

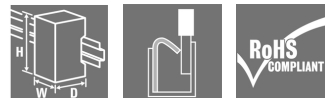
**ACT20P-PRO DCDC II-P****Weidmüller Interface GmbH & Co. KG**

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.	<a href="#">1481960000</a>
Type	ACT20P-PRO DCDC II-P
GTIN (EAN)	4050118291025
Qty.	1 pc(s).

Creation date March 24, 2021 1:21:11 AM CET

Catalogue status 12.03.2021 / We reserve the right to make technical changes.

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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
Net weight	20 g	Weight	130 g
Width	12.5 mm	Width (inches)	0.492 inch

### Probability of failure

MTBF	76 Years
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### Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
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### Input

Input current	configurable, $\pm 0.1\text{mA} \dots \pm 100\text{mA}$ , Measuring range min. $200\ \mu\text{A}$	Input resistance, current	$< 5\text{mA}$ : approx. $100\ \Omega$ ; $> 5\text{mA}$ : approx. $5\ \Omega$
Input resistance, voltage	approx. $1\ \text{M}\Omega$	Input signal	Voltage source, Current source
Input voltage	configurable, $\pm 40\text{mV} \dots \pm 300\text{V}$ , Measuring range. min $40\text{mV}$	Number of inputs	1
Sensor	4-wire sensor (with own power supply)		

### Output

Cut-off frequency (-3 dB)	$> 10\text{kHz} / < 10\text{Hz}$	Load impedance current	$\leq 600\ \Omega$
Offset current	$20\ \mu\text{A}$	Offset voltage	$< 10\text{mV}$
Output current	Adjustable, $0 \dots \pm 20\text{mA}$	Output voltage, note	Adjustable, $0 \dots \pm 10\text{V}$
Status indicator	Green LED	load impedance voltage	$\geq 1\ \text{k}\Omega$

### Display

Display value	current measured value, Configuration data	Type	Dot-matrix display with ticker text, green
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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	$\leq 2.3\text{W}$
Rail	TS 35	Step response time	$\leq 50\ \mu\text{s}$
Temperature coefficient	$\leq 0.01\%$ of the output measurement range / $^{\circ}\text{C}$	Type of connection	PUSH IN
Voltage supply	$24 \dots 230\text{V DC} \pm 20\%$ , $24 \dots 230\text{V AC} \pm 10\%$ @ $48 \dots 62\text{Hz}$		

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### 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 <sub>eff</sub> , 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
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### Connection data

Type of connection	PUSH IN	Wire connection cross section AWG, min.	AWG 26
Wire connection cross section AWG, max.	AWG 14	Wire cross-section, solid, min.	0.2 mm <sup>2</sup>
Wire cross-section, solid, max.	2.5 mm <sup>2</sup>	Wire connection cross section, finely stranded, min.	0.2 mm <sup>2</sup>
Wire connection cross section, finely stranded, max.	2.5 mm <sup>2</sup>	Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, min.	0.2 mm <sup>2</sup>
Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, max.	2.5 mm <sup>2</sup>		

### Classifications

ETIM 6.0	EC002653	ETIM 7.0	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

### Important note

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"> <li>• universal wide-range voltage supply</li> <li>• universally configurable via DIP switch or via the LED display using control buttons</li> <li>• Active or passive signal output</li> <li>• Operating status display on a front panel LED</li> <li>• Galvanic 3-way isolation between input, output and supply.</li> </ul>
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**Technical data**

**Approvals**

Approvals



Approvals	CULUS;GERMLLOYD;
ROHS	Conform
UL File Number Search	E337701

**Downloads**

Approval/Certificate/Document of Conformity	<a href="#">Declaration of Conformity</a> <a href="#">UL - certification</a> <a href="#">DNV German Loyd approval</a> <a href="#">ATEX certification</a>
Engineering Data	<a href="#">STEP</a>
Software	<a href="#">DIP switch configuration tool</a>
User Documentation	<a href="#">Instruction sheet</a>

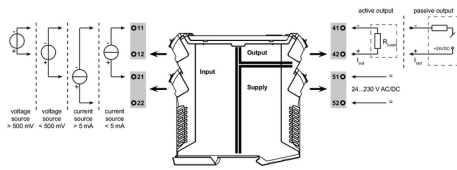
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**Drawings**

**Wiring**



**DIP switch setting for standard values**

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				

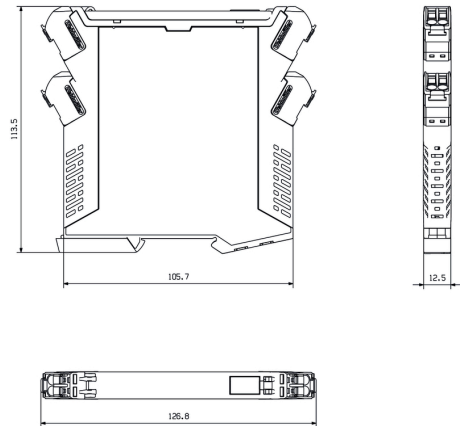
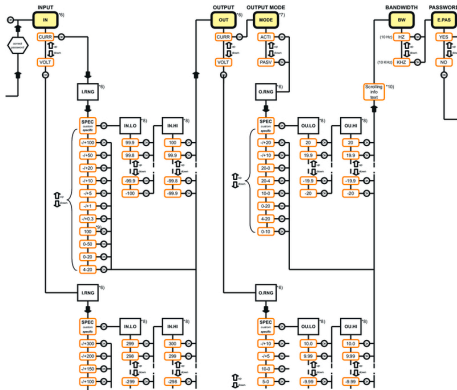
  

Output range	DIP switch			
	5	6	7	8
configuration via display				
-10...+10 V				
-5...+5V				
10...0 V *				
0...10 V				
2...10 V				
5...0 V *				
0...5 V				
1...5 V				
-20...+20 mA				
-10...+10 mA				
20...0 mA *				
0...20 mA				
20...4 mA *				
4...20 mA				
reserved				

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

**Dimensioned drawing**

Configuration menu (part) universal input / output values



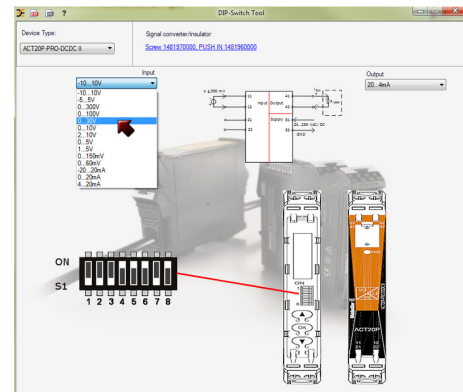
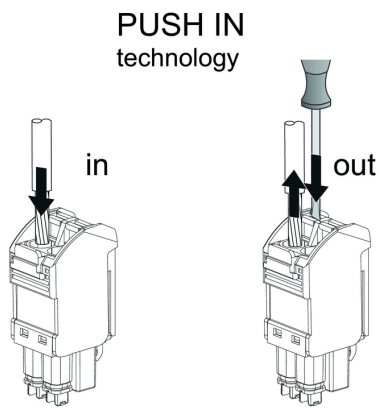
setting via display and push-buttons

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**Drawings**



example for DIP switch setting (with ACT20 tool)