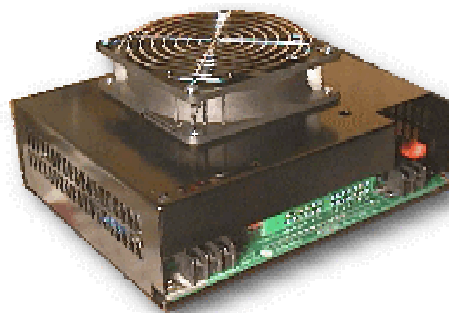


FX850 Lead acid charger series

850 Watt Switched Mode

Features:

- High reliability
- Thermal protection as standard
- Industry standard footprint
- Float charge @ 2.25V/Cell
- Constant current / voltage charge
- Internal ORing diode to prevent discharge
- Front panel available for 19" Rack applications



Description:

The FX850 float / boost charger series again offers exceptional charging performance and has proven to be highly popular for applications within the UPS industry. Optional features include mains input auto-select, top or side fan cooling, mains powerfail, charger output OK, inhibit / enable control and current share for parallel use. Internal ORing diode fitted as standard.

Specification:

Outputs

FX850-06: Contact Sales	FX850-36 : 40.5V / 21A	FX850-96 : 108V / 7.9A
FX850-12 : 13.5V / 63A	FX850-48 : 54V / 15.7A	FX850-120 : 135V / 6.3A
FX850-24 : 27.6V / 32.5A	FX850-60 : 67.5V / 12.6A	FX850-240 : 270V / 3.1A

Input

Input range : 90-132Vac / 180-264Vac (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

Output

Output voltages / currents : see table
Voltage adjustment : +/- 5% * wide range available
Initial setting : 0.5%
Load regulation : <1%
Line regulation : <0.2% over input range
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 : Constant current limit >100%
Output power : 850W Fan cooled
Temperature coefficient :0.02%/°C
Shock and vibration : Meets MIL STD810E

Options

Output / charge OK signal	Low battery disconnect signal
Mains power fail signal	Current share for parallel use
Mains input auto-select	Inhibit / enable control
Front panel to specification	Remote sense
Side fans available	IEC mains inlet
Battery temperature compensation @ 0.2% Vout/°C	
Boost charge @ 2.4V/cell (reduce to float charge@80%)	
Connection via M6 studs or 9mm screw terminals	

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:
-20°C 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-A (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)



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TOP VIEW

OUTPUT CONNECTOR

OPTIONS:

2 x 6mm STUDS

0.375" SCREW TERMINALS

3	V1
4	—

$$\begin{array}{r} 2 \text{ V1} \\ 1 + \end{array}$$

OPTIONS CONNECTOR:

0.1" MOLEX

6	+S
5	INH

4	B
3	DE

3	PF
2	PF

1 COM

I SHARE

CHARGER FAIL SIGNALS

NORMALLY OPEN

NORMALLY CLOSED

LINK SELECT CONNECTOR: 115V LINK - 5mm SCREW TERMINALS 240V LINK - 5mm SCREW TERMINALS

5mm SCREW TERMINALS

115V LINK <

240V LINK -

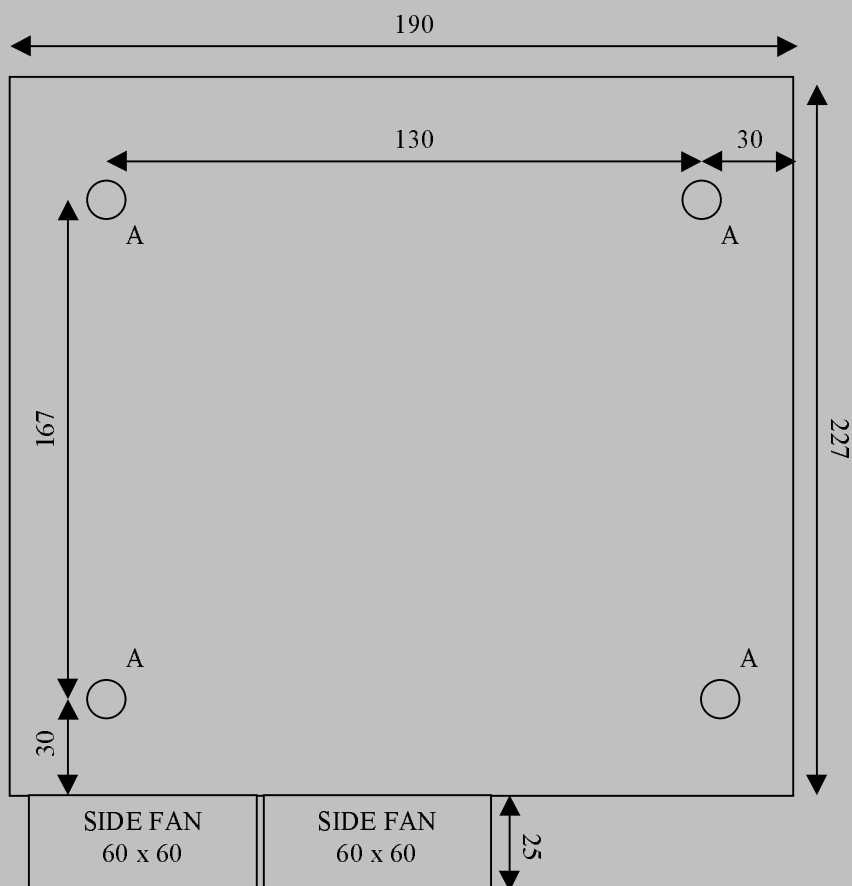
INPUT CONNECTOR:

0.375" SCREW TERMINALS

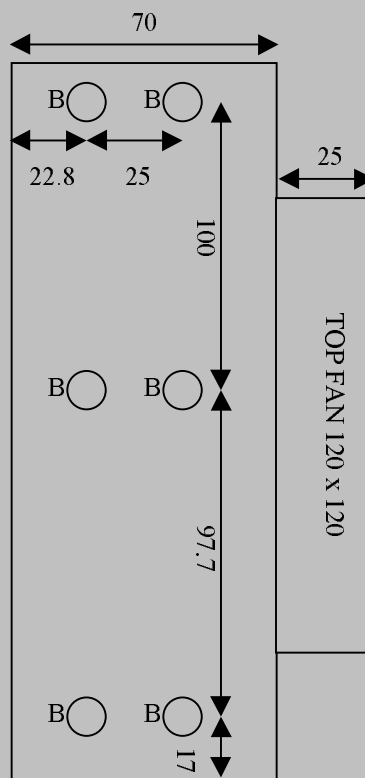
3	N
2	L

1	E
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BOTTOM VIEW



SIDE VIEW



A : M3 CAPTIVE NUT
Maximum Insertion 6mm

B : M4 CAPTIVE NUT
Maximum Insertion 6mm