

ACT20P-AI-AO-DC-P**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com**Similar to illustration****ACT20P: The flexible solution**

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

General ordering data

| | |
|------------|--|
| Version | Signal converter/insulator, Input : I/U universal, Output : I/U universal, Signal converter/isolator, 24 V DC power supply |
| Order No. | 2456860000 |
| Type | ACT20P-AI-AO-DC-P |
| GTIN (EAN) | 4050118471793 |
| Qty. | 1 pc(s). |

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Technical data

Dimensions and weights

| | | | |
|------------|----------|-----------------|------------|
| Depth | 113.7 mm | Depth (inches) | 4.476 inch |
| Height | 127.1 mm | Height (inches) | 5.004 inch |
| Width | 12.5 mm | Width (inches) | 0.492 inch |
| Net weight | 178 g | | |

Temperatures

| | | | |
|-----------------------------------|----------------------------|-----------------------|----------------------------|
| Storage temperature | -25 °C...70 °C | Operating temperature | -20 °C...60 °C |
| Humidity at operating temperature | 0...95 % (no condensation) | Humidity | 10...90 %, no condensation |

Probability of failure

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

Input

| | | | |
|---------------------------|---|---------------------------|---|
| Input current | configurable, 0-22 mA (min. measurement range 4 mA) | Input resistance, current | 100 Ω |
| Input resistance, voltage | ≥ 1 MΩ | Input voltage | configurable, 0-11 V (min. measurement range 2 V) |
| Number of inputs | 1 | Resolution | 3.5 µA / 1.76 mV per bit |
| Sensor supply | 24 V DC | | |

Output

| | | | |
|------------------------|--|-------------------|--|
| Load impedance current | 1 kΩ @ 20 mA | Number of outputs | 1 |
| Offset voltage | ≤ 20 mV | Output current | Adjustable, 0...22 mA, Output range, min, 4 mA |
| Output voltage, note | Adjustable, 0...11 V, Output range, min, 2 V | Type | active, connected control must be passive |
| load impedance voltage | > 600 Ω @ 10 V | | |

Output (digital)

| | |
|----------------------------|-----|
| Max. switching voltage, AC | 0 V |
|----------------------------|-----|

Output (analogue)

| | |
|----------------|--|
| Output current | Adjustable, 0...22 mA, Output range, min, 4 mA |
|----------------|--|

General data

| | | | |
|-------------------------|--|-------------------------|---|
| Configuration | DIP switch, Keys and LED display, with reference voltage/current sources | Galvanic isolation | 3-way isolator, between input/output/supply |
| Linearity | <± 0.1 % of signal range, Typ. ± 0.05 % of signal range | Power consumption, typ. | 3 W |
| Rail | TS 35 | Step response time | 350 ms |
| Temperature coefficient | <0.05 % / °C | Voltage supply | 12...60 V DC |

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Insulation coordination

| | | | |
|---------------------------|------------------|------------------------|---|
| EMC standards | IEC 61326-1 | Galvanic isolation | 3-way isolator, between input/output/supply |
| Impulse withstand voltage | 4 kV (1.2/50 µs) | Insulation voltage | 2 kV inputs / outputs |
| Pollution severity | 2 | Surge voltage category | III |

Connection data

| | | | |
|---|---------------------|---|---------------------|
| Type of connection | PUSH IN | 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 26 | Wire connection cross section AWG, max. | AWG 14 |
| Wire cross-section, solid, min. | 0.2 mm ² | Wire cross-section, solid, max. | 2.5 mm ² |
| Wire connection cross section, finely stranded, min. | 0.2 mm ² | Wire connection cross section, finely stranded, max. | 2.5 mm ² |
| Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, min. | 0.2 mm ² | Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, max. | 2.5 mm ² |

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 |

Environmental Product Compliance

| | |
|------------|--------------------------------------|
| REACH SVHC | Lead 7439-92-1 |
| SCIP | 2f6dd957-421a-46db-a0c2-cf1609156924 |

Important note

| | |
|---------------------|---|
| Product information | <p>The universally configurable DC isolating amplifier ACT20P-AI-AO-DC/AC-x isolates and converts analogue signals.</p> <p>An analogue input signal (current or voltage) is linearly converted into an analogue output signal (current or voltage) and galvanically isolated.</p> <p>The power supply is galvanically isolated from input and output (3-way isolation).</p> <p>Features</p> <ul style="list-style-type: none"> • Universally configurable via DIP switches and operating buttons • Active or passive signal input • Front LED indicates operation status • 3-way galvanic isolation between input, output and power supply |
|---------------------|---|

