolator ACT20M-CI-CO-OLP-S isolates standard analogue current signals. An analogue input current signal is linearly converted into an analogue output current signal and galvanically isolated. Power is supplied through the output measurement circuit (output loop-powered).</p> <p>The passive isolator ACT20M-2CI-2CO-OLP-S offers the same functionality, but has two galvanically isolated channels..</p> |
|---------------------|--|

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# Technical data

### Approvals

Approvals



|                         |            |
|-------------------------|------------|
| ROHS                    | Conform    |
| UL File Number Search   | UL Website |
| Certificate no. (cULus) | E337701    |

### Downloads

|   |   |
|---|---|
| Approval/Certificate/Document of Conformity | <a href="#">DNV-GL certificate</a><br><a href="#">FM certificate</a><br><a href="#">IECEX certificate</a><br><a href="#">ATEX certificate</a><br><a href="#">UL certification for canada</a><br><a href="#">Declaration of Conformity</a> |
| Engineering Data                            | <a href="#">CAD data – STEP</a>   |
| User Documentation                          | <a href="#">Instruction sheet</a>   |
| Catalogues                                  | <a href="#">Catalogues in PDF-format</a>  |
| Brochures                                   |   |

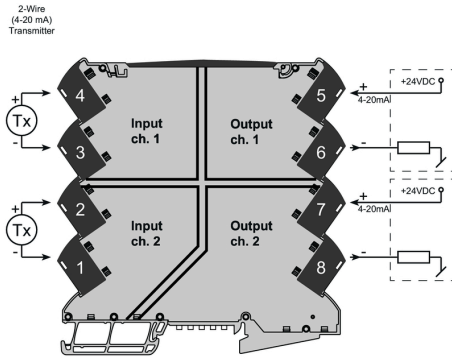
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**Drawings**

**Connection diagram**



**Dimensional drawing**

