

Model SLA1.5M & SLA3.0M Battery Chargers

General Specification

The SLA1.5M and SLA3.0M automatic managed constant-current constant-voltage chargers for sealed lead acid batteries are suitable for standby, cyclic and deep discharge applications. The output is factory preset for use with 6V or 12V batteries for the SLA1.5M, and 12V or 18V batteries for the SLA3.0M model. At switch on, a deep discharged battery is reformed by a limited charge current until the cells accept maximum bulk charge. This process frequently recovers old batteries to a working state. When the battery voltage approaches the preset end point voltage of 2.35Vper cell, the bulk charge decays and the constant standby voltage ensures the current stabilises at a safe maintenance level where it may be left indefinitely without overcharge.

Current limited constant voltage charger

- Input: 110V - 230Vac 50/60Hz autoselect via IEC connector.
- Output: Via 4mm sockets mounted on the front panel.
- Bulk current limit 1500mA (SLA1.5M) or 3000mA (SLA3.0M).
- Reverse polarity and short circuit protected.
- Charge termination voltage set for the top end of float charge.
- CE compliant.

SLA1.5M

Output factory preset for 6V or 12v batteries
Dimensions 160 x 110 x 95mm
Mass 2.0kg

SLA3.0M

Output factory preset for 12V or 18v batteries
Dimensions 220 x 110 x 95mm
Mass 2.2kg

LED Indicators:-

- Red LED1 - Power On/Off
- Red LED2 - Bulk Charging
- Green LED3 - Ready

The left Red LED1 on indicates that the battery charger is powered up. The central Red LED2 on indicates that bulk charging is in progress. It goes off when the charge current drops below about 100mA, an indication that the battery is nearly fully charged (>85%). Once Red LED2 has gone out completely leaving the right Green LED3 on, the battery can be considered fully charged. The battery can be left connected indefinitely in this trickle charge state to maintain the battery fully charged.

Maximum charge current into an SLA battery should not exceed $0.25 \times C$ Amperes, where C is the Ampere-hour capacity of the battery. This guideline means that the SLA1.5M should only be used to charge SLA batteries with capacities > 6Ah. The corresponding minimum battery capacity for the SLA3.0M is 12Ah.

The approximate charge time for an SLA battery in good condition can be calculated as:-

Time (h) = (Battery Ah Capacity / Max Charger Current A) + 2h

Caution

Attention should be paid to allowing sufficient cooling/ ventilation around the charger in all eventualities of operation. The external heatsink surfaces can get very hot. It is the responsibility of the system integrator to meet all safety and functional requirements.

