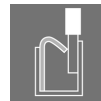


ACT20P-UI-AO-DO-LP-P**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com**Similar to illustration****FDT** 2**ACT20P: The flexible solution**

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

General ordering data

Version	Signal converter/insulator, Limit value monitoring, Input : universal U, I, R, 9, Output : 4-20 mA, (loop powered), Transistor (Alarm)
Order No.	2456850000
Type	ACT20P-UI-AO-DO-LP-P
GTIN (EAN)	4050118471786
Qty.	1 pc(s).

ACT20P-UI-AO-DO-LP-P

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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	191 g		

Temperatures

Storage temperature	-20 °C...70 °C	Operating temperature	-20 °C...60 °C
Humidity at operating temperature	0...95 % (no condensation)	Humidity	10...90 %, no condensation

Probability of failure

SIL in compliance with IEC 61508	None
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Input

Cable-length compensation	$\leq \pm 0.002 \Omega$ per cable resistance Ω	Influence of the sensor cable resistance	5 Ω @ RTD- Kabel
Input current	configurable, ± 5 A DC (min. measurement range 0.5 A)	Input resistance, current	40 Ω
Input resistance, voltage		Input voltage	configurable, ± 12 V DC (min. measurement range 1 V), ± 28 V DC (min. measurement range 2 V), ± 300 V DC (min. measurement range 100 V)
	> 10 M Ω @ 600 mV, 2 M Ω	Potentiometer	1.2...500 k Ω
Number of inputs	1	Sensor	PT100 (2-/3- wire), PT1000 (2-/3- wire), PT200, N120, Cu 10, Thermocouples: B, E, J, K, L, N, R, S, T, U
Resistance	0...750 Ω , 0...1.5 k Ω , 0...12 k Ω	Temperature input range	CU10: -100...+260 °C, Ni120: -80 °C...+320 °C, PT100 / 200 / 1000: -200 °C...+850 °C, B: +100...+1820 °C, E: -270...+1000 °C, J: -270...+1200 °C, K: -270...+1372 °C, L: +100...+900 °C, N: -180...+1300 °C, R: -50...+1768 °C, S: -50...+1768 °C, T: -270...+400 °C, U: -200...+600 °C
Sensor supply	0.1 mA / 0.05 mA (depending on measuring range) @ RTD cable		
Type	Universal signal isolator / signal amplifier, thermocouple, RTD		

Output

Load impedance current	$\leq 600 \Omega$	Type	passive, connected control must be active
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Technical data

Output (digital)

Alarm function	configurable, Top and bottom limit values, window range, Alarm delay: 0...99 s	Hysteresis	≥ 0.1 % of FS
Number of digital outputs	1	Rated switching current	20 mA
Rated switching voltage	≤ 30 V DC	Type	Transistor, open collector

Output (analogue)

Number of analogue outputs	1	Output current	4...20 mA (current loop)
Signal output	direct or inverted		

General data

Accuracy	<0.1 % of measuring range	Cold-junction compensation error	±1.0°C @ -20°C - 65°C
Configuration	With FDT/DTM software, Requires configuration adapter 8978580000 CBX200 USB	Galvanic isolation	2-way isolator, between input/output
Protection degree	IP20	Rail	TS 35
Step response time	450 ms	Temperature coefficient	<0.02 °C of measuring range / °C
Voltage supply	Output loop powered, (10...45 V)		

Insulation coordination

EMC standards	EN 61326-1	Galvanic isolation	2-way isolator, between input/output
Impulse withstand voltage	4 kV (1.2/50 µs)	Insulation voltage	3.51 kV between input and output
Pollution severity	2	Rated voltage	300 V _{eff}
Surge voltage category	III		

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 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 14
Wire cross-section, solid, min.	0.2 mm ²	Wire cross-section, solid, max.	2.5 mm ²
Wire connection cross section, finely stranded, min.	0.5 mm ²	Wire connection cross section, finely stranded, max.	2.5 mm ²
Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, min.	0.2 mm ²	Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, max.	2.5 mm ²

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

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www.weidmueller.com**Technical data****Environmental Product Compliance**

REACH SVHC	Lead 7439-92-1
SCIP	2f6dd957-421a-46db-a0c2-cf1609156924

Important note

Product information	<p>The ACT20P-UI-AO-DO-LP-X converts and isolates current, voltage, potentiometer and temperature sensor signals (mA, A, mV, V, potentiometer, RTD and TC). The transmit function between the input and output can be set via the configuration program either to predefined functions (x0.5, x, x2) or via a freely definable function table. The device is powered via the output current loop.</p> <p>Features</p> <ul style="list-style-type: none">• Configuration and monitoring are performed via FDT/DTM-Software „WI-Manager“.• The active or passive signal inputs for RTD, TC, potentiometer, mV, V, mA and A are completely electrically isolated.• The TC signal input has internal cold-junction compensation.• Alarm output (for example, for limit monitoring, sensor error detection and more)• 3-way galvanic isolation between input, output/supply and alarm output.
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Approvals

