

Features

- System board for Yokogawa CENTUM VP
- For 16-channel AI cards AAI141, AAI143
- For 8 modules
- Recommended modules: HiD2026 (AI), HiD2030 (AI), HiD2082 (TI)
- 24 V DC supply
- Hazardous area: spring terminals, blue
- Safe area: Yokogawa system connector, 40-pin

Function

The function of the Termination Board as well as the connector pin assignment exactly fit the requirement of Yokogawa systems.

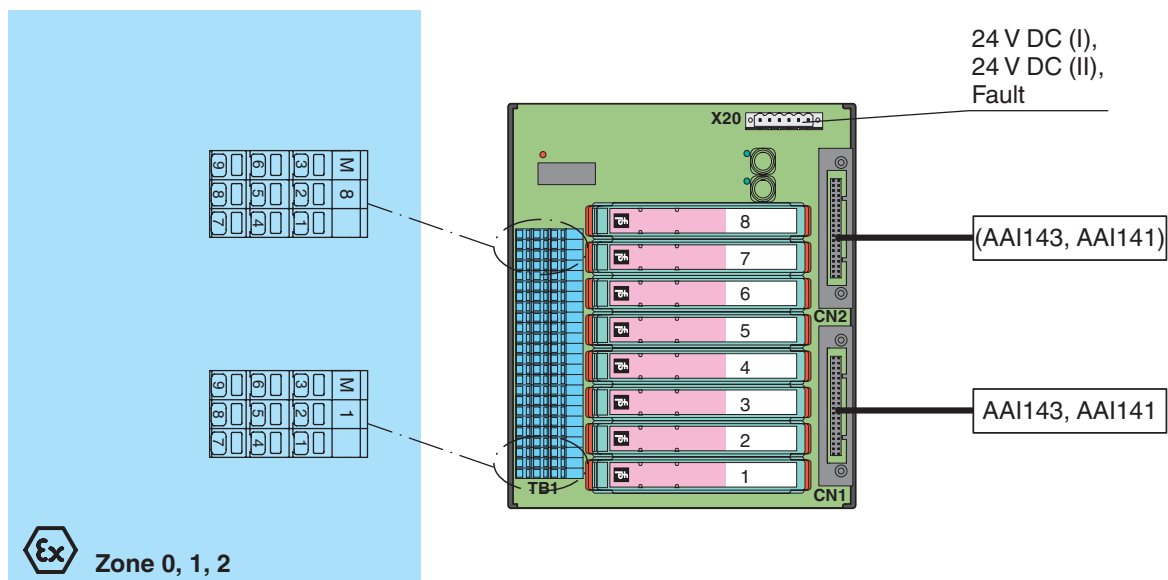
Information about missing supply voltage of the interface modules is available for the system as potential-free contact. Wiring errors from field will be reported via the same relay contact if the interface module supports this function.

The Termination Boards are supplied with a robust glass fiber reinforced plastic housing as standard. This design permits the fast and reliable installation on 35 mm DIN mounting rail acc. to EN 60715 in the cabinet.

Assembly



Connection



Release date 2017-10-19 13:27 Date of issue 2017-10-19 236165_eng.xml

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".


Pepperl+Fuchs Group
www.pepperl-fuchs.com

USA: +1 330 486 0002
pa-info@us.pepperl-fuchs.com

Germany: +49 621 776 2222
pa-info@de.pepperl-fuchs.com

Singapore: +65 6779 9091
pa-info@sg.pepperl-fuchs.com

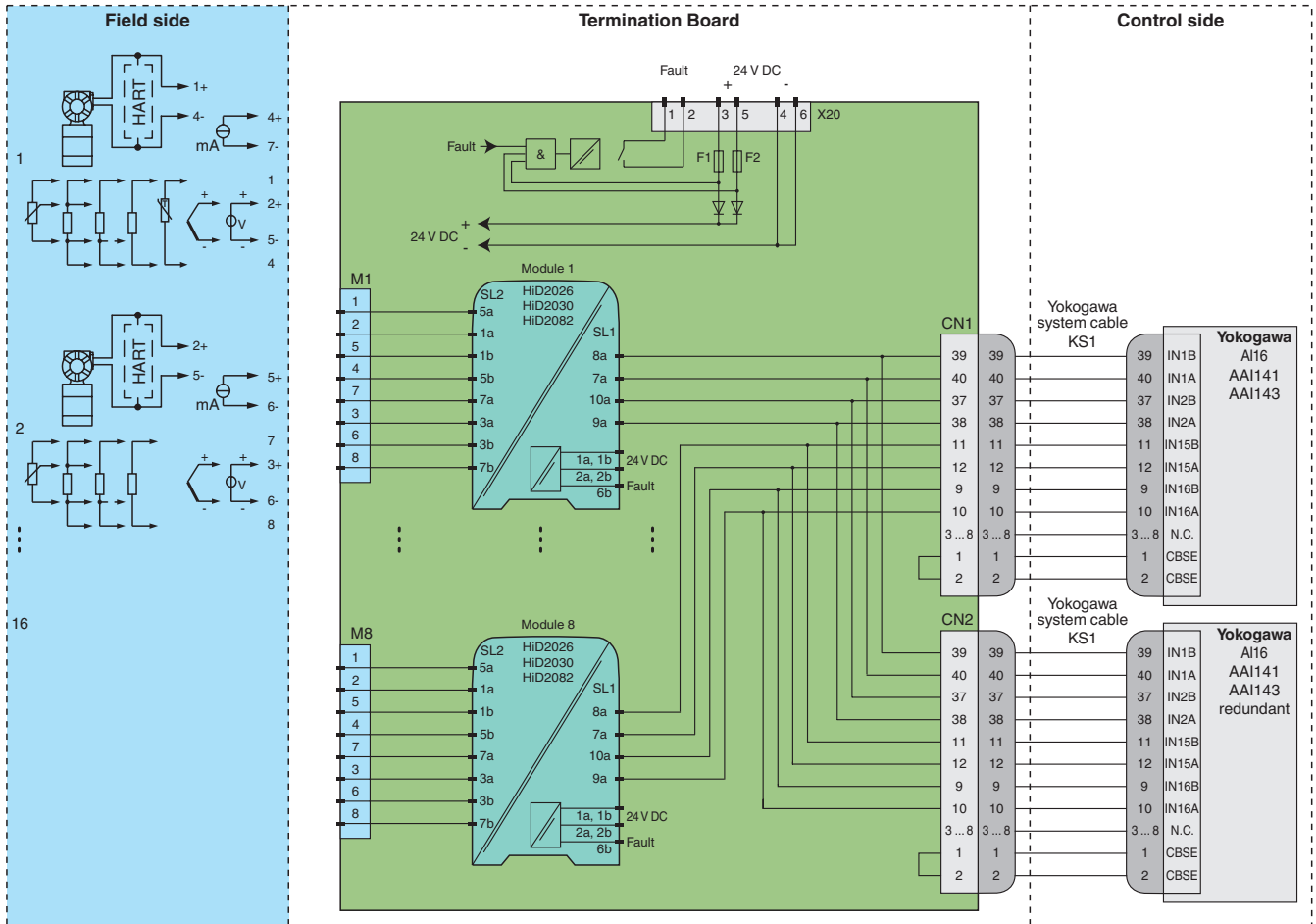
PF PEPPERL+FUCHS
PROTECTING YOUR PROCESS

