



The output module AOH40Ex 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 excom. The explosion protection category of the outputs is Ex ia IIC.

The outputs 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 actuators that communicate directly with the HART controller can be connected to the module.

The resolution is 13 bit, i.e. the analog value of 0...21 mA is represented as a number between 0 and 8191. For easier operation, the host system operates in a value range between 0...21000. This raw value is reduced by the AOH40EX to a 13-bit resolution.

Parameters such as line monitoring, substitute values etc. can be adjusted for each channel separately and are initialized solely by the master.

- Output module for the connection of analog actuators
- Transmission of HART data

Type designation	AOH40EX
Ident no.	6884003
Supply voltage	Via module rack, central power supply module
Power consumption	≤ 3 W
Galvanic isolation	to int. bus and supply circuit
Number of channels	4
Output circuits	intrinsically safe acc. to EN 60079-11
No-load voltage	0/4...20 mA
HART impedance	16 VDC
External load	> 240 Ω
Short circuit	≤ 600 Ω
Wire break	< 50 Ω (only in live zero mode)
	> 15 V (only in live zero mode)
Reference temperature	25 °C
Resolution	13 Bit
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 12.0030
Ex approval acc. to conformity certificate	PTB 02 ATEX 2051
Device designation	Ⓢ II 2 (1) G Ex ib [ia Ga] IIC T4 Gb
Device marking	Ⓢ II (1) D [Ex ia Da] IIIC
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	66 years acc. to SN 29500 (Ed. 99) 40 °C
Dimensions	18 x 118 x 106 mm
Approvals	ATEX IECEX TR CU CMI KOSHA NEPSI INMETRO DNV GL BV LR

Dimensions