Approvals

Approvals



ROHS

Conform

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Technical data

Downloads

Approval/Certificate/Document of Con-
formity

[Declaration of Conformity](#)

Engineering Data

[CAD data – STEP](#)

Software

[DIP switch configuration tool](#)

User Documentation

[Instruction sheet](#)

Catalogues

[Catalogues in PDF-format](#)

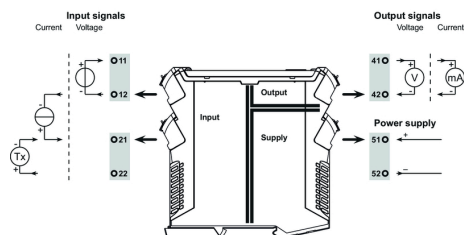
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Drawings

Connection diagram

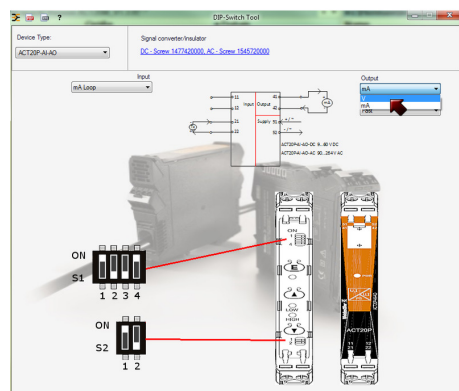
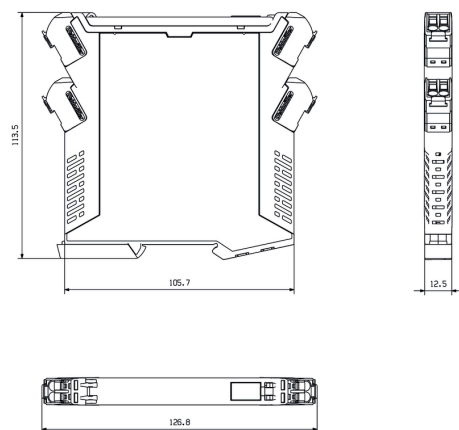


Type codes

| Input | | | Output | | | | |
|-------------|---------------|---|-------------------|---------------|---|---|---|
| Input range | DIP switch S2 | | Output range | DIP switch S1 | | | |
| | 1 | 2 | | 1 | 2 | 3 | 4 |
| current | ■ | | current | ■ | | | ■ |
| voltage | | ■ | voltage | | | ■ | |
| | | | filtered response | | | | |
| | | | fast response | | | | |

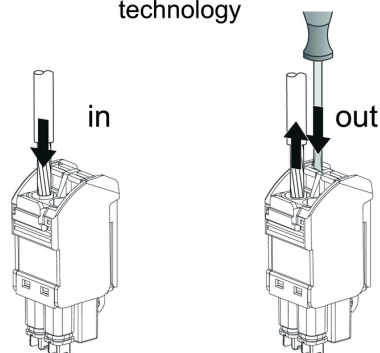
■ = ON

Dimensioned drawing



example for DIP switch setting (with ACT20 tool)

PUSH IN
technology



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www.weidmueller.com**Accessories****Blank**

ESG is the tried-and-tested marker in MultiCard format for use on many well-known electrical devices. The result is high-quality device marking with a high-contrast appearance.

Various types are available for devices from manufacturers like Siemens, ABB, Beckhoff etc.

Advantages at a glance:

- Tags for universal usage, self-adhesive or clip-on tags, depending on type
- For aligned equipment, e.g. circuit breakers, we supply ESG markers for clipping onto tag rails
- Individual laser-quality printing according to specifications

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 | ESG 6.6/11 BHZ 5.00/02 | Version |
| Order No. | 1082490000 | ESG, Device markers x 11 mm, PA 66, Colour: white |
| GTIN (EAN) | 4032248845330 | |
| Qty. | 200 pc(s). | |

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General ordering data

| | | |
|------------|----------------------------|---|
| Type | ESG 8/13.5/43.3 SAI AU | Version |
| Order No. | 1912130000 | ESG, Device markers x 13.5 mm, PA 66, Colour: Transparent |
| GTIN (EAN) | 4032248541164 | |
| Qty. | 5 pc(s). | |