Model SLA500MPCB & SLA800MPCB Battery Chargers

General Specification

The SLA500MPCB and SLA800MPCB 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 6V, 12V or 24V 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.

Model	SLA500MPCB			SLA800MPCB		
Battery Voltage	6V	12V	24V	6V	12V	24V
Output Current	650mA	500mA	350mA	1200mA	800mA	600mA
Battery Capacity	3-10Ah	2-6Ah	1-4Ah	5-15Ah	4-10Ah	3-8Ah
Input Voltage	230Vac ±10%, 50Hz			230Vac ±10%, 50Hz		
Thermal Fuse	Yes			Yes		
Led Indicators	Charge, Ready			Power, Charge, Ready		
Mass	0.4kg			0.7kg		

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.

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. SLA800MPCB 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:

SLA500MCBP:- PCB size 115mm x 70mm 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.

SLA800MCBP:- PCB size 120mm x 85mm 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.

Astrosyn TECHNICAL DATASHEET

Note: The card must be mounted to provide adequate insulation requirements for the application.

Maximum earthed metalwork screw heads/ washers etc. ≤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≥8mm, clearance≥5mm. Mains/Earth pcb creepage & clearance≥ 3mm.

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

