

# FXP450 Lead acid charger series

## 450 Watt Switched Mode

### Features:

- High reliability
- U Channel construction
- Float charge @ 2.25v/cell
- Constant current / voltage charge
- Available with filtered IEC Inlet
- Thermal protection as standard
- Internal ORing diode to prevent battery discharge



310 x 127 x 70mm

### Description:

This FXP450 single output float charger series offers high performance charging coupled with active power factor correction and universal mains input as standard. U channel design makes this product highly versatile for applications where height is limited. Features include optional screw terminal or filtered IEC inlet, output connection via M6 studs or screw terminals, remote output sense, inhibit / enable control, current share for parallel use and mains power fail.

### Specification:

#### Input

Input range : 90-264Vac  
 Frequency range : 47-63Hz  
 Earth leakage : 2.5mA typical @ 264Vac  
 Inrush current : <30A@ peak input volts  
 Power Factor : >0.98 typical @ 230Vac EN61000-3-2 Class D  
 Hold up time : 20ms from 90-240V @ full load  
 Input fuse: F8AHRC

#### Output

Output voltages / currents : see table (custom available)  
 Voltage adjustment : +/- 5%  
 Initial setting : 0.5%  
 Load regulation : <1%  
 Line regulation : <0.1% 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 output voltage  
 Over current protection : Constant current limiting >100%  
 Output power : 450W fan cooled  
 Temperature coefficient :0.02%/°C  
 Shock and vibration : Meets MIL-STD-810F  
 Safety cover : Fitted as standard

#### Options

Inhibit / Enable control                      Remote sense  
 Mains powerfail signal                      Output / charger OK signal  
 Current share for parallel use              Low battery disconnect signal  
 Minimum current detect signal  
 Battery temperature compensation @ 0.2%  $V_{out}/^{\circ}C$   
 Boost charge at 2.4V/cell (reduce to float charge @80%)  
 Input connection via 9mm screw terminals or IEC  
 Output connections via 9mm screw or M6 studs  
 60 way D-type connection also available for output

### Outputs

FXP450-06 : 6.75V / 66.6A	FXP450-36 : 40.5V / 11.1A	FXP450-96 : 108V / 4.2A
FXP450-12 : 13.5V / 33.3A	FXP450-48 : 54V / 8.3A	FXP450-120 : 135V / 3.3A
FXP450-24 : 27.6V / 16.6A	FXP450-60 : 67.5V / 6.6A	FXP450-240 : 270V / 1.7A

### General

Efficiency: 80% typical  
 MTBF: >100,000 hrs to MIL-STD-217F @ 25°C  
 Dielectric strength:  
 4.25Kvdc input to Output  
 2.25Kvdc input to Earth  
 500Vdc output to Earth  
 Connections: 0.375" Beau screw terminals or M6 studs (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)

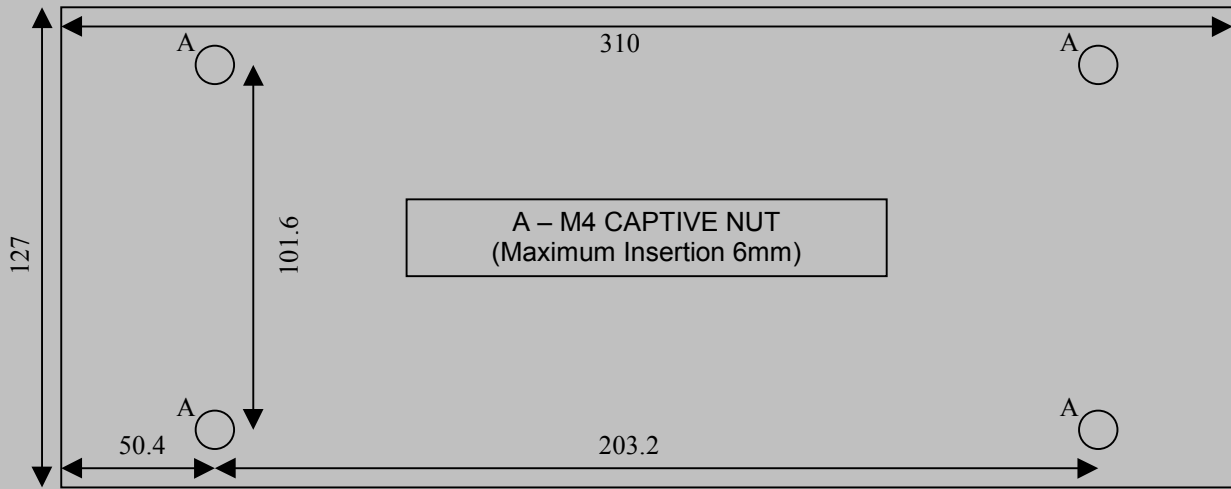
Immunity designed to meet:

