

Trusted Power Distribution Unit 15-Way Fused

Product Overview

The Trusted® Power Distribution Unit 15-way Fused provides 15 dual redundant fused power outputs from dual redundant 24 Vdc or 48 Vdc incoming power feeders. The Unit is designed to be mounted on a DIN rail.

On-board monitoring circuits provide local Light Emitting Diode (LED) indication of individual fuse failure (red LED). A common fuse failure alarm signal is provided by the Unit via a volt-free relay contact output.

Features:

- Fifteen 'dual' 24 Vdc or 48 Vdc, 3.15 A fuse protected outputs – suitable for direct connection to Trusted Field Termination Assemblies (FTAs), or other equipment.
- Visual indications of input power supply status.
- Visual indication of individual fuse status.
- Common alarm of fuse status via volt-free contact.
- Link selectable supply voltage options.

ISSUE RECORD

Issue	Date	Comments
6	Sep 05	Format
7	Dec 06	Specifications
8	Jul 12	Correction
9	Sep 15	Rebranded and reformatted
10	Apr 16	Standardisation of Relative Humidity Range and Operating Temperature statements in the Specification Section

1. Description

The Trusted Power Distribution Unit 15-Way Fused is shown in Figure 1 below.

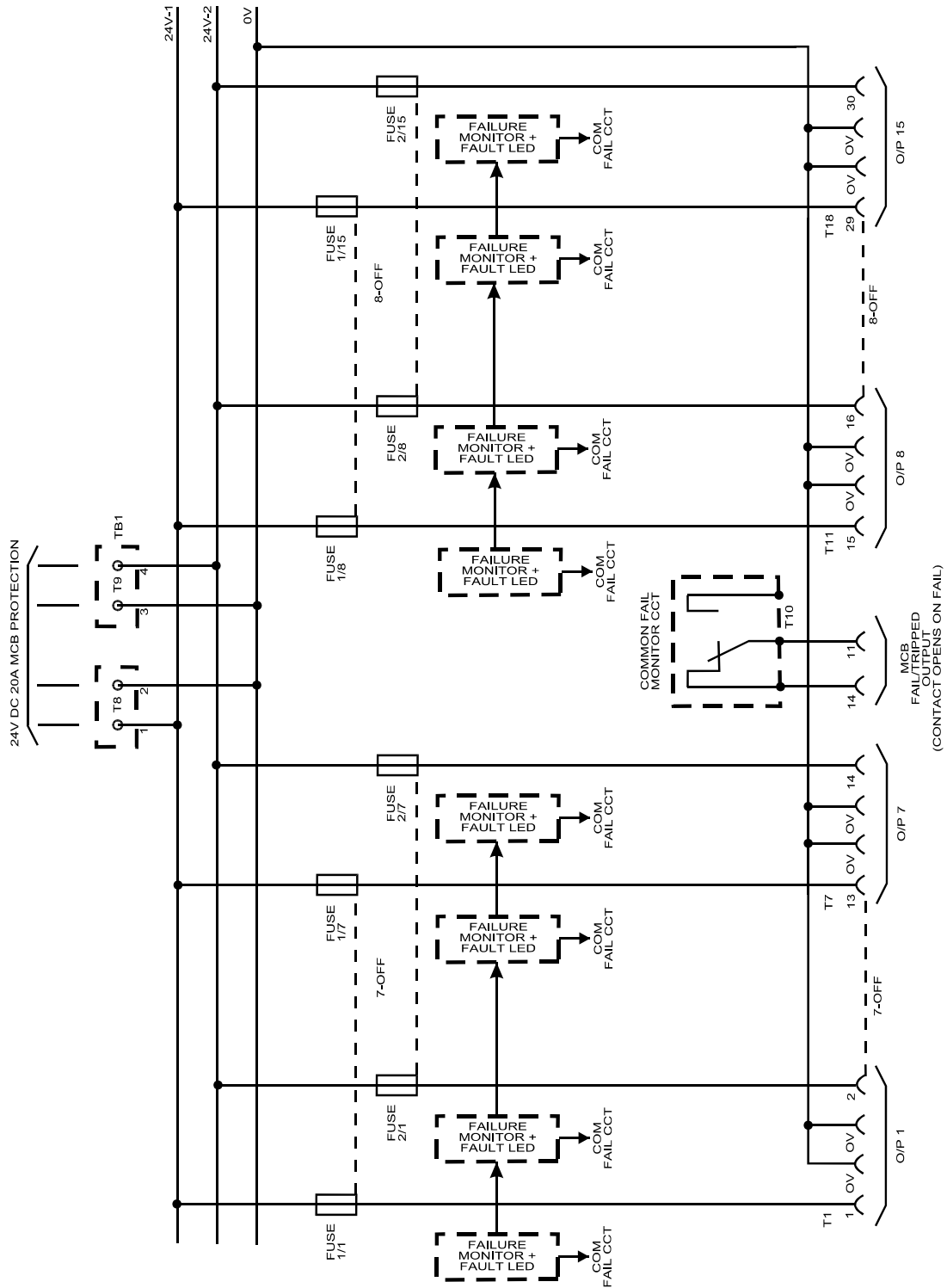


Figure 1 Trusted Power Distribution Unit 15-Way Fused

Two 24 Vdc or 48 Vdc (link selectable) supplies, are distributed through 30 fuses, arranged in two banks of 15 fuses. The outputs are fed via 15 terminal blocks labelled T1 to T7, and T11 to T18.

Each supply shares a common 0 V reference.

Each fuse is monitored for open circuit condition and provides a local on-board LED indication of individual fuse failure. Red LEDs are used to display the failed state.

A volt-free relay contact provides the fuse failure common alarm signal (contact open for fuse failure) for connection to external alarm monitoring circuits.

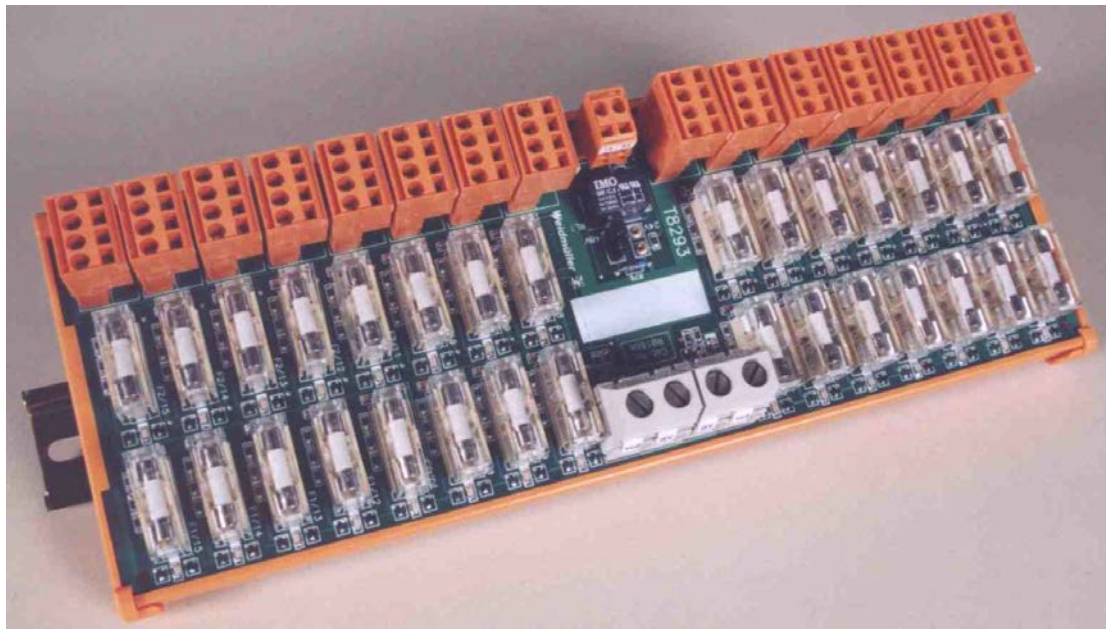


Figure 2 T8293 Photo

2. Status Indicators

2-off green LED	On to indicate that the associated power supply feeder is healthy.
30-off red LED	On to indicate that the adjacent fuse has failed.

3. Configuration

Link selection for 24 Vdc or 48 Vdc operation. The appropriate link must be fitted to select the required voltage.

6. Terminal Connections

The terminal connections for the Trusted Power Distribution Unit 15-Way Fused are shown below.

