










# EPS 2425

Automatic Switch-Mode Battery Charger



## GENERAL FEATURES

-  **Twin battery charger**
-  **Fitted with boost phase time-out timer to avoid excessive battery gassing**
-  **Overheating and short circuit protection**
-  **Fan ventilation**
-  **LED charging display**
-  **Switch for mute function and**
-  **Switch field for the selection of the charging voltage and timer function**
-  **For motor homes, on sailing yachts, ambulance, and emergency vehicles**
-  **Optional Accessories: remote control and temperature sensor**

## INPUT

Input	207-253V
Frequency	50-60Hz
Protection	Internal Primary
Isolation	Input-Output 3000VAC
	Input-Case 2500 VAC
	Output-Case 500 VAC
Safety	Designed to IEC 950
EMI-EMC	FCC Class B, CE, C-Tick
Standard	AS 3193
Input Connection	3 Core SAA Cable IEC

## MECHANICAL

Case Dimension	325L X 230W X 108H
Casing Material	Extruded Anodized Aluminum
Weight	5.05 kg.
Cooling	Fan cooled
Warranty	12 Months

## ELECTRICAL

Topology	Switching DC Power
Efficiency	90%
Boost Charge Voltage	28.8 / 29.6 VDC
Float Charge Voltage	27.6VDC
Output Charge Current	25 Amps
Max. Battery Capacity	200 Ah
U0 Phase Limitation	4h or 8h
Short Circuit Protection	Output Shutdown
Over Current Protection	Secondary Current Limited
Reverse Polarity Protection	Internal Fuse
Fuse	T6.3 A/ 250V

## ENVIRONMENTAL

Operating Temp. Range	-5° to 50°C
Storage Temperature	-30°C to +85°C
Relative Humidity	10% to 90%
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).