

ACT20P
ACT20P-UI-2RCO-DC-S



The ACT20P-UI-2RCO universal trip amplifier in 22.5 mm width,

for monitoring DC currents +/- 25 mA/5 A, DC voltages +/-600 mV...300 V, temperatures and resistors.

Four-wire RTD sensors, resistors, potentiometers or thermocouples can be connected to the input side, in compliance with IEC 584.

Two relay outputs (COs) are used to monitor if the specified lower or upper limits have been exceeded.

The component can be configured using the buttons, display and coding switch – or by using FDT/DTM software.

The ACT20P-UI-2RCO is designed with 3 kV of 3-way electrical isolation. The component is optionally available with either a

90...264 V AC or 24 VDC power supply.

They can be used in many application around the world because of their excellent reliability, accuracy, wide temperature range and international approvals.

General ordering data

Type	ACT20P-UI-2RCO-DC-S
Order No.	7940045760
Version	ACT20P, Universal signal converters / trip amplifiers
GTIN (EAN)	4050118278507
Qty.	1 pc(s).

**ACT20P
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Technical data
Dimensions and weights

Width	22.5 mm	Height	113.6 mm
Depth	114 mm	Net weight	121 g

Temperatures

Humidity	10...90 % (no condensation)	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	< 0.05 % 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	2-way isolator, Input to supply / Alarm 1 / Alarm 2
Mounting rail	TS 35	Power consumption	3 W @ 240 V AC
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
Type of connection	Screw connection		

Insulation coordination

Galvanic isolation	2-way isolator, Input to supply / Alarm 1 / Alarm 2	Impulse withstand voltage	3 kV (1.2/50µs)
Insulation voltage	3 kV	Pollution severity	2
Rated voltage	300 V _{eff}	Standards	DIN EN 61326-1, DIN EN 61010-1
Surge voltage category	III		

Data sheet

**ACT20P
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Technical data

Output (digital)

Type	2 CO contacts	Rated switching current	200mA @ 110Vdc, 6A @ 24Vdc / 240Vac
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Connection data

Type of connection	Screw connection	Clamping range, rated connection	2.5 mm ²
Clamping range, rated connection, min.	0.5 mm ²	Clamping range, rated connection, max.	2.5 mm ²

Classifications

ETIM 3.0	EC002479	ETIM 5.0	EC002653
ETIM 6.0	EC002653	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		

Product information

Descriptive text accessories	CBX200 USB configuration adapter - 8978580000
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Approvals

Approvals



ROHS	Conform
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Downloads

FDT/DTM Software	FDT/DTM- frame software
Manual	Quickstart guide_english
Quick reference guide	Quick Start Guide to install FDT/DTM Software
Software	Weidmueller DTM-Library
WI Manager manual	Manual WI-Manager german/english
Declaration of Conformity	Declaration of Conformity

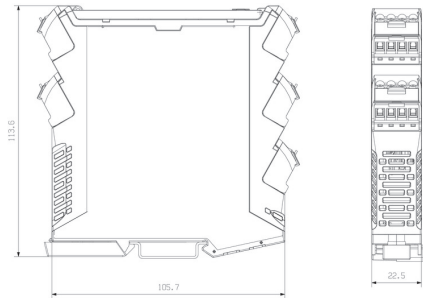
ACT20P
ACT20P-UI-2RCO-DC-S

Drawings

Wiring diagram



Removable terminals



Dimensioned drawing



Removable terminals

ACT20P
ACT20P-UI-2RCO-DC-S

Drawings

