ACT20P-PRO DCDC II-P

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	Signal converter/insulator, 24...230 V AC/DC power supply, Input : I/U universal, Output : I/U universal
Order No.	1481960000
Type	ACT20P-PRO DCDC II-P
GTIN (EAN)	4050118291025
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	130 g		

Temperatures

Operating temperature	-25 °C...70 °C

Probability of failure

MTBF	76 a

Input

Input current	configurable, ± 0.1mA...± 100 mA, Measuring range min. 200 µA	Input resistance, current	<5 mA: approx. 100 Ω; >5 mA: approx. 5 Ω
Input resistance, voltage	approx. 1 MΩ	Input voltage	configurable, ±40 mV... ±300 V, Measuring range. min 40 mV
Number of inputs	1	Sensor	4- wire sensor (with own power supply)

Output

Cut-off frequency (-3 dB)	> 10 kHz/ <10 Hz	Load impedance current	≤ 600 Ω
Offset current	20 µA	Offset voltage	<10 mV
Output current	Adjustable, 0...±20 mA	Output voltage, note	Adjustable, 0...±10 V
Type	active (as current source) or passive (as current sink), connected control can be active / passive	load impedance voltage	≥ 1 kΩ

Output (digital)

Max. switching voltage, AC	0 V	Status indicator	Green LED

Output (analogue)

Output current	Adjustable, 0...±20 mA

Display

Display value	current measured value, Configuration data	Type	Dot-matrix display with ticker text, green

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Technical data

General data

Accuracy	<0.05 % of measuring range	Configuration	DIP switch, or via display and push-buttons
Galvanic isolation	3-way isolator, between input / output / supply	Power consumption	≤2.3 W
Rail	TS 35	Step response time	≤50 µs
Temperature coefficient	≤0.01% of the output measurement range / °C	Voltage supply	24...230 V DC ±20 %, 24...230 V AC ±10 % @ 48...62 Hz

Insulation coordination

EMC standards	EN 60079-0, EN 60079-15, EN 61010-1, EN 61140, EN 61326-1, UL 61010-1, SN29500 for MTBF	Galvanic isolation	3-way isolator, between input / output / supply
Impulse withstand voltage	5 kV (1.2/50 µs)	Insulation voltage	4 kV_{eff}, input / output / power supply
Pollution severity	2	Rated voltage	600 V
Surge voltage category	II		

Data for Ex applications (ATEX)

Marking	II 3 G Ex nA IIC T4 Gc

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 mm²
Clamping range, min.	0.5 mm²	Clamping range, max.	2.5 mm²
Wire connection cross section AWG, min.	AWG 26	Wire connection cross section AWG, max.	AWG 14
Wire cross-section, solid, min.	0.5 mm²	Wire cross-section, solid, max.	2.5 mm²
Wire connection cross section, finely stranded, min.	0.5 mm²	Wire connection cross section, finely stranded, max.	2.5 mm²
Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, min.	0.2 mm²	Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, max.	2.5 mm²

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

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Technical data

Important note

Product information	The universally configurable DC isolating amplifier ACT20P-PRO DCDC II isolates and converts analogue signals. An analogue input signal (current or voltage) is linearly converted into an analogue output signal (current or voltage) and galvanically isolated. The power supply is galvanically isolated from the input and output (3-way isolation). Properties • universal wide-range voltage supply • universally configurable via DIP switch or via the LED display using control buttons • Active or passive signal output • Operating status display on a front panel LED • Galvanic 3-way isolation between input, output and supply.

Approvals

Approvals	
Approvals	CULUS;GERMLLOYD;
ROHS	Conform
UL File Number Search	UL Website
Certificate no. (cULus)	E314307
Certificate no. (cULusEX)	E345958

Downloads

Approval/Certificate/Document of Conformity	Declaration of Conformity UL - certification Electrical Equipment DNV German Loyd approval ATEX certification UL - certification Hazardous Locations
Engineering Data	CAD data – STEP
Software	DIP switch configuration tool
User Documentation	Instruction sheet
Catalogues	Catalogues in PDF-format

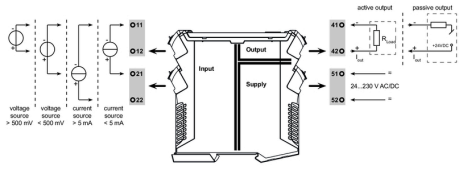
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Drawings

