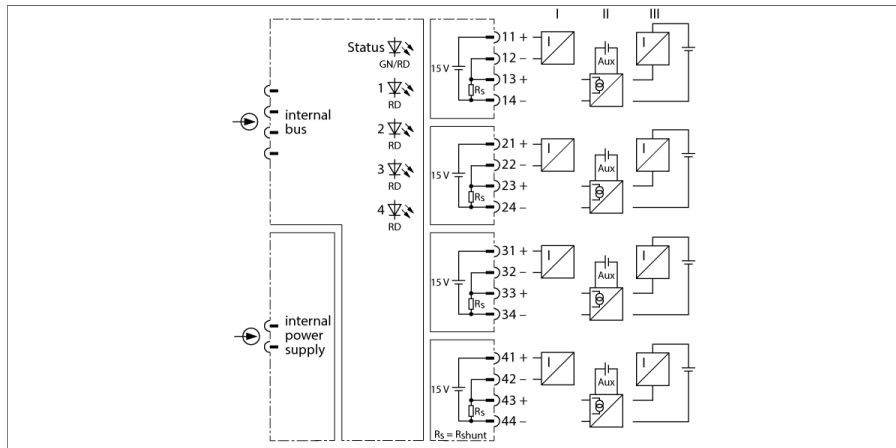


excom I/O System

Input Module, Analog, 4-channel

AI401EX



The input module AI401Ex is used for the connection of 2-wire transducers (active input = source mode / transducer passive) or 4-wire transducers (passive input = sink mode / transducer active).

The module features protection class Ex ib IIC and can be mounted in zone 1 in combination with the excom system. The field circuits feature ignition protection type Ex ia IIC resp. Ex iaD.

The field circuits 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 measuring range is digitized in the scope of 0...21 mA. For clear reading, the digitized value is displayed in a range of 0 ... 21000 (independent of the parametrized measuring range) and transmitted to the host system.

- Input module for the connection of passive transmitters (active inputs) or active transmitters (passive inputs).
- Complete galvanic isolation



Dimensions

Type	AI401EX
ID	6884204
Supply voltage	Via module rack, central power supply module
Power consumption	≤ 2.2 W
Galvanic isolation	Complete galvanic isolation acc. to EN 60079-11
Number of channels	4
Input circuits	Intrinsically safe acc. to EN 60079-11
	0/4...20 mA
Supply voltage	15 VDC at 20 mA
Overload capability	> 21 mA
Low level control	< 3.6 mA
Short-circuit	> 24 mA (only in live zero mode)
Wire-break	< 2 mA (only in live zero mode)
Reference temperature	25 °C
Resolution	14 Bit
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 03 ATEX 2217
Device designation	Ex II 2 (1) G Ex ib [ia] IIC T4
Device marking	Ex II (1) D [Ex ia] 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	77 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

