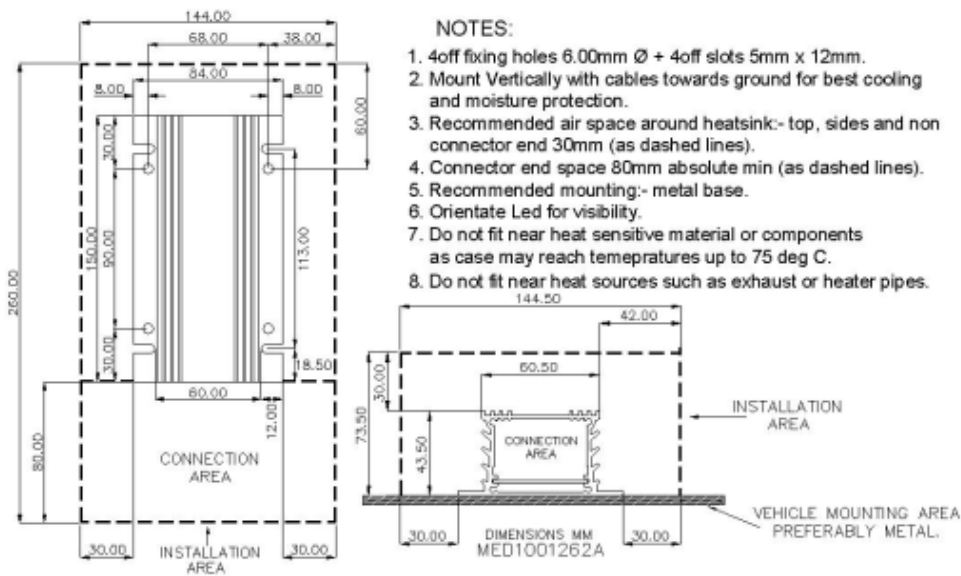




15A Converter Range : Installation Instructions

- This Battery Charger allows you to charge an Auxiliary Battery from a Vehicle Starting Battery Charger System.
- This unit is suited to Ignition control, Constant Voltage Alternators, Euro 5 & Euro 6 engines, STOP/START, Smart Alternators & Vehicles with Regenerative Braking. (Mercedes Blue Efficiency Vehicles, VW Blue Motion Vehicles, Ford ECOnetic Vehicles, Vauxhall ecoFlex vehicles to name a few).
- The unit is shipped configured for optimum operation with any lead acid battery & engine run detection or Ignition control. The Serial Interface in conjunction with the Ablemail Software Interface allows the unit to be configured to meet specific battery / customer requirements.
- Two or more converters can be used to allow larger loads to be powered .

Mechanical: This unit should be mounted as / the drawing subject to guidelines below .



Electrical:

The converter should be mounted as close to the battery being charged as possible & connected as below. If the user wishes to connect to the ignition the converter must be configured to operate on an ignition signal and the Ignition Feed must be connected as below .

WE RECOMMEND FITTING:

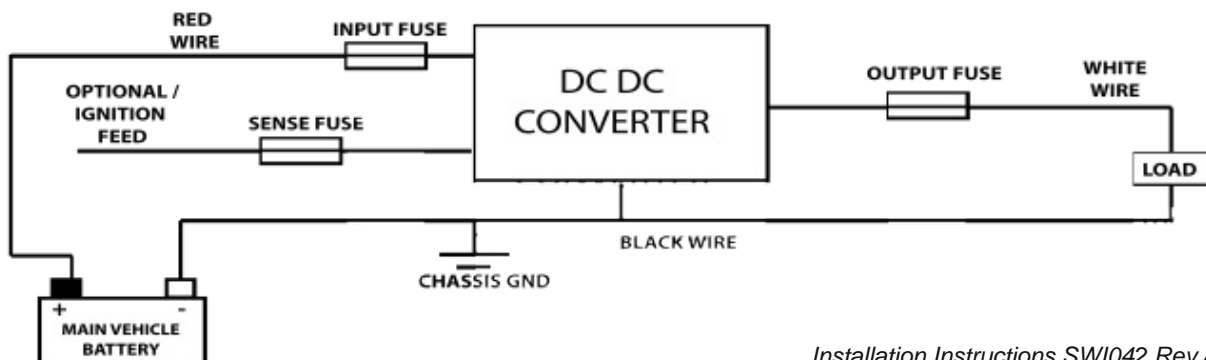
IMAGE No : SI10010A

- 20A INPUT POWER FUSE & 20A OUTPUT POWER FUSE TO PROTECT THE VEHICLE WIRING SYSTEM.
- 1A FUSE IN V-REMOTE TO PROTECT VEHICLE WIRING.