Supply	
Nominal voltage	24 V DC , in consideration of rated voltage of used isolators
Voltage drop	0.9 V , voltage drop across the series diode on the termination board must be considered
Ripple	≤ 10 %
Fusing	2 A , in each case for 8 modules
Power dissipation	≤ 500 mW , without modules
Reverse polarity protection	yes
Redundancy	
Supply	Redundancy available. The supply for the isolators is decoupled, monitored and fused.
Fault indication output	
Output type	volt-free contact
Contact loading	30 V DC , 1 A
Indicators/settings	
Display elements	LEDs PWR ON (Termination Board power supply) - LED power supply I, green LED - LED power supply II, green LED LED FAULT (fault indication), red LED - LED lits: module failure - LED flashes: power supply failure
Directive conformity	
Electromagnetic compatibility	
Directive 2014/30/EU	EN 61326-1:2013 (industrial locations)
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 ... 70 °C (-40 ... 158 °F)
Mechanical specifications	
Degree of protection	IP20
Connection	
Field side	explosion hazardous area: spring terminals , blue
Control side	non-explosion hazardous area: Yokogawa system connector, 40-pin
Supply	pluggable screw terminals , black
Fault output	pluggable screw terminals , black
Core cross-section	spring terminals: rigid: 0.2 ... 2.5 mm ² flexible: 0.25 ... 1.5 mm ²
Material	housing: polycarbonate
Mass	approx. 550 g
Dimensions	205 x 175 x 153 mm (8.1 x 6.9 x 6.02 inch) , height including module assembly
Mounting	on 35 mm DIN mounting rail acc. to EN 60715:2001
Data for application in connection with hazardous areas	
EU-Type Examination Certificate	CESI 11 ATEX 062
Marking	 II (1)G [Ex ia Ga] IIC  II (1)D [Ex ia Da] IIIC  I (M1) [Ex ia Ma] I
Safe area	
Maximum safe voltage	250 V (Attention! U _m is no rated voltage.)
Galvanic isolation	
Field circuit/control circuit	safe electrical isolation acc. to IEC/EN 60079-11, voltage peak value 375 V
Directive conformity	
Directive 2014/34/EU	EN 60079-0:2012+A11:2013 , EN 60079-11:2012 , EN 50303:2000
International approvals	
IECEX approval	IECEX CES 11.0022
Approved for	[Ex ia Ga] IIC [Ex ia Da] IIIC [Ex ia Ma] I
General information	
Supplementary information	Observe the certificates, declarations of conformity, instruction manuals, and manuals where applicable. For information see www.pepperl-fuchs.com .
Accessories	
Designation	optional accessory: Label Carrier HiALC-Hi*TB-SET-1**

Release date 2017-10-19 13:27 Date of issue 2017-10-19 236165_eng.xml

Application

Typical loop



Module switch settings

Type	Channel	DIP switch	Position
HiD2026 (AI, source)	II	S1	OFF
		S2	OFF
	I	S3	OFF
		S4	OFF
HiD2030 (AI, source)	II	S1	OFF
		S2	OFF
	I	S3	OFF
		S4	OFF
HiD2082 (TI, source)	I	S1	ON
		S2	OFF
		S3	OFF
		S4	OFF
	II	S5	ON
		S6	OFF
		S7	OFF
		S8	OFF

Card switch settings

Type	Function
AAI141 (AI, sink)	4-wire
AAI143 (AI, sink)	4-wire



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

Release date 2017-10-19 13:27 Date of issue 2017-10-19 236165_eng.xml