

ACT20P-AI-AO-AC-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	Signal converter/insulator, Input : I/U universal, Output : I/U universal, Signal converter/isolator, 90...264 V AC power supply
Order No.	1545720000
Type	ACT20P-AI-AO-AC-S
GTIN (EAN)	4050118350791
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	259.954 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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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	90...264 V AC, 47 to 63 Hz

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Technical data**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

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	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
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Approvals

Approvals



ROHS	Conform
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Downloads

Approval/Certificate/Document of Conformity	Application notes – UL Certification Declaration of Conformity
Engineering Data	CAD data – STEP
User Documentation	Instruction sheet
Catalogues	Catalogues in PDF-format

Creation date May 15, 2024 8:01:02 AM CEST

Catalogue status 04.05.2024 / We reserve the right to make technical changes.

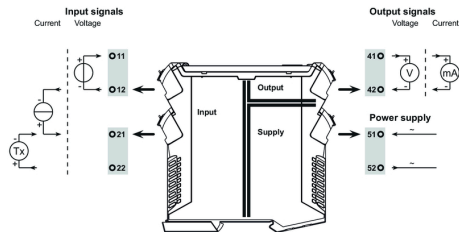
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Drawings

Connection diagram

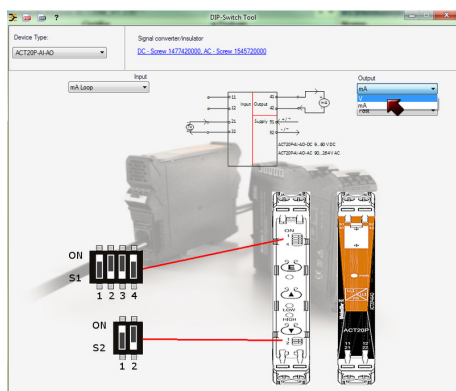
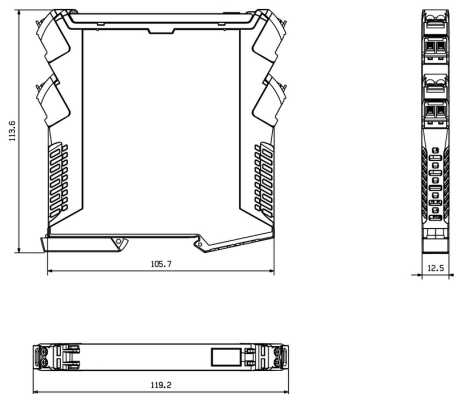


Type codes

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)