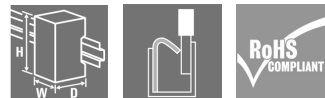


**ACT20P-AI-AO-DC-P****Weidmüller Interface GmbH & Co. KG**

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="#">2456860000</a>
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
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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	12...60 V DC

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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	PUSH IN	Tightening torque, min.	0.4 Nm
Tightening torque, max.	0.6 Nm	Clamping range, rated connection	2.5 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 14
Wire cross-section, solid, min.	0.2 mm <sup>2</sup>	Wire cross-section, solid, max.	2.5 mm <sup>2</sup>
Wire connection cross section, finely stranded, min.	0.2 mm <sup>2</sup>	Wire connection cross section, finely stranded, max.	2.5 mm <sup>2</sup>
Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, min.	0.2 mm <sup>2</sup>	Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, max.	2.5 mm <sup>2</sup>

## 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



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](#)

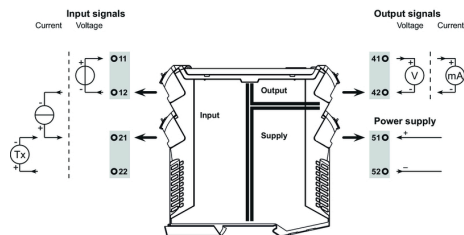
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## Drawings

### Connection diagram

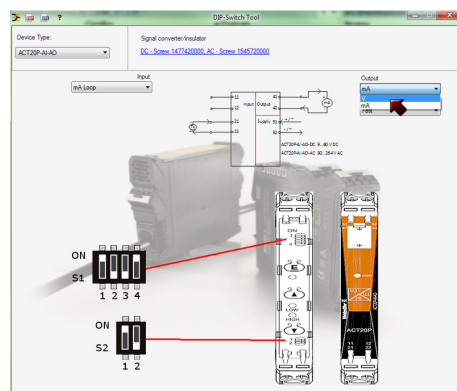
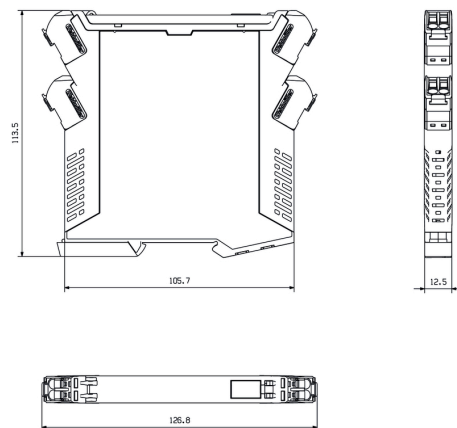


### Type codes

Input			Output				
Input range	DIP switch S2		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)

**PUSH IN**  
technology

