

EPS 1225

The EPS 1225 has two out banks to charge batteries, a switch for mute function, and a switch field for the selection of the charging voltage and timer function. It also has an optional connection for remote control and temperature sensor as optional accessories.

This sophisticated switch-mode charger has been specially developed for use with all deep-cycle, sealed lead-acid, calcium lead and automotive/marine batteries including immobilised gel electrolyte batteries. It is light-weight, compact and efficient and it will automatically operate on any AC input voltage between 207VAC to 253 VAC.

It automatically charges, without requiring monitoring, all deep cycle, sealed lead-acid, calcium lead, automotive/marine type and gel type batteries with a nominal voltage of 12 volts and up to 110 AH. Charging begins immediate if the battery has been properly connected. The output of the charger is electronically protected against short circuit and extremely deeply discharged batteries.



INPUT

Input Voltage Range	207-253 VAC
Frequency	50-60 Hz
Protection	Internal Primary Inrush Limiting
Boost Charge Voltage	14.4/14.8 V
Float Charge Voltage	13.8 V
Output Charge Current	25 Amps

MECHANICAL

Case Dimension	310L X 240 W X 77 H (mm)
Casing Material	Extruded Anodized Aluminum
Weight	3.5 kg
Cooling	Fan cooled
Warranty	12 Months

ELECTRICAL

Battery Connections	Two
Max. Battery Capacity	300 Ah
Topology	Switching DC Power
Efficiency	90%
Short Circuit Protection	Output Shutdown
Over Current Protection	Secondary Current Limited
Reverse Polarity Protection	Internal Fuse
Fuse	T4 A/250V
U0 Phase Limitation	4 h or 8 h

ENVIRONMENTAL

Operating Temp. Range	-5° to 50°C
Storage Temperature	-30°C to +85°C
Relative Humidity	10% to 95% non-condensing
Altitude	0-3000m

Charging characteristic

The charging characteristic is generally designated as a modified IU0U characteristic

I phase

At the beginning of the charging process, the empty battery is charged with constant current until the battery voltage reaches 13.8 V or 27.6 V. When the battery reaches this voltage level, the charging current slowly drops. With the drop of the current to the 80 % mark, the charger switches over to the higher charging voltage 14.3 V/14.7 V or 28.6 V/29.4 V.

U0 phase

Here the time registration starts which limits the main charging phase (U0 phase) to a maximum of 4/8 hours. With the switching over of the charging voltage, the current rises again to its maximum value. Now it remains constant as long as the battery voltage is below 14.3 V/14.7 V or 28.6 V or 29.4 V.

After reaching the maximum voltage, the current drops again. Thereby the voltage remains constant (U0). Within this main charging phase, which is limited to 4/8 hours, the battery is fully charged.

U phase

If the current decreases to 10% of the rated current or if the time limit of 4/8 hours is exceeded, then the charger switches over to economy charging (13.8 V or 27.6 V) (U phase).