

ACT20P-AI-AO-DC-S

Weidmüller Interfaces GmbH & Co. KG

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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.	1477420000
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	210.377 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		

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		

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	Long-term drift	0
Power consumption, typ.	3 W	Rail	TS 35
Step response time	350 ms	Temperature coefficient	<0.05 % / °C
Type of connection	Screw connection	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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Catalogue status 18.02.2023 / We reserve the right to make technical changes.

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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 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 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 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
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Approvals

Approvals



Approvals	CULUS;
ROHS	Conform

Downloads

Approval/Certificate/Document of Conformity	UL Certification Declaration of Conformity
Engineering Data	CAD data – STEP
Software	Runtime Software – DIP switch configuration tool
User Documentation	Instruction sheet
Catalogues	Catalogues in PDF-format
Brochures	

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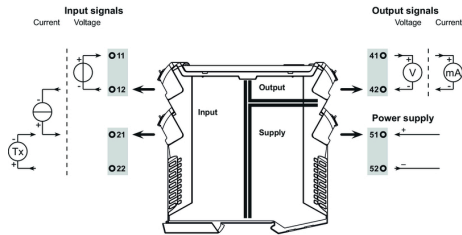
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Drawings

Connection diagram

Type codes



Input

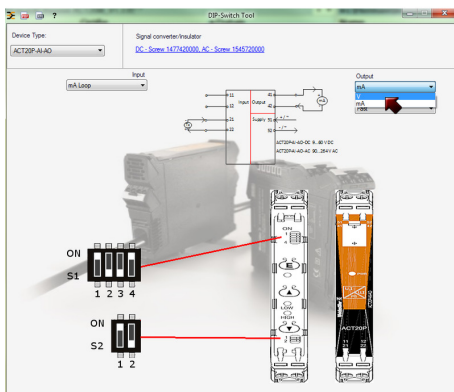
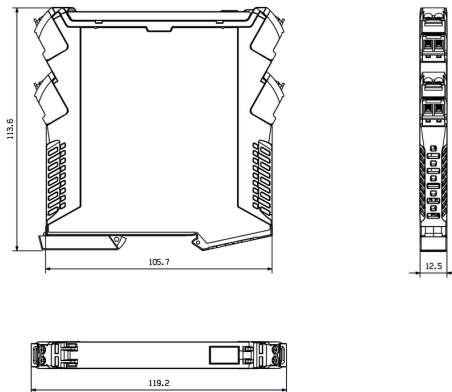
Input range	DIP switch S2	
	1	2
current	■	■
voltage		■

■ = ON

Output

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)