

ACT20P-UI-2RCO-AC-S

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

www.weidmueller.com

Product image



General ordering data

| | |
|------------|---|
| Version | Limit value monitoring, Input: temperature, R, U, I, Relay output, 90...264 V AC power supply, universal U, I, R, Ω , 2 x relays |
| Order No. | 1238910000 |
| Type | ACT20P-UI-2RCO-AC-S |
| GTIN (EAN) | 4050118027075 |
| Qty. | 1 Stück |

Erstellungs-Datum May 25, 2023 10:33:35 AM CEST

Katalogstand 12.05.2023 / Technische Änderungen vorbehalten

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Technische Daten

Dimensions and weights

| | | | |
|------------|----------|-----------------|------------|
| Depth | 113.6 mm | Depth (inches) | 4.472 inch |
| Height | 119.2 mm | Height (inches) | 4.693 inch |
| Width | 22.5 mm | Width (inches) | 0.886 inch |
| Net weight | 239 g | | |

Temperatures

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

Probability of failure

| | |
|------|-----------|
| MTBF | 180 Years |
|------|-----------|

Input

| | | | |
|---------------------------|--|--|---|
| Cable-length compensation | < ±0.002 Ω per cable resistance Ω | Influence of the sensor cable resistance | 5 Ω @ RTD- Kabel |
| Input current | configurable, ± 25 mA DC, ±5 A DC | Input resistance, current | 40 Ω |
| Input resistance, voltage | 2 MΩ, > 10 MΩ | Input voltage | configurable, ±150 mV DC, ± 600mV DC, ±30 V DC, ±300 V DC |
| Number of inputs | 1 | Potentiometer | 1.2...500 kΩ |
| Resistance | 0...10 kΩ, 0...12 kΩ, 0...15 kΩ | Sensor | RTD (2,3-wire): Pt100, Pt200, Pt1000, Ni120, Cu10, Thermocouples: B, E, J, K, L, N, R, S, T,U |
| Sensor supply | 0.1 mA / 0.05 mA (depending on measuring range) @ RTD cable, 24 V (@ 4-20 mA loop) | Temperature input range | B: +100...+1820 °C, E: -270...+1000 °C, J: (-210...+1200 °C), K: -270...+1372 °C, L: +100...+900 °C, N: (-180...+1300 °C), R: -50...+1768 °C, S: -50...+1768 °C, T: -270...+400 °C, U: -200...+600 °C |

Output (digital)

| | | | |
|----------------------------|--|----------------------------|-------------------------------------|
| Alarm function | configurable, Top and bottom limit values, window range, Alarm delay: 0...99 s, Hysteresis adjustable, auto / manual reset | Max. switching frequency | 20 Hz |
| Max. switching voltage, AC | 250 V | Max. switching voltage, DC | 110 V |
| Number of digital outputs | 2 | Rated switching current | 200mA @ 110Vdc, 6A @ 24Vdc / 240Vac |
| Type | 2 CO contacts, normal / inverse adjustment, Switching frequency 20 Hz | | |

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General data

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| 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, Requires configuration adapter 8978580000 CBX200 USB | Galvanic isolation | 4-way isolator, Input to supply / Alarm 1 / Alarm 2 |
| Long-term drift | 0.1 % / 10.000 h | 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 | 90...264 V AC | | |

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 |

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 | EC002654 | ETIM 7.0 | EC002654 |
| ETIM 8.0 | EC002654 | ECLASS 9.0 | 27-21-01-22 |
| ECLASS 9.1 | 27-21-01-22 | ECLASS 10.0 | 27-21-01-22 |
| ECLASS 11.0 | 27-21-01-22 | ECLASS 12.0 | 27-21-01-22 |

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Technische Daten

Tender specification sheets

Long specification

Short specification

Universal limit-value monitoring component with relay output and external supply
Universal limit-value monitoring component in 22.5 mm width with external voltage and sensor supply, for monitoring and isolating DC currents
 +/- 25mA...5 A,
DC voltages
 +/-600 mV... 300 V,
 2-/3-/4-wire RTD sensors , resistors, potentiometers and thermocouple signals according to IEC584.
Two relay contacts (CO) are available on the output side.
This component is programmed using FDT/DTM software.
Add-on housing for TS35 rail mounting
Dimensions: L/W/H
 119/ 22.5/ 113.6 mm
Screw connection / Nominal cross-section
 2.5 mm²
Protection degree: IP
 20
Input +/-25
 mA...5 A
DC
 +/-
600 mV...300 V DC
PT100, PT1000, Ni100, Ni1000
Resistance 0...12 kOhm
Potentiometer
 0...500 kOhm
Thermocouple types B, E, J, K, L, LR, N, R, S, T, U, W3, W5
Sensor supply 24 V DC
Output
 2 x 1 CO (hard gold-plated)
 240
V AC/ 24 V DC @ 6 A
Repeat accuracy <
 0,05 % v. E.
Step response time <
 10...90 %
 200 ms
Auxiliary power
 90...264 V AC /
 120...330 V DC
Power loss approx. 3 W @ 240 V AC
Ambient temperature range -20

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Environmental Product Compliance

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

Important note

| | |
|---------------------|--|
| 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"> • 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. |
|---------------------|--|

Approvals

Approvals



| | |
|-----------|---------|
| Approvals | CULUS; |
| ROHS | Conform |

Downloads

| | |
|---|--|
| Approval/Certificate/Document of Conformity | UL Certification Declaration of Conformity |
| Engineering Data | CAD data – STEP |
| Software | Runtime Software – WI-Manager, DTM-Library for online installation Release notes for Weidmueller FDT-DTM Software version |
| User Documentation | instruction sheet 20210120 Security Advisory - WI-Manager affected by MundM Software fdtCONTAINER vulnerability |
| Catalogues | Catalogues in PDF-format |

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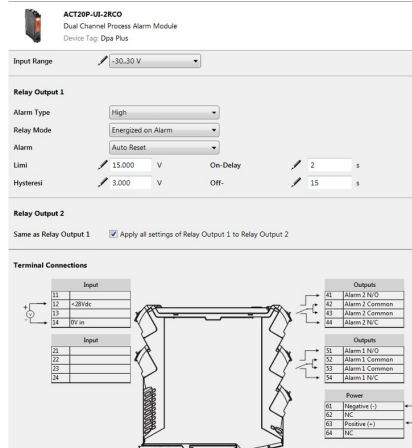
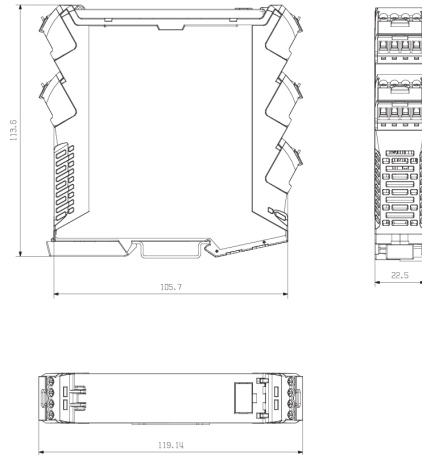
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Zeichnungen

Dimensioned drawing



Removable terminals



screenshot of configuration with FDT2 / DTM software

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Zeichnungen

