

EPS 2415

Automatic Switch-Mode Battery Charger



GENERAL FEATURES

- Compact Size
- Light Weight
- Twin Battery Charger
- Reverse Polarity
- Short Circuit Protection
- Full Automatic Operation
- Suits Any Lead Acid Battery
- Simple LED Charge Indicator
- Switch for mute function and a switch field for the selection of the charging voltage and timer function
- Optional Accessories: temperature sensor and remote control
- Use for automotives, caravans, and marines

INPUT

Input	207-253-260VAC
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	310L X 240W X 77H
Casing Material	Extruded Anodized Aluminum
Weight	3.5 kg.
Cooling	Fan cooled
Warranty	12 Months

ELECTRICAL

Battery Connections	Two
Topology	Switching DC Power
Efficiency	90%
Boost Charge Voltage	28.8/29.6VDC
Float Charge Voltage	27.6VDC
Output Charge Current	15 Amps
Mx. Battery Capacity	200Ah
U0 Phase Limitation	4 h or 8 h
Short Circuit Protection	Output Shutdown
Over Current Protection	Secondary Current Limited
Reverse Polarity Protection	Internal Fuse
Fuse	T4A / 250 V

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).