

ACT20P-PRO-RTCI-AO-DO-S

Weidmüller Interfaces GmbH & Co. KG

Postfach 3030

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Product image



Product currently not yet available



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. | 2448100000 |
| Type | ACT20P-PRO-RTCI-AO-DO-S |
| GTIN (EAN) | 4050118462241 |
| Qty. | 1 pc(s). |

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Technical data

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 |
|---------------------|----------------|----------|---------------------------|

Probability of failure

| | |
|----------------------------------|------|
| SIL in compliance with IEC 61508 | None |
|----------------------------------|------|

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 adjustible from -200... +850 °C | | |

Output

| | | |
|------------------------|------|----------------------------------------------------------------------------------------------------|
| Load impedance current | Type | active (as current source) or passive (as current sink), connected control can be active / passive |
| ≤ 600 Ω | | |

Output (digital)

| | | | |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------|---------------------------|-------------|
| Alarm function | configurable, Top and bottom limit values, window range, Short circuit at input, Alarm delay: 0...99 s, Hysteresis 5% / 10% | Number of digital outputs | 1 |
| Rated switching current | 100 mA | Rated switching voltage | 24 VDC ±30% |
| Type | NPN-Transistor, Switching frequency 5 kHz | | |

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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 |

Display

| | | | |
|---------------|-----------------------------------------------------------------|------|--------------------------------------------|
| 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 | Converter, 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 | Type of connection | Screw connection |
| 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 |

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Environmental Product Compliance

| | | |
|------------|--------------------------------------|--------------------------------------------------------------|
| REACH SVHC | Lead 7439-92-1 | www.weidmueller.com |
| SCIP | 2f6dd957-421a-46db-a0c2-cf1609156924 | |

Important note

| | |
|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product information | <p>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.</p> <p>Features</p> <ul style="list-style-type: none"> • 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 |
| User Documentation | Instruction sheet Configuration manual |
| Catalogues | Catalogues in PDF-format |

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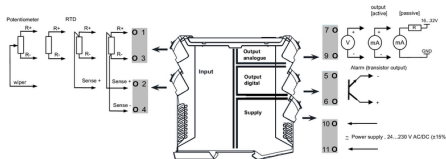
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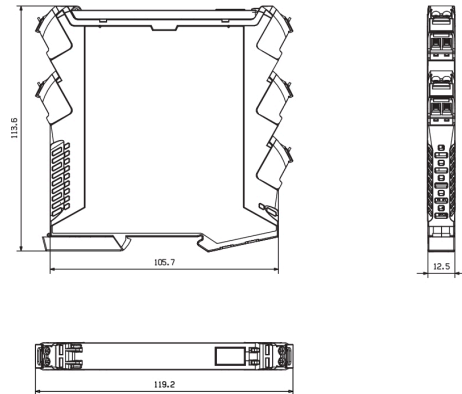
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Drawings

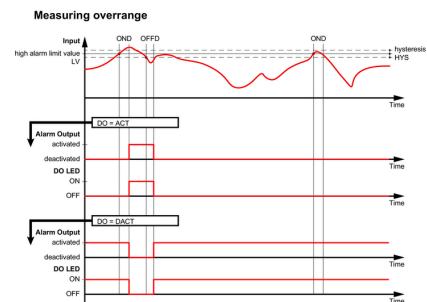
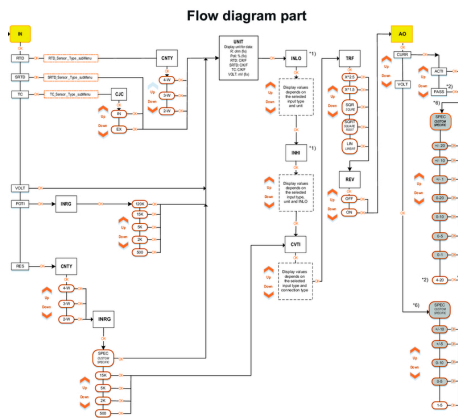
Connection diagram



Dimensioned drawing



Dimensioned drawing



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Drawings

