

ACT20P ACT20P-UI-2RCO-DC-S

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ACT20P: The flexible solution

- Precise and highly functional signal converters
- Simple configuration via display (Pro DCDC II), FDT/DTM software or DIP switch
- Release levers simplify handling
- More space in the control cabinet, from 12.5 mm wide for two channels

General ordering data

Type	ACT20P-UI-2RCO-DC-S
Order No.	7940045760
Version	Limit value monitoring, Signal converter/isolator, All-purpose, Input: temperature, R, U, I, Relay output, 24 V DC power supply
GTIN (EAN)	4050118278507
Qty.	1 pc(s).

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Technical data
Dimensions and weights

Width	22.5 mm	Width (inches)	0.886 inch
Height	117.2 mm	Height (inches)	4.614 inch
Depth	113.6 mm	Depth (inches)	4.472 inch
Net weight	121 g		

Temperatures

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

Input

Number of inputs	1	Sensor	Thermocouples: B, E, J, K, L, N, R, S, T, U, PT100/2-/3-wire, PT200, PT1000, N120, Cu 10, Potentiometer: 1.2 kΩ - 500 kΩ, Resistance: 0 - 1.5 kΩ, Resistance: 0 - 12 kΩ, Resistance: 0 - 750 Ω
Sensor supply	0.1 mA / 0.05 mA (depending on measuring range) @ RTD cable	Influence of the sensor cable resistance	5 Ω @ RTD- Kabel
Input voltage	configurable, ±150 mV DC, ± 600mV DC, ±30 V DC, ±300 V DC	Input resistance, voltage	2 MΩ, > 10 MΩ
Input current	configurable, ± 25 mA DC, ±5 A DC	Input resistance, current	40 Ω
Input measurement range	configurable, Thermocouple type J -100...+1200°C, Thermocouple type K -200...+1370°C, PT100 -200...+850 °C	Cable-length compensation	< ±0.002 Ω per cable resistance Ω
Potentiometer	1.2...500 kΩ		

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	Galvanic isolation	4-way isolator,; Input to supply / Alarm 1 / Alarm 2
Mounting rail	TS 35	Power consumption	≤ 3.5 W
Repeat accuracy	± 0.05 % of upper measurement range limit	Step response time	450 ms
Supply voltage	9...60 V DC	Temperature coefficient	< 0.02 °C of measuring range / °C

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Technical data
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 _{eff}
Surge voltage category	III	Test voltage	300 V

Output (digital)

Alarm function	configurable, Top and bottom limit values, window range, Hysteresis 2°C adjustable, Alarm mode: delay, switch on or switch on/off, Alarm delay: 0...10 s	Number of digital outputs	2
Type	2 CO contacts, normal / inverse adjustment	Max. switching voltage, AC	240 V
Rated switching current	200mA @ 110Vdc, 6A @ 24Vdc / 240Vac		

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 ²
Clamping range, min.	0.5 mm ²	Clamping range, max.	2.5 mm ²
Wire connection cross section AWG, min.	AWG 30	Wire connection cross section AWG, max.	AWG 14

Classifications

ETIM 3.0	EC002479	ETIM 5.0	EC002653
ETIM 6.0	EC002654	eClass 6.2	27-21-01-20
eClass 7.1	27-21-01-20	eClass 8.1	27-21-01-20
eClass 9.0	27-21-01-20	eClass 9.1	27-21-01-22

Product information

Product information	<p>The devices of the ACT20P-UI-2RCO-XX-S 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"> • 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. 		
Descriptive text accessories	CBX200 USB configuration adapter - 8978580000		

Data sheet**ACT20P**
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Approvals



Approvals	CULUS;
ROHS	Conform

Downloads

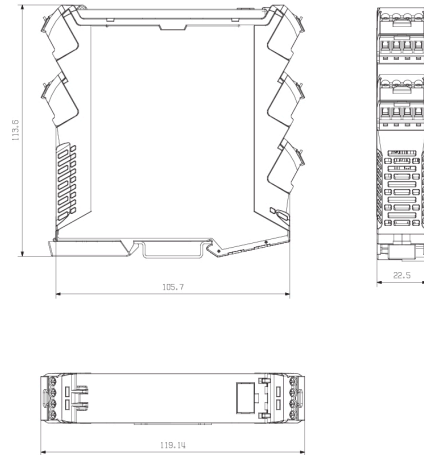
Approval/Certificate/Document of Conformity	Declaration of Conformity
Brochure/Catalogue	CAT 4.1 ELECTR 16/17 EN
Engineering Data	EPLAN, WSCAD
Software	WI-Manager, DTM-Library for online installation
User Documentation	instruction sheet

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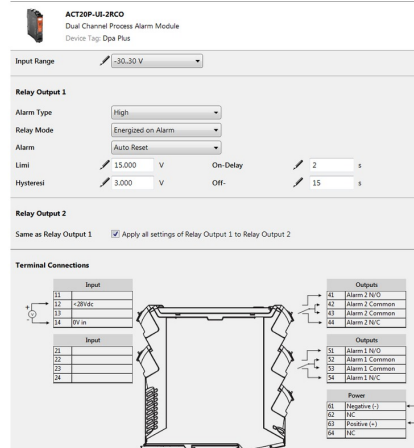
Removable terminals



Dimensioned drawing



Removable terminals



screenshot of configuration with FDT2 / DTM software

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Drawings

