1. Product Range

Catalogue No.	Product name	Description
T8240	Power Shelf	19 inch x 1U chassis for up to 3 Power Packs. Includes Power Port + 10-way cable connector, 3 off mains plugs and retaining clips.
T8231	Power Pack 24 Vdc	750 W, universal input, 24 Vdc out.
T8232	Power Pack 28 Vdc	750 W, universal input, 28 Vdc out.
T8243	Power Port	Plug in diagnostic interface + 10-way cable connector.
T8234	Power Controller	For live adjustment of output voltage. 19 inch x 1U. 1 x 5 way ribbon cable.
T8235	Power Shield	Covers unused Power Pack positions.
TC-323	Power Shelf Interconnect	1 x 5 way ribbon cable for current sharing between shelves and connection to a Power Controller.
T8247	Power Shelf support brackets	A pair of brackets that can support up to 4 Power Shelves.

Table 1 T824X Power System Product Range



Figure 1 Front View - Power Shelf with Power Packs

2. Description

A pair of brackets mounted in to a 19 inch frame supports up to 4 Power Shelves.

Power Packs are slotted into the 1U Power Shelf with the first Power Pack in the right hand slot, as shown in Figure 2. Each Power Pack provides 750 W (31.25 A at 24 Vdc) to the DC output on the Power Shelf.

The standard AC input connection to the Power Shelf is through IEC 60320 type connectors rated at 10 A/250 Vac in Europe/Asia and 15 A/120 Vac in North America.

Output terminal blocks on each Power Shelf have three M4 screw connections. Ring type connectors should be used when connecting from the Power Shelf to system power distribution busbars.

The Power Port plugs into the back of the Power Shelf and requires a 24 V supply. The Power Port can provide monitoring and control via a 25 way D connector when connected to a Power Controller. A separate connector (CON3) provides DC and AC fail contacts. When more than one Power Shelf is used, Power Ports are linked using a Power Shelf Interconnect ribbon cable to enable current sharing.

Spare slots in the Power Shelf are normally covered by Power Shields and the appropriate fault relays are linked on the Power Port.

The 824X system includes an optional 1U Power Controller that is connected via the Power Port, using a TC-323 Power Shelf Interconnect cable, and allows online setting of output voltage. The Power Controller can monitor up to 12 Power Packs in 4 Power Shelves. Each Power Shelf is identified by the Power Controller by selecting addresses on the Power Port as described in paragraph 5.2.4.

Unused slots in the 4U brackets may be used for other equipment or fitted with blanking plates.

Unused connectors on the TC-323 cable should be tied back and left unused.

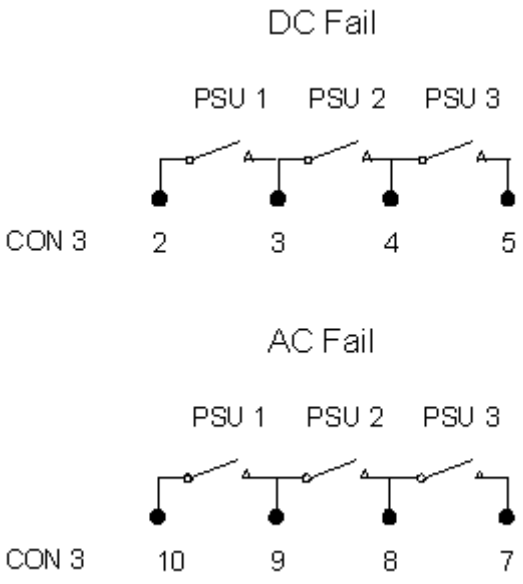
5.3.2. Pin-out CON 3

Pin	Description
1	+24V system supply
2/3	DCFAIL_1
3/4	DCFAIL_2
4/5	DCFAIL_3
6	0V system supply return
7/8	ACFAIL_3
8/9	ACFAIL_2
9/10	ACFAIL_1

Table 10 Connector 3 Pin-out

CON 3 provides volt-free alarm contacts as detailed in section 5.2.2 and 5.2.3 for use by the system. These are made available on a connector for ease of wiring into the system.

CON 3 connector cable block is Weidmuller type BLZF3.5/10.



The relays are energised (contacts closed) when a PSU is fitted in a Power Shelf and healthy. Link across those contacts that do not have a corresponding PSU fitted.