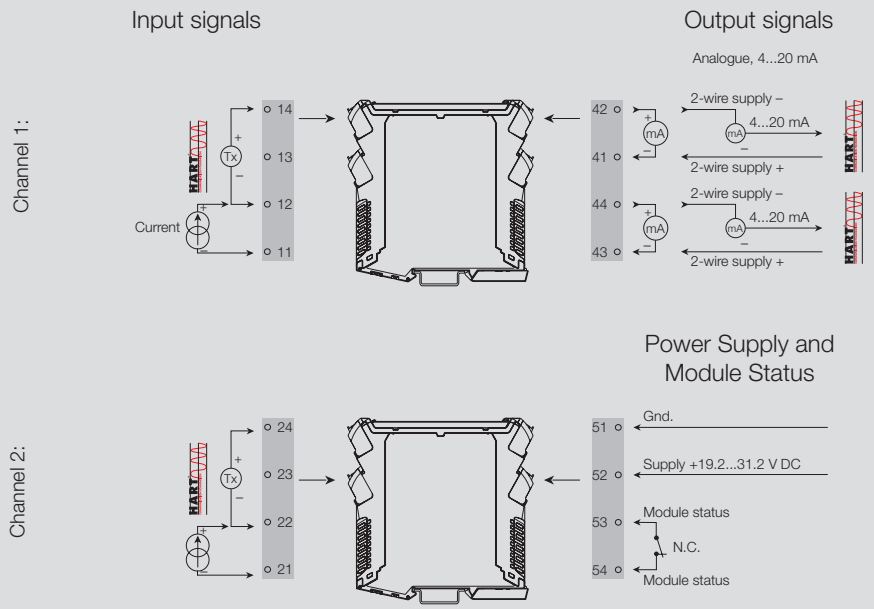
## ACT20X

### Current supply isolator, HART® Transparent

The ACT20X-HAI-SAO current supply isolator is a HART® protocol, transparent signal isolator for analogue input signals from the Ex zone 0. It provides an analogue signal for the safe zone on the output side. It is optionally available in a single-channel or double-channel version.