NOTE: THE PERFORMANCE OF ANY PRODUCT CAN BE IMPROVED BY USING THICKER SUPPLY CABLE, INCLUDING THE GROUND CONNECTION & CONNECTING REMOTE INPUT POWER CABLE TO THE INPUT BATTERY.

IF THE INPUT / OUTPUT POWER CABLES NEEDS LENGTHENING:

- MINIMUM SIZE: 3MM SQ FOR UP TO 1.5M.
- MINIMUM SIZE: 6MM SQ FOR LONGER RUNS.



Operation:

Each converter operates as described below:

- The converter operates with an input voltage between 9V & 32V.
- The remote Input voltage controls the charger turn on/off according to the configuration.
- The output current is limited at 30A for each charger.
- In case of a low input voltage (<9V), the output voltage is reduced to prevent damage to the converter.
- The converter is protected against overheating & resets when it cools down.

NOTE: The LED shows the converter state:

- Flashing Red - In fault mode (see codes below of number of short flashes followed by number of long flashes).
- Flashing Green - At output voltage

Trouble Shooting:

- Check voltage at input pins and polarity is correct.
- Check voltage at output pins is the same as the units being supplied and polarity is correct.
- Check fuses OK.
- Check Led flashes status as power is applied.

IMAGE No: SI10044

FAULT MODE	FAULT CODE RED LED	
	SHORT FLASHES	LONG FLASHES
ENGINEER MODE	3	0
LOCAL INPUT VOLTAGE BELOW 9V	3	1
LOCAL INPUT VOLTAGE OVER 36V	3	2
LOCAL INPUT VOLTAGE OVER 33V	3	3
CHARGE CONTROLLER POWER DEVICES TEMPERATURE		
MICRO TEMPERATURE OVER 70°C	3	4
FET TEMPERATURE OVER 115°C	3	5
LOCAL OUTPUT VOLTAGE (OUT OF RANGE)	3	9
OVERLOAD	3	10

If the unit is still not working satisfactorily Please contact Ablemail Technical on 0161 745 7697.

Optional Extras:

The Ablemail Software Interface , a windows pc & the serial communication cable MEU100086 allows many of the settings to be changed to meet a specific customer requirement.

If the external interface uses 2 x 5 way terminal block organized as shown below: If this is fitted more advanced operational control functions are available:

- The serial communication cable 'MEU100086' allows monitoring, re-configuring of the DC DC Converter of the output voltage.
- The remote temperature/output cable 'MEU100085' allows more accurate control of the output voltage & temperature control of an enclosure fan.
- The external status/alarm unit 'MEU100087' allows external monitoring of the converter status.
- These additional features need the interface board.

This interface uses terminal block organized as shown below, If this is fitted more advanced operational & control functions are available.

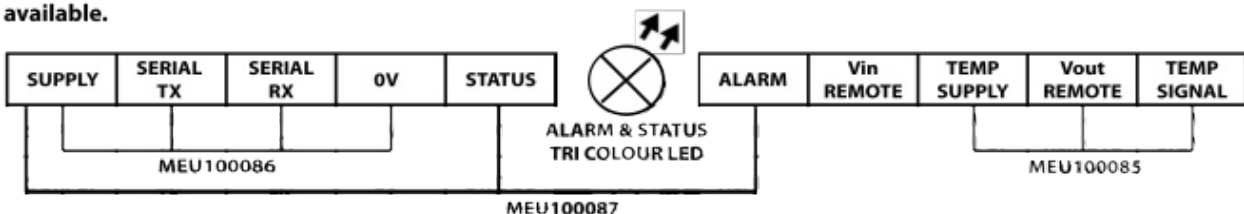


IMAGE No: SI1001A

If you require any assistance or advice on this product & or its safe integration with other electrical equipment, Please contact Ablemail Technical on +44(0)161 745 7697.