

MAINI BATTERY CHARGER

USER MANUAL

Manufactured By

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General

General Description:

The Battery Charger is for charging lead acid traction batteries only. The Charger is electronically protected against over current, short circuit and reverse battery connection. The charging profile is constant current followed by a forced taper, while sensing voltage to evaluate 100% charge condition.

General Instruction:

1. Operate the charger at 230V AC. The charger input should be connected through an ELCB (Earth Leakage Circuit Breaker) of 30/ 100 mA fault current
2. Always cover the plug when not in use
3. Servicing should be done by authorized personnel only

Technical Specification:

- | | |
|-----------------------------|--|
| 1. Input voltage/ Frequency | : 230V + 10%/ -15%, 50Hz |
| 2. Output @ 56 Volts | : 25A max |
| 3. Charging Time | : 8 Hours for a 80% discharged Lead Acid Battery |
| 4. Battery Operating Temp. | : 0° to 45° C |
| 5. Relative Humidity | : 95% |

Display Details:

- | | | |
|----------------------------------|-------|--|
| 1. If Power LED (RED) | : ON | Charger Input is ON |
| | : OFF | Charger Input Cable
Check switch is in ON Position |
| 2. If Charger status LED (GREEN) | : ON | Batteries are Charging |
| | : OFF | Check Point No. 1 |
| 3. If OVER TEMPERATURE LED (RED) | : ON | Temperature has exceeded 80° C. Check
Blockage of airways of fan on charger. The
Charger will restart automatically in 30-45 mins.
Else contact Customer Care |
| 4. If END OF CHARGE LED (AMBER) | : ON | Bateries fully charged in equalising mode.
Normal charging duration is 8 hrs for an 80%
discharged battery. |
| | : OFF | Charging in process |

SAFETY INSTRUCTION

Important:

1. All designated users of the Battery Charger must read and understand the contents of this manual before operating the Battery Charger
2. Do not tamper or open the Charger. Warranty will be void if tampered or opened

Important:

1. Please don't open the charger to repair by yourself
2. Please don't change power supply cables by yourself
3. AC power supply is with three core cable which has earthing wire. Ensure proper earthing, before connecting
4. Please do not expose charger to wet conditions
5. Insert DC socket tightly. If damaged, replace it
6. Turn off the charger if any abnormal noise or burning smell is observed
7. Dial Customer Care No. _91 9972122884 for any assistance
8. Please do not alter the cable lengths
9. Please don't obstruct airways of the charger
10. Disconnect power supply and connector before relocating the charger
11. This charger is suitable only for lead acid batteries of nominal 48V and 150-240 AH capacities
12. While disconnecting, pull the connector body but not with the cables

WORKING PRINCIPLES

Charging Process:

First Stage: Constant current mode, charge voltage increases to set voltage

Second Stage: Constant voltage mode current decreases at constant output voltage of 56.5V

Third Stage: Voltage increases up to 61V and Current decreases to 1Amp

Charging automatically stops after the Battery Voltage reaches 61V

Note: The charger is suitable only for lead-acid battery of 48V nominal voltage and 150-240 AH capacities

Operating Procedure:

1. Connect the 3 pin plug to power supply
2. Connect the charge plug to the charge socket
3. Switch on MCB/ ELCB. Power Light 'ON' shows that power is supplied. After three seconds charger checks the condition of the battery. After ascertaining the state of charge of the battery, charging commences and passes through the various steps of charging
4. After batteries are charged completely, the charger automatically cut off

INSTRUCTIONS

Instructions for Servicing the Chargers:

Should it become necessary to send back the instrument to the factory, please observe the following procedure:

1. Before despatching the instrument, please write to us giving complete details of the fault noticed
2. After receipt of your letter, CCC department will advise you whether it is necessary to send the instrument back to us for repairs or the servicing is possible at your place
3. Despatch the instrument only on receipt of our advice, securely packed to original packing duly insured and a copy of details of the faults sent to us to our factory address

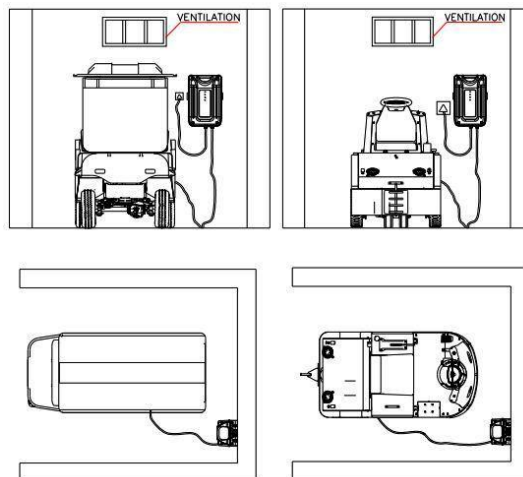
INSTALLATION & COMMISSIONING

Receiving the Charger:

When received, the charger should be unpacked and checked for any transit damage. If any, it should be notified to us immediately

Location of Charger:

Install the charger in cool, dry, well ventilated location away from corrosive fumes and moist atmosphere. Allow 200mm free space on all sides for proper ventilation. *Refer pictures below.*



Note:

Park the vehicle for charging in a position as shown. Ensure that the cable is not stretched while connecting to the charge port. Cable length provided is 2.5m.

CHARGER MOUNTING INSTRUCTION

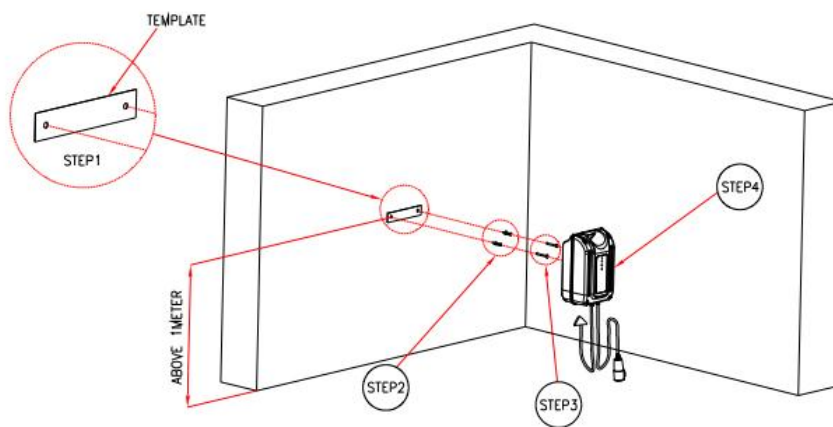
Procedure for Installation of Charger:

Step 1: Drill holes using the given template

Step 2: Insert plastic screw plugs to the drilled holes

Step 3: Fasten screw to the plug, such that the screw head is projected 1" from the wall surface

Step 4: Mount the charger onto the screws installed in the wall as shown in the illustration below



Dos and Don'ts:

1. Do not tamper with the seal, warranty will be void, if seal is broken
2. Do not operate in a damp or wet environment
3. Turn-off the power before connecting or disconnecting the charger
4. Ensure charger airways are not blocked