

ACT20M ACT20M-TCI-AO-S

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ACT20M: The slim solution

- Safe and space-saving (6 mm) isolation and conversion
- Quick installation of the power supply unit using the CH20M mounting rail bus
- Easy configuration via DIP switch or FDT/DTM software
- Extensive approvals such as ATEX, IECEx, GL, DNV
- High interference resistance

General ordering data

Type	ACT20M-TCI-AO-S
Order No.	1375480000
Version	Temperature converter, Thermocouple, Input : Temperature, Output : I / U
GTIN (EAN)	4050118259650
Qty.	1 pc(s).

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Technical data
Dimensions and weights

Width	6.1 mm	Width (inches)	0.24 inch
Height	112.5 mm	Height (inches)	4.429 inch
Depth	114.3 mm	Depth (inches)	4.5 inch
Net weight	84 g		

Temperatures

Humidity	40 °C / 93 % rel. humidity, no condensation	Operating temperature	
Ambient temperature	-25 °C...+70 °C	Storage temperature	-40 °C...85 °C

Probability of failure

MTBF	147 Years
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Input

Number of inputs	1	Sensor	Thermocouple (type J, K)
Input measurement range	Thermocouple type J -100...+1200°C, Thermocouple type K -200...+1370°C	Temperature input range	Configurable, min. measurement range 50°C (TC)

Output

Number of outputs	1	Output voltage, note	configurable, 0(2)...10 V, 0(1)...5 V
Output current	configurable, 0...20 mA, 4...20 mA	Wire break detection	3.5 mA / 23 mA / none
cold junction compensation	configurable internal or external cold- junction compensation (thermocouple)	load impedance voltage	≥ 10 kΩ
load impedance current	≤ 600 Ω		

General data

Accuracy	absolute accuracy: < ±0.05 % of the measurement range, Basic accuracy: < ±0.5°	Configuration	DIP switch
Galvanic isolation	3-way isolator	Mounting rail	TS 35
Power consumption, max.	0.7 W	Power consumption, typ.	0.49 W
Step response time	≤ 30 ms, < 300 ms, Configurable	Supply voltage	24 V DC ± 30 %
Temperature coefficient	0,1 °C/°C, or, ≤0,01% des Messbereichs°C		

Insulation coordination

EMC standards	IEC 61326-1, NE 21	Galvanic isolation	3-way isolator
Insulation voltage	2.5 kV _{eff} / 1 min.	Pollution severity	2
Rated voltage	300 V _{eff}	Standards	IEC 61010-1
Surge voltage category	II		

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Technical data

Data for Ex applications (ATEX)

Marking II 3 G Ex nA IIC T4 Gc

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, rated connection, min.	0.5 mm ²	Clamping range, rated connection, max.	2.5 mm ²
Wire connection cross section AWG, min.	AWG 30	Wire connection cross section AWG, max.	AWG 14

Rated data UL

UL certificate E337701.pdf

Ratings IECEx/ATEX/cUL

Certificate No. (ATEX) KEMA10ATEX0183X Certificate No. (IECEX) IECEXKEM10.0090X

Classifications

ETIM 5.0	EC002653	ETIM 6.0	EC002919
eClass 6.2	27-21-01-20	eClass 7.1	27-21-01-20
eClass 8.1	27-21-01-20	eClass 9.0	27-21-01-20
eClass 9.1	27-21-01-29		

Product information

Descriptive text accessories DIN mounting rail, see accessories

Approvals

Approvals



ROHS Conform

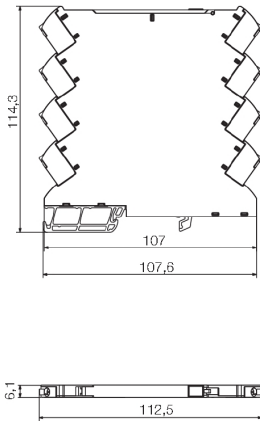
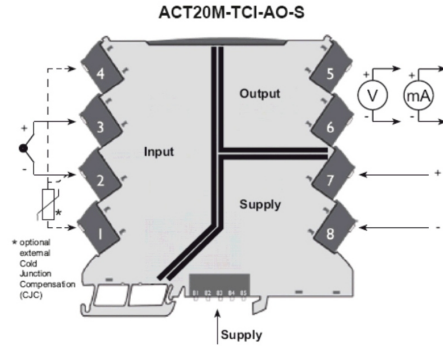
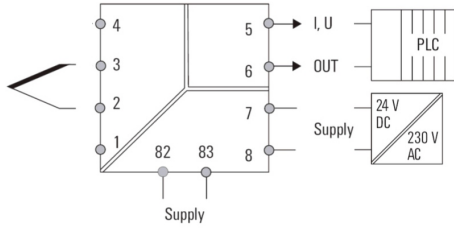
Downloads

Approval/Certificate/Document of Conformity	Declaration of Conformity
Brochure/Catalogue	CAT 4.1 ELECTR 16/17 EN
Engineering Data	EPLAN, WSCAD, Zuken E3.S
Software	DIP switch configuration tool
User Documentation	instruction sheet

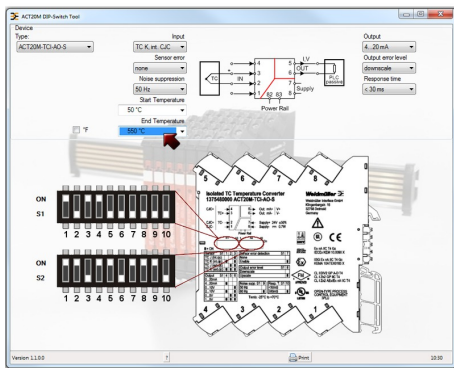
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Drawings



Power supply via the rail bus



example for DIP switch setting
(with ACT20M tool software)