

ACT20P ACT20P-PRO DCDC II-S

Weidmüller Interface GmbH & Co. KG
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Product image



ACT20P: The flexible solution

- Precise and highly functional signal converters
- Simple configuration via display (Pro DCDC II), FDT/DTM software or DIP switch
- Release levers simplify handling
- More space in the control cabinet, from 12.5 mm wide for two channels

General ordering data

Type	ACT20P-PRO DCDC II-S
Order No.	1481970000
Version	ACT20P, Signal converter/insulator, Signal converter/isolator, universal, 24...230 V AC/DC power supply
GTIN (EAN)	4050118291032
Qty.	1 pc(s).

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Technical data**Dimensions and weights**

Width	12.5 mm	Width (inches)	0.492 inch
Height	117.2 mm	Height (inches)	4.614 inch
Depth	113.7 mm	Depth (inches)	4.476 inch
Weight	130 g	Net weight	130 g

Temperatures

Operating temperature, max.	70 °C	Operating temperature, min.	-25 °C
Storage temperature, max.	85 °C	Storage temperature, min.	-40 °C
Operating temperature	-25 °C...70 °C	Storage temperature	-40 °C...85 °C

Probability of failure

MTBF	76 Years
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Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
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Input

Number of inputs	1	Input voltage	configurable, ± 20 mV... ± 300 V, min. measuring range 40 mV
Input resistance, voltage	approx. 1 M Ω	Input current	configurable, ± 0.1 mA... \pm 100 mA
Input resistance, current	< 5 mA: approx. 100 Ω ; >5 mA: approx. 5 Ω		

Output

Output voltage, note	adjustable, 0... ± 10 V	Output current	adjustable, 0... ± 20 mA
Cut-off frequency (-3 dB)	> 10 kHz / < 10 Hz	load impedance voltage	≥ 1 k Ω
load impedance current	≤ 600 Ω	Offset voltage	< 10 mV
Offset current	20 μ A	Status indicator	Green LED

Display

Type	Dot-matrix display with ticker text, green	Display value	current measured value, Configuration data
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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 μ s
Temperature coefficient	$\leq 0,01\%$ des Messbereichs/ °C	Voltage supply	24...230 V DC ± 20 %, 24...230 V AC ± 10 % @ 48...62 Hz

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Technical data**Insulation coordination**

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

Connection data

Type of connection	Screw connection	Tightening torque, min.	0.4 Nm
Tightening torque, max.	0.6 Nm	Clamping range, rated connection	2.5 mm ²
Clamping range, min.	0.5 mm ²	Clamping range, max.	2.5 mm ²
Wire connection cross section AWG, min.	AWG 30	Wire connection cross section AWG, max.	AWG 14

Ratings IECEx/ATEX/cUL

Certificate No. (ATEX)	DEMKO15ATEX1397X
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Classifications

ETIM 3.0	EC001774	ETIM 5.0	EC002653
ETIM 6.0	EC002653	eClass 6.2	27-21-01-20
eClass 7.1	27-21-01-20	eClass 8.1	27-21-01-20
eClass 9.0	27-21-01-20	eClass 9.1	27-21-01-20

Product information

Product information	<p>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).</p> <p>Properties</p> <ul style="list-style-type: none"> • 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.
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Approvals

Approvals



Approvals	CULUS;
ROHS	Conform

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Technical data**Downloads**

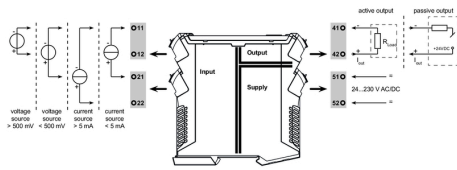
Approval/Certificate/Document of Conformity	Declaration of Conformity UL file number DNV German Loyd approval
Brochure/Catalogue	CAT 4.1 ELECTR 16/17 EN
Engineering Data	EPLAN, WSCAD, Zuken E3.S
Engineering Data	STEP
Software	DIP switch configuration tool
User Documentation	instruction sheet

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Drawings

Wiring



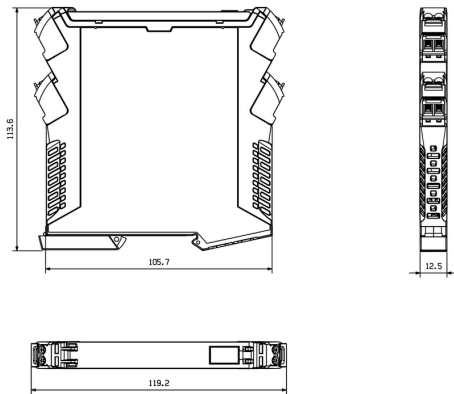
Configuration

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

Output range	DIP switch			
	5	6	7	8
configuration via display				
-10...+10 V				
-5...+5V				
10...0 V *				
0...10 V				
2...10 V				
5...0 V *				
0...5 V				
1...5 V				
-20...+20 mA				
-10...+10 mA				
20...0 mA *				
0...20 mA				
20...4 mA *				
4...20 mA				
reserved				

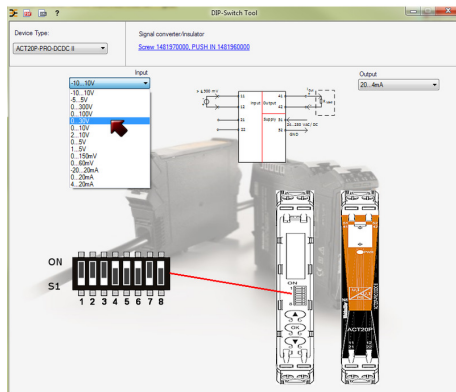
■ = ON * Inverted output range: Output polarity must be reversed!

Dimensioned drawing



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Drawings

example for DIP switch setting (with ACT20 tool)