

24Vdc 3A & 6A Power Series

MODELS:

TPS24-3DC
TPS24-3DC-B
TPS24-3DC-ME
TPS24-3DC-MED10
TPS24-3DC-MED20
TPS24-6DC
TPS24-6DC-B
TPS24-6DC-ME
TPS24-6DC-MED10
TPS24-6DC-MED20

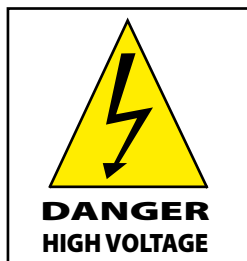
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DESIGNED & MANUFACTURED

Installation Manual

CAUTION



Dangerous internal voltages exceeding 400 Volts - DO NOT REMOVE COVERS !

Equipment must be installed & serviced by suitably qualified service personnel in a restricted access area.

Dangerous Voltages Inside !

Do not remove covers

No user serviceable parts inside

General

These power supplies are designed for **indoor use only**.



TPS24-DC Series models are high performance, extremely low noise, Dual Channel Switch Mode power supplies offering 24Vdc at 3A or 24Vdc 6A (model dependant).

When operating from mains, these models provide an output of 24Vdc (to power connected equipment) and are configured with a separate 27.6Vdc battery charging channel. Available battery charge current is 700ma @ 27.6Vdc (approx) for TPS24-3DC Models (total output 3.7A) & 1.4A @ 27.6Vdc (approx) for TPS24-6DC Models (total output 7.4A) In the event of mains failure, battery voltage is clamped to 24Vdc and instantaneously powers the load. When the mains voltage is restored, batteries are disconnected from the load and recharging commences automatically.

Output short-circuit and overload protection are provided . Removal of the fault / short circuit condition will return the power supply to normal operation (Auto-Reset).

Model Variants

TPS24-3DC	Single 3A Output - Supply only - no cabinet (273L x 145W x 80H)
TPS24-3DC-B	Single 3A Output - Medium steel enclosure (340W x 436H x 145D mm)
TPS24-3DC-ME	Single 3A Output - Large steel enclosure (482W x 470H x 185D mm)
TPS24-3DC-MED10	10 x 300mA Outputs - Large steel enclosure (482W x 470H x 185D mm)
TPS24-3DC-MED20	20 x 150mA Outputs - Large steel enclosure (482W x 470H x 185D mm)
TPS24-6DC	Single 6A Output - Supply only - no cabinet (273L x 145W x 80H)
TPS24-6DC-B	Single 6A Output - Medium steel enclosure (340W x 436H x 145D mm)
TPS24-6DC-ME	Single 6A Output - Large steel enclosure (482W x 470H x 185D mm)
TPS24-6DC-MED10	10 x 600mA Outputs - Large steel enclosure (482W x 470H x 185D mm)
TPS24-6DC-MED20	20 x 300mA Outputs - Large steel enclosure (482W x 470H x 185D mm)

Connection

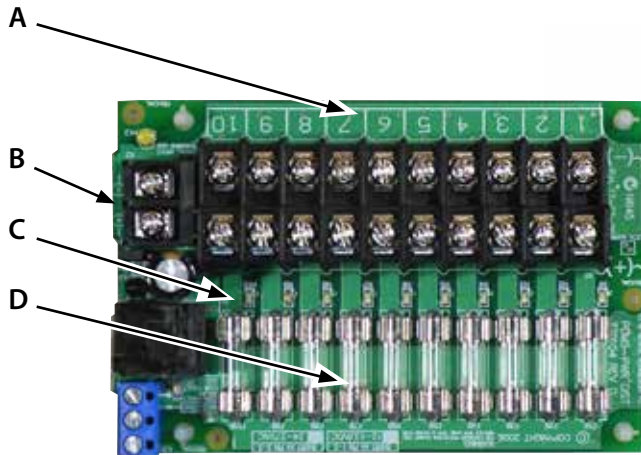
Single Output Models	Multiple Output Models
10-way removable terminal block provides the following: (See over the page for a layout) * 24Vdc Output * 27.6Vdc Output for SLA (Sealed Lead Acid) Batteries * Battery Test load (not used on this model) * AC OK Relay Output (SPST) * Battery Fault/Low Battery Relay Output (SPST)	24Vdc Output is via individually fused outputs (10 or 20) 10-way removable terminal block provides the following: (See over the page for a layout) * 27.6Vdc Output for SLA (Sealed Lead Acid) Batteries * Battery Test load (not used on this model) * AC OK Relay Output (SPST) * Battery Fault/Low Battery Relay Output (SPST)

Caution when handling batteries:

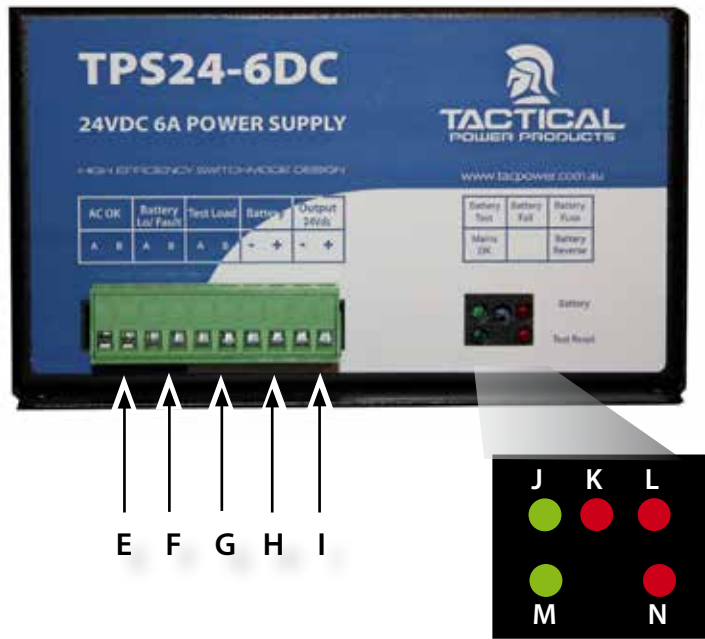
Before connecting two 12V SLA batteries in series to this power supply, ensure both are fully charged to 13.8V, this will ensure the batteries are charged evenly via the 27.6v charging circuit. Exercise care when terminating and connecting batteries. Mishandling or short circuit of SLA batteries can cause severe damage, burns and fire.

LAYOUT

Multi-Output Models
(e.g. TPS24-6DC-MED10)



TPS24-6DC Module Face



A	Output Terminals (Multi Output models only)	B	PDM Input (Multi Output models only) - "I" below
C	Individual Circuit Status LEDs (Multi Output Models)	D	Individual Circuit Fuses (Multi Output models only)
E	AC Mains OK Output (COM / NC)	F	Battery Low / Fault Output (COM / NC)
G	Not used in this model	H	- Battery + (Connect Sealed Lead Acid Batteries)
I	- Output 24Vdc + (Connect to load or PDM)	J	Not used in this model
K	Battery Test Fail LED (Red ON = Fail)	L	Battery Fuse Fail LED (Red ON = Fail)
M	AC Mains OK LED (Green ON = OK)	N	Reverse Battery LED (Red ON = Fail)
O	240V IEC Mains Socket	P	Compliance / Date of Manufacture Label



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24Vdc

3A & 6A Series



Specifications : (In the interests of product improvement, Tactical reserves the right to change specifications without notice)

	3DC	3DC-B	3DC-ME	3DC-MED10	3DC-MED20	6DC	6DC-B	6DC-ME	6DC-MED10	6DC-MED20
Full Model Number	TPS24-3DC	TPS24-3DC-B	TPS24-3DC-ME	TPS24-3DC-MED10	TPS24-3DC-MED20	TPS24-6DC	TPS24-6DC-B	TPS24-6DC-ME	TPS24-6DC-MED10	TPS24-6DC-MED20
Output Voltage	24Vdc									
Output Current	3A					6A				
Output Channels	1			10	20	1			10	20
Output per Channel	3A			300mA	150mA	6A			600mA	300mA
Input Voltage	240 V ac (215V - 255V) 50Hz									
Input Current	0.8A at full load					1.6A at full load				
Input In-Rush	<20A (25 C cold start up)									
Battery Charger	27.6Vdc / 0.7A					27.6Vdc / 1.4A				
Low Battery Indicator	1 x SPST Relay & Red LED									
AC OK Indicator	1 x SPST Relay & Green LED									
Weight	< 2Kg	< 5Kg	< 12Kg			< 2Kg	< 5Kg	< 12Kg		
Dimensions (mm)	273L x 145W x 80H	340W x 436H x 145D	482W x 470H x 185D			273L x 145W x 80H	340W x 436H x 145D	482W x 470H x 185D		
Efficiency	80% Typical									
Overload Protection	Constant current limiting, short circuit shutdown, auto recovery									
Load Regulation	< 1% from open to full load									
Line Regulation	< 0.2%									
Output Ripple	<50 mVp-p @ full load									
Working Temperature	0 - 45 ° C without derating									
Revision	K									
Safety Standards	AS NZS 60950.1:2003									
EMC Standards	AS / NZS CISPR 11:2004 Class B (Conducted & Radiated)									



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