

SBC-8268 Smart Battery Charger

Lead Acid Battery Charger using
Micro processor Control Unit with Pulse Width Modulation Charge technology

Introduction

This is a fully automatic 3 stage chargers suitable for 16 to 100AH lead acid battery.

The Micro Processor Control Unit(MCU) with Pulse Width Absorption Charge make it suitable for all types of lead acid batteries, Wet, Gel, AGM and Calcium-Calcium types.


The MCU checks out the battery, reconditions drained out battery or repairs lightly desulphated battery automatically.

Operations

The Smart Charger runs its own self-tests when connected to an AC source of (100 to 240V).

There are 3 Charge Modes to be selected: Sealed Lead Acid / Wet / Calcium-Calcium charge.

Checks faulty battery


The Smart Charger will scan the battery by injecting short DC pulses. If the battery is found faulty, the  LED flashes until the faulty battery is disconnected.

3 Stage charging with Repair Charging

When the battery is found to be chargeable, the battery will go through constant current Bulk Charge, then a Pulse Width Absorption Charge, and finally a Pulse Float Charge. The charger can be connected to battery permanently without over charge.

Repair charging

If the battery is found to be sulphated, the Smart Charger will use special repair charge pulses to de-sulphate the battery until battery becomes ready for normal bulk charge.

If after 8 hours of repair charge, the battery still cannot be improved, it is then considered to be non- repairable and the  LED will flash until battery is removed.

Safety

There is no voltage at the output connectors until they are in contact with the battery terminal.

There is absolutely no spark during the contact.

Electronic reverse polarity and output short circuit protection with flashing alarm LED.

The maximum charge time is limited to 40 hours to avoid over-charging.

The charger has double protections against overheating.

The output power will decrease when ambient temperature increases above a set temperature.

If this does not cool down enough, the charger will shut down at a preset maximum temperature.

Features

- Microprocessor Control 3 stage charger with Pulse Absorption and Float Charge
- Universal AC input (100V to 240V)
- Suitable for All types of lead acid batteries Wet, Gel, AGM and Calcium-Calcium types
- Suitable for 16AH to 100AH batteries
- Auto pulse repair
- Thermo control regulates charge current in hot or enclosed conditions
- Two swappable connection leads with clamps and eyelet terminals.
- No worries about wrong connections, shorting of charger leads and sparks on contact.
- No worries about overcharging or undercharging battery designed for long term connection.
- The Micro-processor constantly monitors the battery condition from initial checking, conditioning if necessary, to bulk, absorption and float charges.
- Simple 3 selections with intuitive iconic LED indications

Specifications

AC Input Voltage	100-240V
AC Frequency Range	48-62Hz~
No Load AC Current	100mA@100VAC
Full Load AC Current	1.3A@230VAC
Max Power	70W
Optimal Efficiency	> 81%
Bulk Charge Max. Current Level (Current Limit) For All Mode	2.5A
V _{BULK} For Sealed Lead Acid Mode	28.4V
V _{BULK} For Wet Mode	28.8V
V _{BULK} For Calcium-Calcium Mode	29.2V
Ripple & Noise(P-P)	200mV
Protection	Overload, Short Circuit, Over Temperature, Reverse Polarity, No Spark For Battery Connected, Short Output and 40HR MAX. Charging Time.
Construction	Poly-carbonate Casing, Water Resistant
Cooling System	Natural Convection
Approvals	CE EN55014 EN60335 , IP45 for body only
Weight	Approx. 400g
Dimensions(LXWXH)	150x60x30mm

