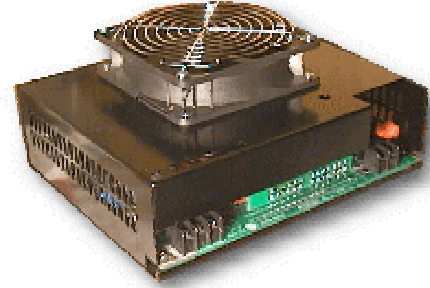


FR850 SERIES

850 Watt Switched Mode Power Supply

Features:

- High reliability
- Thermal protection as standard
- Industry standard footprint
- Up to seven outputs available
- 600Vdc maximum output voltage
- Peak power available to 1.3kW
- Conforms to International safety regulations



Description:

The FR850 series is effectively an up-rated version of our 750W series with even more performance available in terms of cubic Watts. Again available with up to 7 outputs, optional features include mains input auto-select, top or side fan cooling, mains powerfail, output OK, inhibit / enable control, current share for parallel use, ORing diodes for N+1, output remote sense.

Specification:

Input

Input range : 90-132Vac / 180-264Vac Link selectable
(90-264Vac auto-select)
Frequency range : 47-63Hz
Input VA : 1600VA Max @240Vrms
Earth leakage : 1.5mA typical @ 264Vac
Inrush current : <30A@ peak input volts
Power Factor : 0.67 typical @ 230Vac
Hold up time : 20ms from 240V @ full load
Input fuse: F12AHRC 32 x 6.3mm
Efficiency : 75-80% typical @ 240Vac-full load

Output

Output voltage : As required within 8.5 – 500Vdc range
Output current : 100A maximum available
Voltage adjustment : +/- 5% (V1)
Initial setting : 0.5%(V1);1.5%(V2 - V5)
Load regulation : <1% single o/p and V1 (4%V2-V5)*10% min load.
Line regulation : <0.2% over input range
Cross regulation : 0.5% (V2-5) @ 10% load change V1
Ripple and noise: 0.2%RMS, 1% peak DC - 30MHz
Transient deviation : 5% for 50% load variation
Transient time : 2mS
Over voltage protection : 115 - 125% of V1
Over current protection : All outputs
Output power : 850W Fan cooled
Temperature coefficient : 0.02%/°C (V1)0.05%(V2-V5)

Options

Current share for parallel use	ORing diode(s) for N+1
Mains powerfail signal	Output OK signal
Remote sense	Inhibit / enable control
Top or side fans	
Front panel for rack mounting applications - to specification	
Voltage / current adjustment via external potentiometer	
Connection via 9mm screw terminal or M6 stud	
Available with top fan enclosed (85mm height)	
Mains input auto-select (universal)	

General

Efficiency: 80% typical
MTBF: >100,000 hrs to MIL217E @ 25°C
Dielectric strength:
4.25Kvdc input to Output
2.25Kvdc input to Earth
500Vdc output to Earth
Connections: 0.375" screw terminals, M6 studs or custom loom assy.

Environmental

Operating Temperature:
-20c to +60°C De-rate at 2.5% /°C above 50°C
Storage Temperature:
-25°C to + 85°C
Operating humidity:
0 to 95% RH non-condensing

Safety & EMC

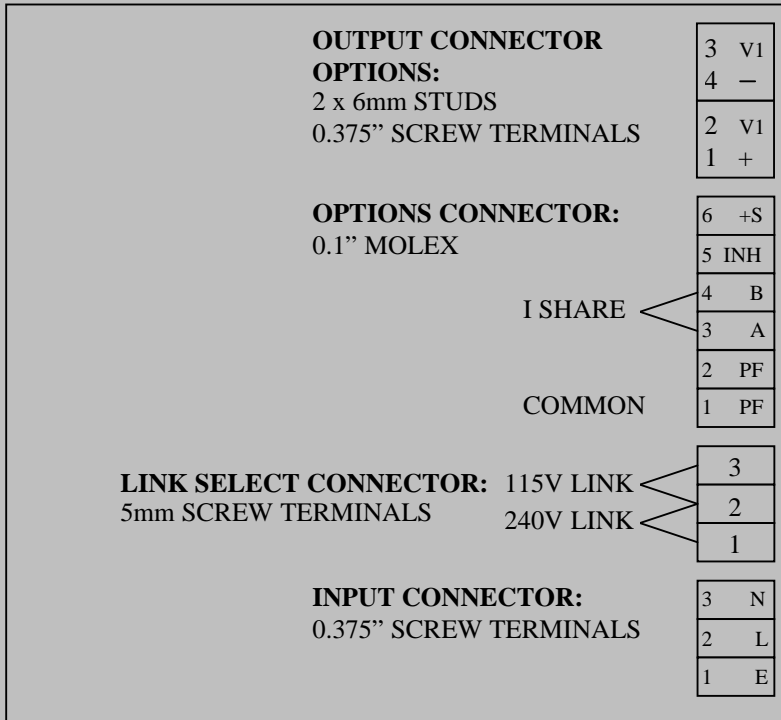
Isolation, input to earth : 2.5kVdc, >2.5mm
Isolation, input to output : 4.25KVdc, >6.4mm
Isolation, output to earth : 500Vdc
(unless commoned)
Units designed to meet: EN60950, UL60950,
CSA 22.2 No. 950 & 234
Emissions designed to meet: EN55022-B
(conducted) EN55022-A (radiated)

