

**ACT20X**  
**ACT20X-HTI-SAO-S**

**Weidmüller Interface GmbH & Co. KG**  
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The ACT20X-HTI-SAO / 2HTI-2SAO temperature transducers record temperatures from PT100 sensors and thermocouples from Ex Zone 0 areas. Current loops from 0(4) to 20 mA can also be connected on the input side. On the output side, there are active and passive current loops available for the safe area.

Integrated alarm contacts issue an alert in the event of a malfunction; this makes troubleshooting easier and increases the system availability.

The rail-mounted current output isolators are optionally available in one- or two-channel versions. With 11 mm width per channel, the devices need little space in the electrical cabinet.

**General ordering data**

Order No.	<a href="#">8965470000</a>
Type	ACT20X-HTI-SAO-S
Version	ACT20X, EX signal isolating converter, 1-channel version
GTIN (EAN)	4032248785087
Qty.	1 pc(s).

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## Technical data

### Dimensions

Length	119.2 mm	Width	22.5 mm
Height	113.6 mm		

### Temperatures

Operating temperature	-20 °C...+60 °C	Storage temperature	-20 °C...+85 °C
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### input

Type		Sensor	RTD: PT10, PT20, PT50, PT100, PT250, PT300, PT400, PT500, PT1000, Ni50, Ni100, Ni120, Ni1000, Thermocouples: B, E, J, K, N, R, S, T ; in compliance with IEC 60584-1 and L, U in compliance with DIN43710
	RTD, TC, DC (mA)		
Sensor supply	3.8...26 V DC	Temperature input range	Configurable
Input current	0(4)...20 mA	Input resistance, current	20 Ω + PTC 50 Ω
Line resistance in measuring circuit	≤ 50 Ω		

### Output

Influence of load resistance	≤ 0.01% of span / 100 Ω	Output signal limit	3.8...20.5 mA / 0...20.5 mA (dependent on range)
Output current	0(4)...20 mA / 20...4 mA (configurable)	load impedance current	≤ 600 Ω

### Alarm output

Type		Nominal switching voltage	≤ 125 V AC / 110 V DC (safe area) ≤ 32 V AC / 32 V DC (Zone 2)
	Relay, 1 NC (voltage-free)		
Continuous current	≤ 0.5 A AC / 0.3 A DC (safe zone), ≤ 0.5 A AC / 1 A DC ( Zone 2)	Power rating	≤ 62.5 VA / 32 W (safe area) ≤ 16 VA / 32 W (Zone 2)

### General specifications

Supply voltage	19.2 – 31.2 V DC	Type of connection	Screw connection
Power consumption	≤ 3 W (2 channels)	Protection degree	IP 20
Humidity	0...95 % (no condensation)		

### Insulation coordination

EMC standards	DIN EN 61326	Insulation voltage	2.6 kV (input / output)
Rated voltage	300 V		

### Output current loop

2-wire supply	3.5...26 V DC	Output current (current loop)	4...20 mA
Load resistance	(U <sub>B</sub> - 3.5) / 0.023 A	Influence of load resistance	≤ 0.01% of span / 100 Ω

**Datasheet**

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**Technical data**

**Data for Ex applications (ATEX)**

Voltage $U_0$	8.7 V DC	Current $I_0$	18.4 mA
Power $P_0$	40 mW		

**Ratings IECEx/ATEX**

Certificate No. (ATEX)	KEMA10ATEX0020X	Certificate No. (IECEX)	IECEXKEM09.0092X
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**Classifications**

ETIM 3.0	EC002479	ETIM 4.0	EC002479
UNSPSC	30-21-18-01	eClass 5.1	27-21-01-07
eClass 6.0	27-21-01-07		

**Approvals**

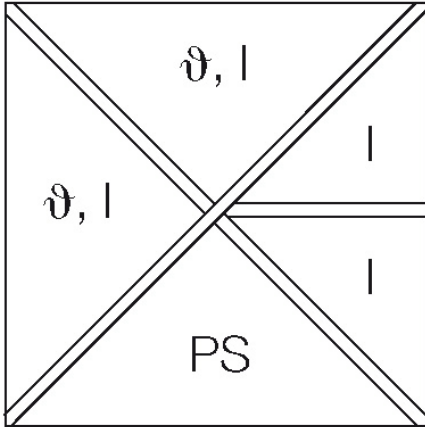
Approvals	CULUS; FMEX; IECEXKEM; KEMAATEX
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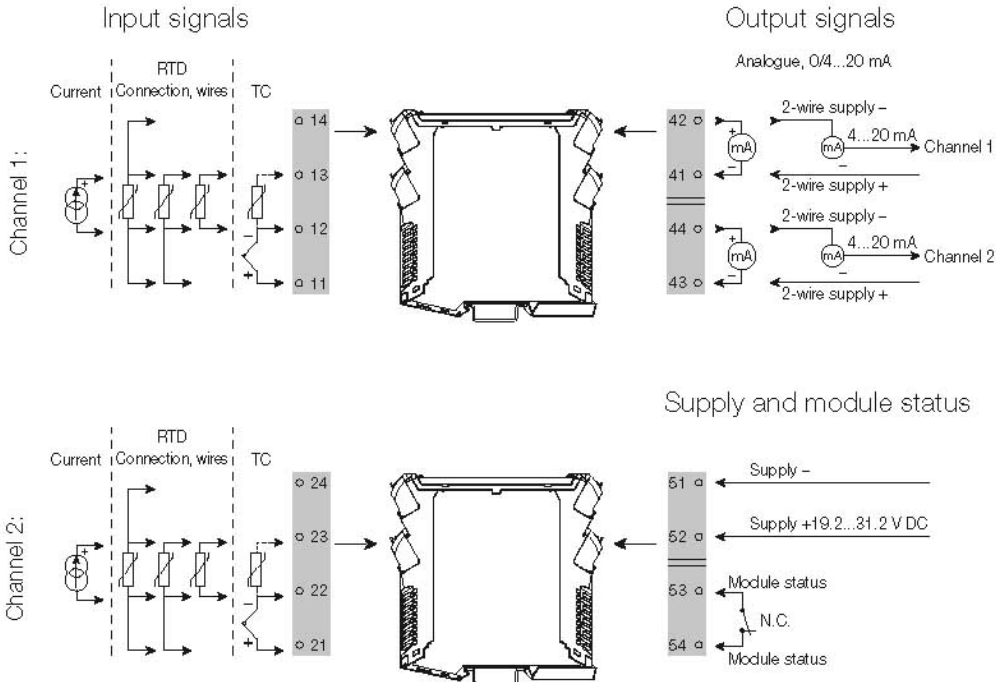
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**Drawings**


**Electric symbol**



**Circuit diagram**



 Zone 0, 1, 2, 20, 21, 22 / Cl. I/II/III, div. 1 gr. A-G

 Zone 2 / FM Cl. 1, div. 2, gr. A-D o safe area