

ACT20P-AI-AO-DC-S

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
 D-32758 Detmold
 Germany

www.weidmueller.com



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, 24 V DC power supply
Order No.	1477420000
Type	ACT20P-AI-AO-DC-S
GTIN (EAN)	4050118284959
Qty.	1 items

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Technical data

Approvals

Approvals CE; CULUSEX

Approvals CULUS;

Approvals



ROHS Conform

UL File Number Search [UL Website](#)

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	116 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

Environmental Product Compliance

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

Input

Number inputs	1	Resolution	3.5 µA / 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	≥ 1 MΩ
Input resistance, current	100 Ω		

Output

Number of outputs	1	load impedance voltage	> 600 Ω @ 10 V
Load impedance current	1 kΩ @ 20 mA	Offset voltage	≤ 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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Protection degree	IP20	Supply voltage	12...60 V DC
Linearity	<± 0.1 % of signal range, Typ. ± 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	≤ 2000 m	Power consumption, typ.	3 W

Insulation coordination

Impulse withstand voltage	4 kV (1.2/50 µs)	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 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

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"> • 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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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		

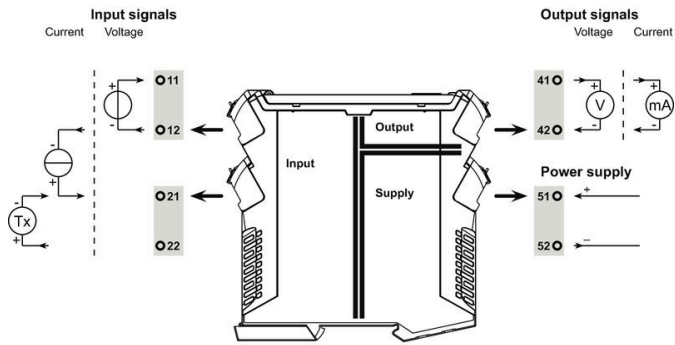
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Drawings

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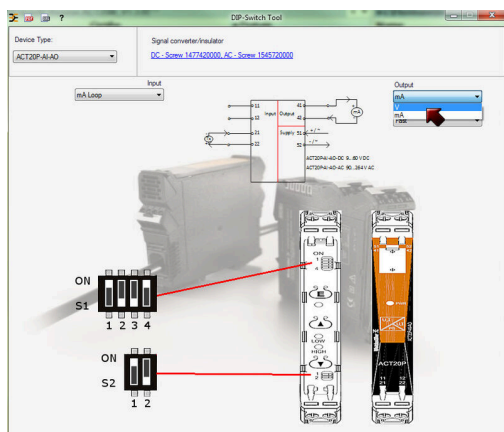
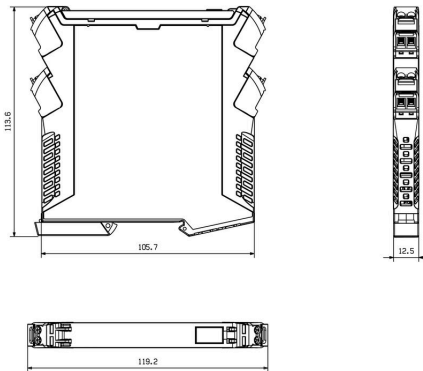
Connection diagram



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)

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Accessories

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Blank



ESG is the tried-and-tested marker in MultiCard format for use on many well-known electrical devices. The result is high-quality device marking with a high-contrast appearance.

Various types are available for devices from manufacturers like Siemens, ABB, Beckhoff etc.

Advantages at a glance:

- Tags for universal usage, self-adhesive or clip-on tags, depending on type
- For aligned equipment, e.g. circuit breakers, we supply ESG markers for clipping onto tag rails
- Individual laser-quality printing according to specifications

For custom printing: Please send us a file of our labeling software M-Print PRO or M-Print PRO Online (without installation) for your labeling specifications.

General ordering data

Type	ESG 8/13.5/43.3 SAI AU	Version	
Order No.	1912130000	ESG, Device markers x 13.5 mm, PA 66, Colour: Transparent,	
GTIN (EAN)	4032248541164	pluggable	
Qty.	5 ST		
Type	ESG 6.6/11 BHZ 5.00/02	Version	
Order No.	1082490000	ESG, Device markers x 11 mm, PA 66, Colour: white, pluggable	
GTIN (EAN)	4032248845330		
Qty.	200 ST		