Wiring

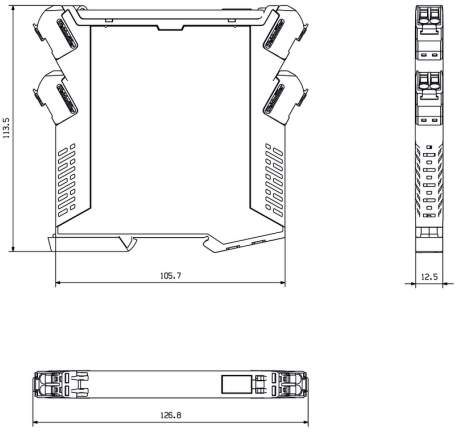


DIP switch setting for standard values

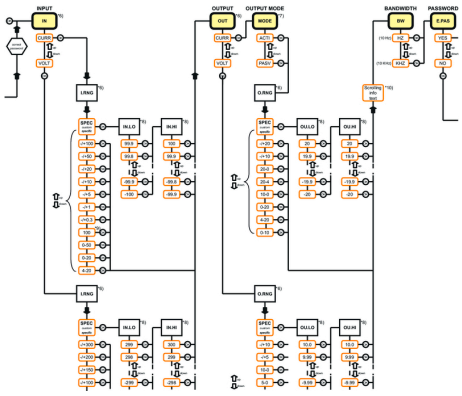
Input range	DIP switch 1	2	3	4	Output range	DIP switch 5	6	7	8
configuration via display					configuration via display				
-10...+10 V				■	-10...+10 V				■
-5...+5V			■		-5...+5V			■	
0...300 V			■	■	10...0 V *			■	■
0...100 V	■				0...10 V		■		
0...30 V	■			■	2...10 V		■		■
0...10 V	■	■			5...0 V *		■	■	
2...10 V	■	■	■		0...5 V		■	■	■
0...5 V	■				1...5 V	■			
1...5 V	■			■	-20...+20 mA	■			■
0...150 mV	■		■		-10...+10 mA	■		■	
0...60 mV	■		■	■	20...0 mA *	■		■	■
-20...+20 mA	■	■			0...20 mA	■	■		
0...20 mA	■	■		■	20...4 mA *	■	■		■
4...20 mA	■	■	■		4...20 mA	■	■	■	
reserved	■	■	■	■	reserved	■	■	■	■

■ = ON * Inverted output range: Output polarity must be reversed!

Dimensioned drawing



Configuration menu (part) universal input / output values





setting via display and push-buttons



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Accessories

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 6.6/11 BHZ 5.00/02	Version
Order No.	1082490000	ESG, Device markers x 11 mm, PA 66, Colour: white
GTIN (EAN)	4032248845330	
Qty.	200 pc(s).	

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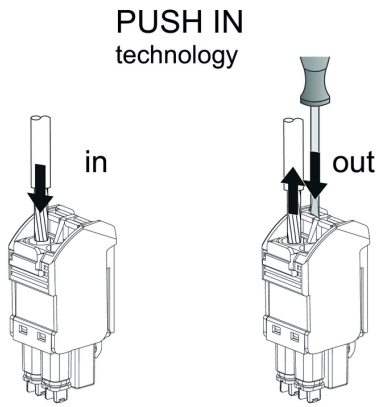
Type	ESG 8/13.5/43.3 SAI AU	Version
Order No.	1912130000	ESG, Device markers x 13.5 mm, PA 66, Colour: Transparent
GTIN (EAN)	4032248541164	
Qty.	5 pc(s).	

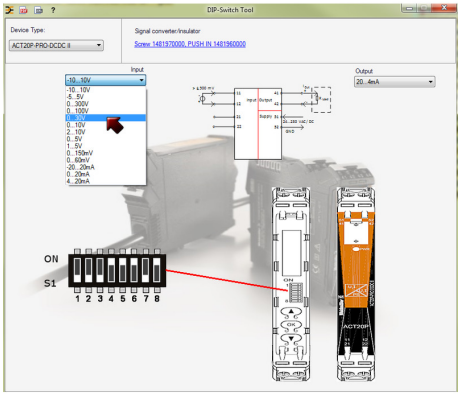
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Drawings





example for DIP switch setting (with ACT20 tool)