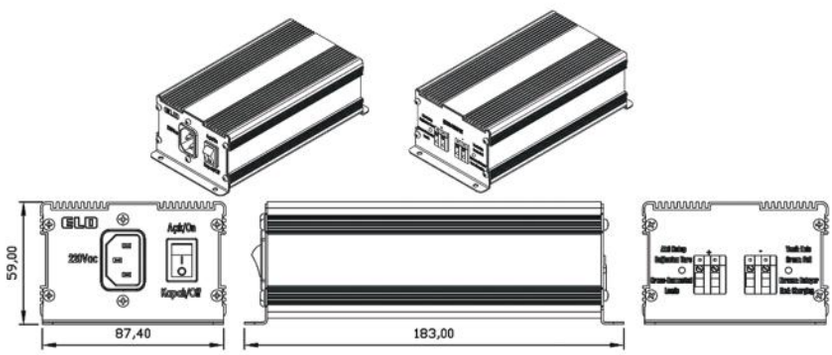
Battery Charger - Full Automatic SMPS

Product Code		
	220.100.004	**12V - 5A**
	220.100.005	**24V - 3A**
	220.100.006	**6V - 5A**

Terminal Configuration & Dimensions



Technical Data

	220.100.004	220.100.005	220.100.006
Short Description	12V 5A w/o Display	24V 3A w/o Display	6V 5A w/o Display
Nominal Voltage	12V	24V	6V
Voltage Set Point	13,8V	27,6V	6,8V
Charging Current	5A	3A	5A
Suggested Battery Capacity	20-105Ah	10-60Ah	20-105Ah
Battery Type	Lead Acid / AGM / GEL		
Architecture	SMPS, w/o Fan		
Input Voltage	176-264Vac 50 / 60 Hz		
Input Current	<1Aac / 164Vac		
Insulation Voltage	I / O 3kVac, I / I 2,5kVac, I / O 500Vac		
Insulation Resistance	100MOhm / (500Vdc 25°C)		
Vibration	10 - 500Hz, 2G/10min.		
Charging / Full	Yes / Red LED - Charging / Green LED - Fully Charged		
Short Circuit Protection	Yes		
Current Limit	Yes		
Cross Connected Battery Protection	Yes / Warning with Red LED		
Over Temperature Protection	Yes		
Input Leads	Minimum 1,5 m Grounded		
Output Leads	Black & Red Cables (minimum length 1,5 m, cross section 1,5 mm²) with Crocodile Clips		
Ambient Temperature	- 10 / + 40 °C		

Notes
All measurements are in milimeters.

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	220.100.006	***6V - 5A***	

Product Details

ELO Full Automatic SMPS Battery Charger provides the batteries to be charged in the most optimum way without exceeding the charge voltage limits. Charger reduces the charge current automatically when the charge voltage limit has been reached and switches to trickle charge mode only to compensate for battery self-discharge. Thus, the battery always stays at the highest level of charge. The unique design of the unit increases the efficiency up to 85% while reducing weight and total heat dissipation in comparison to linear chargers.

CURRENT LIMITATION

ELO Full Automatic SMPS Battery Charger incorporates a current limiter. The charger limits the current at 5A in the case of any defective/shorted cell battery being connected. The charger keeps voltage reduced and continues to charge at 5A until the batteries reach the normal charge level. The charge current reduces proportionally as the battery voltage increases. The charge status can be observed from the "Charge Status LED" on the front panel. The red LED indicates that the unit is being charged, while green LED signifies full charge.

SHORT CIRCUIT PROTECTION

Due to its short circuit protection, the charger will not give an output unless the battery is properly connected. Consequently, if the (+) terminal and the (-) terminals are short circuited, there will be no negative consequences since there is no output. The charger begins to give output when the battery is correctly connected. When one of the terminals are removed from the battery, the charger cuts off the output voltage automatically.

CROSS CONNECTION

The unit has the feature of protecting the battery when terminals are reversely connected to the charger, also known as cross connection. Therefore, if the battery terminals are accidentally connected in a reverse manner, the charger will not give an output. This way a possible damage to the charger or the battery is avoided. The "Cross Connection Warning" red LED is lit in case of reverse polarity connection. The charger begins to give output only when the terminals are connected correctly. Again, the charger ceases to give output when terminals are shorted or cross connected. The charger and the battery will not be damaged even in the case of battery terminals being reversely connected to the charger cables.

OVERHEAT PROTECTION

In cases which many parallel batteries or a battery which is below the permitted discharge values or a faulty battery connected, there will be excessive heating due to the prolonged drawing of maximum charge value of 5A from the charger. In the case of overheating of the electronic components, the charger switches to excessive heat protection mode. When the heat decreases the charger switches back to charging mode according to the need of the battery.

INPUT VOLTAGE RANGE

The input voltage needed for the unit is 220 VAC. However, the unit is designed to operate normally in order to compensate the fluctuations between 176 and 264V of voltage input.