

## ACT20P-UI-2RCO-DC-P

Weidmüller Interfaces GmbH & Co. KG

Postfach 3030

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### Product image



### ACT20P: The flexible solution

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

### General ordering data

Version	Limit value monitoring, Input: temperature, R, U, I, Relay output, 24 V DC power supply, universal U, I, R, S, 2 x relays
Order No.	<a href="#">2456840000</a>
Type	ACT20P-UI-2RCO-DC-P
GTIN (EAN)	4050118471779
Qty.	1 pc(s).

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## Technical data

## Dimensions and weights

Depth	113.6 mm	Depth (inches)	4.472 inch
Height	127.1 mm	Height (inches)	5.004 inch
Width	22.5 mm	Width (inches)	0.886 inch
Net weight	308.117 g		

## Temperatures

Storage temperature	-20 °C...70 °C	Operating temperature	-20 °C...70 °C
Operating temperature, min.	-20 °C	Operating temperature, max.	70 °C
Humidity	10...90 %, no condensation		

## Probability of failure

SIL in compliance with IEC 61508 None

## Input

Cable-length compensation	< ±0.002 Ω per cable resistance Ω	Influence of the sensor cable resistance	5 Ω @ RTD- Kabel
Input current	configurable, ± 25 mA DC, ±5 A DC	Input resistance, current	40 Ω
Input resistance, voltage	2 MΩ, > 10 MΩ	Input voltage	configurable, ±150 mV DC, ± 600mV DC, ±30 V DC, ±300 V DC
Number of inputs	1	Potentiometer	1.2...500 kΩ
Resistance	0...10 kΩ, 0...12 kΩ, 0...15 kΩ	Sensor	Thermocouples: B, E, J, K, L, N, R, S, T, U, RTD: PT100, PT200, PT1000, Ni120, Cu10, 2-/3-/4-wire
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 (digital)

Alarm function	configurable, Top and bottom limit values, window range, Alarm delay: 0...99 s, Hysteresis adjustable, auto / manual reset	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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### 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
Long-term drift	0.1 % / 10.000 h	Power consumption	≤ 3.5 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
Type of connection	PUSH IN	Voltage supply	9...60 V DC

### Insulation coordination

EMC standards	EN 61326-1	Galvanic isolation	4-way isolator, Input to supply / Alarm 1 / Alarm 2
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	300 V

### 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 <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 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	EC002654	ETIM 7.0	EC002654
ETIM 8.0	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

### Environmental Product Compliance

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

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**Important note**

**Product information**

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.

**Properties**

- Configuration and diagnosis with the FDT/DTM software "WI-Manager".
- Manual configuration on the device is performed via the LED display by means of operating buttons and rotary encoders.
- The dual-channel trip amplifier enables various alarm functions: window alarm, alarm delay, wire break detection, hysteresis and upper / lower limit alarm.
- The active or passive signal inputs for RTD, TC, potentiometer, voltage and current are fully galvanically isolated.
- Remote diagnosis: reporting of errors (e.g. cable breaks) via status relay.
- Operational status and relay status indicated by front panel LEDs.
- Galvanic 4-way isolation between input, output and supply.

**Approvals**

Approvals



Approvals

CULUS;

ROHS

Conform

**Downloads**

Approval/Certificate/Document of Conformity

[Declaration of Conformity](#)

Engineering Data

[CAD data – STEP](#)

Software

[Library and function block – 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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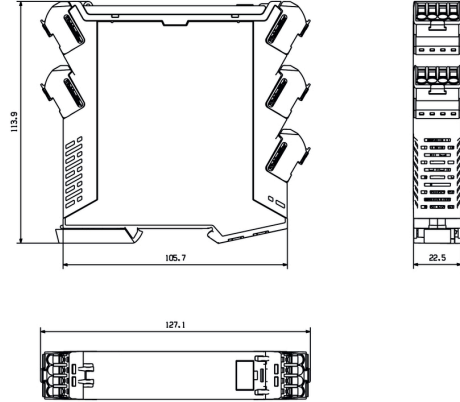
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**Drawings**

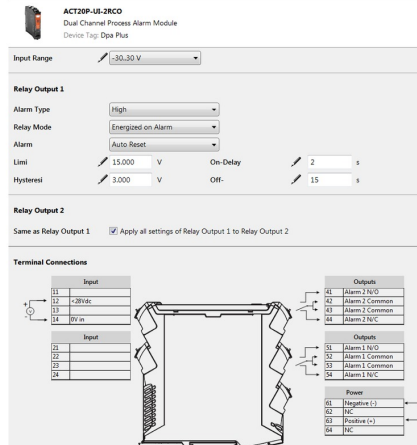
**Dimensioned drawing** [info@weidmueller.com](mailto:info@weidmueller.com)



Removable terminals

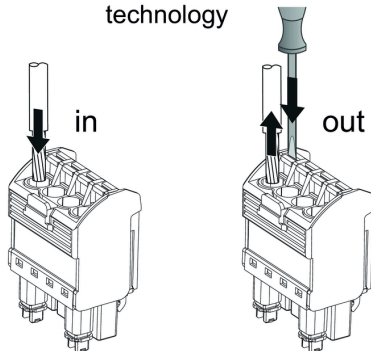


**Similar to illustration**



screenshot of configuration with FDT2 / DTM software

**PUSH IN technology**



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**Drawings**

