

**ACT20P-UI-2RCO-AC-S****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

[www.weidmueller.com](http://www.weidmueller.com)**Product image****ACT20P: The flexible solution**

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

**General ordering data**

Version	Limit value monitoring, Input : universal U, I, R, 9, Output : 2 x relays, Input: temperature, R, U, I, Relay output, 90...264 V AC power supply
Order No.	<a href="#">1238910000</a>
Type	ACT20P-UI-2RCO-AC-S
GTIN (EAN)	4050118027075
Qty.	1 pc(s).

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**Technical data****Dimensions and weights**

Depth	113.6 mm	Depth (inches)	4.472 inch
Height	119.2 mm	Height (inches)	4.693 inch
Width	22.5 mm	Width (inches)	0.886 inch
Net weight	223 g		

**Temperatures**

Storage temperature	-20 °C...70 °C	Operating temperature	-20 °C...65 °C
Humidity at operating temperature	0...95 % (no condensation)	Humidity	10...90 %, no condensation

**Probability of failure**

SIL in compliance with IEC 61508	None	MTBF	180 a
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**Input**

Cable-length compensation	$\leq \pm 0.002 \Omega$ per cable resistance $\Omega$	Influence of the sensor cable resistance	5 $\Omega$ @ RTD- Kabel
Input current	configurable, $\pm 25$ mA DC, $\pm 5$ A DC	Input resistance, current	40 $\Omega$
Input resistance, voltage	2 M $\Omega$ , > 10 M $\Omega$	Input voltage	configurable, $\pm 150$ mV DC, $\pm 600$ mV DC, $\pm 30$ V DC, $\pm 300$ V DC
Number of inputs	1	Potentiometer	1.2...500 k $\Omega$
Resistance	0...10 k $\Omega$ , 0...12 k $\Omega$ , 0...15 k $\Omega$	Sensor	RTD (2,3-wire): Pt100, Pt200, Pt1000, Ni120, Cu10, Thermocouples: B, E, J, K, L, N, R, S, T, U
Sensor supply	0.1 mA / 0.05 mA (depending on measuring range) @ RTD cable, 24 V (@ 4-20 mA loop)	Temperature input range	B: +100...+1820 °C, E: -270...+1000 °C, J: (-210...+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

**Output**

Number of outputs	2
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**Output (digital)**

Alarm function	configurable, Top and bottom limit values, window range, Alarm delay: 0...99 s, Hysteresis adjustable, auto / manual reset	Max. switching frequency	20 Hz
Max. switching voltage, AC	250 V	Max. switching voltage, DC	110 V
Number of digital outputs	2	Rated switching current	200mA @ 110Vdc, 6A @ 24Vdc / 240Vac
Type	2 CO contacts, normal / inverse adjustment, Switching frequency 20 Hz		

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**Technical data****General data**

Accuracy	<0.1 % of measuring range	Cold-junction compensation error	±2.0°C @ -20°C - 70°C
Configuration	With FDT/DTM software, or via 7-segment display, push-buttons and rotary encoder on the device itself, Requires configuration adapter 8978580000 CBX200 USB	Galvanic isolation	4-way isolator, Input to supply / Alarm 1 / Alarm 2, yes, between input / output / supply
Long-term drift	0.1 % / 10.000 h	Power consumption	≤ 3.5 W, <2 W
Rail	TS 35	Repeat accuracy	± 0.05 % of measuring range final value
Step response time	450 ms	Temperature coefficient	<0.02 °C of measuring range / °C, 350 ppm/K
Voltage supply	90...264 V AC		

**Insulation coordination**

EMC standards	EN 61326-1	Galvanic isolation	4-way isolator, Input to supply / Alarm 1 / Alarm 2, yes, between input / output / supply
Impulse withstand voltage	4 kV (1.2/50 µs)	Insulation voltage	4 kV (input / output)
Pollution severity	2	Rated voltage	300 V <sub>eff</sub>
Surge voltage category	III	Test voltage	0.3 kV

**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

**Classifications**

ETIM 6.0	EC002654	ETIM 7.0	EC002654
ETIM 8.0	EC002654	ETIM 9.0	EC002654
ECLASS 9.0	27-21-01-22	ECLASS 9.1	27-21-01-22
ECLASS 10.0	27-21-01-22	ECLASS 11.0	27-21-01-22
ECLASS 12.0	27-21-01-22	ECLASS 13.0	27-21-01-22

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## Technical data

## Tender specification sheets

## Long specification

**Universal limit-value monitoring component with relay output and external supply**  
**Universal limit-value monitoring component in 22.5 mm width with external voltage and sensor supply, for monitoring and isolating DC currents +/- 25mA...5 A, DC voltages +/-600 mV... 300 V, 2-/3-/4-wire RTD sensors, resistors, potentiometers and thermocouple signals according to IEC584.**

**Two relay contacts (CO) are available on the output side.**

**This component is programmed using FDT/DTM software.**

**Add-on housing for TS35 rail mounting**  
**Dimensions: L/W/H**  
**119/ 22.5/ 113.6 mm**  
**Screw connection / Nominal cross-section**  
**2.5 mm<sup>2</sup>**

