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TB-D5016-YOK-008

16-pos Term. Board for Yokogawa Prosafe RS SDV144 DI Cards and SDV541 DO Cards

This Termination Board (TB) provides direct connection between the I/O Card of the system and D5000 / D6000 Series modules. The Intrinsically Safe protection and signal isolation between Safe and Hazardous Area is provided by D5000 Series Associated Apparatus. The TB allows redundant 24 Vdc power supplies.

FEATURES

- Yokogawa Prosafe RS DI/DO Cards board interfaces
- 16 positions Termination Board for up to 32 channels
- · Lower cables installation and maintenance costs
- · Power supplies fault monitoring
- Hardware provided for single DIN Rail or wall mounting kit

SUPPORTED CARDS & MODULES

SYSTEM	I/O CARD	CARDS / BOARDS	MODULES
Prosafe RS	SDV144	1+(1)*1	D5031S, D5032S, D5037S, D5038SA, D5039SA
Prosafe RS	SDV144	2+(2)*1	D5031D, D5032D, D5037D, D5038DA, D5038XA, D5039DA, D5039XA
Prosafe RS	SDV144	1+(1)*1	D5093S, D6001S, D6031S, D6032S, D6037S, D6038SA, D6039SA
Prosafe RS	SDV144	2+(2)*1	D5093D, D6001D, D6031D, D6032D, D6037D, D6038DA, D6038XA, D6039DA, D6039XA
Prosafe RS	SDV541	1+(1)*1	D5040S, D5048S, D5049S
Prosafe RS	SDV541	2+(2)*1	D5040D
Prosafe RS	SDV541	1+(1)*1	D5090S, D5091S, D5094S, D5095S, D5096S- 100, D5098S, D6001S
Prosafe RS	SDV541	2+(2)*1	D5098D, D6001D

For more detailed information, refer to Instruction Manual. *1 Optional I/O Card redundancy.

TERMINATION BOARD IMAGE

TECHNICAL DATA

General

Number of positions: 16 Maximum number of channels: 32

Supply

24 Vdc nom (20 to 30 Vdc), reverse polarity protected, redundant power supplies, with OR diodes to mix supply voltages.

Max allowed current consumption: 1.5 A (as total supply)

Connection: by polarized plug-in disconnect screw terminal blocks to accommodate terminations up to 2.5 mm². Protection fuse: 4 A time lag.

Fault detection

The on-board diagnostic monitors both power supplies integrity and the module cumulative fault. Any malfunction is reported by deactivating a relay and activating the corresponding LEDs.

Alarm is issued if:

1) Power supply 1 or 2 < 17 Vdc or

2) Power supply 1 or 2 > 33 Vdc or

3) Module cumulative fault ON.

Alarm is removed if:

1) 20 Vdc < Power supply 1 and 2 < 30 Vdc and

2) No module cumulative fault.

Connection: by polarized plug-in disconnect screw terminal block to accommodate terminations up to 2.5 mm²

Ouptut rating: 2 A 36 Vac 72 VA, 2 A 48 Vdc 80 W (resistive load).

I/O Card Interface

Connection: 4 x 50-poles male connector (require female mating connector).

Cable: CABF039.

Environmental conditions Operating temperature: temperature limits -40 to +70 °C. Max altitude: 2000 m a.s.l.

Storage temperature: temperature limits -45 to +80 °C.

Mounting

Hardware included for mounting on single DIN-rail 35 mm or wall. Weight: about 400 g, excluding modules and mounting options. Location: installation in Safe Area. Dimensions: Width 267 mm, Depth 176 mm, Height 125 mm.

ORDERING INFORMATION

Ordering codes TB-D5016-YOK-008

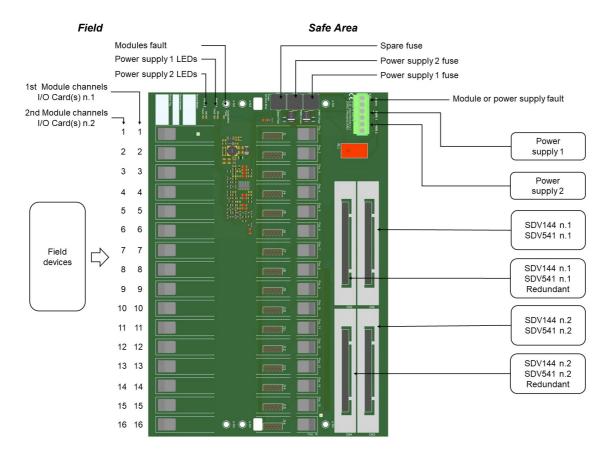


Functional Safety Management Certification: GM International is certified to conform to IEC61508:2010 part 1 clauses 5-6 for safety related systems up to and included SIL3. In addition, GM International products have been granted I.S. certificates from the most credited Notified Bodies in the world.

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FUNCTION DIAGRAM

Additional installation diagrams may be found in Instruction Manual.



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1 Rev.1

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