

**ACT20P-PRO DCDC II-24-S**

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

www.weidmueller.com

**Product image**

ACT20P: The flexible solution

- Precise and highly functional signal converters
- Release levers simplify handling

**General ordering data**

Version	Analogue isolating amplifier, 24 V DC power supply, Input : I/U universal, Output : I/U universal
Order No.	<a href="#">2816690000</a>
Type	ACT20P-PRO DCDC II-24-S
GTIN (EAN)	4064675313809
Qty.	1 items

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**Technical data**

**Approvals**

Approvals



ROHS	Conform
UL File Number Search	<a href="#">UL Website</a>
Certificate no. (cULus)	E314307

**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	130 g		

**Temperatures**

Storage temperature		Operating temperature	-20 °C...60 °C
Humidity at operating temperature	0...95 % (no condensation)		

**Probability of failure**

SIL in compliance with IEC 61508	None	MTBF	76 a
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**Environmental Product Compliance**

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

**Input**

Sensor	4- wire sensor (with own power supply)	Number inputs	1
Input voltage	configurable, ±40 mV... ±300 V, Measuring range: min 40 mV, (Example: 0...+40 mV or -40...0 mV or -20...+20 mV or...), Measuring range, max: 300 V	Input signal	Current or voltage input is selectable
Input current	configurable, ± 0.1mA...± 100 mA, Measuring range min. 200 µA	Input resistance, voltage	≥ 1 MΩ
Input resistance, current	<5 mA: approx. 100 Ω; >5 mA: approx. 5 Ω		

**Output**

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

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## Technical data

### 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	Protection degree	IP20
Supply voltage	24 V DC (-20% / +30%)	Step response time	≤50 µs
Mounting rail	TS 35	Power consumption	≤2.3 W
Temperature coefficient	≤0,01% des Messbereichs/ °C	Nominal power consumption	2 VA
Configuration	DIP switch, or via display and push-buttons	Operating altitude	≤ 2000 m

### Insulation coordination

Impulse withstand voltage	5 kV (1.2/50 µs)	EMC standards	EN 61326-1
Surge voltage category	II	Pollution severity	2
Galvanic isolation	3-way isolator, between input / output / supply	Insulation voltage	4 kVeff, input / output / power supply
Rated voltage	600 V		

### Data for Ex applications (ATEX)

Marking	II 3 G Ex nA IIC T4 Gc
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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	2.5 mm <sup>2</sup>
Clamping range, min.	0.5 mm <sup>2</sup>	Clamping range, max.	2.5 mm <sup>2</sup>
Wire connection cross section AWG, min.	AWG 26	Wire connection cross section AWG, max.	AWG 12

### Part description

**Product description** 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.

### Classifications

ETIM 6.0	EC002653	ETIM 7.0	EC002653
ETIM 8.0	EC002653	ETIM 9.0	EC002653
ETIM 10.0	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
ECLASS 15.0	27-21-01-20		

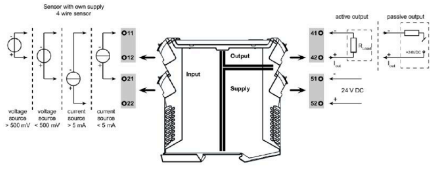
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**Drawings**

**Wiring**



DIP switch setting for standard values

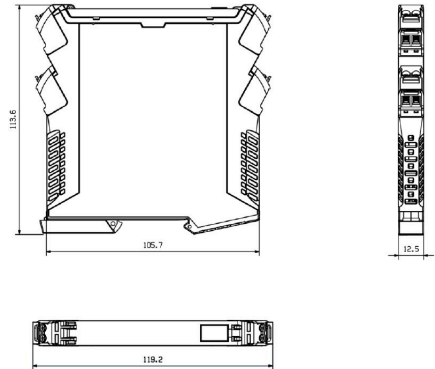
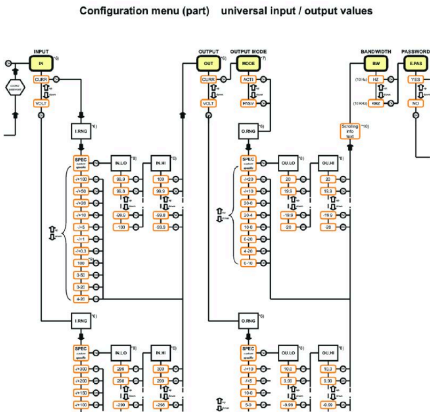
Input range	DIP switch			
	1	2	3	4
configuration via display				
-10...+10 V				■
-5...+5 V				■
0...300 V		■	■	■
0...100 V		■	■	■
0...30 V		■	■	■
0...10 V		■	■	■
2...10 V	■	■	■	■
0...5 V	■	■	■	■
1...5 V	■	■	■	■
0...150 mV	■	■	■	■
0...60 mV	■	■	■	■
-20...+20 mA	■	■	■	■
0...20 mA	■	■	■	■
4...20 mA	■	■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

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



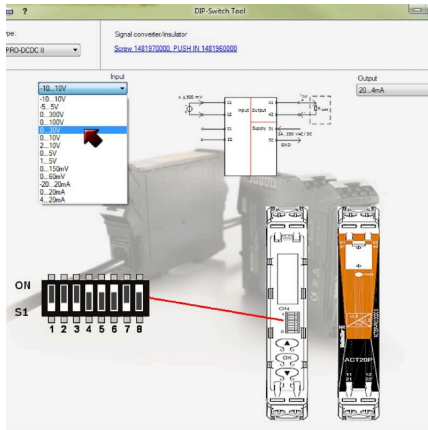
setting via display and push-buttons

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Drawings

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example for DIP switch setting (with ACT20 tool)