

**ACT20X
ACT20X-HUI-SAO-S**

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 16
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-2083
www.weidmueller.com



The ACT 20X HUI-SAO-S/ SAO-LP universal measurement and signal isolating converters can be configured individually. Temperature signals from PT100 sensors and thermocouples as well as analogue DC current and voltage signals can be recorded from the Ex Zone 0.

On the output side, optional current/voltage (SAO-S) or 4–20 mA current loop signals (SAO-LP / SAO-S) are provided for the safe zone.

The ACT20X-HUI-SAO-S also has a relay output for configuring its switching threshold. An integrated alarm contact is available on this device for issuing an alert in the event of a malfunction. This makes troubleshooting easier and also increases system availability.

The power supply of the signal isolating converter is either done using the integrated power supply (SAO-S) or alternatively over the output side current loop (SAO-LP).

The rail mountable devices are designed with one channel, and optionally available in widths of 12.5 mm (SAO-LP) or 22.5 mm (SAO-S).

General ordering data

Order No.	8965490000
Type	ACT20X-HUI-SAO-S
Version	ACT20X, EX signal isolating converter, 1-channel version
GTIN (EAN)	4032248785100
Qty.	1 pc(s).

ACT20X
ACT20X-HUI-SAO-S

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 16
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-2083
www.weidmueller.com

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
-----------------------	-----------------	---------------------	-----------------

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
Sensor supply	RTD, TC, DC (mA, V) 28...16.5 V DC/0...20 mA	Temperature input range	Configurable
Resistance	0...1k5 Ω, 0...750 Ω	Input voltage	0...12 V DC, configurable: 0.1 / 0.2...1 / 0...5 / 0...10 and 2...10 V DC
Input current	0(4)...20 mA	Input resistance, voltage	> 10 MΩ
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...23 mA, configurable: 0... 20 / 4...20 / 20...0 / 20...4 mA	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)
Continuous current	Relay, 1 NC (voltage-free) ≤ 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	≤ 3.5 W	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		

ACT20X ACT20X-HUI-SAO-S

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 16
 D-32758 Detmold
 Germany
 Fon: +49 5231 14-0
 Fax: +49 5231 14-2083
 www.weidmueller.com

Technical data

Digital output

Type	Relay, 1 NO	Nominal switching voltage	≤ 250 V AC / 30 V DC (safe area) ≤ 32 V AC / 32 V DC (Zone 2)
Power rating	≤ 500 VA / 60 W (safe area) ≤ 16 VA / 32 W (Zone 2)	Continuous current	≤ 2 A AC/DC (safe area, Zone 2 area)
Function	Configurable switching thresholds		

Output current loop

2-wire supply	≤ 26 V DC	Output current (current loop)	4...20 mA
Load resistance	≤ (Vs - 10 V) / 20 mA (current loop)	Influence of load resistance	≤ 0.01% of span / 100 Ω

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)	KEMA10ATEX0071X	Certificate No. (IECEx)	IECExKEM10.0034X
------------------------	-----------------	-------------------------	------------------

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

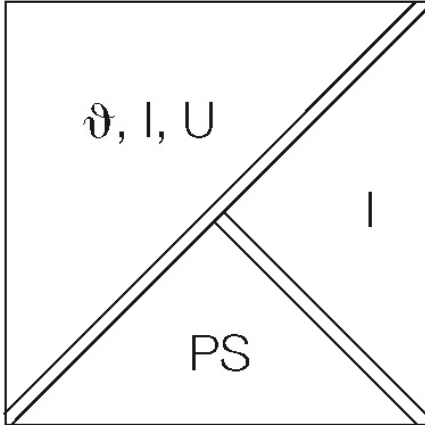
Approvals	CULUS; FMEX; IECExKEM; KEMAATEX
-----------	------------------------------------

**ACT20X
ACT20X-HUI-SAO-S**

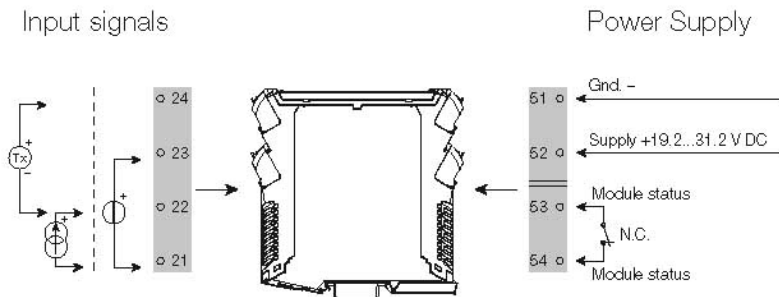
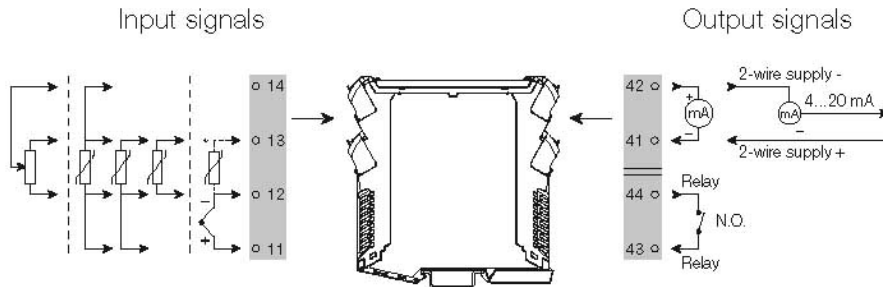
Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 16
 D-32758 Detmold
 Germany
 Fon: +49 5231 14-0
 Fax: +49 5231 14-2083
 www.weidmueller.com


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