Terminal	Description	Terminal	Description
T8-1	V+ – Incoming Supply 1	T8-2	0 V – Incoming Supply 1
T9-3	V+ – Incoming Supply 2	T9-4	0 V – Incoming Supply 2
T1-1	Output from Fuse 1/1	T1-0V	0 V associated with Fuse 1/1
T1-2	Output from Fuse 2/1	T1-0V	0 V associated with Fuse 2/1
T2-3	Output from Fuse 1/2	T2-0V	0 V associated with Fuse 1/2
T2-4	Output from Fuse 2/2	T2-0V	0 V associated with Fuse 2/2
T3-5	Output from Fuse 1/3	T3-0V	0 V associated with Fuse 1/3
T3-6	Output from Fuse 2/3	T3-0V	0 V associated with Fuse 2/3
T4-7	Output from Fuse 1/4	T4-0V	0 V associated with Fuse 1/4
T4-8	Output from Fuse 2/4	T4-0V	0 V associated with Fuse 2/4
T5-9	Output from Fuse 1/5	T5-0V	0 V associated with Fuse 1/5
T5-10	Output from Fuse 2/5	T5-0V	0 V associated with Fuse 2/5
T6-11	Output from Fuse 1/6	T6-0V	0 V associated with Fuse 1/6
T6-12	Output from Fuse 2/6	T6-0V	0 V associated with Fuse 2/6
T7-13	Output from Fuse 1/7	T7-0V	0 V associated with Fuse 1/7
T7-14	Output from Fuse 2/7	T7-0V	0 V associated with Fuse 2/7
T11-15	Output from Fuse 1/8	T11-0V	0 V associated with Fuse 1/8
T11-16	Output from Fuse 2/8	T11-0V	0 V associated with Fuse 2/8
T12-17	Output from Fuse 1/9	T12-0V	0 V associated with Fuse 1/9
T12-18	Output from Fuse 2/9	T12-0V	0 V associated with Fuse 2/9
T13-19	Output from Fuse 1/10	T13-0V	0 V associated with Fuse 1/10
T13-20	Output from Fuse 2/10	T13-0V	0 V associated with Fuse 2/10

Terminal	Description	Terminal	Description
T14-21	Output from Fuse 1/11	T14-0V	0 V associated with Fuse 1/11
T14-22	Output from Fuse 2/11	T14-0V	0 V associated with Fuse 2/11
T15-23	Output from Fuse 1/12	T15-0V	0 V associated with Fuse 1/12
T15-24	Output from Fuse 2/12	T15-0V	0 V associated with Fuse 2/12
T16-25	Output from Fuse 1/13	T16-0V	0 V associated with Fuse 1/13
T16-26	Output from Fuse 2/13	T16-0V	0 V associated with Fuse 2/13
T17-27	Output from Fuse 1/14	T17-0V	0 V associated with Fuse 1/14
T17-28	Output from Fuse 2/14	T17-0V	0 V associated with Fuse 2/14
T18-29	Output from Fuse 1/15	T18-0V	0 V associated with Fuse 1/15
T18-30	Output from Fuse 2/15	T18-0V	0 V associated with Fuse 2/15
T10-11	Volt-free fuse fail contact (moving pole)	T10-14	Volt-free fuse fail contact

Table 2 Terminal Connections

7. Specifications

Voltage Range	22–30 Vdc or 43–60 Vdc (link selectable)
Supply Current	23 A max
Fuse Outputs	30-off 3.1 5A fast blow 5x20 mm cartridge arranged in two banks of 15
Max Relay Contact Switching Voltage	60 Vdc or 125 Vac
Max Relay Contact Switching Current	0.5 A
Input Connection	LU10.16 screw clamp terminal
Input Connection Conductor Clamping Range	0.5 mm ² to 16 mm ²
Output Connector	BLZ two-part terminal
Output Connector Conductor Clamping Range	0.5 mm ² to 2.5 mm ²
Operating Temperature	0 °C to +60 °C (+32 °F to +140 °F)
Non-operating Temperature	-25 °C to +70 °C (-13 °F to +158 °F)
Relative Humidity range (operating, storage & transport)	10 % – 95 %, non-condensing
Environmental Specifications	Refer to document 552517
Dimensions	
Height	79 mm (3.1 in)
Width	285 mm (11.2 in)
Depth	109 mm (4.3 in)
Weight	576 g (1.3 lb)