

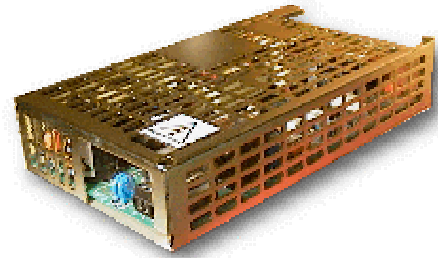
FXP150 Lead acid charger series

150 Watt Switched Mode



Features:

- High reliability
- Thermal protection as standard
- Float charge @ 2.25V/cell
- Constant current / voltage charge
- Low profile - High density format
- Conforms to International safety regulations
- Internal ORing diode to prevent battery discharge



Low Profile: 212.5 x 116 x 43mm

Description:

The FXP150 float charger series offers a highly compact charging supply incorporating active power factor correction to meet the requirements of EN61000-3-2 D. Optional features include choice of connections (Molex, screw terminal or custom), volt free charger ok signal, low battery disconnect, output remote sense and ORing diode as standard. See below for full battery options available. Custom charge voltages also available – contact sales.

Specification:

Input

Input voltage : 90 – 264Vac
 Input frequency : 47 – 63Hz
 Inrush current : < 30A (230Vac)
 Earth Leakage : 1.5mA typical at peak input volts
 Power Factor : 0.98 typical @ 230Vac
 Input current : 2A @ 90Vac
 Hold up time : 28ms from 240V @ full load
 Input fuse : F5AHRC 5 x 20mm

Output

Output voltages / currents: see table
 Voltage adjustment: +/- 5% (Wide range versions available)
 Initial setting: 0.5%
 Load /cross regulation: <1%
 Line regulation : <0.5%
 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 output voltage
 Over current protection : Constant current limit >150W
 Output power : 150 Watts convection cooled
 De-rating: 2.5% /°C above 50°C
 Temperature coefficient :0.02%/°C
 Shock and vibration: Meets MIL STD810F

Options available :

Battery temperature compensation @ 0.2% Vout / °C - (either internal or via 1M remote probe)

AC fail signal via 2 way relay contact (N/O in fault condition) (2 x 2.5mm² screw terminals)

Low battery disconnect (disconnects @ <1.75V per cell) (Load and battery connect via single 4mm² terminal in each case)
 Test / Charger OK indication – Status of charger output voltage provided (single 2.5mm² screw terminal)

Outputs

FXP150-06 : 6.75V / 22.2A	FXP150-36 : 40.5V / 3.7A	FXP150-96 : 108V / 1.4A
FXP150-12 : 13.5V / 11.1A	FXP150-48 : 54V / 2.8A	FXP150-120 : 135V / 1.1A
FXP150-24 : 27.6V / 5.6A	FXP150-60 : 67.5V / 2.2A	FXP150-240 : 270V / 0.6A

General

Efficiency: 80% typical
 MTBF: >100,000 hrs to MIL217F @ 25°C
 Dielectric strength:
 4.25Kvdc input to Output
 2.25Kvdc input to Earth
 500Vdc output to Earth
 Connections: 0.375" Beau screw terminals, 5mm screw or Molex 0.156" as required.
 (custom loom optional)

Environmental

Operating Temperature:
 0°C to +70°C De-rate at 2.5% /°C above 50°C
 (Low temp. versions available)
 Storage Temperature:
 -25°C to + 85°C
 (Low temp. versions available)
 Operating humidity:
 0 to 95% RH non-condensing

