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%/°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/°C
Boost charge @ 2.4V/cell (reduce to float charge@80%)

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:

 $-20c \text{ to } +60^{\circ}\text{C}$ De-rate at 2.5% / $^{\circ}\text{C}$ above 50 $^{\circ}\text{C}$

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)

FX550 Series Mechanical Details and Connections