### Connection diagram: ACT20X-HAI-SAO current supply isolator

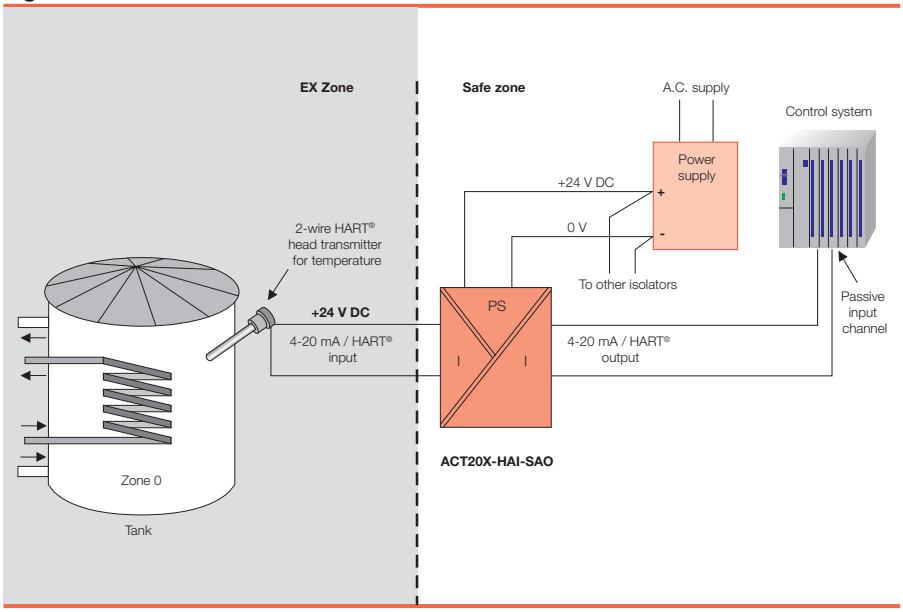



### Ex label

| |
|---|
| **ATEX** |
| II 3 G Ex nA nC IIC T4 |
| II (1) G [Ex ia] IIC/IIB/IIA |
| II (1) D [Ex iaD] |
| **IECEx** |
| Ex nA nC IIC T4 Gc |
| [Ex ia Ga] IIC/IIB/IIA |
| [Ex ia Da] IIIC |
| **FM** |
| Installation in CL I DIV2 GP A-D T4 |
| Protects Ex circuits, in compliance with |
| Cl. I-III ABT 1/2 GP A-G or |
| Cl. I Zn2 AEx/Ex nA nC [ia] IIC T4. |

**Note**

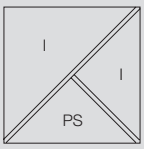
### Application example: measuring temperature with a head transmitter, signal transmission with HART®



## Current supply isolator

- Converts analogue signals from the Ex Zone 0 into analogue output signals for the safe zone.
- Active and passive current inputs
- HART® Transparent
- PC configuration with FDT/DTM software, download at www.weidmueller.com
- Relay output for error alarm
- 2-channel module can also be used as signal splitter

## ACT20X-HAI-SAO-S / 2HAI-2SAO-S




## Technical data

### *Preliminary product data!*

| | |
|---|---|
| **Input** | |
| Input current | 4...20 mA |
| Sensor supply | > 15 V DC at 20 mA |
| Residual ripple (current loop) | < 7.5 $mV_{eff}$ |
| **Output analogue** | |
| Output current | 4...20 mA |
| Output signal limit | < 28 mA |
| load impedance current | ≤ 600 Ω |
| 2-wire supply | ≤ 26 V DC |
| Accuracy | < 0.1% span |
| Temperature coefficient | < 0.1% vom Span/°C ($T_U$) |
| Step response time | ≤ 5 ms |
| Cut-off frequency (-3 dB) | 0.5…2.5 kHz @ 3.5…23 mA bi-directional HART® signal |
| **Alarm output** | |
| Type | Relay, 1 NO (voltage-free) |
| Nominal switching voltage | ≤ 125 V AC / 110 V DC (safe area)<br>≤ 32 V AC / 32 V DC (Zone 2) |
| Continuous current | ≤ 0.5 A AC / 1 A DC (safe area, Zone 2) |
| Power rating | ≤ 62.5 V AC / 32 W (safe area)<br>≤ 16 VA / 32 W (Zone 2) |
| **General data** | |
| Supply voltage | 19…31.2 V DC |
| Power consumption | ≤ 3 W (2 channels) |
| Tightening torque, min. / Tightening torque, max. | 0.4 Nm / 0.6 Nm |
| Ambient temperature / Storage temperature | -20 °C...+60 °C / -20 °C...+85 °C |
| **Approvals** | |
| Approvals | cULus; CE; ATEX; IECEX; FM |
| **Insulation coordination** | |
| Insulation voltage | 2.6 kV (input / output) |
| Rated voltage | 300 V |
| EMC standards | DIN EN 61326 |
| **Data for Ex applications (ATEX)** | |
| Voltage $U_0$ | 28 V DC |
| Current $I_0$ | 93 mA |
| Power $P_0$ | < 650 mW |

| **Dimensions** | |
|---|---|
| Clamping range (nominal / min. / max.) | mm² |
| Length x width x height | mm |
| **Note** | |

| **Screw connection** |
|---|
| 2.5 / 0.5 / 2.5 |
| 119.2 / 22.5 / 113.6 |
| |

## Ordering data

| Type | Qty. | Order No. |
|---|---|---|
| **1-channel version** | | |
| ACT20X-HAI-SAO-S | 1 | **8965430000** |
| **2-channel version** | | |
| ACT20X-2HAI-2SAO-S | 1 | **8965440000** |

CBX200 USB configuration interface - 8978580000