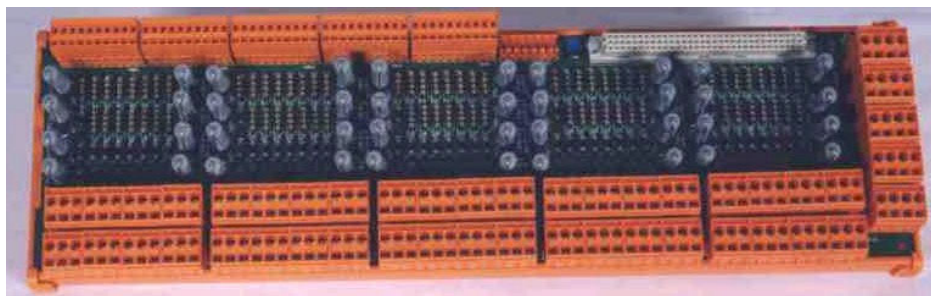


Trusted 40 Channel Fire Input Versatile FTA

(T8847)

Issue 3 January 2002



The **Trusted** 40 Channel Fire Input Versatile FTA T8847 is designed to act as the main interface between a field device generating a fire input and the **Trusted** TMR 24V dc Digital Input Module T8403, or the **Trusted** TMR 120V dc Digital Input Module T8423.

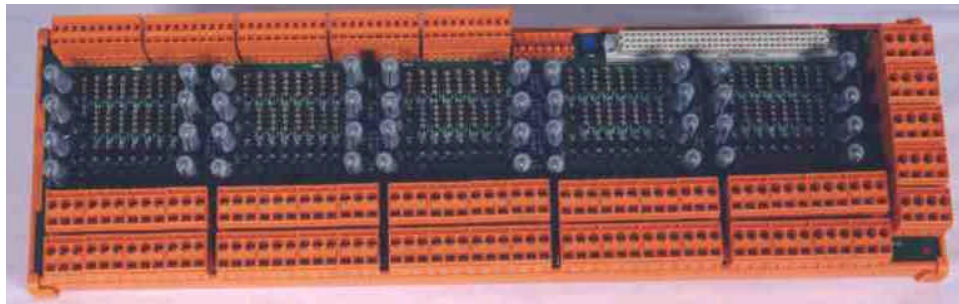
Features

- 40 input channels per VFTA.
- Industry standard field device connections (3-wire).
- Standard DIN rail compatibility.
- Simple installation and connection.
- 24V dc operation.
- SmartSlot connection for 'one to many' hot replacement of input modules.
- Fused field power supply per channel.
- Designed for use with 'sourcing' field devices, i.e. the input module 'sinks' current.

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- Designed for use with 'sourcing' field devices, i.e. the input module 'sinks' current.

ASSEMBLY DESCRIPTION

The **Trusted** 40 Channel Fire Input Versatile FTA T8847 provides termination for a maximum of 40 input channels from various types of field devices associated with the detection of fire hazards. These include smoke and heat detectors, and manual alarm callpoints (MACs) etc. The 40 channels are arranged in five power groups each comprising eight identical channels. Figure 1 below shows the configuration of a single channel within a group.

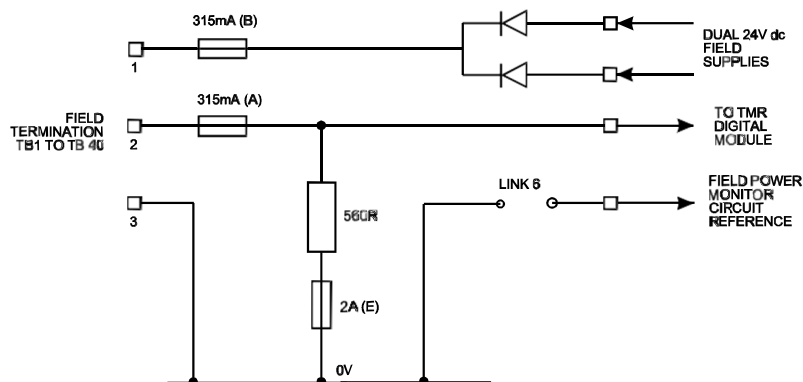


Figure 1 Single Channel Schematic

Each power group is supplied from dual 24V dc feeds which are 'commoned' via diodes on the VFTA. The supply is then fed to each channel within the group

The supply voltage to the field is fed via the 315mA fuse. The incoming signal from the field device is fed through the 315mA fuse which effectively limits the input signal. The voltage developed across the 560R resistor is used by the input module to detect the field device status.

Note: This VFTA is suitable for use with MTL 5061 I.S barriers in instances where the field device is located in hazardous areas of the plant.

