

**ACT20P-CI-CO-S**

**Weidmüller Interface GmbH & Co. KG**  
 Klingenbergstraße 26  
 D-32758 Detmold  
 Germany

www.weidmueller.com

**Product image**



ACT20P: The flexible solution

- Precise and highly functional signal converters
- Release levers simplify handling

**General ordering data**

|            |   |
|------------|---|
| Version    | Analogue isolating amplifier, Input : 0(4)-20 mA, Output : 0(4)-20 mA, Signal converter/isolator, HART® |
| Order No.  | <a href="#">7760054114</a>  |
| Type       | ACT20P-CI-CO-S  |
| GTIN (EAN) | 6944 169656552  |
| Qty.       | 1 items   |

Technical data

Approvals

Approvals



|                           |                            |
|---------------------------|----------------------------|
| ROHS                      | Conform                    |
| UL File Number Search     | <a href="#">UL Website</a> |
| Certificate no. (cULus)   | E366074                    |
| Certificate no. (cULusEX) | E338066                    |

Dimensions and weights

|            |          |                 |             |
|------------|----------|-----------------|-------------|
| Depth      | 113.7 mm | Depth (inches)  | 4.4764 inch |
| Height     | 117.2 mm | Height (inches) | 4.6142 inch |
| Width      | 12.5 mm  | Width (inches)  | 0.4921 inch |
| Net weight | 142 g    |                 |             |

Temperatures

|                                   |                            |                       |                           |
|-----------------------------------|----------------------------|-----------------------|---------------------------|
| Storage temperature               | -40 °C...85 °C             | Operating temperature | -20 °C...60 °C            |
| Humidity at operating temperature | 0...95 % (no condensation) | Humidity              | 5...95 %, no condensation |

Probability of failure

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

Environmental Product Compliance

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

Input

|               |   |               |  |
|---------------|---|---------------|--|
| Sensor        | 2-wire transmitter (without own power supply), 3-wire sensor, 4-wire sensor (with own power supply) | Number inputs | 1  |
| Sensor supply | > 17 V DC at 20 mA  | Input signal  | current source, HART® signal bidirectional |
| Input current | 0...20 mA, 4...20mA   | Voltage drop  | ≤ 1 V                                      |

Output

|                   |   |                        |  |
|-------------------|---|------------------------|--|
| Number of outputs | 1   | Load impedance current | ≤ 550 Ω  |
| Type              | active, connected control must be passive | Output current         | 0...20 mA (if input: 0...20 mA), 4...20 mA (if input: 4...20 mA), HART® digital signal |

General data

|                |                     |                    |          |
|----------------|---------------------|--------------------|----------|
| Accuracy       | <0.1 % of end value | Protection degree  | IP20     |
| Supply voltage | 20...30 V DC        | Step response time | ≤ 0,5 ms |

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## Technical data

|  |  |                           |          |
|--|--|---------------------------|----------|
| Current consumption                          | ≤60 mA (24V power supply, 20mA output) | Mounting rail             | TS 35    |
| Power consumption                            | ca. 1.5 W                              | Temperature coefficient   | 80 ppm/K |
| Type of signal forwarding according to HART® | unchanged                              | Nominal power consumption | 2 VA     |
| Configuration                                | none                                   | Operating altitude        | ≤ 2000 m |

## Insulation coordination

|                           |                                      |                        |   |
|---------------------------|--------------------------------------|------------------------|---|
| Impulse withstand voltage | 4 kV (1.2/50 µs)                     | EMC standards          | EN 61326-1, EN 61000-6-2, EN 61000-6-4      |
| Test voltage              | 0.3 kV                               | Surge voltage category | III   |
| Pollution severity        | 2                                    | Galvanic isolation     | 3-way isolator, between input/output/supply |
| Insulation voltage        | 2 kV inputs / outputs / power supply | Rated voltage          | 300 V                                       |

## Data for Ex applications (ATEX)

|         |                        |                       |                 |
|---------|------------------------|-----------------------|-----------------|
| Marking | II 3 G Ex ec IIC T5 Gc | IECEx - gas labelling | Ex ec IIC T5 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 <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 26              | Wire connection cross section AWG, max. | AWG 12              |

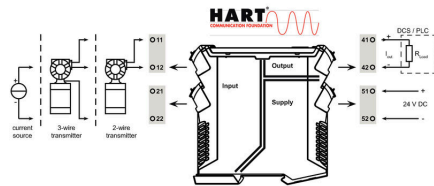
## Part description

|                     |  |
|---------------------|--|
| Product description | <p>The non-adjustable DC isolating amplifier ACT20P-CI-CO isolates analogue standard current signals from a power source or from a 2- or 3-wire sensor. An analogue input current signal is linearly converted into an analogue output current signal and is galvanically isolated. The power supply is galvanically isolated from the input and output (3-way isolation).</p> <p>Properties</p> <ul style="list-style-type: none"> <li>• HART-compatible for 0.5 - 2.5 kHz</li> <li>• The active or passive mA signal inputs are fully galvanically isolated.</li> <li>• Operating status display on a front panel LED</li> <li>• Galvanic 3-way isolation between input, output and supply.</li> </ul> |
|---------------------|--|

## Classifications

|             |             |             |             |
|-------------|-------------|-------------|-------------|
| ETIM 8.0    | EC002653    | ETIM 9.0    | EC002653    |
| ETIM 10.0   | EC002653    | ECLASS 14.0 | 27-21-01-20 |
| ECLASS 15.0 | 27-21-01-20 |             |             |

**Connection diagram**



**Dimensioned drawing**

