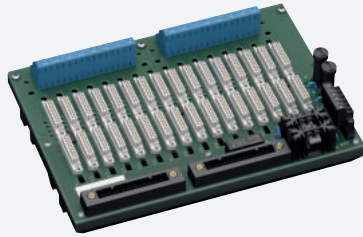


# Termination Board

## HiCTB16-YC3-RRB-KS-CC-AI16



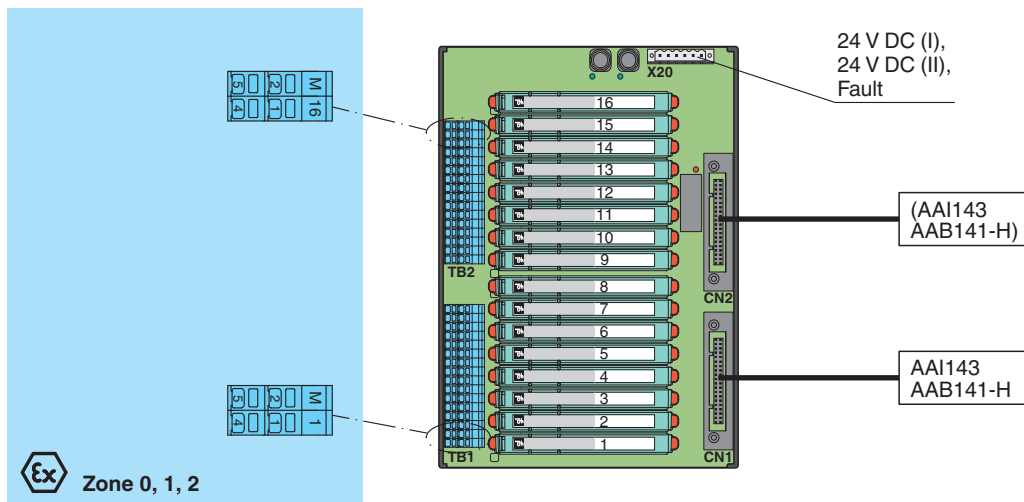
- System board for Yokogawa CENTUM VP
- For 16-channel AI cards AAI143, AAB141-H
- For 16 modules
- Recommended modules: HiC2025(A) (AI), HiC2081 (TI)
- 24 V DC supply
- Hazardous area: spring terminals, blue
- Non-hazardous area: Yokogawa system connector, 40-pin



### Function

The function of the termination board and the connector pin assignment is exactly fitted to the requirements of the Yokogawa Centum VP system. The signal is output to the process control system via the system connector. Information about a missing supply voltage of the isolators is available for the system as a volt-free contact. Wiring faults from the field side will be reported via the same relay contact, if this function is supported by the isolators. The termination board has a robust plastic housing. The termination board is mounted in the switch cabinet on a 35 mm DIN mounting rail according to EN 60175.

### Connection



### Technical Data

<b>Supply</b>	
Connection	X20: terminals 3, 5(+); 4, 6(-)
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	4 A , in each case for 16 modules
Power dissipation	≤ 500 mW , without modules
Reverse polarity protection	yes
<b>Redundancy</b>	
Supply	Redundancy available. The supply for the isolators is decoupled, monitored and fused.

Release date: 2023-02-20 Date of issue: 2023-02-20 Filename: 236163\_eng.pdf

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


PEPPERL+FUCHS

## Technical Data

<b>Fault indication output</b>		
Connection		X20: terminals 1, 2
Output type		volt-free contact
Switch behaviour		no fault: relay contact closed power supply fault: relay contact open module fault: relay contact open
Contact loading		30 V DC , 1 A
<b>Indicators/settings</b>		
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 fault - LED flashes: power supply fault
<b>Directive conformity</b>		
Electromagnetic compatibility		
Directive 2014/30/EU		EN 61326-1:2013 (industrial locations)
<b>Conformity</b>		
Electromagnetic compatibility		NE 21:2017 For further information see system description.
Degree of protection		IEC 60529:2001
<b>Ambient conditions</b>		
Ambient temperature		-20 ... 60 °C (-4 ... 140 °F)
Storage temperature		-40 ... 70 °C (-40 ... 158 °F)
<b>Mechanical specifications</b>		
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 <sup>2</sup> flexible: 0.25 ... 1.5 mm <sup>2</sup>
Material		housing: polycarbonate
Mass		approx. 645 g
Dimensions		240 x 175 x 153 mm (9.45 x 6.9 x 6.02 inch) (W x H x D) , depth including module assembly
Mounting		on 35 mm DIN mounting rail acc. to EN 60715:2001
<b>Data for application in connection with hazardous areas</b>		
EU-type examination certificate		CESI 06 ATEX 022
Marking		Ⓔ II (1)G [Ex ia Ga] IIC Ⓔ II (1)D [Ex ia Da] IIIC Ⓔ I (M1) [Ex ia Ma] I
Non-hazardous area		
Maximum safe voltage		250 V (Attention! U <sub>m</sub> 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 IEC 60079-0:2018+AC:2020 , EN 60079-11:2012 , EN 50303:2000
<b>International approvals</b>		
IECEx approval		
IECEx certificate		IECEx CES 06.0003
IECEx marking		[Ex ia Ga] IIC [Ex ia Da] IIIC [Ex ia Ma] I
<b>General information</b>		
Supplementary information		Observe the certificates, declarations of conformity, instruction manuals, and manuals where applicable. For information see <a href="http://www.pepperl-fuchs.com">www.pepperl-fuchs.com</a> .

