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Automatic 3 Stage Battery Charger

ENC series-ENC1220(12V20A)



Features: ■

- 3 stage (IUoU) switching model lead acid battery charger
 - Battery can be connected to charger indefinitely
 - Power ON/OFF switch ◀
- AC Input Voltage Range Selectable: 90~165V / 190~265V ◀
 - Protections: short circuit, overload, <a>over-temperature, reverse polarity (fuse)
 - Temperature Sensor: optional
 - Simple operations and maintenance
 - Slient coolling fan operation
- LED indicates for bulk, absorption, float, charge status fault and

power ON/OFF

Plug Type (optional)

Specification:

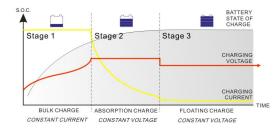
Model		ENC1220			
	DC Voltage	12V	Input	AC voltage	190-265V
Output	Restrict Voltage	$14.5V\!\pm\!0.2V$	IIIput	range	50/60Hz
	Floating Voltage	13.8V±0.2V	-	AC	3A
	Max.Power	280W	Fuse	DC	25A
	Max Charging Current (continuous)	20A	Efficiency at max. power	110V:>83% 230V:>87%	
			Size	235*102*55.5mm	
Protection	Reverse Polarity	O/P cut-off, auto-reset			
	Short Circuit	O/P cut-off, auto-reset		Auto 3-Stages Battery Charger Constant voltage Posting Charge	
	Overload	O/P current-limited			
	Over-temp.	Inner temp. ≥80°C, auto.shut off		◆	■ AUTOMATIC
	OVP (output over voltage protection)	Yes			
	Battery Low Voltage Protection	Yes		Universal Protection Circuit Protection Circuit	
Included Acessories	Cable Length:1.5	gth:1.5m, Plug type selectable & spare fuse			
Optional Acessories	temperature sensor			Compact	Design,
Remarks	Specification prior to change without notice				

USA Italy UK France&Germany Australia Small Europe Type South Africa Universa

■ Normal 3-Stage (IUoU)Charging Operation

The 3 stage IUoU charge algorithm ensures fast, complete and at same time gentle charging of the lead acid battery.

3-STAGE CHARGING DIAGRAM



State	Name	Explanation	Specification
Stage 1	The Constant Current Charging.	Normally the battery is charged at constant maximum current until it rises to absorption voltage level. The charging voltage changes with the battery voltage.	Full Load Charge
Stage 2	The Constant Voltage Charging	When the battery voltage rises to the absorption voltage level, the charging switches to constant voltage charging and battery is over 85% full. The battery is kept at this high voltage while the current reduces gradually to set value at which the charger automatically switches to float stage.	14.5V±0.2V
Stage 3	The Floating Voltage Charging	In this stage, the battery is full and only takes in the amount of current necessary for maintaining the capacity.	≤2A

Note: If you need charge for GEL battery, please let us know before place order we can adjust the charge voltage.

■ Temperature Sensor (Optional)

When an external temperature sensor(optional accessory) is installed, the controller will ajust the bulk and float charge voltage according to the temperature of the battery battery. The regualtion setpoint is 25 $^\circ\! C$. The controller adjusts the bulk and float setpoints $-0.03 V/^\circ\! C$.

Plug in the temp sensor before switch on the charger to activate the temperature control function, neave plug in the charger during the charging.

Stick the temperature sensor in a position on the battery and ensure it is not effected by other cooling or heating source.

■ Installation

