

ACT20P-PRO-RTCI-AO-DO-S

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

www.weidmueller.com

Product image



ACT20P: The flexible solution

- Precise and highly functional signal converters
- Release levers simplify handling

General ordering data

Version	Signal converter/insulator, Temperature, Resistance, Potentiometer, I/U universal, Transistor (Alarm)
Order No.	2448 100000
Type	ACT20P-PRO-RTCI-AO-DO-S
GTIN (EAN)	4050118462241
Qty.	1 Stück

Erstellungs-Datum May 25, 2023 2:25:43 PM CEST

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Technische Daten

Dimensions and weights

Depth	113.7 mm	Depth (inches)	4.476 inch
Height	119.2 mm	Height (inches)	4.693 inch
Width	12.5 mm	Width (inches)	0.492 inch
Net weight	194 g		

Temperatures

Storage temperature	-40 °C...85 °C	Humidity	5...95 %, no condensation
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Input

Number of inputs	1	Potentiometer	10... 150 kΩ
Resistance		Sensor	RTD: PT100, PT200, PT500, PT1000, Ni50, Ni100, Ni120, Ni1000, Cu10, Cu25, Cu50, Cu100, RTD (2-wire): KTY83/110, KTY83/120, KTY83/150, KTY83/121, KTY83/122, KTY83/210, KTY83/220, KTY83/221, KTY83/250, KTY82/110, KTY82/120, KTY82/150, KTY82/121, KTY82/122, KTY82/210, KTY82/220, KTY82/221, KTY82/250, KTY84/130, KTY16, KTY19, ST13, ST20
Temperature input range	0... 15 kΩ adjustable from -200... +850 °C		

Output (digital)

Alarm function	configurable, Top and bottom limit values, window range, Short circuit at input	Hysteresis	1...20 %
Max. switching frequency	≤ 5 kHz	Number of digital outputs	1
Rated switching current	100 mA	Rated switching voltage	24 VDC ±30%
Switch-on delay	0... 180 s, 50 ms ... 7.5 s	Type	NPN-Transistor, Switching frequency 5 kHz

Output (analogue)

Load resistance current	≤ 600 Ω	Load resistance voltage	> 1 kΩ (60 VAC < U _{in} < 230 VAC), > 5 kΩ (24 VAC < U _{in} < 60 VAC)
Number of analogue outputs	1	Output current	configurable, 0(4)...20 mA, -20...+20 mA, ± 10mA, upscale (23 mA), downscale (3,5 mA)
Output voltage	configurable, 0(1)...5 V, 0(2)...10 V, downscale (0 V), upscale (11 V), -5...+5 V, -10...+10 V	Signal output	direct or inverted
Transmit function	linear, √X, X ¹ , X ^{1.5} , X ² , X ^{2.5} , 1-X, -5...+5 % of output span (TRIM)	Type (analogue output)	Voltage and current output (configurable), Active/passive

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Katalogstand 12.05.2023 / Technische Änderungen vorbehalten

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Display

Display range	-9999...9999	Display value	Configuration data and process data (input/output) in operation
Type	Dot-matrix display with ticker text, green		

General data

Accuracy	≤0.05 % of span	Configuration	with push-buttons and display
Galvanic isolation	4-way isolator, between input/output/supply	Included in delivery	Transducer, Instruction sheet
Long-term drift	0.1 % / 10.000 h	Power consumption	≤ 2.6 W
Rail	TS 35	Step response time	10 ms, 2- / 4- wire: 320 ms, 3- wire / Poti: 640 ms
Temperature coefficient	≤ 0.01 % / °C	Voltage supply	24...230 V AC +20 % / -10 %

Insulation coordination

EMC standards	EN 61326-1	Galvanic isolation	4-way isolator, between input/output/supply
Impulse withstand voltage	5 kV (1.2/50 μs)	Insulation voltage	4 kV _{eff} / 1 min.
Pollution severity	2	Rated voltage	600 V
Surge voltage category	II		

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 26	Wire connection cross section AWG, max.	AWG 12

Classifications

ETIM 6.0	EC002919	ETIM 7.0	EC002919
ETIM 8.0	EC002919	ECLASS 9.0	27-21-01-29
ECLASS 9.1	27-21-01-29	ECLASS 10.0	27-21-01-29
ECLASS 11.0	27-21-01-29	ECLASS 12.0	27-21-01-29

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
SCIP	2f6dd957-421a-46db-a0c2-cf1609156924

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Technische Daten**Important note**

Product information

The universal, configurable resistance measuring transducer ACT20P-PRO-RTCI-AO-DOS converts 2- / 3- / 4-wire ohmic resistance and potentiometers into an active or passive standard current signal or an active voltage signal. For set point Limit Monitoring the device is equipped with an digital NPN Output. The universal power supply can be powered up from 24Vuc...230Vuc. The device can be configured via the display.

Features

- universal wide range supply
- universal configurability, LED- Display by touch key
- Active or passive signal output
- Digital NPN transistor output
- Operating status display via front-sided LED
- Galvanic 4-way isolation between Input, analogue, digital output and supply

Approvals

Approvals



ROHS

Conform

Downloads

Approval/Certificate/Document of Conformity

[Declaration of Conformity](#)

Engineering Data

[CAD data – STEP](#)

Engineering Data

[EPLAN](#)

User Documentation

[Instruction sheet](#)
[Configuration manual](#)

Catalogues

[Catalogues in PDF-format](#)

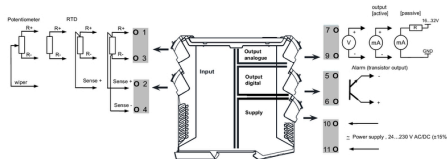
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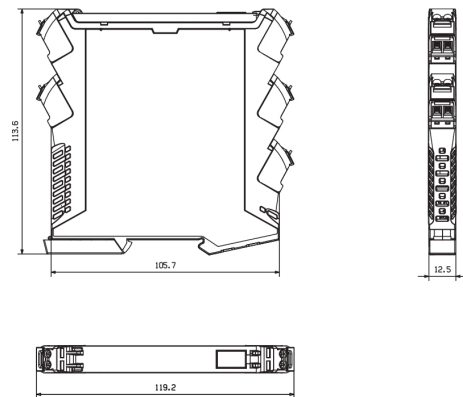
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Zeichnungen

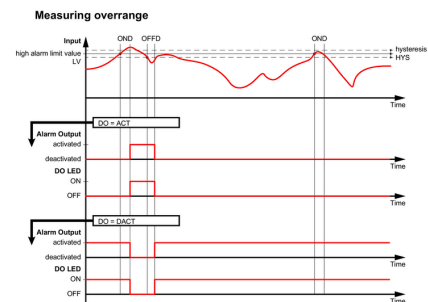
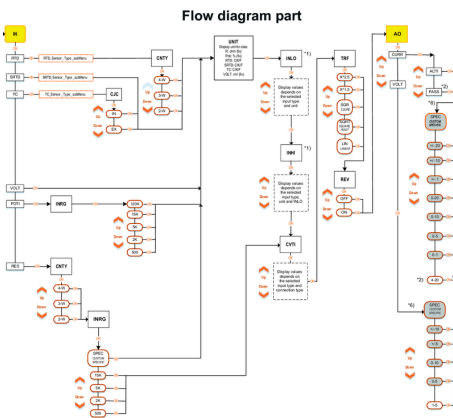
Connection diagram



Dimensioned drawing



Dimensioned drawing



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