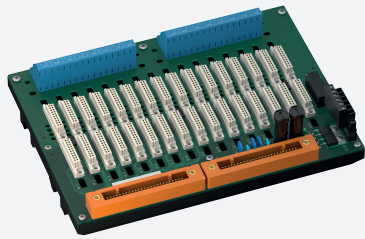


# Termination Board

## HiCTB16-YRS-RRB-AK-CC-DI16



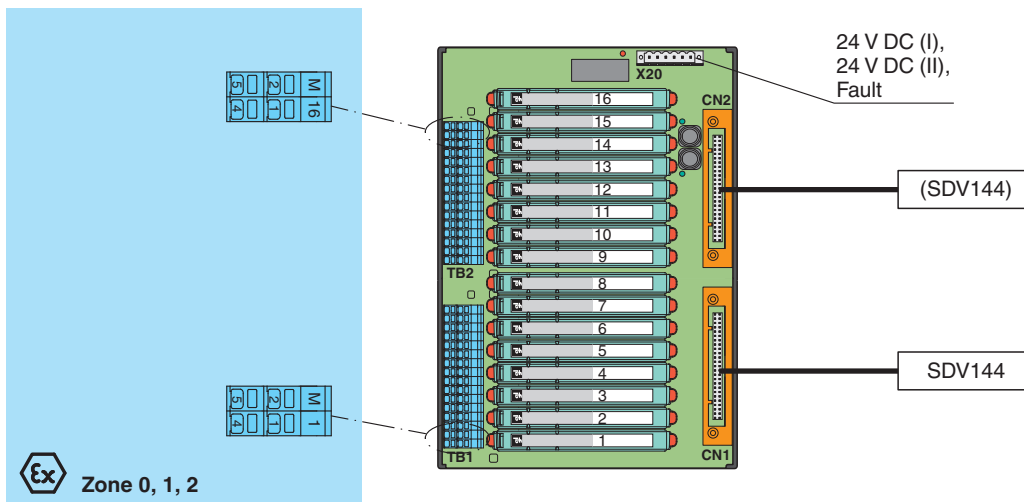
- System board for Yokogawa ProSafe-RS
- For 16-channel DI card SDV144
- For 16 modules
- Recommended modules: HiC2831R1 (DI), HiC2853R1 (DI)
- 24 V DC supply
- Hazardous area: spring terminals, blue
- Non-hazardous area: Yokogawa system connector, 50-pin



### Function

The function of the termination board and the connector pin assignment is exactly fitted to the requirements of the Yokogawa ProSafe-RS system. The signal is output to the safety instrumented system via the system connector. Information about a missing supply voltage of the isolators is available for the system as a volt-free contact. 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

Supply	
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
Redundancy	
Supply	Redundancy available. The supply for the isolators is decoupled, monitored and fused.
Fault indication output	

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

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## Technical Data

Connection	X20: terminals 1, 2
Output type	volt-free contact
Switch behaviour	no fault: relay contact closed power supply 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 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, 50-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. 625 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> .

**Accessories**

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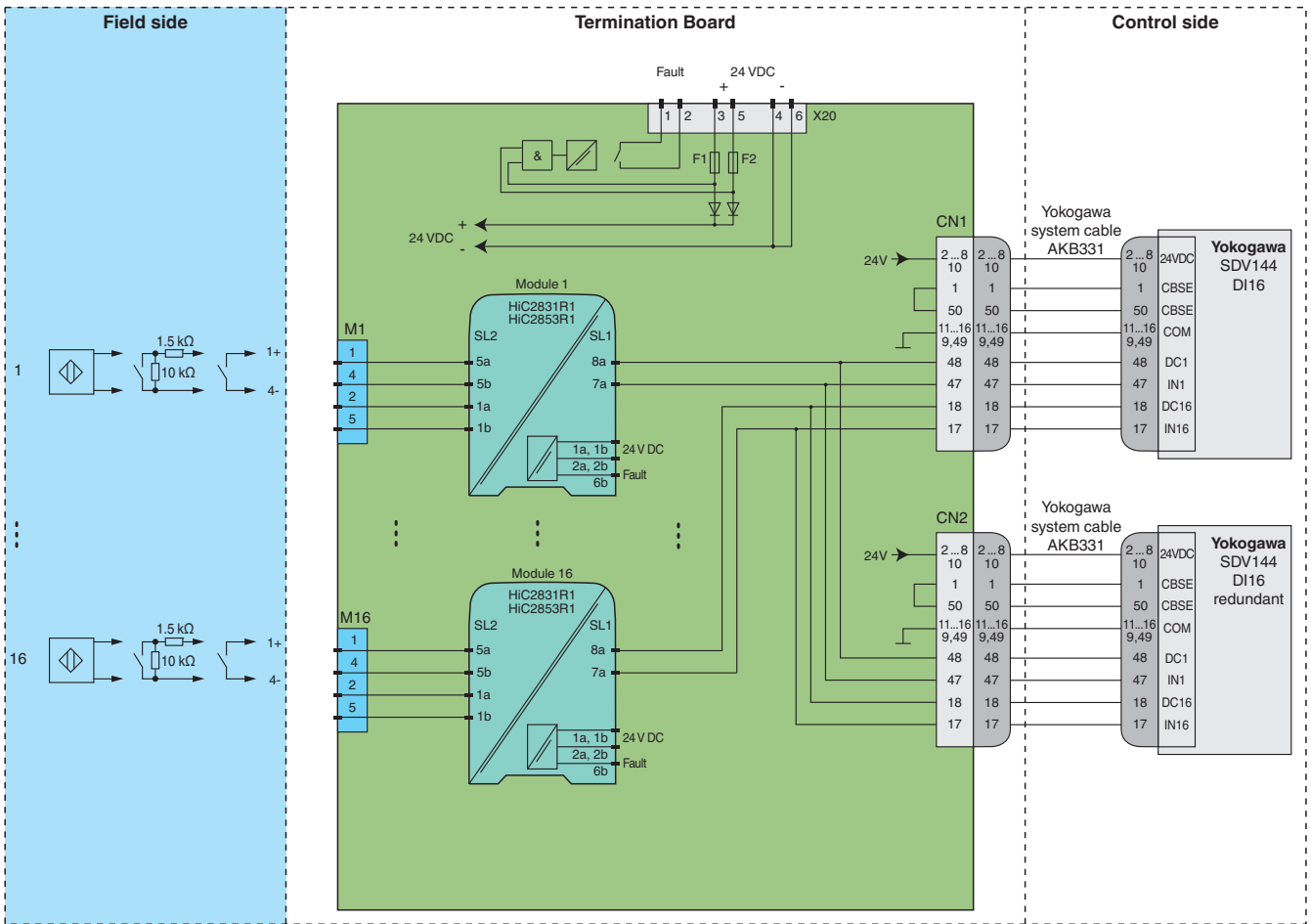
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**Application**

**Typical circuit**



**Module switch settings**

Type (DI)	DIP switch	Position
HiC2831R1 • Input line fault detection: enabled	S1	freely selectable
	S2	I
	S3	no function
	S4	no function
HiC2853R1	not available	



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).

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