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)

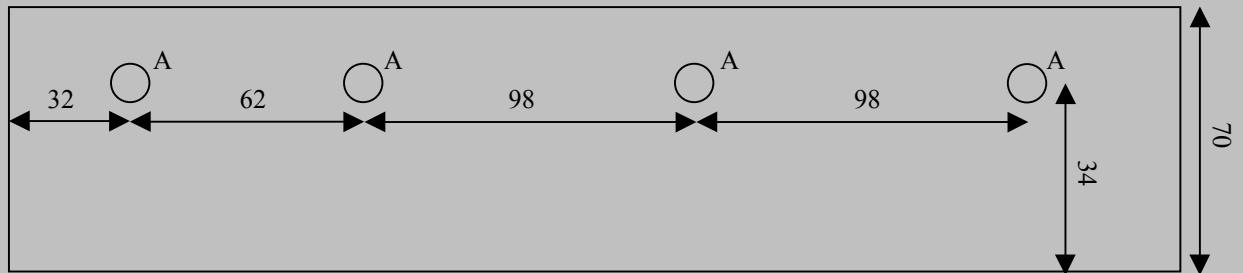
# FXP450 Series

## Mechanical Details and Connections

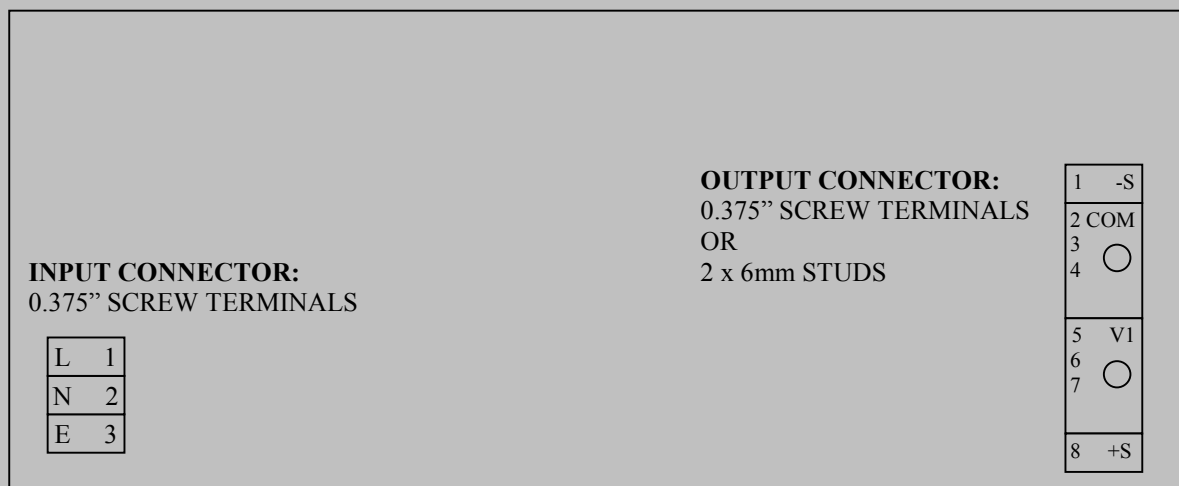
**BOTTOM VIEW**



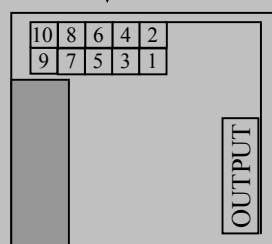
**SIDE VIEW**



**TOP VIEW**



**CONNECTOR DETAIL**



1. INHIBIT
2. O/P I LEVEL DETECT
3. UV DETECT
4. SIGNAL 0V
5. SIGNAL 0V
6. SIGNAL 0V
7. CHARGER OUTPUT OK
8. PF
9. OVP
10. TEMP. COMPENSATION

For other options contact sales