

ACT20P-UI-2RCO-DC-P

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, Input: temperature, R, U, I, Relay output, 24 V DC power supply
Order No.	2456840000
Type	ACT20P-UI-2RCO-DC-P
GTIN (EAN)	4050118471779
Qty.	1 items

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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	127.1 mm	Height (inches)	5.0039 inch
Width	22.5 mm	Width (inches)	0.8858 inch
Net weight	166 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	2f6dd957-42 1a-46db-a0c2-cf1609156924

Input

Sensor	Thermocouples: B, E, J, K, L, N, R, S, T, U, RTD: PT100, PT200, PT1000, Ni120, Cu10, 2-/3-/4-wire	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	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.	0.2 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

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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.
- 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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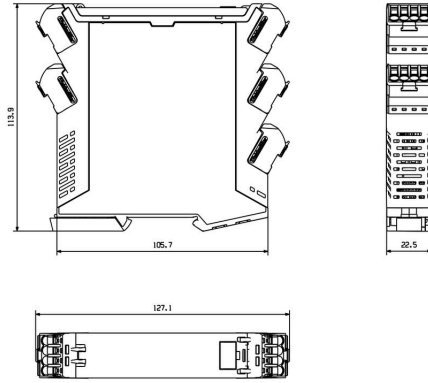
Drawings

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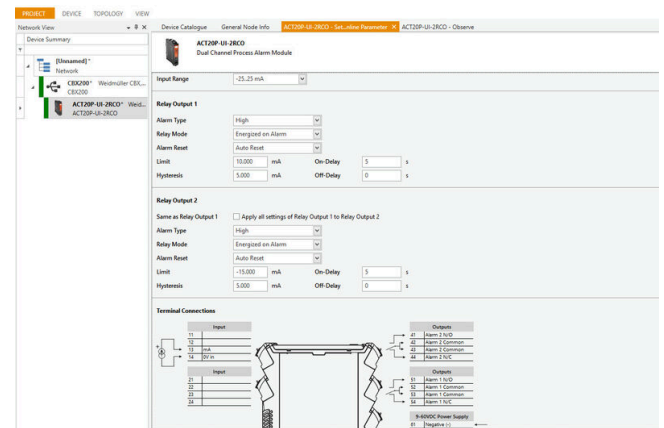
Dimensioned drawing



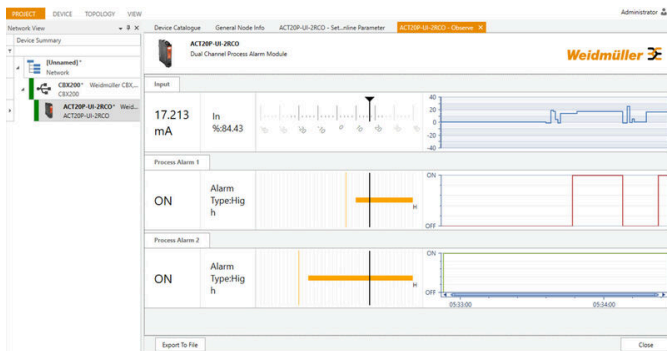
Removable terminals



Similar to illustration

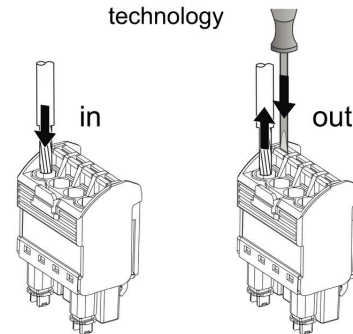


screenshot of configuration with FDT2 / DTM software



screenshot of configuration with FDT2 / DTM software

PUSH IN technology



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