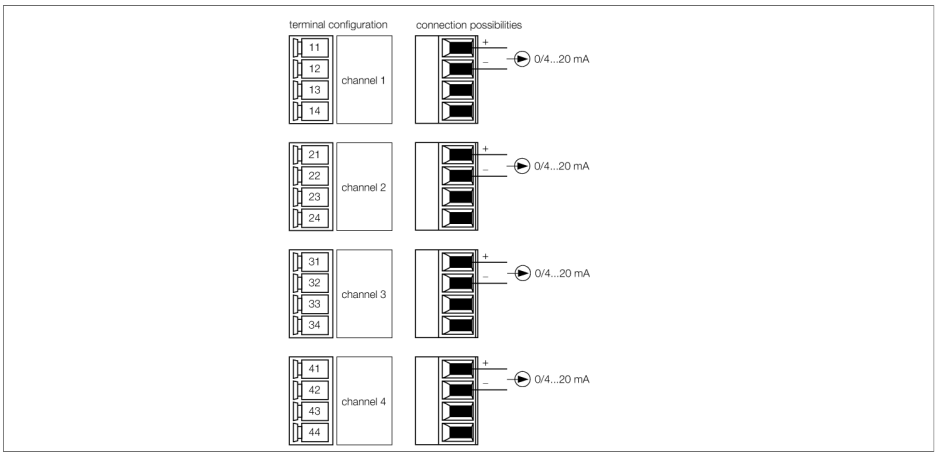
Remote I/O system *excom*® output module, analog, 4-channel AO401Ex



The output module AO401Ex is designed for 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 outputs feature protection class Ex ia IIC resp. Ex iaD.

The inputs are galvanically separated.

HART® capable transducers can be connected to the module. The field device can thus be parameterized directly at the terminals on the DIN rail with a licensed modem. Additional impedance at the circuit is unnecessary.

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 separation**

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Hans Turck GmbH & Co.KG ● D-45472 Mülheim an der Ruhr ● Witzlebenstraße 7 ● Tel. 0208 4952-0 ● Fax 0208 4952-264 ● more@turck.com ● www.turck.com

Remote I/O system *excom*®
output module, analog, 4-channel
AO401Ex

Industrial Automation

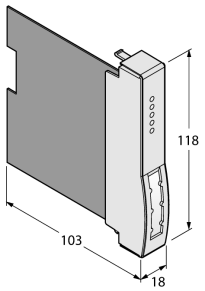
Type code	AO401Ex
Ident no.	6884205
Supply voltage	via the backplanes, central power supply
Power consumption	≤ 2.2 W
Galvanic separation	complete galvanic isolation acc. to EN 60079-11
Number of channels	4-channel
Output circuits	intrinsically safe acc. to EN 60079-11 0/4…20 mA
No-load voltage	16 VDC
External load	≤ 640 Ω
Short circuit	> 50 Ω (only with live zero)
Wire-break	< 2 mA (only with live zero)
Resolution	13 Bit
max. Messabweichung	**≤ max. Messabweichung %** / **max. Messabweichung** 0.1
Linearitätsabweichung	≤ 0.05% of full scale vom Endwert
Temperature drift	≤ 0.005 % / K
Rise time/fall time	≤ 50 ms (10 … 90 %)
Ex approval acc. to conformity certificate	PTB 00 ATEX 2179
Device designation	Ⓔx II 2 (1) G Ex ib [ia] IIC T4 Ⓔx II (1) D [Ex iaD]
Max. values:	terminal connection 1+2
Max.output voltage U_o	≤ 18.9 V
Max. output current I_o	≤ 80 mA
Max. output power P_o	≤ 510 mW
Internal resistance R_i	334 Ω
Characteristic	trapezoidal
Internal inductance/capacitance L_i/C_i	L_i negligibly small C_i negligibly small

External inductance/capacitance L_o/C_o

	IIC	IIB
L_o [mH]	C_o [µF]	C_o [µF]
2.0	0.12	1.00
1.0	0.12	1.00
0.5	0.14	1.00
0.2	0.18	1.20

Indication	
Operational readiness	1 x green / red
State/ Fault	4 x red
Housing material	Plastic
Connection mode	module, plugged on rack
Protection class	IP20
Ambient temperature	-20…+70 °C
Relative humidity	≤ 95% at 55 °C acc. to EN 60068-2
Vibration test	acc. to IEC 60068-2-6
Shock test	acc. to IEC 60068-2-27
EMC	acc. to EN 61326-1 (2006) acc. to Namur NE21 (2007)
MTTF	78 years acc. to SN 29500 (Ed. 99) 40 °C
Dimensions	18x 118x 103 mm
Weight	75 g

Dimensions



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