Safety & EMC

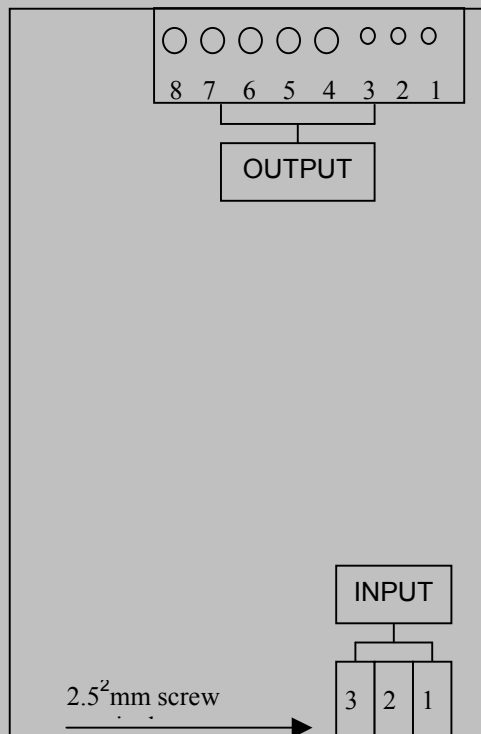
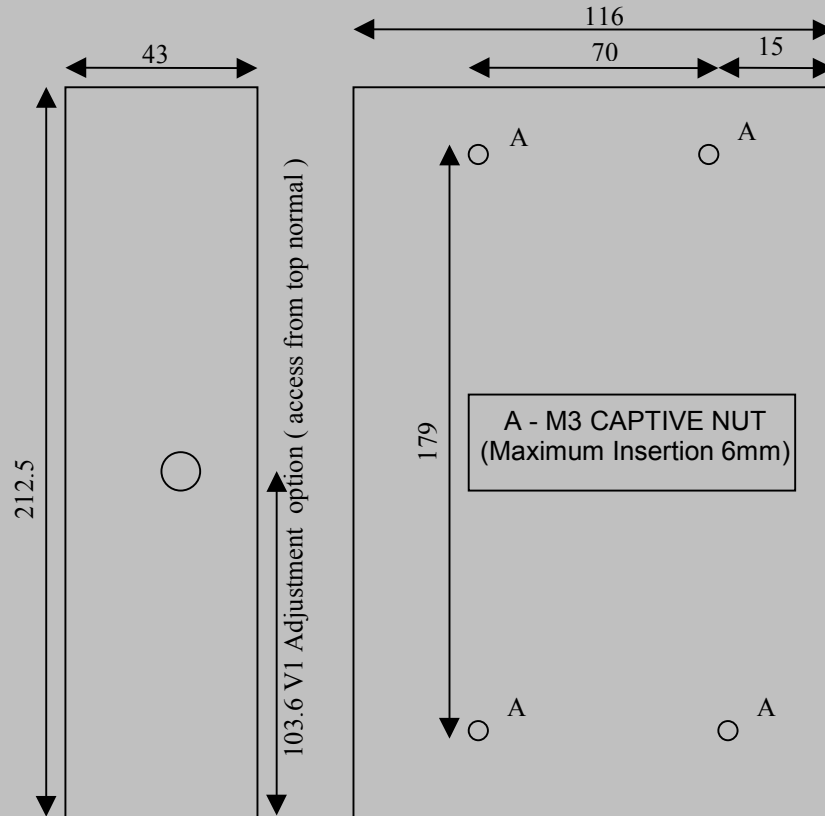
Isolation, input to earth : 2.5kVdc, >2.5mm
 Isolation, input to output : 4.25KVdc, >6.4mm
 Isolation, output to earth : 500Vdc
 (unless commoned)
 Units designed to meet: EN60950, UL60950, CSA 22.2 No. 950 & 234
 Emissions designed to meet: EN55022-B (conducted)
 EN55022-A (radiated)

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)

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Mechanical Details and Connections



Connections :

Input :

(2.5mm² screw terminals)

- 1 = Earth
- 2 = Line
- 3 = Neutral

Output :

(2.5mm² screw terminals)

- 1 = AC Fail (N/O)
- 2 = AC Fail (N/O)
- 3 = Test (charger fail)

(4mm² screw terminals)

- 4 = 0V
- 5 = 0V
- 6 = Load
- 7 = Battery(+)
- 8 = Battery (+)