

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

Klingenbergstraße 26

D-32758 Detmold

Germany

[www.weidmueller.com](http://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, Input current loop feed, 2-channel, Input : 2 x 0(4) - 20 mA, Output : 2 x 0(4) - 20 mA |
| Order No.  | <a href="#">1176080000</a>                                                                                |
| Type       | ACT20M-2CI-2CO-ILP-S                                                                                      |
| GTIN (EAN) | 4032248970001                                                                                             |
| 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 | 97 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,<br>no condensation |

**Probability of failure**

|                                  |      |      |       |
|----------------------------------|------|------|-------|
| SIL in compliance with IEC 61508 | None | MTBF | 699 a |
|----------------------------------|------|------|-------|

**Input**

|                             |                                          |               |                |
|-----------------------------|------------------------------------------|---------------|----------------|
| Input current               | 0...20 mA, 4...20mA                      | Input voltage | > 3 V @ 20 mA  |
| Number of inputs            | 2                                        | Sensor        | Current source |
| Voltage drop, current input | 1.25 V + 0.015 V <sub>out</sub><br>@25°C |               |                |

**Output**

|                           |                                              |                        |                        |
|---------------------------|----------------------------------------------|------------------------|------------------------|
| Cut-off frequency (-3 dB) | 100 Hz                                       | Load impedance current | ≤600 Ω (channel 1 + 2) |
| Number of outputs         | 2                                            | Output current         | 0...20 mA, 4...20 mA   |
| Type                      | active, connected control<br>must be passive |                        |                        |

**General data**

|                    |                                      |                         |                   |
|--------------------|--------------------------------------|-------------------------|-------------------|
| Accuracy           | <0.1 % of measuring range            | Configuration           | none              |
| Galvanic isolation | 2-way isolator                       | Power consumption       | 30 mW per channel |
| Protection degree  | IP20                                 | Rail                    | TS 35             |
| Step response time | ≤ 5 ms                               | Temperature coefficient | ≤ 0.01 % / °C     |
| Voltage supply     | Loop powered, via 4...20<br>mA input |                         |                   |

**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<br>area, zone 2 | Marking | II 3 G Ex nA IIC T4 Gc |
|-----------------------|------------------------------------------|---------|------------------------|

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**Technical data****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

**Isolation** **EN 61010-1, 2-way isolation up to 2.5 kV AC/DC**

**Test voltage** **2.5 kV input against output against auxiliary power**

**Rated voltage** **300 V AC/DC at overvoltage category II and pollution degree 2**

**Approvals** cULus, FM Div2, ATEX Zone2, DNV, GL

**Type**  
**ACT20M-2CI-2CO-ILP-S**

Short specification

**Standard signal passive isolator**  
**2-channel signal passive isolator in 6.1 mm width with input current loop feed, for transmitting and isolating analogue DC current signals from 0/4 to 20 mA**

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

Creation date October 22, 2024 1:27:55 PM CEST

Catalogue status 12.10.2024 / We reserve the right to make technical changes.

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[www.weidmueller.com](http://www.weidmueller.com)**Technical data****Approvals**

Approvals



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

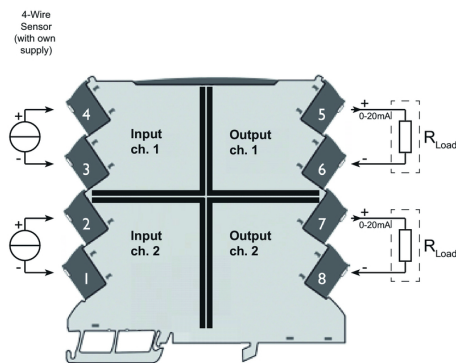
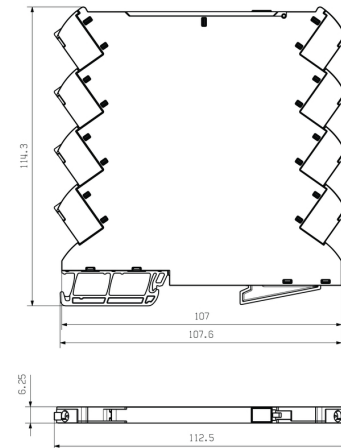
**Downloads**

|                                             |                                                                                                                                                                                             |
|---------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Approval/Certificate/Document of Conformity | <a href="#">DNV-GL certificate</a><br><a href="#">FM certificate</a><br><a href="#">IECEXx certificate</a><br><a href="#">ATEX certificate</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**

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[www.weidmueller.com](http://www.weidmueller.com)**Accessories****Blank**

MultiFit is the Weidmüller marker system used for other makes of terminals. Similar to the Weidmüller Dekafix, the markers of the MultiFit family are available ready-for-use with standard printing.

We recommend to carry out a test with sample markers on the terminals used when using MultiFit for the first time.

- One marker, suitable for different makes of terminals.
- Ready-to-use markers with standard printing
- Blank markers for printing with the PrintJet CONNECT or Plotter
- Delivery of individually printed markers according to customer CAE data or specifications
- One marking system for all applications

**For custom printing:** Please send us a file of our labeling software M-Print PRO or M-Print PRO Online (without installation) for your labeling specifications.

**General ordering data**

|            |                            |                                                                    |
|------------|----------------------------|--------------------------------------------------------------------|
| Type       | MF 5/7.5 MC NE WS          | Version                                                            |
| Order No.  | <a href="#">1877680000</a> | MultiFit, Terminal marker, 5 x 7.5 mm, Pitch in mm (P): 7.50 Adels |
| GTIN (EAN) | 4032248468270              | RKW, Phoenix, white                                                |
| Qty.       | 320 pc(s).                 |                                                                    |