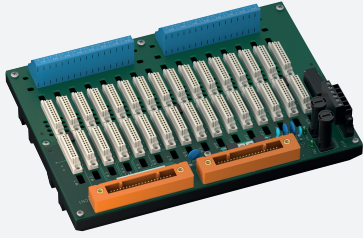


Termination Board

HiCTB16-YRS-RRB-KS-CC-AI16-Y1



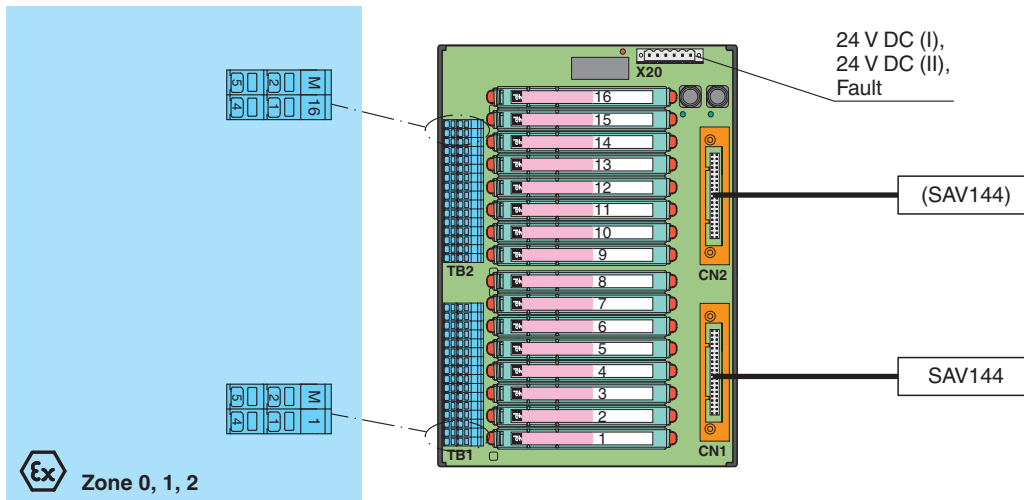
- System board for Yokogawa ProSafe-RS
- For 16-channel AI card SAV144
- For 16 modules
- Recommended modules: HiC2025(A) (AI)
- 24 V DC supply
- Hazardous area: spring terminals, blue
- Non-hazardous area: Yokogawa system connector, 40-pin



Function

The function of the termination board and the connector pin assignment is exactly fitted to the requirements of the Yokogawa 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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Technical Data

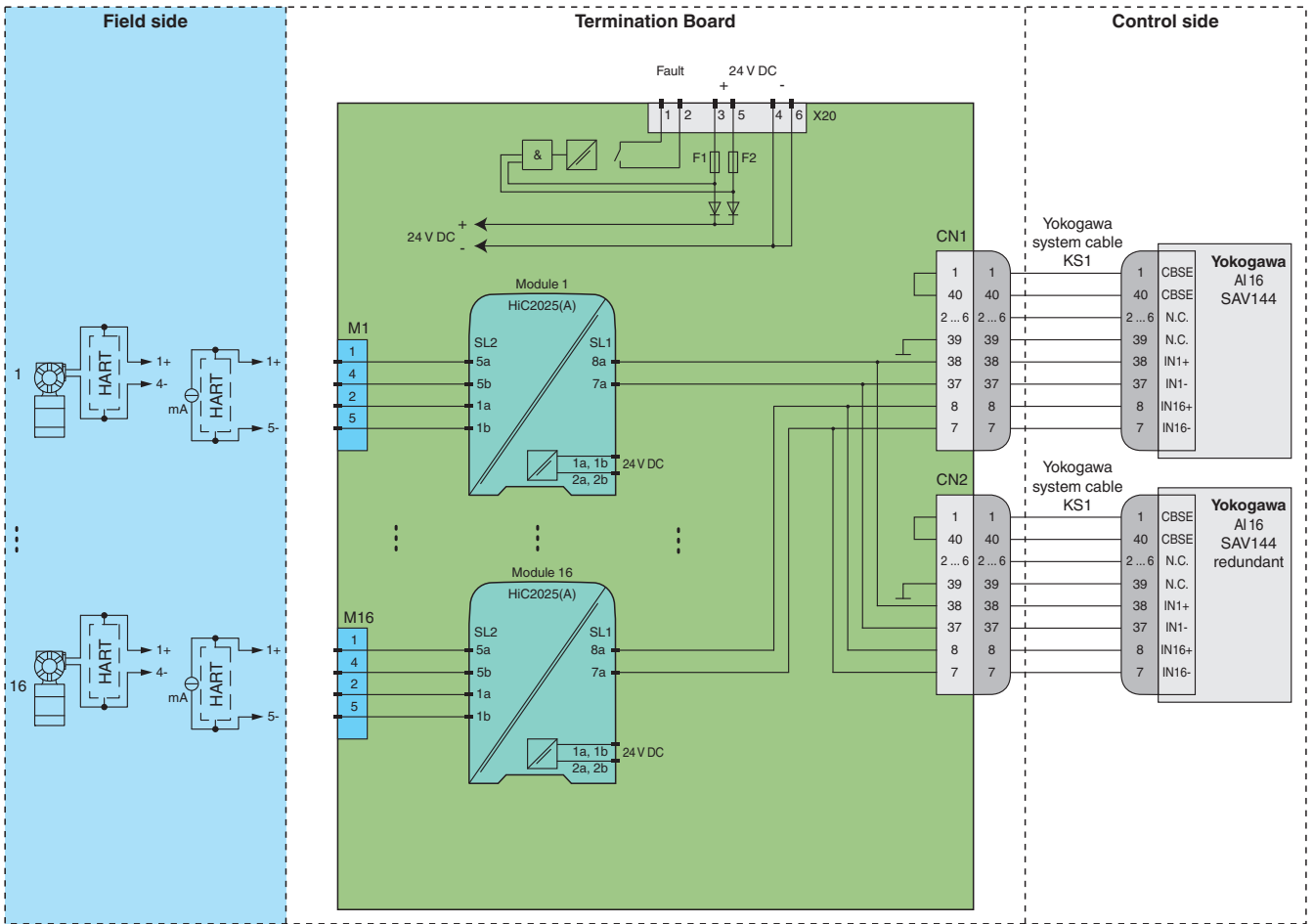
| | |
|----------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Connection | X20: terminals 1, 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 |
| 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 flashes: power supply fault |
| Directive conformity | |
| Electromagnetic compatibility | |
| Directive 2014/30/EU | EN 61326-1:2013 (industrial locations) |
| Conformity | |
| Electromagnetic compatibility | NE 21:2017 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. 630 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 |
| Data for application in connection with hazardous areas | |
| 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 _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 IEC 60079-0:2018+AC:2020 , EN 60079-11:2012 , EN 50303:2000 |
| International approvals | |
| IECEx approval | |
| IECEx certificate | IECEx CES 06.0003 |
| IECEx marking | [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**HiALC-HICTB-SET-108**

Label carrier for HiC termination boards

Application

Typical circuit



Module switch settings

| Type (AI) | DIP switch | Position |
|---------------------------------------------------|------------|----------|
| HiC2025, HiC2025A (voltage source 1 V ... 5 V) | S1 | OFF |
| | S2 | OFF |
| | S3 | ON |
| | S4 | ON |



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.