Approvals



ROHS	Conform
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Downloads

Approval/Certificate/Document of Conformity	Declaration of Conformity
Engineering Data	CAD data – STEP
Software	WI-Manager, DTM-Library for online installation Release notes for Weidmueller FDT-DTM Software version
User Documentation	Instruction sheet 20210120 Security Advisory - WI-Manager affected by MundM Software fdtCONTAINER vulnerability
Catalogues	Catalogues in PDF-format

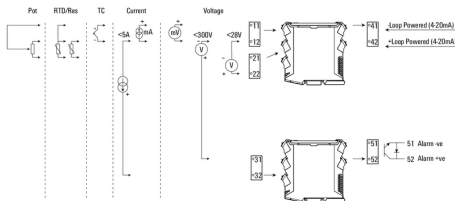
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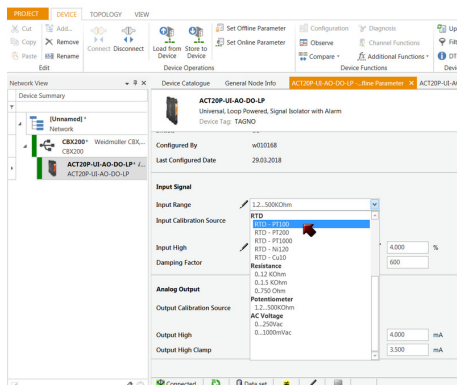
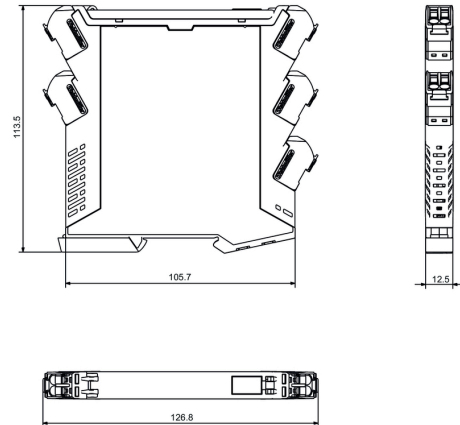
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Drawings

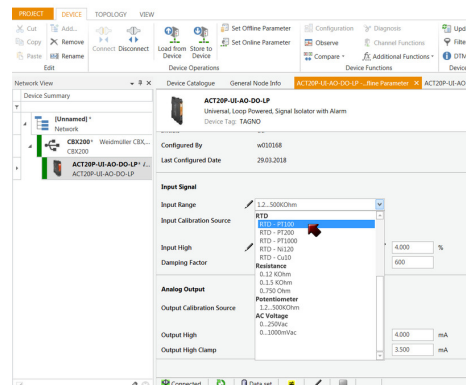
Connection diagram



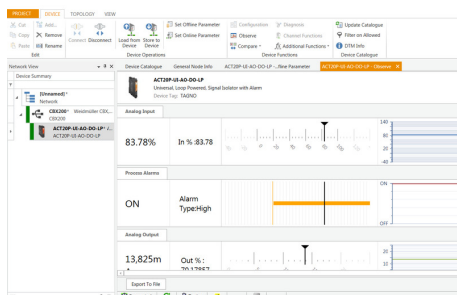
Dimensioned drawing



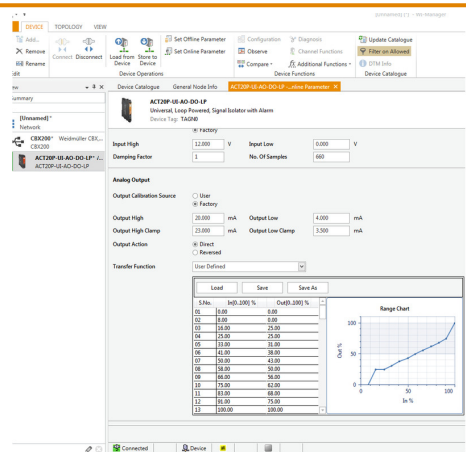
screenshot of configuration with FDT2 / DTM software



screenshot of configuration with FDT2 / DTM software



screenshot of "observe" with FDT2 / DTM software"



example of user defined transfer function for assigning customized output values

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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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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).	

Configuration interfaces**General ordering data**

Type	CBX200 USB
Order No.	8978580000
GTIN (EAN)	4032248813759
Qty.	1 pc(s).