Release date: 2023-02-20 Date of issue: 2023-02-20 Filename: 236163\_eng.pdf

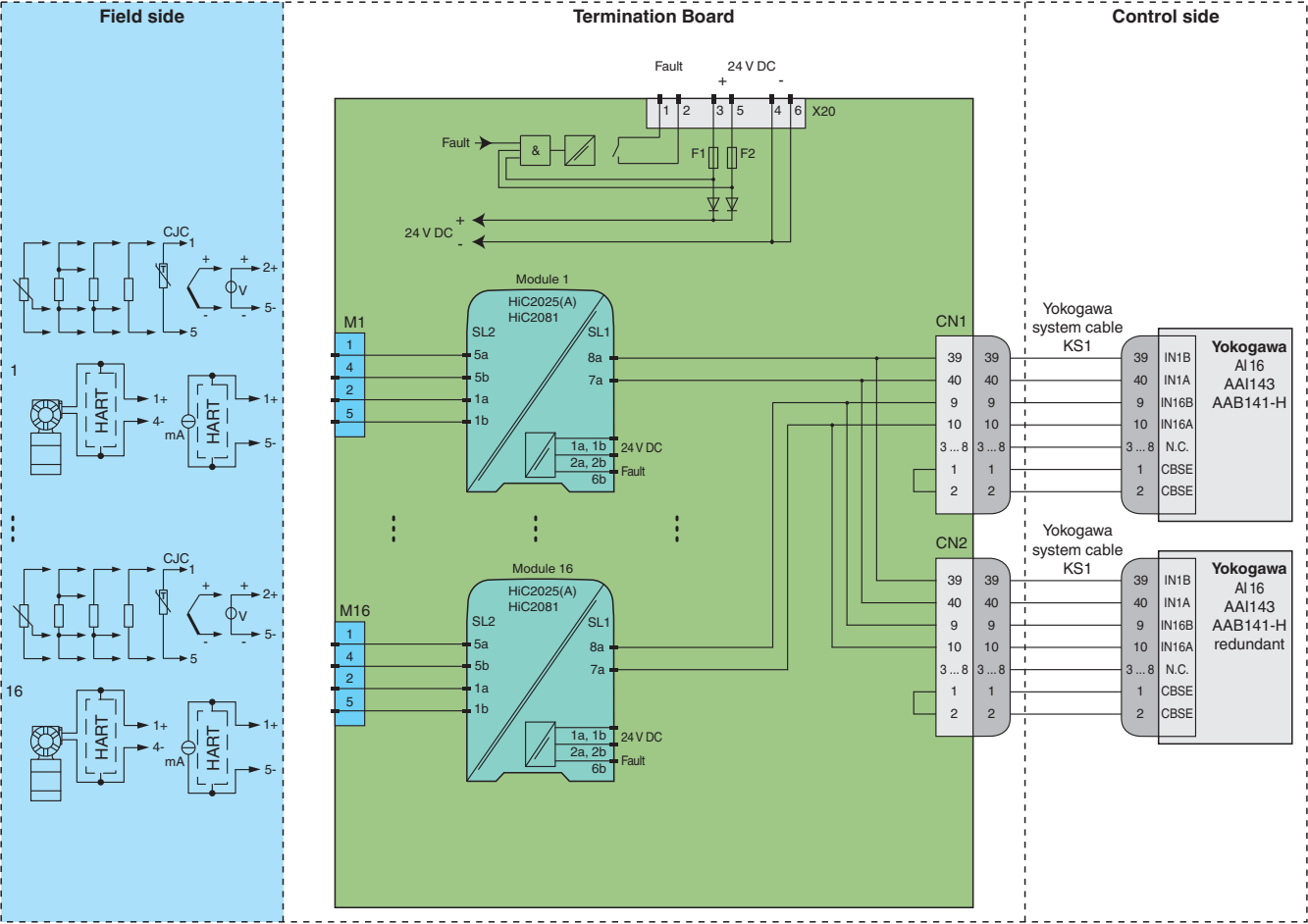
Accessories

	<b>HiALC-HICTB-SET-108</b>	Label carrier for HiC termination boards
---	----------------------------	--

Release date: 2023-02-20 Date of issue: 2023-02-20 Filename: 236163\_eng.pdf

Application

Typical circuit



Module switch settings

Type (AI)	DIP switch	Position
HiC2025, HiC2025A (current source 4 mA ... 20 mA)	S1	OFF
	S2	OFF
	S3	ON
	S4	OFF

Type (TI)	DIP switch	Position
HiC2081 (source)	S	I

Card switch settings

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



For exact pin assignment for connection to field side and control side, see the documentation of the isolated barrier.



The pin-out configuration has to be observed. For information see corresponding pin-out table on [www.pepperl-fuchs.com](http://www.pepperl-fuchs.com).