

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.	2816690000
Type	ACT20P-PRO DCDC II-24-S
GTIN (EAN)	4064675313809
Qty.	1 pc(s).

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Technical data**Dimensions and weights**

Depth	113.7 mm	Depth (inches)	4.476 inch
Height	119.2 mm	Height (inches)	4.693 inch
Width	12.5 mm	Width (inches)	0.492 inch
Net weight	130 g		

Temperatures

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

SIL in compliance with IEC 61508	None	MTBF	76 a
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Input

Input current	configurable, $\pm 0.1\text{ mA} \dots \pm 100\text{ mA}$, Measuring range min. 200 μA	Input resistance, current	<5 mA: approx. 100 Ω ; >5 mA: approx. 5 Ω
Input resistance, voltage	$\geq 1\text{ M}\Omega$	Input signal	Current or voltage input is selectable
Input voltage	configurable, $\pm 40\text{ mV} \dots \pm 300\text{ V}$, Measuring range min 40 mV, (Example: 0...+40 mV or -40...0 mV or -20...+20 mV or....), Measuring range, max: 300 V	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	$\leq 600\text{ }\Omega$
Offset current	20 μA	Offset voltage	<10 mV
Output current	configurable, 0... $\pm 20\text{ mA}$	Output voltage, note	configurable, 0... $\pm 10\text{ V}$
Type	active (as current source) or passive (as current sink), connected control can be active / passive	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	Nominal power consumption	2 VA
Operating altitude	$\leq 2000\text{ m}$	Power consumption	$\leq 2.3\text{ W}$
Protection degree	IP20	Rail	TS 35
Step response time	$\leq 50\text{ }\mu\text{s}$	Temperature coefficient	$\leq 0.01\%$ des Messbereichs/°C
Voltage supply	24 V DC (-20% / +30%)		

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Technical data

Insulation coordination

EMC standards	EN 61326-1	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
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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 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

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		

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

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.
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www.weidmueller.com**Technical data****Approvals**

Approvals



Approvals MAMID	https://mdcop.weidmueller.com/mediadelivery/rendition/900_319222/-T1z1mm-S800/ https://mdcop.weidmueller.com/mediadelivery/rendition/900_319228/-T1z1mm-S800/ https://mdcop.weidmueller.com/mediadelivery/rendition/900_319213/-T1z1mm-S800/ https://mdcop.weidmueller.com/mediadelivery/rendition/900_319234/-T1z1mm-S800/ https://mdcop.weidmueller.com/mediadelivery/rendition/900_319240/-T1z1mm-S800/
ROHS	Conform
UL File Number Search	UL Website
Certificate no. (cULus)	E314307

Downloads

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

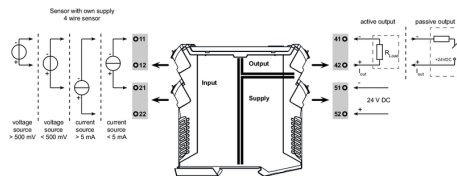
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Drawings

Wiring



DIP switch setting for standard values

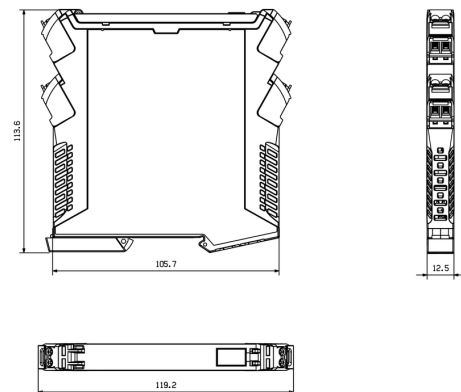
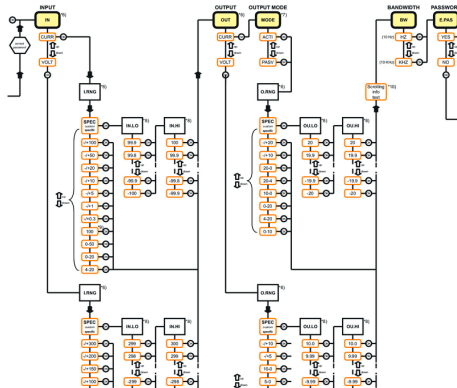
Input range	DIP switch	Output range	DIP switch
configuration via display	1 2 3 4	configuration via display	5 6 7 8
-10...+10 V		-10...+10 V	
-5...+5V		-5...+5V	
0...300 V		10...0 V *	
0...100 V		0...10 V	
0...30 V		2...10 V	
0...10 V		5...0 V *	
2...10 V		0...5 V	
0...5 V		1...5 V	
1...5 V		-20...+20 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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www.weidmueller.com**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 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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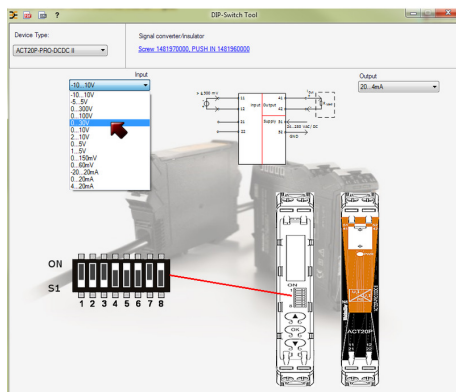
Type	ESG 6.6/11 BHZ 5.00/02	Version
Order No.	1082490000	ESG, Device markers x 11 mm, PA 66, Colour: white
GTIN (EAN)	4032248845330	
Qty.	200 pc(s).	

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Drawings



example for DIP switch setting (with ACT20 tool)