

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	Isolating amplifier, Input : I/U universal, Output : I/U universal, Signal converter/isolator, 24 V DC power supply
Order No.	1477420000
Type	ACT20P-AI-AO-DC-S
GTIN (EAN)	4050118284959
Qty.	1 pièce(s)

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Caractéristiques techniques

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	167 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		

General data

Configuration	DIP switch, Front push-button, 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
Protection degree	IP20	Rail	TS 35
Step response time	350 ms	Temperature coefficient	<0.05 % / °C
Voltage supply	12...60 V DC		

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

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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 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
ECLASS 14.0	27-21-01-20		

Environmental Product Compliance

RoHS Compliance Status	Compliant with exemption
RoHS Exemption (if applicable/known)	7a, 7cl
REACH SVHC	Lead 7439-92-1
SCIP	2f6dd957-42 1a-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
UL File Number Search	UL Website
Certificate no. (cULusEX)	E338066

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Caractéristiques techniques

Downloads

Approval/Certificate/Document of Conformity	UL Certification UL certification (hazardous locations) for canada Declaration of Conformity
Engineering Data	CAD data – STEP
Software	DIP switch configuration tool
User Documentation	Instruction sheet
Catalogues	Catalogues in PDF-format
Brochures	

Fiche de données

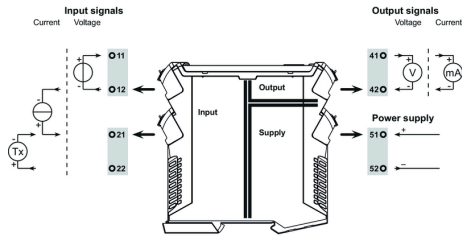
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Dessins

Connection diagram



Input

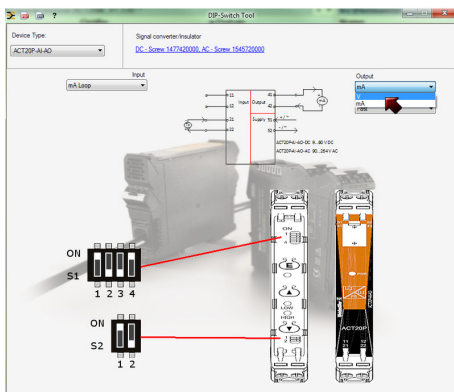
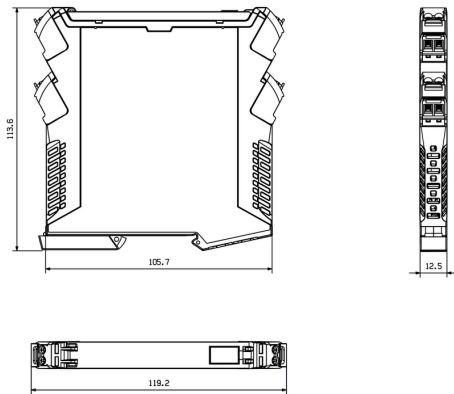
Input range	DIP switch S2	
	1	2
current	■	■
voltage		■

■ = 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)