The cable linking the 40 channels on the input module to the VFTA is terminated at five 10-way connectors (TBG1 to TBG5). SmartSlot signals from the module are connected to a single 7-way connector (TBGSS). The dual 24V dc power supplies are connected to the VFTA via five 4-way connectors (TBFP1 to TBFP5). Forty 3-way connectors are used for the field loops (TB1 to TB40).

ASSEMBLY DESCRIPTION

The **Trusted** 40 Channel Fire Input Versatile FTA T8847 provides termination for a maximum of 40 input channels from various types of field devices associated with the detection of fire hazards. These include smoke and heat detectors, and manual alarm callpoints (MACs) etc. The 40 channels are arranged in five power groups each comprising eight identical channels. Figure 1 below shows the configuration of a single channel within a group.

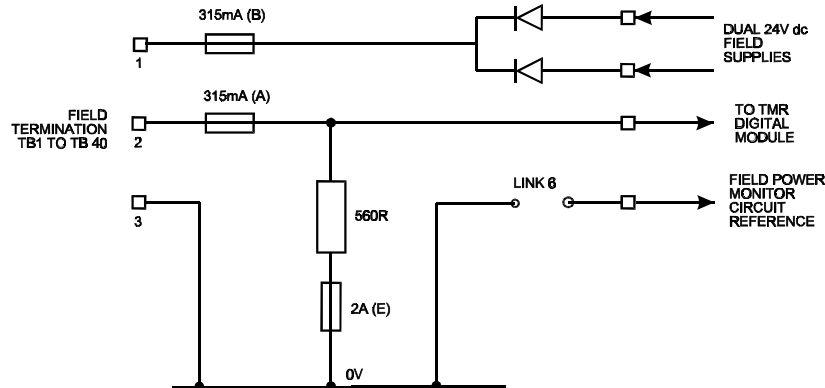


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ASSEMBLY INSTALLATION

Trusted 40 Channel Fire Input Versatile FTA T8847 is designed to be mounted on either of the TS32 or TS35 DIN rails in the horizontal or vertical positions as required.

ASSOCIATED CABLE SELECTION

Refer to the product descriptions detailed below:

PD-TC000	<i>Trusted</i> Power Cables
PD-TC100	<i>Trusted</i> I/O SmartSlot Cables Version 1
PD-TC200	<i>Trusted</i> I/O Companion Slot Cables
PD-TC500	<i>Trusted</i> I/O SmartSlot Cables Version 2

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ASSEMBLY PINOUT CONNECTIONS

TBFP1 TO TBFP5 CONNECTIONS

The pin connections of TBFP1 to TBFP5 are identical and are detailed below:

Pin	Service
1	24V-1
2	0V
3	0V
4	24V-2

TBG1 CONNECTIONS

Pin	Service
1	0V
2	Channel 1
3	Channel 2
4	Channel 3
5	Channel 4
6	Channel 5
7	Channel 6
8	Channel 7
9	Channel 8
10	Not used

TBG2 CONNECTIONS

Pin	Service
1	0V
2	Channel 9
3	Channel 10
4	Channel 11
5	Channel 12
6	Channel 13
7	Channel 14
8	Channel 15
9	Channel 16
10	Not used

ASSEMBLY PINOUT CONNECTIONS

TBFP1 TO TBFP5 CONNECTIONS

The pin connections of TBFP1 to TBFP5 are identical and are detailed below:

Pin	Service
1	24V-1
2	0V
3	0V
4	24V-2

TBG1 CONNECTIONS

Pin	Service
1	0V
2	Channel 1
3	Channel 2
4	Channel 3
5	Channel 4
6	Channel 5
7	Channel 6
8	Channel 7
9	Channel 8
10	Not used

TBG2 CONNECTIONS

Pin	Service
1	0V
2	Channel 9
3	Channel 10
4	Channel 11
5	Channel 12
6	Channel 13
7	Channel 14
8	Channel 15
9	Channel 16
10	Not used

TBG3 CONNECTIONS

Pin	Service
1	0V
2	Channel 17
3	Channel 18
4	Channel 19
5	Channel 20
6	Channel 21
7	Channel 22
8	Channel 23
9	Channel 24
10	Not used

TBG4 CONNECTIONS

Pin	Service
1	0V
2	Channel 25
3	Channel 26
4	Channel 27
5	Channel 28
6	Channel 29
7	Channel 30
8	Channel 31
9	Channel 32
10	Not used

TBG3 CONNECTIONS

Pin	Service
1	0V
2	Channel 17
3	Channel 18
4	Channel 19
5	Channel 20
6	Channel 21
7	Channel 22
8	Channel 23
9	Channel 24
10	Not used

TBG4 CONNECTIONS

Pin	Service
1	0V
2	Channel 25
3	Channel 26
4	Channel 27
5	Channel 28
6	Channel 29
7	Channel 30
8	Channel 31
9	Channel 32
10	Not used

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