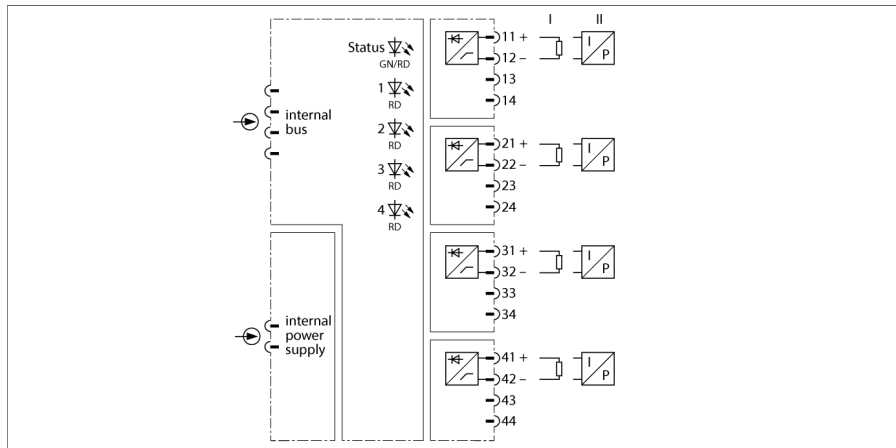


excom I/O System

Output Module, Analog, 4-channel

AO401EX



The output module AO401Ex is used for the connection of intrinsically safe analog actuators such as control valves or process indicators.

The module features protection class Ex ib IIC and can be mounted in zone 1 in combination with the excom system. The explosion protection category of the outputs is Ex ia IIC resp. Ex iaD. The outputs are galvanically isolated from each other.

HART-compatible transducers can be connected to the module. The field device can thus be parametrized directly at the terminals on the DIN rail with a licensed modem. Additional impedance in the circuit is not necessary.

The host system transmits a digitized control value 0...21000 (independent of the parametrized measuring range). This raw value is then transformed by the AO401Ex into a signal between 0...21 mA.

- Output module for the connection of analog actuators
- Complete galvanic isolation



Dimensions

Type	AO401EX
ID	6884205
Supply voltage	Via module rack, central power supply module
Power consumption	≤ 2.5 W
Galvanic isolation	Complete galvanic isolation acc. to EN 60079-11
Number of channels	4
Output circuits	Intrinsically safe acc. to EN 60079-11 0/4...20 mA444
No-load voltage	16 VDC
External load	≤ 640 Ω
Short circuit	< 50 Ω (only in live zero mode)
Wire break	< 2 mA (only in live zero mode)
Reference temperature	25 °C
Resolution	13 Bit
Measuring accuracy (including linearity, hysteresis and repeatability)	≤ 0.06 % of full scale
Linearity deviation	≤ 0.05 % full scale
Temperature drift	≤ 0.005 % of full scale/K
Rise time/fall time	≤ 50 ms (10...90 %)
Max. measurement tolerance under EMC influence	≤ 0.1 %
Ex approval acc. to conformity certificate	PTB 00 ATEX 2179
Device designation	Ex II 2 (1) G Ex ib [ia Ga] IIC T4 Gb
Device marking	Ex II (1) D [Ex ia Da] IIIC
Displays/Operating elements	
Operational readiness	1 × green/red
State/ Fault	4 × red
Housing material	Plastic
Connection mode	module, plugged on rack
Protection class	IP20
Ambient temperature	-20...+70 °C
Relative humidity	≤ 93 % at 40 °C acc. to IEC 60068-2-78
Vibration test	Acc. to IEC 60068-2-6
Shock test	Acc. to IEC 60068-2-27
EMC	Acc. to EN 61326-1 Acc. to Namur NE21
MTTF	78 years acc. to SN 29500 (Ed. 99) 40 °C
Dimensions	18 x 118 x 106 mm
Approvals	ATEX cFMus cFM INMETRO EAC Ex DNV GL BV LR KR CMI KCC UKCA CE

