

ACT20P-TMR-RTI-S

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

www.weidmueller.com



ACT20P: The flexible solution

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

General ordering data

Version	Limit value monitoring, Input : Temperature, PT100, Output : 2 x relays
Order No.	7760054305
Type	ACT20P-TMR-RTI-S
GTIN (EAN)	6944 169747311
Qty.	1 items

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Technical data

Approvals

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ROHS Conform

UL File Number Search [UL Website](#)

Certificate no. (cULus) E338066

Dimensions and weights

Depth	114.3 mm	Depth (inches)	4.5 inch
Height	119.2 mm	Height (inches)	4.6929 inch
Width	22.5 mm	Width (inches)	0.8858 inch
Net weight	110 g		

Temperatures

Storage temperature	-40 °C...85 °C	Operating temperature	-25 °C...65 °C
Humidity	5-95% relative humidity, Tu = 40°C, without condensation		

Environmental Product Compliance

RoHS Compliance Status	Compliant with exemption		
RoHS Exemption (if applicable/known)	7a, 7cl		
REACH SVHC	Lead 7439-92-1		
SCIP	2f6dd957-421a-46db-a0c2-cf1609156924		

Input

Sensor	PT100 (2-/3-/4- wire), PTC resistor (2- wire)	Number inputs	1
Temperature input range	Configurable, PT100: -200°C...850 °C	Resistance	PTC: 0...4 kΩ

Output (digital)

Rated switching current	5 A	Number of digital outputs	1
Max. switching voltage, AC	250 V	Max. switching voltage, DC	30 V
Type	2 x 1 - or 1 x 2 changeover contact relay	Alarm function	Alarm range: -200...850 °C, Limit values: high, low, window, Hysteresis: 2 °C (adjustable), Window range: min. 20 °C, Alarm delay: 0...10 s

General data

Accuracy	0.2% FSR, ≤ 2 °C (PT100), ≤ 8 Ω (PTC)	Protection degree	IP20
Supply voltage	20...264 VUC	Long-term drift	0.1 % / 10.000 h
Step response time	≤ 500 ms	Mounting rail	TS 35
Power consumption	≤ 100 mA @ 24 VDC, ≤ 120mA @ 24V AC	Temperature coefficient	≤ 100 ppm/K
Nominal power consumption	3 VA	Configuration	With FDT/DTM software, Requires configuration

Creation date 01.03.2026 03:26:10 MEZ

Catalogue status / Drawings

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adapter 8978580000
CBX200 USB

Operating altitude ≤ 2000 m

Insulation coordination

Impulse withstand voltage	4 kV (1.2/50 µs)	EMC standards	EN 61326-1
Surge voltage category	III	Pollution severity	2
Galvanic isolation	3-way isolator, between input/output/supply	Insulation voltage	2 kV (Input /Output), 1 min, 50 Hz
Rated voltage	300 V		

Data for Ex applications (ATEX)

Marking	II 3 G Ex ec nC IIC T5 Gc	IECEx - gas labelling	Ex ec nC IIC T5 Gc
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Connection data

Type of connection	Screw connection	Tightening torque, min.	0.4 Nm
Tightening torque, max.	0.6 Nm	Clamping range, rated connection	1.5 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

Part description

Product description	<p>The ACT20P-TMR-RTI-S device records temperature sensor signals (Pt100, PTC). It has two independent relay outputs which emit an alarm when levels exceed or fall below pre-set temperature limits.</p> <p>Features</p> <ul style="list-style-type: none"> • Configuration and monitoring are performed via FDT/DTM-Software „WI-Manager“. • Operational status and relay status indicated by front panel LEDs. • 4-way galvanic isolation between input, output and power supply.
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Classifications

ETIM 8.0	EC002919	ETIM 9.0	EC002919
ETIM 10.0	EC002919	ECLASS 14.0	27-21-01-29
ECLASS 15.0	27-21-01-29		

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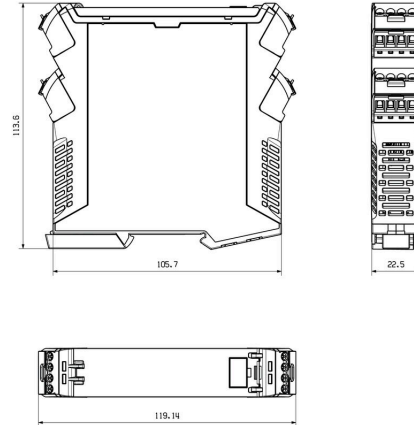
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Drawings

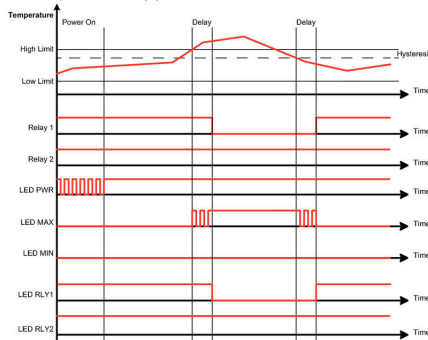
Connection diagram



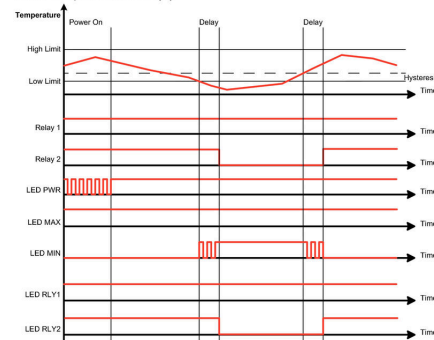
Dimensioned drawing



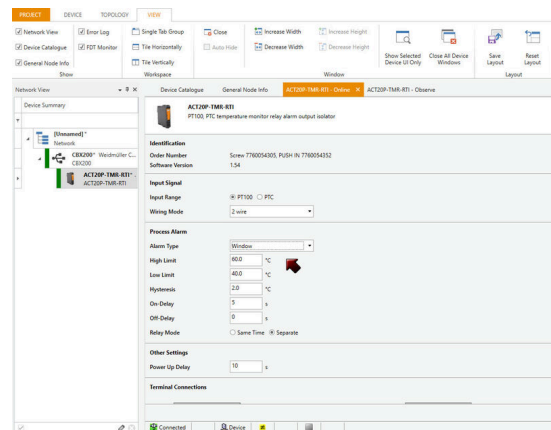
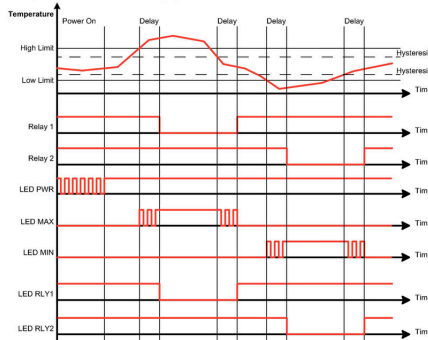
Over-temperature alarm (O)



Under-temperature alarm (U)



Temperature window alarm (W)



screenshot of configuration with FDT2 / DTM software

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Drawings



screenshot of "observe" with FDT2 / DTM software