# **Features**

Assembly

- System Board for HIMA, HIMax
- For 32-channel cards X-DI 32 01 or X-DI 32 04 (DI)
- For 16 modules
- Recommended modules: HiC2822 (DI), HiC2842 (DI)
- 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.

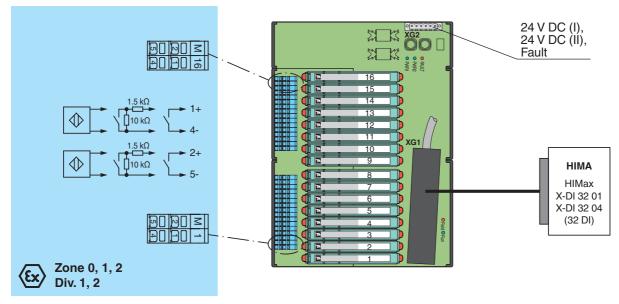
Information about missing supply voltage of the isolated barriers is available for the system as volt-free contact. Wiring errors from field will be reported via the same relay contact if the isolated barriers support this function.

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.



#### Connection



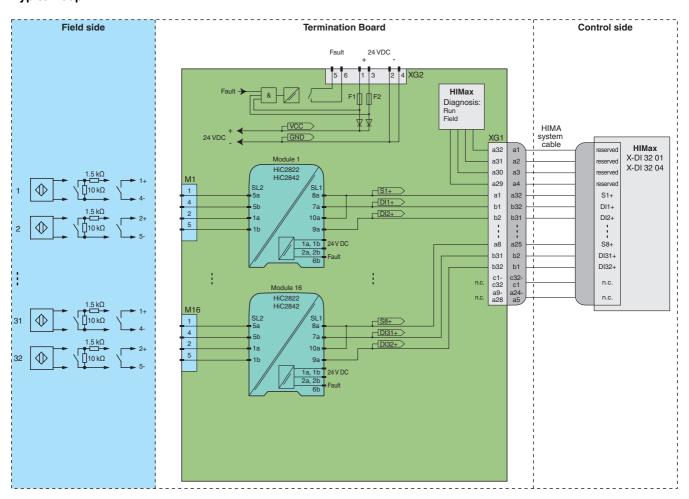
| Supply                                     |   |  |  |  |
|--|---|--|--|--|
| Connection                                 | XG2: terminals 1, 3 (+); 2, 4 (-)   |  |  |  |
| Rated voltage                              | U <sub>n</sub> 24 V DC , in consideration of rated voltage of used isolated barriers  |  |  |  |
| 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  |  |  |  |
| Sisplety cicinotics                        | 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   |  |  |  |
|  | EN 01320-1.2013   |  |  |  |
| 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 <sup>2</sup> (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 conn with Ex-areas | tion  |  |  |  |
| EC-Type Examination Certific               | CESI 06 ATEX 022, for additional certificates see www.pepperl-fuchs.com   |  |  |  |
| Group, category, type of pro               | ection (  |  |  |  |
| Safe area                                  | ✓ , (, ) [=   |  |  |  |
|  | 250 V (Attention III is no rated velters )  |  |  |  |
| Maximum safe voltage                       | 250 V (Attention! U <sub>m</sub> 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                                | 440,0007  |  |  |  |
| • •  | 116-032/  |  |  |  |
| Control drawing                            | 116-0327  |  |  |  |
| Control drawing IECEx approval             | IECEx CES 06.0003   |  |  |  |
| Control drawing                            |   |  |  |  |



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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.pepperfuchs.com. |
|---------------------------|--|
| Accessories               |  |
| Designation               | optional accessories: Label Carrier HiALC-Hi*TB-SET-1**  |

### **Typical loop**



# Module switch settings

| Туре  | Channel | DIP switch | Position |
|---|---------|------------|----------|
| HiC2822 (DI), HiC2842 (DI)                                | 1       | S1         | II       |
| Mode of operation:  |         | S2         | I        |
| close – energized   | 2       | S3         | II       |
| open – de-energized • Input line fault detection: enabled |         | S4         | Ι        |

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

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