**Protection degree: IP 20**

**Input** +/-25  
**mA...5 A**  
**DC**

**600 mV...300 V DC**

**PT100, PT1000, Ni100, Ni1000**

**Resistance 0...12 kOhm**  
**Potentiometer 0...500 kOhm**

**Thermocouple types B, E, J, K, L, LR, N, R, S, T, U, W3, W5**

**Sensor supply 24 V DC**

**Output**  
**2 x 1 CO (hard gold-plated)**

**240 V AC/ 24 V DC @ 6 A**

**Repeat accuracy** <  
**0,05 % v. E.**

**Step response time** <  
**10...90 %**

**200 ms**  
**Auxiliary power**

## Short specification

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**Technical data****Environmental Product Compliance**

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

**Important note**

Product information	<p>The devices of the ACT20P-UI-2RCO-XX-x family record current, voltage, potentiometer and temperature sensor signals (mA, A, mV, V, potentiometer, RTD and TC). They have two independent relay outputs which emit an alarm when levels exceed or fall below pre-set limits.</p> <p>Properties</p> <ul style="list-style-type: none"> <li>• Configuration and diagnosis with the FDT/DTM software "WI-Manager".</li> <li>• Manual configuration on the device is performed via the LED display by means of operating buttons and rotary encoders.</li> <li>• The dual-channel trip amplifier enables various alarm functions: window alarm, alarm delay, wire break detection, hysteresis and upper / lower limit alarm.</li> <li>• The active or passive signal inputs for RTD, TC, potentiometer, voltage and current are fully galvanically isolated.</li> <li>• Remote diagnosis: reporting of errors (e.g. cable breaks) via status relay.</li> <li>• Operational status and relay status indicated by front panel LEDs.</li> <li>• Galvanic 4-way isolation between input, output and supply.</li> </ul>
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**Approvals**

Approvals



Approvals	CULUS;
ROHS	Conform

**Downloads**

Approval/Certificate/Document of Conformity	<a href="#">Application notes – UL Certification</a> <a href="#">Declaration of Conformity</a>
Engineering Data	<a href="#">CAD data – STEP</a>
Software	<a href="#">WI-Manager, DTM-Library for online installation</a> <a href="#">Release notes for Weidmueller FDT-DTM Software version</a>
User Documentation	<a href="#">instruction sheet</a> <a href="#">20210120 Security Advisory - WI-Manager affected by MundM Software fdtCONTAINER vulnerability</a>
Catalogues	<a href="#">Catalogues in PDF-format</a>

## ACT20P-UI-2RCO-AC-S

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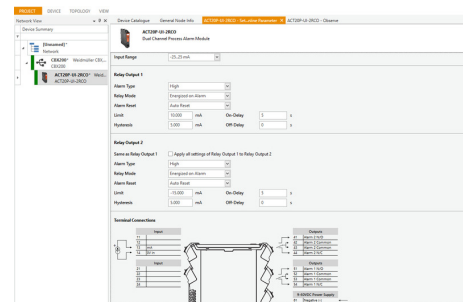
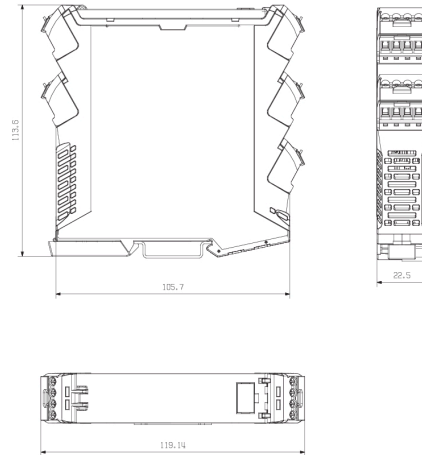
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# Drawings

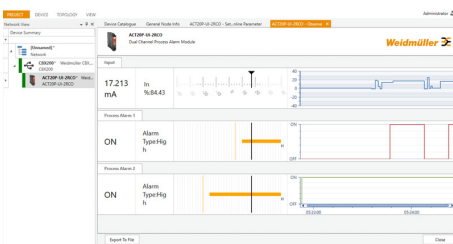
## Dimensioned drawing



Removable terminals



screenshot of configuration with FDT2 / DTM software



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## Accessories

### Configuration interfaces



### General ordering data

Type	CBX200 USB
Order No.	<a href="#">8978580000</a>
GTIN (EAN)	4032248813759
Qty.	1 pc(s).

### 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 6.6/20 BHZ 5.00/04	Version
Order No.	<a href="#">1082540000</a>	ESG, Device markers x 20 mm, PA 66, Colour: white
GTIN (EAN)	4032248845439	
Qty.	200 pc(s).	

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**General ordering data**

Type	ESG 8/13.5/43.3 SAI AU	Version
Order No.	<a href="#">1912130000</a>	ESG, Device markers x 13.5 mm, PA 66, Colour: Transparent
GTIN (EAN)	4032248541164	
Qty.	5 pc(s).	



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**Drawings**