Immunity designed to meet:

EN61000-4-2 (ESD)
EN61000-4-3 (RAD)
EN61000-4-4 (FAST TRANS)
EN61000-4-5 (SURGE)
EN61000-4-6 (CONDUCTED)
EN61000-4-8 (MAGNETIC)
EN61000-4-11 (VOLTAGE DIPS & FLUCTUATIONS)
EN61000-3-2 (MAINS HARMONICS)
EN61000-3-3 (VOLTAGE FLUCTUATIONS)

FR850 Series Single Output Mechanical Details and Connections

TOP VIEW

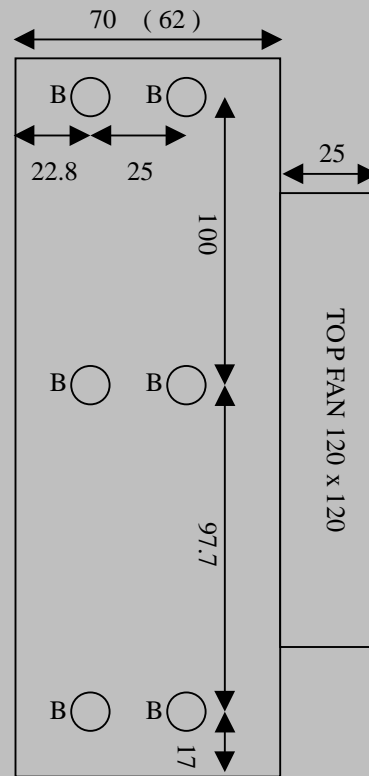


A : M3 CAPTIVE NUT
Maximum Insertion 6mm

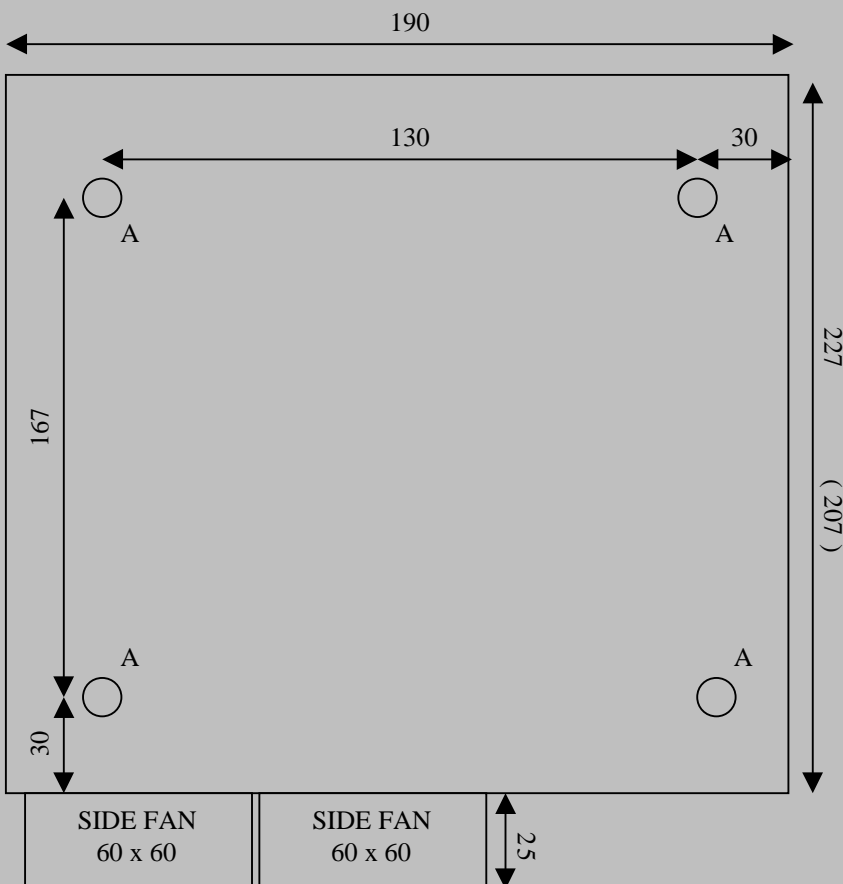
B : M4 CAPTIVE NUT
Maximum Insertion 6mm

