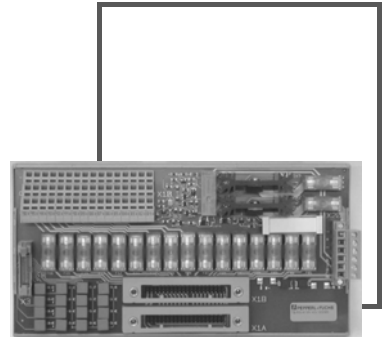


## SYSTEM DESCRIPTION

### **Termination Boards Non-IS Termination Boards for Yokogawa CENTUM C3 and ProSafe RS**



With regard to the supply of products, the current issue of the following document is applicable:  
The General Terms of Delivery for Products and Services of the Electrical Industry, published by  
the Central Association of the Electrical Industry (Zentralverband Elektrotechnik und  
Elektroindustrie (ZVEI) e.V.) in its most recent version as well as the supplementary clause:  
"Expanded reservation of proprietorship"

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# 1 Introduction

The Termination Boards are designed to interface Yokogawa CS3000 R3/ProSafe RS I/O cards. Power feed-if required- and system connector to I/O cards is integrated in the Termination Board which results in noticeable space savings in the interface cabinet. The power supply should have a redundante design for increasing the availability of the system. The operating status of the power supply is monitored and reported via red flashing LED and relay output. There are two retainers on the back for mounting the Termination Board quickly and easily on to a standard DIN Rail in accordance with EN 60715 or integrated similar. Disconnecting is easy with aid of a screw driver to lever the two retainers.

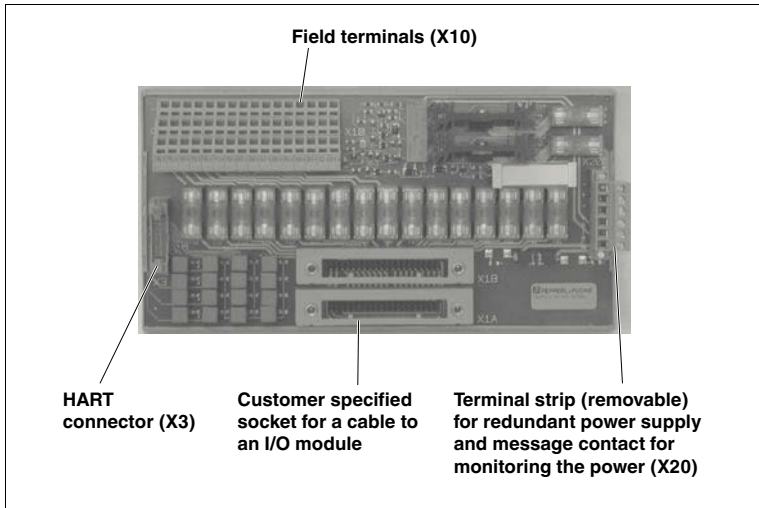


Figure 1.1 Termination Board

## 2 Installation

### 2.1 DIN Mounting Rail

The devices are mounted on a 35 mm DIN mounting rail according to EN 60715.

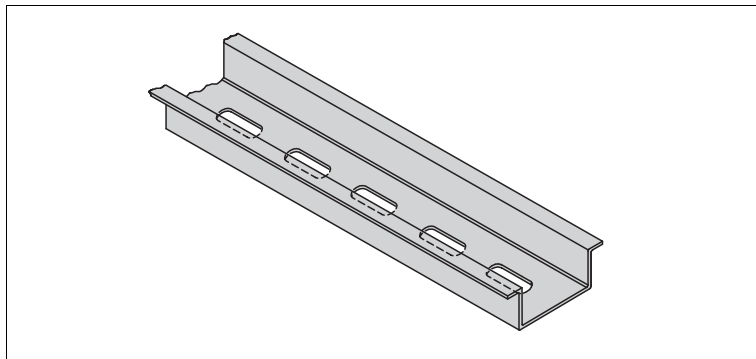


Figure 2.1 Example: DIN mounting rail UPR-MR (35 mm x 15 mm)

### 2.2 Termination Board Mounting



#### **Warning!**

Risk of short circuit

Injuries and damage to the device are possible when working with live parts.

- Before working on the device, always disconnect the supply voltage.
- Connect the device to the supply voltage only after completion of the work.

### Mounting the Termination Boards

The Termination Boards are mounted on the 35 mm DIN mounting rail. The DIN mounting rail runs centrally below the Termination Board.

1. Clip the Termination Board onto the DIN mounting rail.

↳ The Termination Board is now properly mounted and secured.

