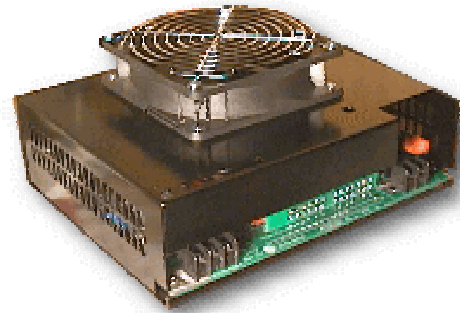


# FX850 Lead acid charger series

## 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:  
 -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)

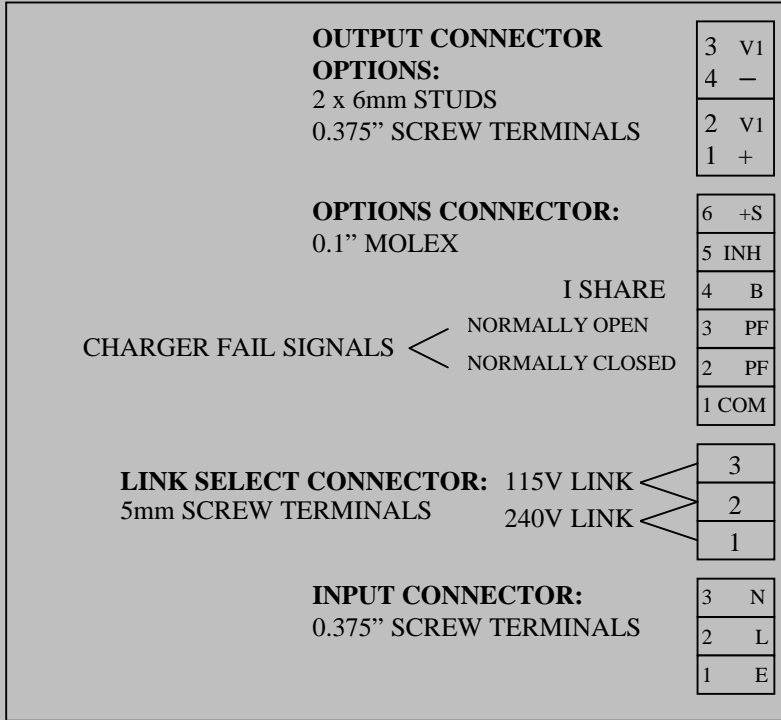
Immunity designed to meet:

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 )

# FX850 Series

## Mechanical Details and Connections

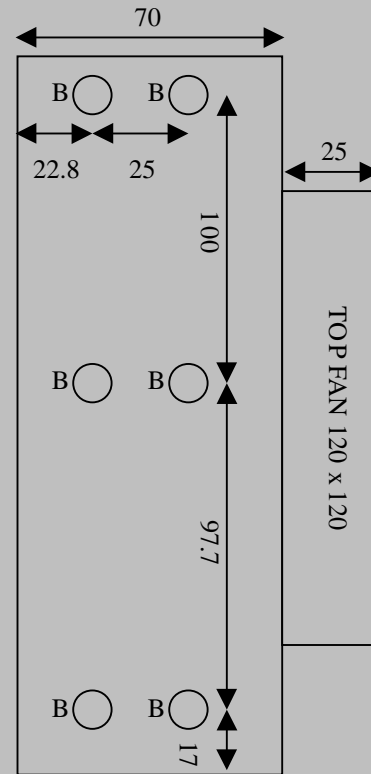
### TOP VIEW



A : M3 CAPTIVE NUT  
Maximum Insertion 6mm

B : M4 CAPTIVE NUT  
Maximum Insertion 6mm

### SIDE VIEW



### BOTTOM VIEW

