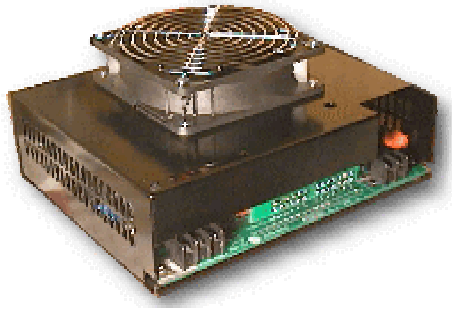
FX550 Lead acid charger series
550 Watt Switched Mode

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 FX550 float / boost charger series offers high reliability and performance with in the mid-band power bracket and has proven to be popular for applications requiring a high autonomy. Optional features include mains input auto-select, top or side fan cooling, powerfail, charger output OK, inhibit / enable control and current share for parallel use. Internal ORing diode fitted as standard.

Specification:

Outputs

FX550-06 : 6.75V / 81.5A	FX550-36 : 40.5V / 13.6A	FX550-96 : 108V / 5.1A
FX550-12 : 13.5V / 40.1A	FX550-48 : 54V / 10.2A	FX550-120 : 135V / 4A
FX550- 24 : 27.6V / 20.4A	FX550-60 : 67.5V / 8.2A	FX550-240 : 270V / 2A

Input

Input range : 90-132Vac / 180-264Vac (90-264Vac auto-select)
Frequency range : 47-63Hz
Input VA : 1050VA 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 >550W
Output power : 550W Fan cooled
Temperature coefficient :0.02%/^{0}C
Shock and vibration : Meets MIL STD810E

Options

Output / charge OK signal	Low battery disconnect relay
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

Connection via M6 studs or 9mm screw terminals
Battery temperature compensation @ 0.2% Vout/^{o}C
Boost charge @ 2.4V/cell (reduce to float charge@80%)

General

Efficiency: 80% typical
MTBF: >100,000 hrs to MIL217E @ 25^{0}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^{0}C De-rate at 2.5% /^{0}C above 50^{0}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)

Units 60 & 62 Werrington Business Centre, Papyrus Road, Peterborough, PE4 5BH
Phone: 01733 322534 Fax: 01733 322535 e-mail: sales@ferrus-power.co.uk

FX550 Series
Mechanical Details and Connections

TOP VIEW

OUTPUT CONNECTOR OPTIONS:
2 x 6mm STUDS
0.375" SCREW TERMINALS

3	V1
4	–
2	V1
1	+

OPTIONS CONNECTOR:
0.1" MOLEX

6	+S
5	INH
4	I SHARE B
3	CHARGER FAIL SIGNALS NORMALLY OPEN PF
2	CHARGER FAIL SIGNALS NORMALLY CLOSED PF
1	COM

LINK SELECT CONNECTOR:
5mm SCREW TERMINALS

3	115V LINK
2	240V LINK
1	

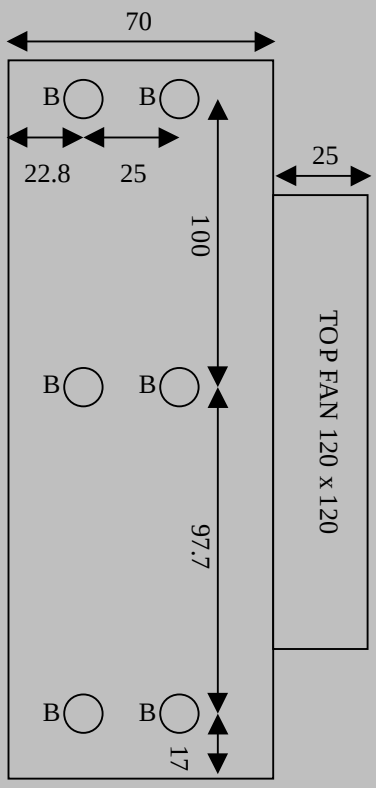
INPUT CONNECTOR:
0.375" SCREW TERMINALS

3	N
2	L
1	E

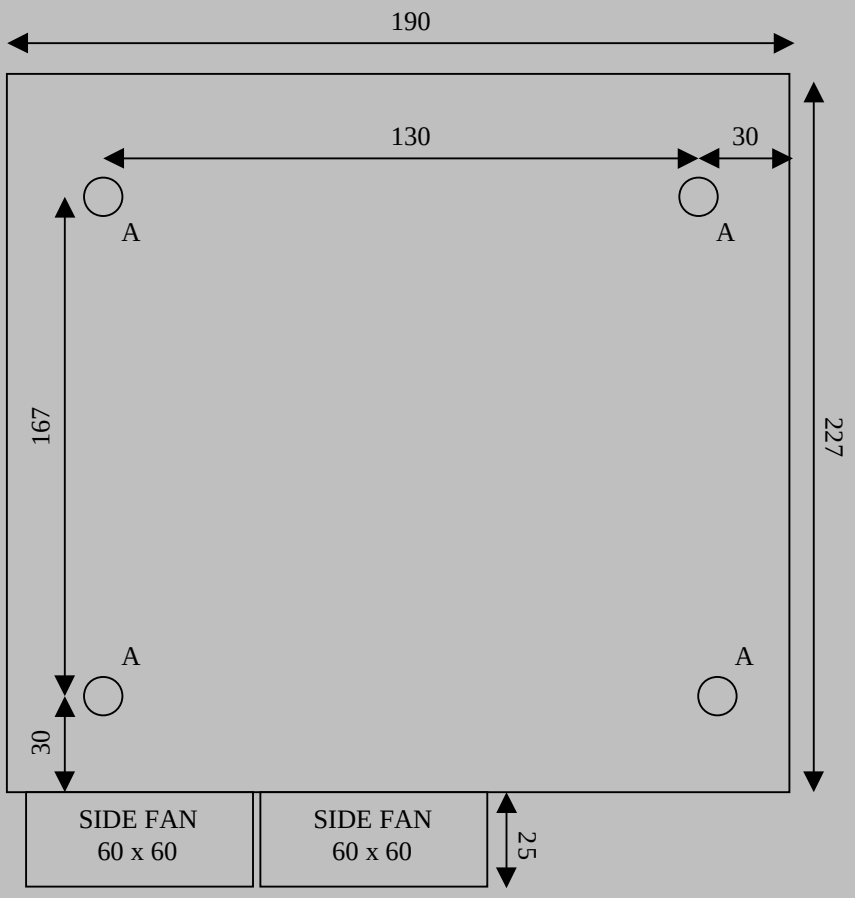
A : M3 CAPTIVE NUT
Maximum Insertion 6mm

B : M4 CAPTIVE NUT
Maximum Insertion 6mm

SIDE VIEW



BOTTOM VIEW



REV 13-06-08

Units 60 & 62 Werrington Business Centre, Papyrus Road, Peterborough, PE4 5BH
Phone: 01733 322534 Fax: 01733 322535 e-mail: sales@ferrus-power.co.uk