

FX100 Lead acid charger series

100 Watt Switched Mode

Features:

- High reliability
- Float charge @ 2.25v/cell
- Constant current / voltage charge
- Light weight
- Compact size – 1U Compatibility
- Internal ORing diode to prevent discharge
- Din rail mountable
- Convection cooled



100 x 145 x 42mm

Description:

The FX100 single output float charger series is ideal for applications in which space is critical offering overall dimensions of only 100 x 145 x 42mm. Features include screw terminal connections, output voltage sense and internal ORing diode as standard.

Specification:

Models available	FX100-36 : 40.5V / 2.57A	FX100-96 : 108V / 0.92A
FX100-12 : 13.5V / 7.4A	FX100-48 : 54V / 1.85A	FX100-120 : 135V / 0.74A
FX100-24 : 27.6V / 3.7A	FX100-60 : 67.5V / 1.48A	FX100-240 : 270V/0.37A

Input

Input range : 180 - 264Vac
 Frequency range : 47-63Hz
 Earth leakage : 1mA typical @ 264Vac
 Inrush current : <30A@ peak input volts
 Power Factor : 0.67 typical @ 230Vac
 Input current: 2.2A @ 90Vac
 Hold up time : 90ms from 240V @ full load
 Input fuse: 3.15A time delay TR5

Output

Output voltages / currents : see table
 Voltage adjustment : +/- 5%
 Initial setting : 0.5%
 Load regulation : <1%, 0-100%load
 Line regulation : <0.5%, 180-264Vac
 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 > 100W
 Output power : 100 Watts max, convection cooled
 Shock and vibration : Meets MIL STD810E

Options

Battery temperature compensation @ 0.2% Vout / °C
 Output OK LED
 9mm or 5mm screw terminal connection
 DIN rail clips
 Remote sense
 Thermal protection

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" Beau screw or M6 studs

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)

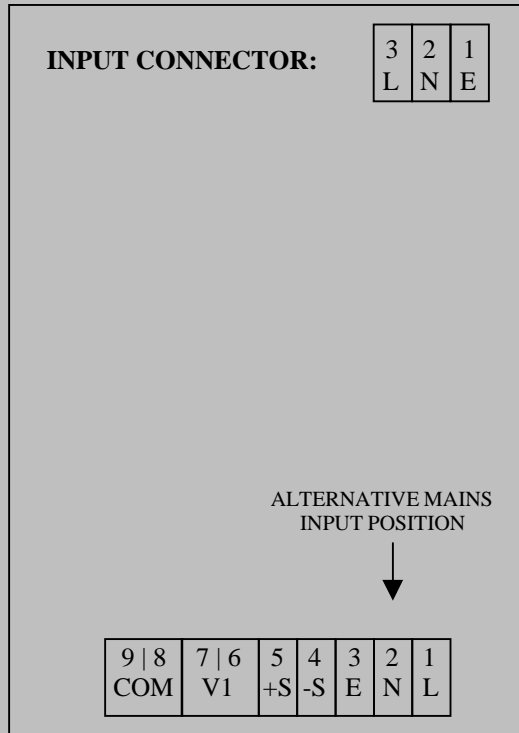
Immunity designed to meet:

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)

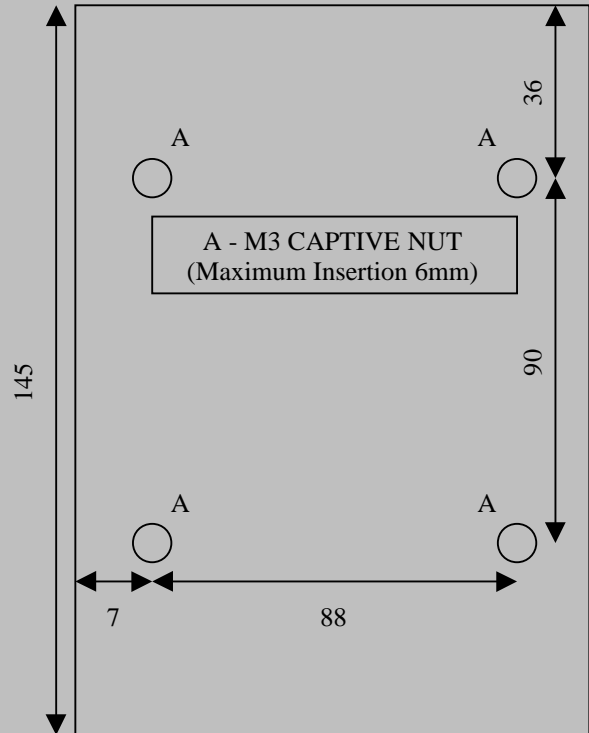
FX100 Series

Mechanical Details and Connections

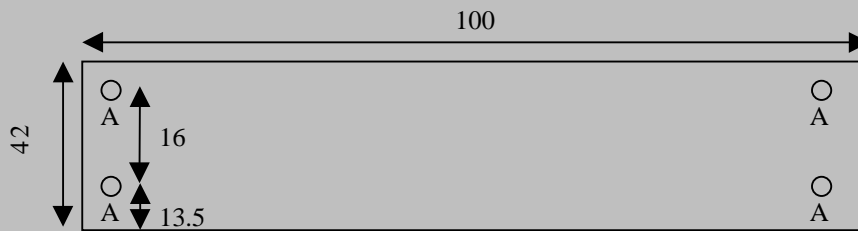
Top View – 0.375” Screw Terminals



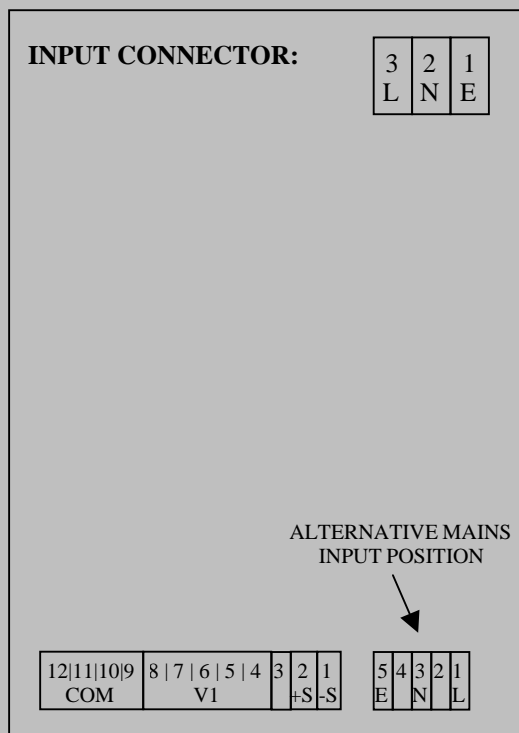
Bottom View



Side View



Top View – 0.156” Molex Square Pin



Top View – 5mm Screw Terminals

