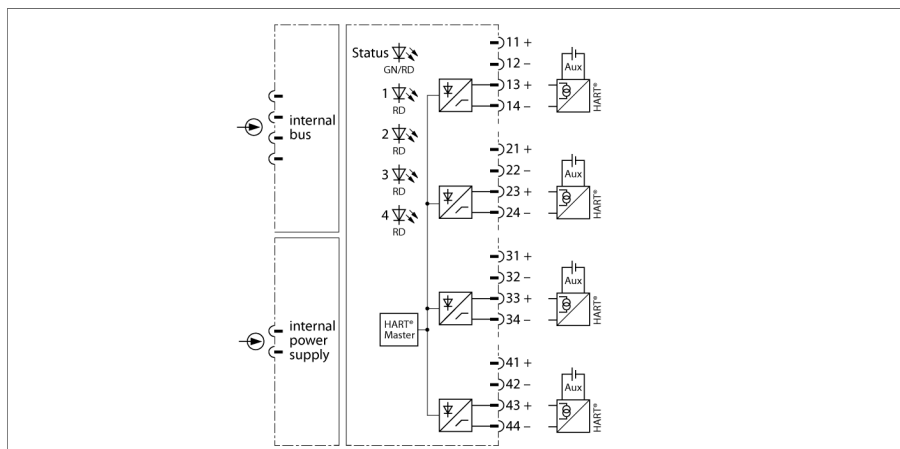




The input module AIH41Ex is used for the connection of 4-wire transducers (passive input = sink mode / transducer active).

The module features protection class Ex ib IIC and can be mounted in zone 1 in combination with *excom®*. The explosion protection category of the inputs is Ex ia IIC.

The inputs are not galvanically isolated from each other. When connecting the field devices, care has to be taken that all outputs are on the same potential.

HART® compatible sensors connected to the module communicate with the HART® controller.

The resolution is 1 μ A per digit, 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.

Up to 8 HART® variables (max. 4 per channel) can be read via the cyclical PROFIBUS data traffic. The bidirectional exchange of variables between the host system and the HART® transmitter is implemented via PROFIBUS-DPV1.

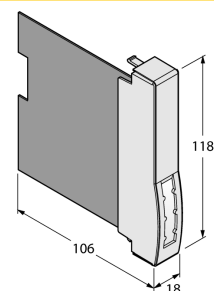
Parameters like wire-break or short-circuit monitoring, measuring range, HART® communication etc., can be adjusted for each channel separately and are solely initialized by the PROFIBUS master.

- **Input module for connection of 4-wire transmitters**
- **Transmission of HART® data**



Input Module, Analog, Passive, HART®, 4-channel AIH41EX

Dimensions



Type designation	AIH41EX
Ident-No.	6884005
Supply voltage	via the backplanes, central power supply
Power consumption	≤ 1.5 W
Galvanic isolation	to int. bus and supply circuit
Number of channels	4-channel
Input circuits	Intrinsically safe acc. to EN 60079-11
	0/4...20 mA
HART® Impedance	> 240 Ω
Overload capability	> 21 mA
Low level control	< 3.6 mA
Short-circuit	< 5 V (only with "live zero")
Wire-break	< 2 mA (only in live zero mode)
Resolution	1 µA / digit
Linearity deviation	≤ 0.1 % 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 % with shielded signal cable ≤ 1 % with unshielded signal cable
Ex approval acc. to conformity certificate	IECEX PTB 12.0018X
Ex approval acc. to conformity certificate	PTB 00 ATEX 2059 X
Device designation	Ex II 2 (1) G Ex ib [ia Ga] IIC T4 Gb
Device marking	Ex II (1) D [Ex ia IIIC Da]
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...+60 °C
Relative humidity	≤ 93 % at 40 °C acc. to EN 60068-2-78: test cab
Vibration test	acc. to IEC 60068-2-6
Shock test	acc. to IEC 60068-2-27
EMC	acc. EN 61326-1 (2013)
	acc. to Namur NE21 (2012)
MTTF	93 years acc. to SN 29500 (Ed. 99) 40 °C
Dimensions	18 x 118 x 106 mm
Approvals	ATEX IECEX FM TR CU CMI KOSHA INMETRO GL DNV BV LR