Features

- System Board for HIMA, HIMax
- For 16-channel card X-AO 1601 (AO, single mode)
- 16-channel card X-AO 1601 (AO, redundant mode on request)
- For 16 modules
- Recommended module: HiC2031 (AO)
- 24 V DC supply
- Hazardous area: spring terminals, blue
- Safe area: HIMA system connector, 96-pin

Function

The function of the Termination Board and the connector pin assignment is exactly fitted to the requirements of HIMA system.

The signal is output to the process control system via the system connector.

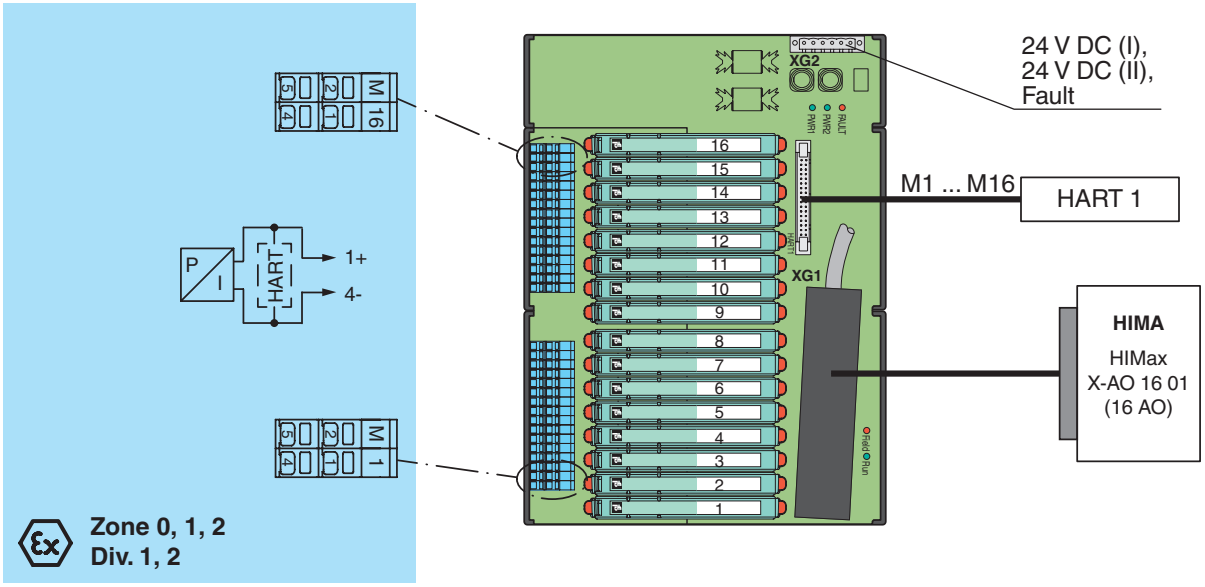
Information about missing supply voltage of the isolated barriers is available for the system as volt-free contact. Wiring errors from field will be reported via the same relay contact if the isolated barriers support this function.

The Termination Board has a robust glass fiber reinforced plastic housing.

The Termination Board is mounted in the switch cabinet on a 35 mm DIN mounting rail according to EN 60175.

Assembly

Connection



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Supply		
Connection		XG2: terminals 1, 3 (+); 2, 4 (-)
Rated voltage	U_n	24 V DC , in consideration of rated voltage of used isolated barriers
Voltage drop		0.9 V , voltage drop across the series diode on the Termination Board must be considered
Ripple		≤ 10 %
Fusing		4 A , in each case for 16 modules
Power loss		≤ 500 mW , without modules
Reverse polarity protection		yes
Redundancy		
Supply		Redundancy available. The supply for the modules is decoupled, monitored and fused.
Error message output		
Connection		XG2: terminals 5, 6
Output type		volt-free contact
Contact loading		30 V DC, 1 A
Indicators/settings		
Display elements		LED PWR1 (Termination Board power supply), green LED LED PWR2 (Termination Board power supply), green LED LED FAULT (fault indication), red LED - LED lits: power supply failure - LED flashes: module failure LED Run, green LED - The HIMax I/O module is supplied with power and is connected to the Termination Board (FTA) via a system cable. LED Field, red LED - The HIMax I/O module detects faults in the connection between HIMax I/O module and Termination Board (FTA).
Directive conformity		
Electromagnetic compatibility		
Directive 2004/108/EC		EN 61326-1:2013
Conformity		
Electromagnetic compatibility		NE 21:2012 For further information see system description.
Degree of protection		IEC 60529:2001
Ambient conditions		
Ambient temperature		-20 ... 60 °C (-4 ... 140 °F)
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)
Mechanical specifications		
Degree of protection		IP20
Connection		hazardous area connection (field side): spring terminals, blue safe area connection (control side): HIMA system connector, 96-pin power supply connection: pluggable spring terminals, black
Core cross-section		0.25 ... 1.5 mm^2 (24 ... 16 AWG)
Material		housing: polycarbonate, 10 % glass fiber reinforced
Mass		approx. 800 g
Dimensions		266 x 200 x 163 mm (10.5 x 7.9 x 6.42 in) , height including module assembly
Mounting		on 35 mm DIN mounting rail acc. to EN 60715:2001
Data for application in connection with Ex-areas		
EC-Type Examination Certificate		CESI 06 ATEX 022 , for additional certificates see www.pepperl-fuchs.com
Group, category, type of protection		⟨Ex⟩ II (1)G [Ex ia Ga] IIC ⟨Ex⟩ II (1)D [Ex ia Da] IIIC ⟨Ex⟩ I (M1) [Ex ia Ma] I
Safe area		
Maximum safe voltage		250 V (Attention! U_m is no rated voltage.)
Electrical isolation		
Field circuit/control circuit		safe electrical isolation acc. to IEC/EN 60079-11, voltage peak value 375 V
Directive conformity		
Directive 94/9/EC		EN 60079-0:2012+A11:2013 , EN 60079-11:2012 , EN 60079-26:2007 , EN 50303:2000
International approvals		
UL approval		
Control drawing		116-0327
IECEx approval		IECEx CES 06.0003
Approved for		[Ex ia Ga] IIC [Ex ia Da] IIIC [Ex ia Ma] I
General information		

