

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

**Weidmüller Interface GmbH & Co. KG**  
Klingenbergstraße 16  
D-32758 Detmold  
Germany  
Fon: +49 5231 14-0  
Fax: +49 5231 14-292083  
www.weidmueller.com

### Product image



#### 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.	<a href="#">7940045760</a>
Version	Limit value monitoring, Signal converter/isolator, universal, 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		

**Environmental Product Compliance**

REACH SVHC	Lead 7439-92-1
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**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
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	Voltage supply	9...60 V DC

Creation date May 27, 2019 3:11:34 PM CEST

Catalogue status 23.05.2019 / We reserve the right to make technical changes.

2

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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 <sub>eff</sub>
Surge voltage category	III	Test voltage	300 V

**Output (digital)**

Alarm function	configurable, Alarm mode: delay, switch on or switch on/off, Top and bottom limit values, window range, Hysteresis adjustable, auto / manual reset	Number of digital outputs	2
Type	2 CO contacts, normal / inverse adjustment, Switching frequency 20 Hz	Max. switching voltage, DC	110 V
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 <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 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	27-21-01-22	eClass 9.1	27-21-01-22

**Product information**

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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**Data sheet****ACT20P**  
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Approvals



Approvals	CULUS;
ROHS	Conform

**Downloads**

Approval/Certificate/Document of Conformity	<a href="#">Declaration of Conformity</a>
Brochure/Catalogue	<a href="#">CAT 4.1 ELECTR 16/17 EN</a>
Engineering Data	<a href="#">EPLAN, WSCAD</a>
Engineering Data	<a href="#">STEP</a>
Software	<a href="#">WI-Manager, DTM-Library for online installation V.1.2.0</a>
User Documentation	<a href="#">instruction sheet</a>

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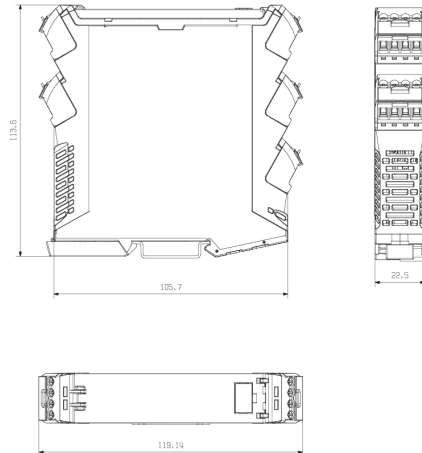
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Drawings

Dimensioned drawing



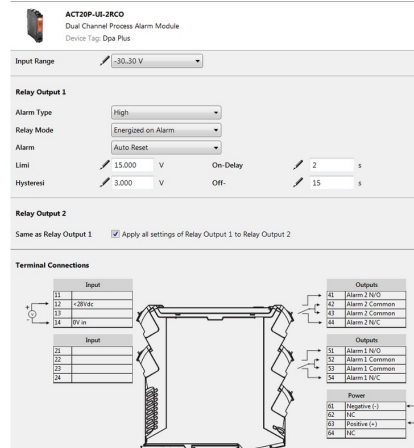
Removable terminals



Dimensioned drawing



Removable terminals



screenshot of configuration with FDT2 / DTM software

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