

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

Klingenbergstraße 26

D-32758 Detmold

Germany

[www.weidmueller.com](http://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.	<a href="#">1477420000</a>
Type	ACT20P-AI-AO-DC-S
GTIN (EAN)	4050118284959
Qty.	1 pc(s).

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**Technical data****Dimensions and weights**

Depth	113.7 mm	Depth (inches)	4.476 inch
Height	119.2 mm	Height (inches)	4.693 inch
Width	12.5 mm	Width (inches)	0.492 inch
Net weight	167 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
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**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
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**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
Protection degree	IP20	Rail	TS 35
Step response time	350 ms	Temperature coefficient	<0.05 % / °C
Voltage supply	12...60 V DC		

**Insulation coordination**

EMC standards	EN 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

Creation date July 2, 2024 11:53:10 PM CEST

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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	1.5 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

**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 <b>ACT20P-AI-AO-DC/AC-x</b> 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"> <li>• Universally configurable via DIP switches and operating buttons</li> <li>• Active or passive signal input</li> <li>• Front LED indicates operation status</li> <li>• 3-way galvanic isolation between input, output and power supply</li> </ul>
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**Approvals**

Approvals



Approvals	CULUS;
ROHS	Conform

**Downloads**

Approval/Certificate/Document of Conformity	<a href="#">Application notes – UL Certification</a> <a href="#">Declaration of Conformity</a>
Engineering Data	<a href="#">CAD data – STEP</a>
Software	<a href="#">DIP switch configuration tool</a>
User Documentation	<a href="#">Instruction sheet</a>
Catalogues	<a href="#">Catalogues in PDF-format</a>
Brochures	

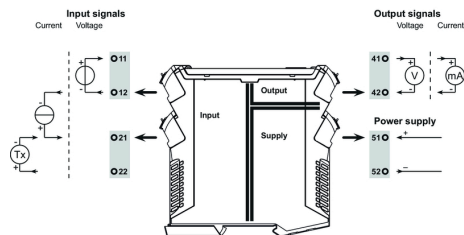
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## Drawings

### Connection diagram



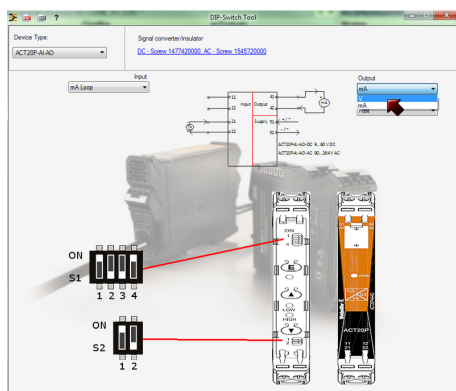
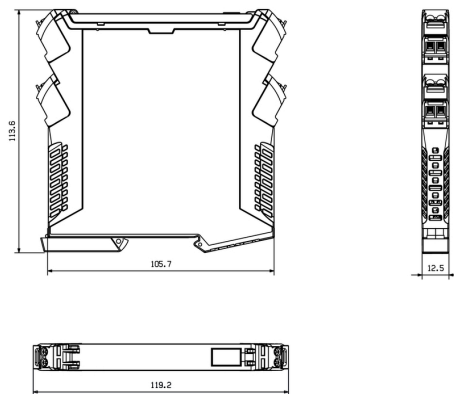
### Type codes

Input range	DIP switch S2	
	1	2
current	■	
voltage		■

■ = ON

Output range	DIP switch S1			
	1	2	3	4
current	■			■
voltage			■	
filtered response		■		
fast response				■

### Dimensioned drawing



example for DIP switch setting (with ACT20 tool)

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[www.weidmueller.com](http://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 8/13.5/43.3 SAI AU	Version
Order No.	<a href="#">1912130000</a>	ESG, Device markers x 13.5 mm, PA 66, Colour: Transparent
GTIN (EAN)	4032248541164	
Qty.	5 pc(s).	

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**General ordering data**

Type	ESG 6.6/11 BHZ 5.00/02	Version
Order No.	<a href="#">1082490000</a>	ESG, Device markers x 11 mm, PA 66, Colour: white
GTIN (EAN)	4032248845330	
Qty.	200 pc(s).	