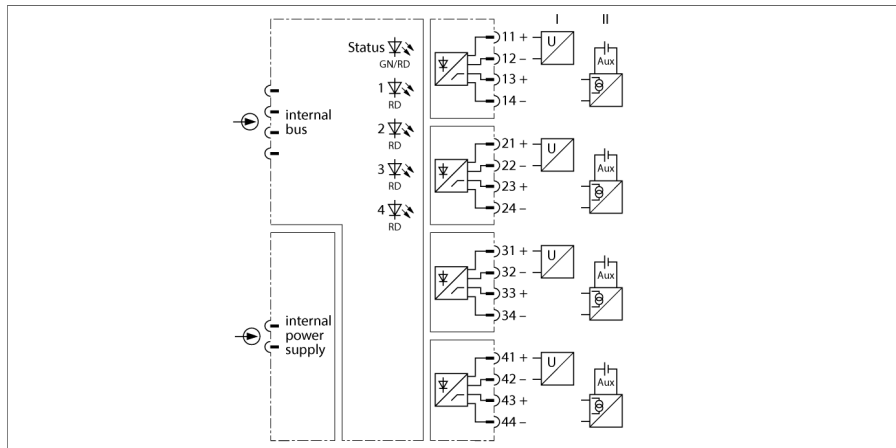


excom I/O System

Input Module, Analog, Passive, 4-channel

AI41EX



The input module AI41Ex is used for the connection of 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 excom. The ignition protection type of the inputs is Ex ia IIC.

The inputs are galvanically isolated from each other.

The resolution is 14 bit, i.e. the analog value between 0...21 mA is represented as a number between 0 and 16383. For clear reading, the digitized value is displayed in a range of 0 ... 21000 and transmitted to the host system. For transmission to the host system, voltage is indicated as a value in a range between 0... 10000.

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

Dimensions

Type	AI41EX
ID	6884020
Supply voltage	Via module rack, central power supply module
Power consumption	≤ 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 0/2...10 VDC
Overload capability	> 22 mA
Low level control	< 3.6 mA
Short-circuit	< 5 V (only in live zero mode)
Wire-break	< 2 mA (only in live zero mode)
Reference temperature	25 °C
Resolution	14 Bit
Linearity deviation	≤ 0.1 % full scale
Temperature drift	≤ 0.005 % of full scale/K
Rise time/fall time	≤ 50 ms (10...90 %)
Ex approval acc. to conformity certificate	PTB 03 ATEX 2023
Device designation	Ex II 2 (1GD) G Ex ib [ia] IIC T4
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...+60 °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	98 years acc. to SN 29500 (Ed. 99) 40 °C
Dimensions	18 x 118 x 106 mm
Approvals	ATEX INMETRO EAC Ex CMI CE