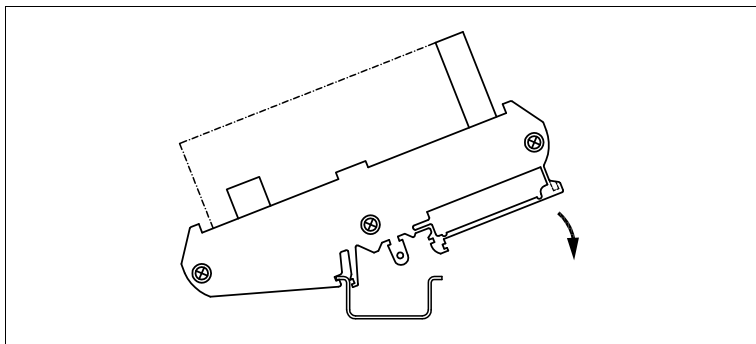


Figure 2.2 Termination Board mounting

### Removing the Termination Boards

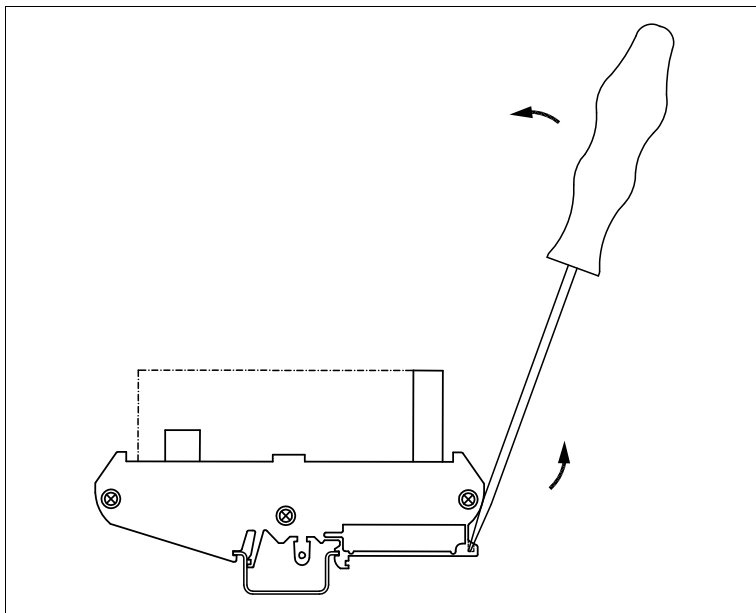


Figure 2.3 Termination Board removing

### Vertical Mounting

The Termination Board is designed for vertical installation. Advantage is, wiring of external connections can be made easily from cable ducts right and left hand side of the modules. So, the total lengths of the cabinet can be used for mounting the modules in one column.