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Supplementary information	EC-Type Examination Certificate, Statement of Conformity, Declaration of Conformity, Attestation of Conformity and instructions have to be observed where applicable. For information see www.pepperl-fuchs.com.
Accessories	
Designation	optional accessories: - HART Communication Board HiATB01-HART-2X16 - HART Multiplexer Master HiDMux2700 - HART connection cable HiACA-UNI-FLK34-*M* - Label Carrier HiALC-Hi*TB-SET-1**

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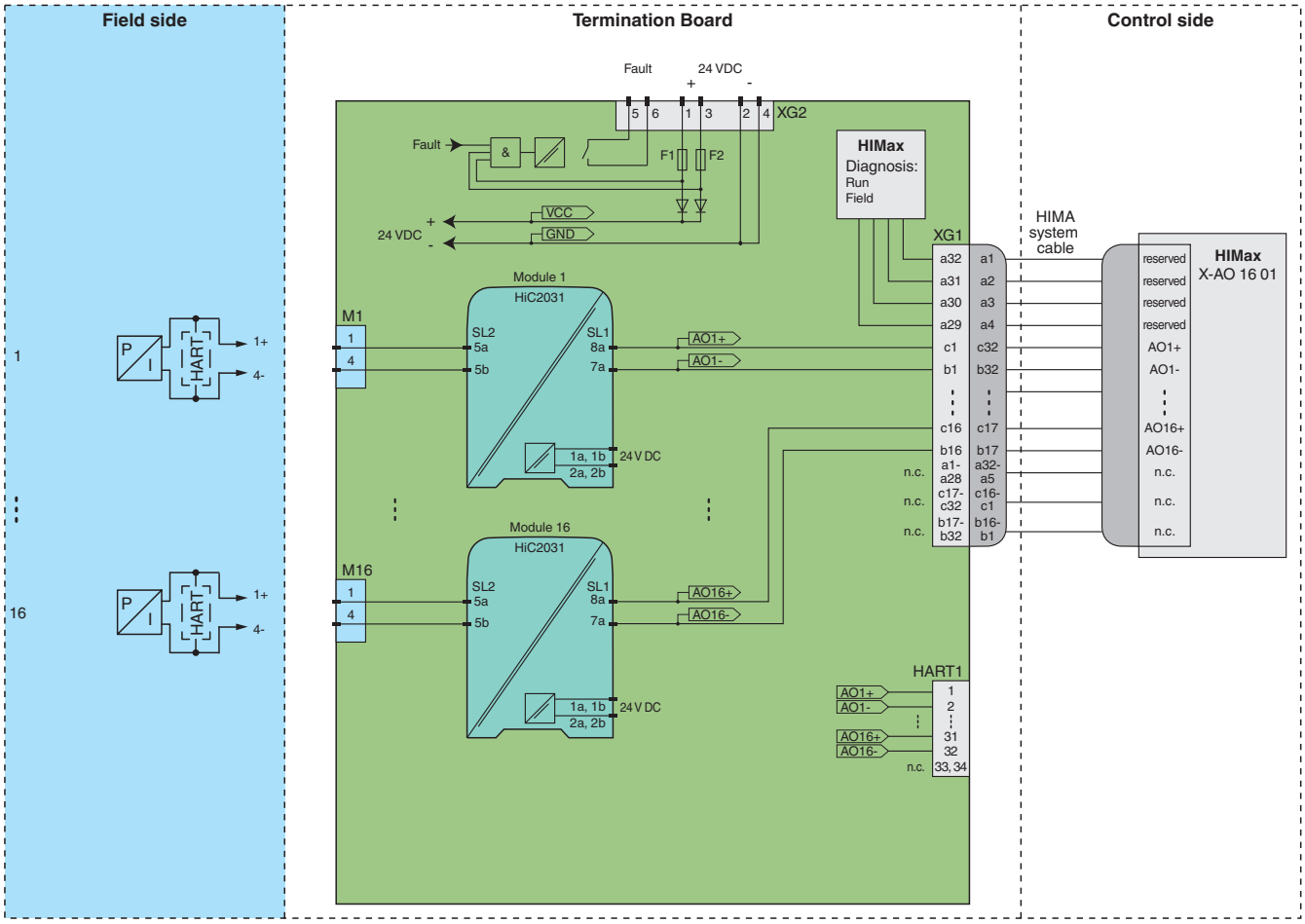
Application

Typical loop



Module switch settings

Type	DIP switch	Position
HiC2031 (AO) Open loop voltage of the control system < 27 V	S1	OFF
	S2	ON
	S3	OFF
	S4	OFF

Card settings

Type	Mode
16-channel card X-AO 1601	AO, single mode
	AO, redundant mode on request

The pin-out configuration has to be observed. For information see corresponding pin-out table on www.pepperl-fuchs.com.

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