

**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	Analogue isolating amplifier, Input : I/U universal, Output : I/U universal, Signal converter/isolator, 90...264 V AC power supply
Order No.	<a href="#">1545720000</a>
Type	ACT20P-AI-AO-AC-S
GTIN (EAN)	4050118350791
Qty.	1 items

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## Technical data

## Approvals

Approvals



ROHS	Conform
UL File Number Search	<a href="#">UL Website</a>
Certificate no. (cULusEX)	E338066

## Dimensions and weights

Depth	113.7 mm	Depth (inches)	4.4764 inch
Height	119.2 mm	Height (inches)	4.6929 inch
Width	12.5 mm	Width (inches)	0.4921 inch
Net weight	255.41 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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## Environmental Product Compliance

RoHS Compliance Status	Compliant with exemption
RoHS Exemption (if applicable/known)	7a, 7cl
REACH SVHC	Lead 7439-92-1
SCIP	2f6dd957-421a-46db-a0c2-cf1609156924

## Input

Number inputs	1	Resolution	3.5 $\mu$ A / 1.76 mV per bit
Sensor supply	24 V DC	Input voltage	configurable, 0-11 V (min. measurement range 2 V)
Input current	configurable, 0-22 mA (min. measurement range 4 mA)	Input resistance, voltage	$\geq$ 1 M $\Omega$
Input resistance, current	100 $\Omega$		

## Output

Number of outputs	1	load impedance voltage	> 600 $\Omega$ @ 10 V
Load impedance current	1 k $\Omega$ @ 20 mA	Offset voltage	$\leq$ 20 mV
Type	active, connected control must be passive	Output voltage, note	Adjustable, 0...11 V, Output range, min, 2 V
Output current	Adjustable, 0...22 mA, Output range, min, 4 mA		

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## General data

Protection degree	IP20	Supply voltage	90...264 V AC, 47 to 63 Hz
Linearity	$\leq \pm 0.1$ % of signal range, Typ. $\pm 0.05$ % of signal range	Step response time	350 ms
Mounting rail	TS 35	Temperature coefficient	$< 0.05$ % / °C
Nominal power consumption	2 VA	Configuration	DIP switch, Front push-button, with reference voltage/current sources
Operating altitude	$\leq 2000$ m	Power consumption, typ.	3 W

## Insulation coordination

Impulse withstand voltage	4 kV (1.2/50 $\mu$ s)	EMC standards	EN 61326-1
Surge voltage category	III	Pollution severity	2
Galvanic isolation	3-way isolator, between input/output/supply	Insulation voltage	2 kV inputs / outputs

## 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

## Part description

Product description	<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"> <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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## Classifications

ETIM 8.0	EC002653	ETIM 9.0	EC002653
ETIM 10.0	EC002653	ECLASS 14.0	27-21-01-20
ECLASS 15.0	27-21-01-20		

ACT20P-AI-AO-AC-S

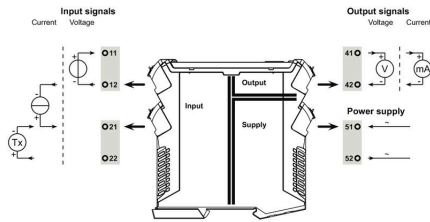
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Drawings

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Connection diagram

Type codes



Input

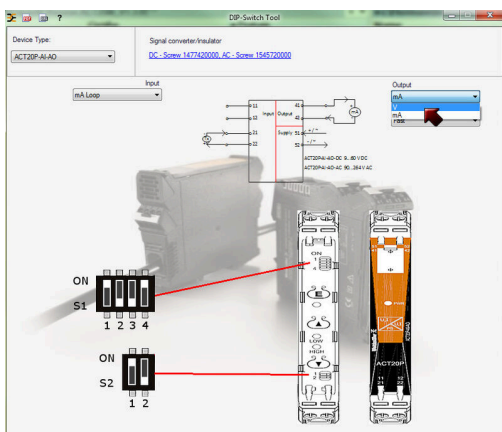
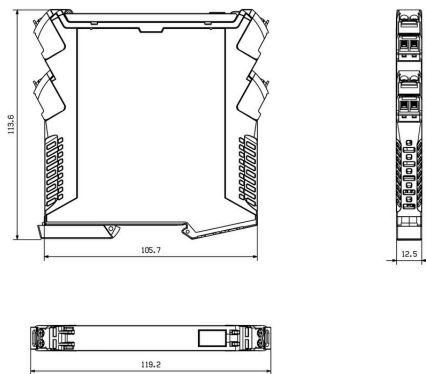
Input range	DIP switch S2	
	1	2
current	■	■
voltage	■	■

■ = 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)