

## ACT20P-AI-AO-DC-S

**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/isolator, 24 V DC power supply, Input : I/U universal, Output : I/U universal
Order No.	<a href="#">1477420000</a>
Type	ACT20P-AI-AO-DC-S
GTIN (EAN)	4050118284959
Qty.	1 Stück

Erstellungs-Datum May 25, 2023 12:34:40 PM CEST

Katalogstand 12.05.2023 / Technische Änderungen vorbehalten

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## Technische Daten

### 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	222 g		

### Temperatures

Storage temperature	-25 °C...70 °C	Operating temperature	-20 °C...60 °C
Operating temperature, min.	-20 °C	Operating temperature, max.	60 °C
Humidity	10...90 %, no condensation		

### 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 (analogue)

Output current	Adjustable, 0...22 mA, Output range, min, 4 mA
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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
Rail	TS 35	Step response time	350 ms
Temperature coefficient	<0.05 % / °C	Voltage supply	12...60 V DC

### 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

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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	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	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

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

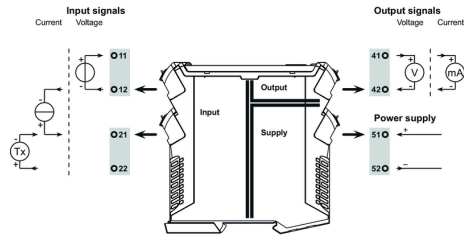
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## Zeichnungen

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### Connection diagram

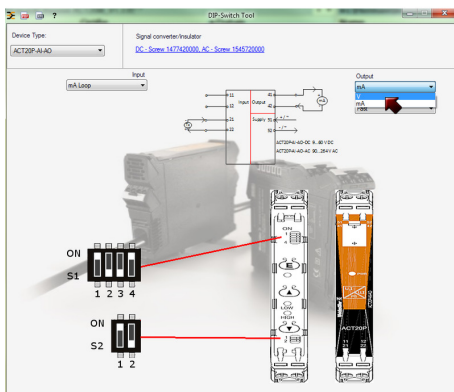
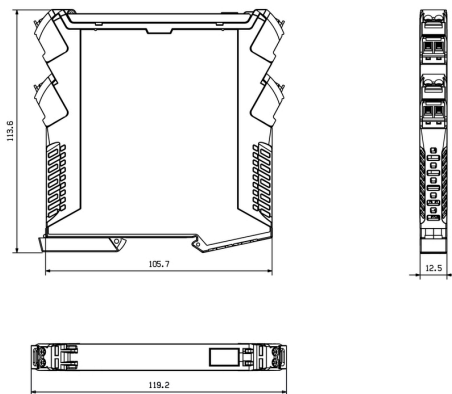


### Type codes

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

■ = ON

### Dimensioned drawing



example for DIP switch setting (with ACT20 tool)