

ACT20P-TMR-RTI-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	Limit value monitoring, Input : Temperature, PT100, Output : 2 x relays
Order No.	7760054305
Type	ACT20P-TMR-RTI-S
GTIN (EAN)	6944169747311
Qty.	1 pc(s).

ACT20P-TMR-RTI-S

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Technical data

Dimensions and weights

Depth	114.3 mm	Depth (inches)	4.5 inch
Height	119.2 mm	Height (inches)	4.693 inch
Width	22.5 mm	Width (inches)	0.886 inch
Net weight	110 g		

Temperatures

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

Input

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

Output (digital)

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	Max. switching frequency	20 Hz
Max. switching voltage, AC	250 V	Max. switching voltage, DC	30 V
Number of digital outputs	1	Rated switching current	5 A
Type	2 x 1 - or 1 x 2 changeover contact relay		

General data

Accuracy	0.2% FSR, ≤ 2 °C (PT100), ≤ 8 Ω (PTC)	Configuration	With FDT/DTM software, Requires configuration adapter 8978580000 CBX200 USB
Galvanic isolation	3-way isolator, between input/output/supply	Long-term drift	0.1 % / 10.000 h
Power consumption	≤ 100 mA @ 24 VDC, ≤ 120mA @ 24V AC	Rail	TS 35
Step response time	≤ 500 ms	Temperature coefficient	≤ 100 ppm/K
Voltage supply	20...264 VUC		

Insulation coordination

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

Data for Ex applications (ATEX)

Marking	II 3 G Ex ec nC IIC T5 Gc
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Creation date May 29, 2024 10:53:07 AM CEST

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Technical data

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

Classifications

ETIM 6.0	EC002919	ETIM 7.0	EC002919
ETIM 8.0	EC002919	ETIM 9.0	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	ECLASS 13.0	27-21-01-29

Environmental Product Compliance

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

Important note

Product information	<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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Approvals

Approvals



ROHS	Conform
UL File Number Search	UL Website
Certificate no. (cULus)	E338066

Downloads

Approval/Certificate/Document of Conformity	Application notes – ATEX Certification Application notes – IECEx Certification Application notes – Declaration of Conformity
Engineering Data	CAD data – STEP
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

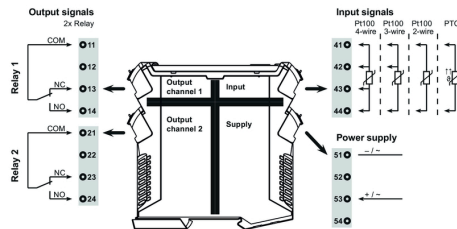
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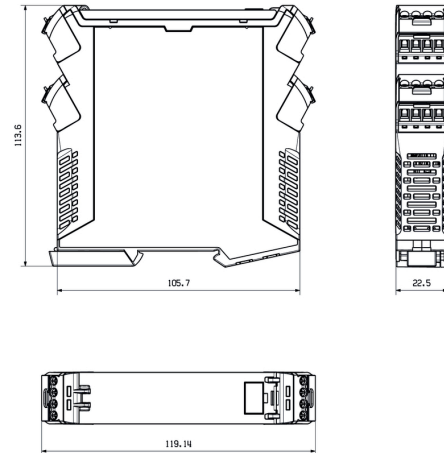
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Drawings

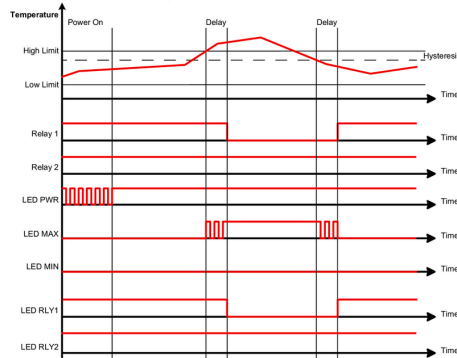
Connection diagram



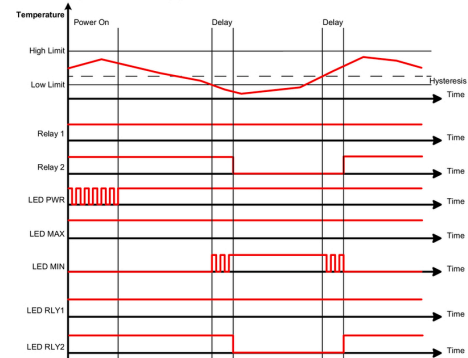
Dimensioned drawing



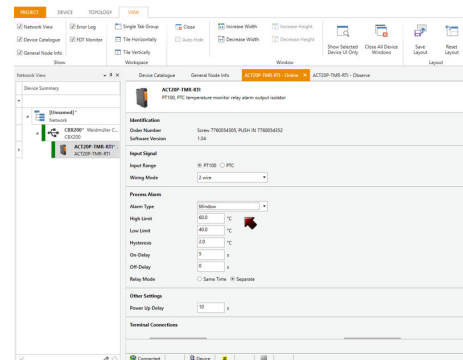
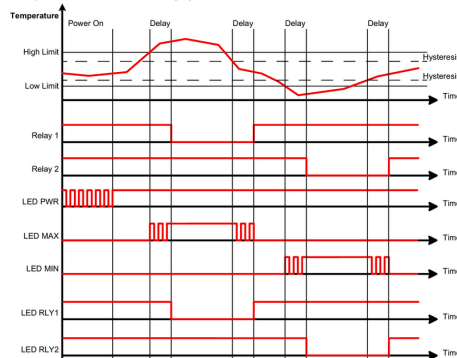
Over-temperature alarm (O)



Under-temperature alarm (U)



Temperature window alarm (W)

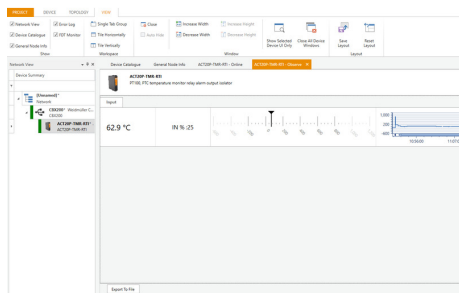


screenshot of configuration with FDT2 / DTM software

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Drawings

screenshot of "observe" with FDT2 / DTM software