Dimensions in (brackets)
Apply to side fans version only

SIDE VIEW

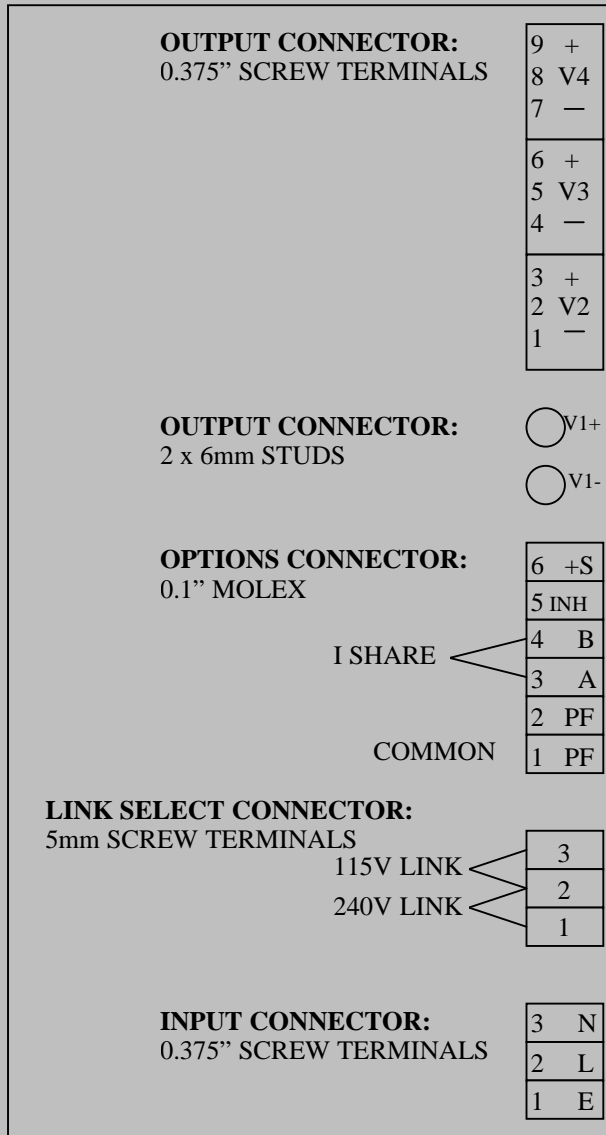


BOTTOM VIEW

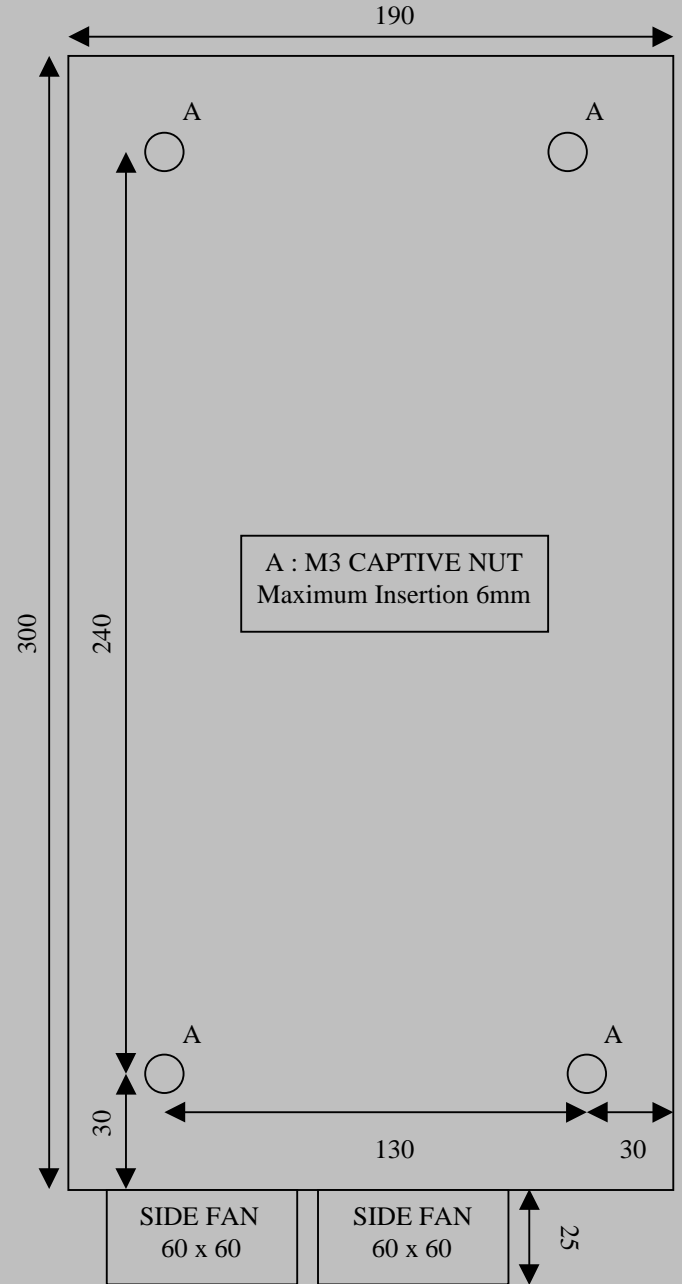


FR850 Series Multiple Output Mechanical Details and Connections

TOP VIEW



BOTTOM VIEW



SIDE VIEW

