

**ACT20P-UI-2RCO-DC-S**

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

www.weidmueller.com



**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, S, Output : 2 x relays, 24 V DC power supply
Order No.	<a href="#">7940045760</a>
Type	ACT20P-UI-2RCO-DC-S
GTIN (EAN)	4050118278507
Qty.	1 items

## ACT20P-UI-2RCO-DC-S

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## Technical data

## Approvals

Approvals CE; CULSEX

Approvals CULUS;

Approvals



ROHS Conform

UL File Number Search [UL Website](#)

Certificate no. (cULusEX) E338066

## Dimensions and weights

Depth	113.6 mm	Depth (inches)	4.4724 inch
Height	119.2 mm	Height (inches)	4.6929 inch
Width	22.5 mm	Width (inches)	0.8858 inch
Net weight	142.28 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	MTBF	180 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	RTD (2,3-wire): Pt100, Pt200, Pt1000, Ni120, Cu10, Thermocouples: B, E, J, K, L, N, R, S, T,U	Number inputs	1
Potentiometer	1.2...500 kΩ	Sensor supply	0.1 mA / 0.05 mA (depending on measuring range) @ RTD cable, 24 V (@ 4-20 mA loop)
Input voltage	configurable, ±150 mV DC, ±600mV DC, ±30 V DC, ±300 V DC	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
Resistance	0...10 kΩ, 0...12 kΩ, 0...15 kΩ	Input current	configurable, ±25 mA DC, ±5 A DC
Input resistance, voltage	2 MΩ, > 10 MΩ	Input resistance, current	40 Ω
Cable-length compensation	<±0.002 Ω per cable resistance Ω	Influence of the sensor cable resistance	5 Ω @ RTD- Kabel

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### Output

Number of outputs 2

### Output (digital)

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

### General data

Repeat accuracy	± 0.05 % of measuring range final value	Accuracy	<0.1 % of measuring range
Protection degree	IP20	Supply voltage	9...60 V DC
Cold-junction compensation error	±2.0°C @ -20° C - 70°C	Long-term drift	0.1 % / 10.000 h
Step response time	450 ms	Mounting rail	TS 35
Power consumption	≤ 3.5 W, <2 W	Temperature coefficient	<0.02 °C of measuring range / °C, 350 ppm/K
Nominal power consumption	1.5 VA	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
Operating altitude	≤ 2000 m		

### Insulation coordination

Impulse withstand voltage	4 kV (1.2/50 µs)	EMC standards	EN 61326-1
Test voltage	0.3 kV	Surge voltage category	III
Pollution severity	2	Galvanic isolation	between input / output / supply / relay
Insulation voltage	4 kV (input / output)	Rated voltage	300 Veff

### 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 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.

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## Technical data

- 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.

### Classifications

ETIM 8.0	EC002654	ETIM 9.0	EC002654
ETIM 10.0	EC002654	ECLASS 14.0	27-21-01-22
ECLASS 15.0	27-21-01-22		

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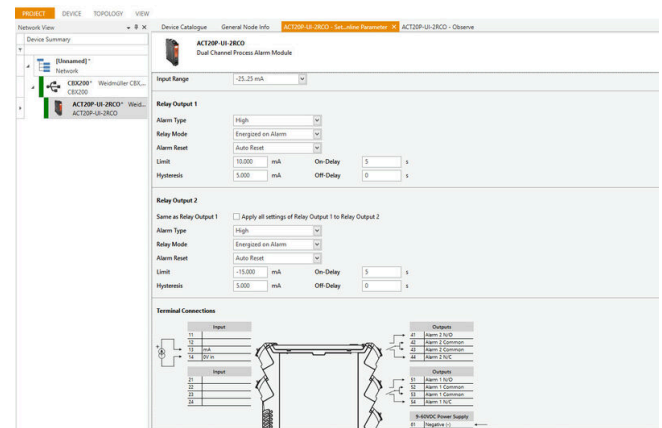
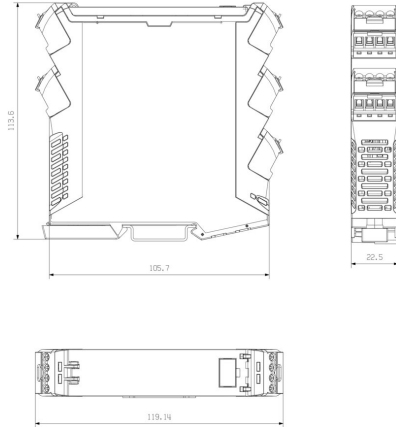
**Drawings**

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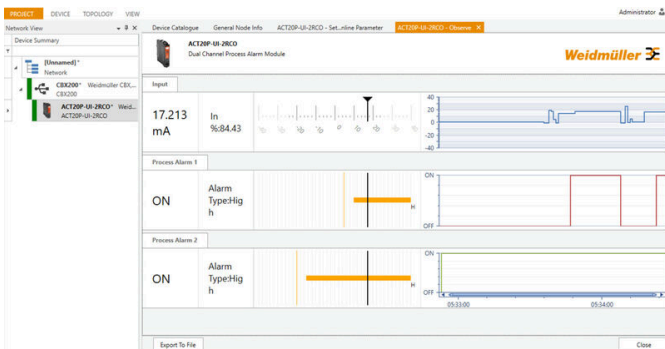
**Dimensioned drawing**



Removable terminals



screenshot of configuration with FDT2 / DTM software



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