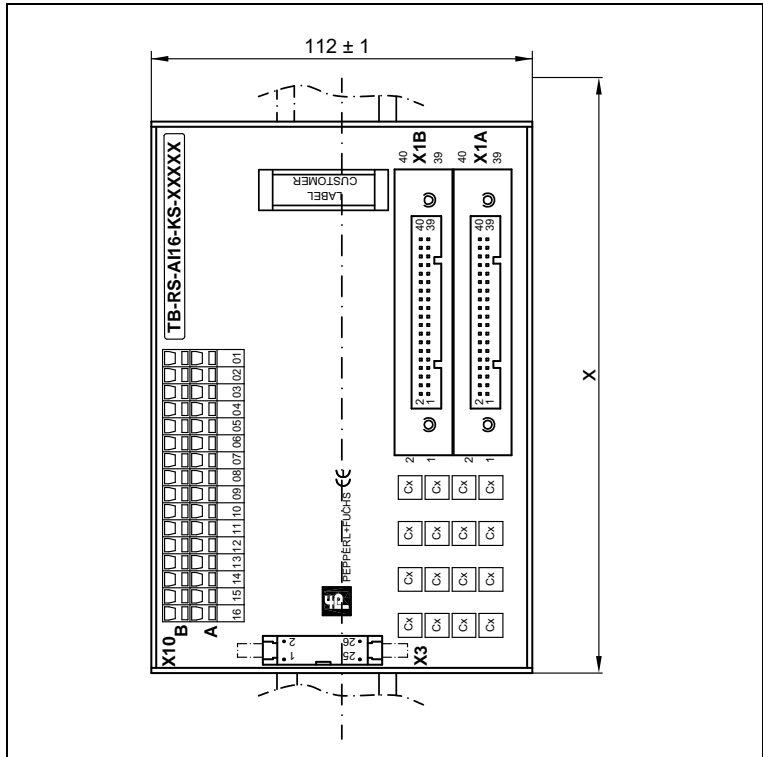


Figure 2.4 Vertical mounting

## 2.3 Connection

### Block Diagram

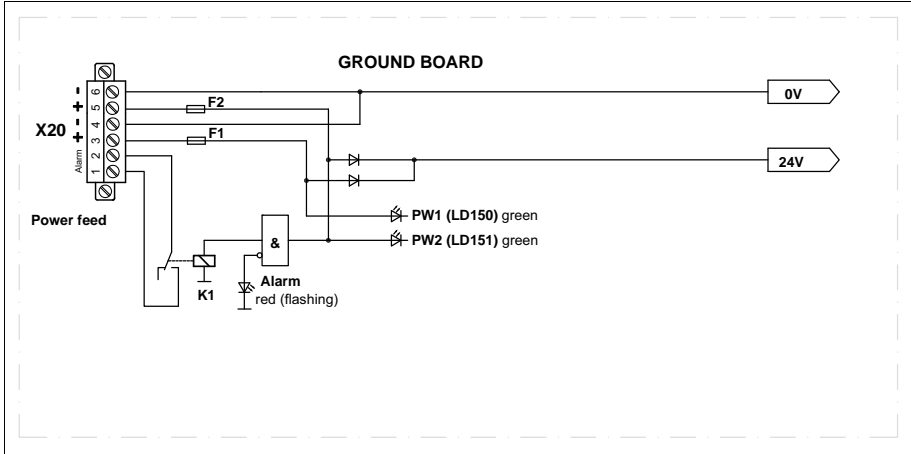


Figure 2.5 Block diagram power supply and fault signal

### Connection Power Supply

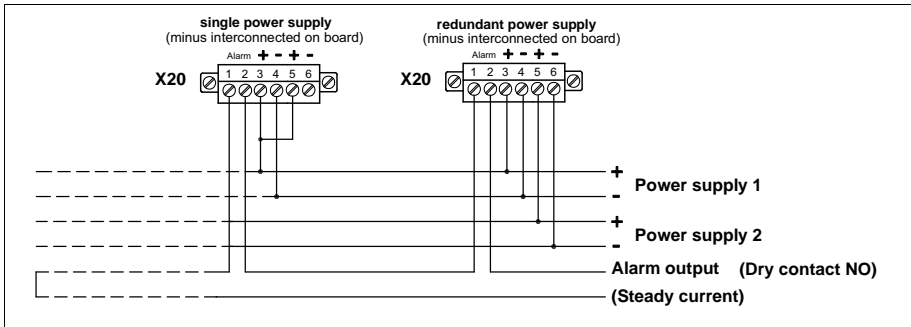


Figure 2.6 Connection power supply and fault signal



### 3 Operation

#### 3.1 Fault Signal and Alarm

Power supply 1	Power supply 2	LED green		LED red (flashing)		X20.1, 2 Alarm contact
PS ON and Fuse 1 OK	PS ON and Fuse 2 OK	LD150 LD151	ON ON	LD135	OFF	contact closed
PS ON and Fuse 1 OK	PS OFF	LD150 LD151	ON OFF	LD135	ON	contact open
PS OFF	PS ON and Fuse 2 OK	LD150 LD151	OFF ON	LD135	ON	contact open
PS ON and Fuse 1 OK	PS ON and Fuse 2 broken	LD150 LD151	ON OFF	LD135	ON	contact open
PS ON and Fuse 1 broken	PS ON and Fuse 2 OK	LD150 LD151	OFF ON	LD135	ON	contact open
PS ON and Fuse 1 broken	PS ON and Fuse 2 broken	LD150 LD151	OFF OFF	LD135	OFF	contact open
PS OFF	PS OFF	LD150 LD151	OFF OFF	LD135	OFF	contact open

Table 3.1

## 4 Technical Specifications

### 4.1 Technical Data

<b>Supply</b>	
Connection	terminal X20 3+, 4-/5+, 6- (Fuse T2A)
Rated voltage	21 ... 30 V DC SELV/PELV, exceptions see data sheet
Ripple	< 10 %
Rated current	see data sheet
Alarm	terminal X20.1, 2, see data sheet
Supply termination	removable terminal block with screw terminals for 0.2 ... 2.5 mm <sup>2</sup>
Field termination	spring terminals 0.2 ... 1.5 mm <sup>2</sup>
<b>Ambient conditions</b>	
Ambient temperature	working: -15 ... 50 °C (5 ... 122 °F) storage: -15 ... 55 °C (5 ... 131 °F)
Protection degree	IP20
Humidity	max. 95 % rel. humidity non condensing
Vibration	< 15 Hz, amplitude ± 2.5 mm/15 Hz as per IEC 68-2-6
Shock	1 g, 16 ms all space directions as per IEC 68-2-27

Table 4.1

### 4.2 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.pepperl-fuchs.com](http://www.pepperl-fuchs.com).

The galvanic isolation of all circuits on a Termination Board conform to the functional isolation level in accordance with EN 50178 with a rated isolation voltage of 50 V<sub>eff</sub>.

This is only a small selection of the most frequently needed Termination Boards. A range of Termination Boards for other Yokogawa I/O modules are also available. Please contact Pepperl+Fuchs.



# PROCESS AUTOMATION – PROTECTING YOUR PROCESS



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