

Managed Sealed Lead Acid Battery Chargers

Models SLA500PCB and SLA800PCB

OPERATING INSTRUCTIONS

The SLAxxxPCB automatic managed constant-current constant-voltage chargers for sealed lead acid batteries are suitable for standby, cyclic and deep discharge applications. The output is preset for use with either 6 or 12 volt batteries up to the maximum specified charge current. At switch on, a deep discharged battery is reformed by a limited charge current until the cells accept maximum bulk charge. (This facility frequently recovers old batteries to a working state.) When the battery voltage approaches the preset end point potential the bulk charge decays and the constant standby voltage ensures the current stabilises at a safe maintenance level where it may be left indefinitely.

The output voltage is factory preset for battery type and operation, Cyclic or Float. There is some small adjustment of the charge termination voltage available via variable resistor VR1.

| Model | SLA500PCB | | SLA800PCB | |
|------------------|------------------------|-------|------------------------|--------|
| Battery Voltage | 6V | 12V | 6V | 12V |
| Output Current | 650mA | 500mA | 1200mA | 800mA |
| Battery Capacity | 3-10Ah | 2-6Ah | 5-15Ah | 4-10Ah |
| Input Voltage | 230Vac \pm 10%, 50Hz | | 230Vac \pm 10%, 50Hz | |
| Thermal Fuse | Yes | | No | |
| Led Indicators | Charge, Ready | | Power, Charge, Ready | |

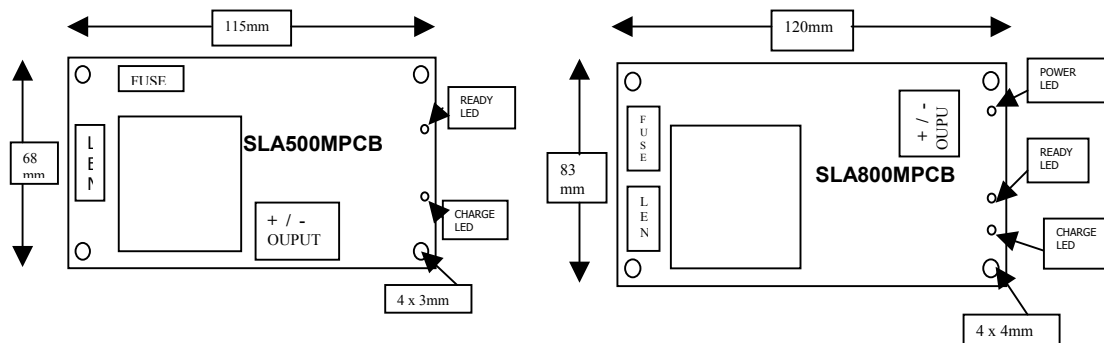
LED Indicators: Bulk charging is indicated by the red CHARGE led. The battery is approximately 90% charged when the green READY led illuminates. The CHARGE led remains on as additional capacity is restored by the maintenance current. SLA800PCB red POWER led illuminates when the pcb is powered. For optimum charge time of 6 - 7 hours the maximum charge current should not exceed 0.25CA. Larger capacity batteries take proportionately longer.

Connection: Ensure correct input voltage. Observe output polarity when making battery connection. All models have mains fuse, reverse polarity and short circuit protection. Open pcb's designed for indoor use.

Mounting:

SLA500MCPB:- PCB size 115mm x 68mm with mounting centres at 103mm x 56mm (4 x 3mm holes). LED centres are 5mm from pcb edge. Maximum component height above pcb: 40mm; below pcb: 5mm.

SLA800MCPB:- PCB size 120mm x 83mm with mounting centres at 105mm x 68mm (4 x 4mm holes). LED centres are 4mm from pcb edge. Maximum component height above pcb: 50mm, below pcb: 5mm.



Note: The card must be mounted to provide adequate insulation requirements for the application. Maximum earthed metalwork screw heads/ washers etc. \leq 5mm diameter without additional insulation. Attention should be paid to allowing sufficient cooling/ ventilation around the pcb in all eventualities of operation. The heatsink can get very hot.

It is the responsibility of the system integrator to meet all safety and functional requirements.

Protective Earth Operation (recommended):

Transformer laminations and one mounting point connected to protective earth terminal via pcb tracking.

Non-Earthed Operation:

Unit provides suitable creepage/ clearance for non-earthed 'double insulated' application if mounted in a suitable housing with suitable mounting insulation. Transformer laminations must be left floating.

Input/Output pcb creepage \geq 8mm, clearance \geq 5mm. Mains/Earth pcb creepage & clearance \geq 3mm.

Refer to applicable standards for your product type (e.g. EN60950).