

# **Charger Retrofit System**





These retrofit kits are designed to replace old controller systems and update to the latest safety specifications. This unique Charger Retrofit System was designed to meet the need to retrofit any taper charger no mater what the voltage or the power input. This unit comes as standard with full equalisation facilty built in.

# **Outline specifications:**

Voltage Selector: 24, 36, 48, 60, 72 & 80V Operating Temperature: -30°C to +80°C Dimensions:125mm x 130mm x 50mm

# **User Benefits:**

No need to stock various boards - 1 unit does it all LED condition display Simple installation Adheasive drill template supplied

# **Features:**

Multi-voltage input
Single/three phase operation
LED condition display
Battery fault indication
Auto/manual start
16 hour/infinate equalisition
Designed to EEC standards



# DIE DATE

# **Battery Charger Retrofit**





# **IMPORTANT**

This kit must be installed by qualified personnel



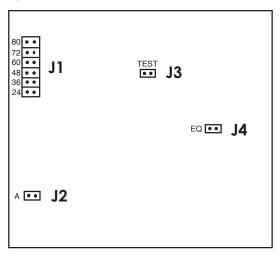
# **IMPORTANT**

This kit can be used to control Pb battery chargers only, with Wa charge system



# **Battery Charger Retrofit**

# 1) Card Jumper Settings:



Jumper J1: Battery voltage selector (preset 24V)

Jumper J2: Autostart option (preset off)

Jumper J3: Test facility (preset off)

Jumper J4: Equalise option (preset 16 hours)

# 2) Basic Operation:

The control card is programmable for batteries of 24, 36, 48, 60, 72 or 80 volts, selectable by a link system on the printed circuit card (J1).

There are two options for starting the charger, selected by a link on the printed circuit card.

Option 1: The charger starts 10 seconds after the mains supply is switched on.

# Option 2: The charger is started by means of the ON switch

The main contactor (if fitted) closes, and the battery begins to charge. The "BULK CHARGE" LED comes on.

When the battery voltage reaches 2.35 volts per cell the "FINAL CHARGE" LED comes on, and a 3 hour timer is started. The battery continues to charge, and at the end of the 3 hour period the "BATTERY FULL" LED comes on and the main contactor (if fitted) opens.

The charger then enters equalise mode, the battery is charged for 4 minutes, this is indicated by the red "EQUALISE" LED and is off for 35 minutes.

The charger switches off after a total charge time of 16 hours and the green "EQUALISE" LED will be lit.

If the charger is connected to a fully charged battery, and the battery voltage exceeds 2.35 v.p.c in less than 20 minutes, the charger switches directly to the equalise phase.

If the battery voltage does not reach 2.35 v.p.c. in 8 hours the charger switches off and the "FAULT" LED comes on.

The control panel has a built in memory, so that it remembers its position in the charge cycle if the mains power is interrupted.



# 3) Installation of the Kit:

Before you start the installation of the kit, disconnect the charger from the AC mains supply and the DC battery supply.

Its necessary to check the efficiency of the power circuits of the charger (transformer, rectifier, fuses, contactor, earth wires etc.)

This kit is compatable with all the Pb battery chargers and it can be installed without changing the existing connections of the charger.

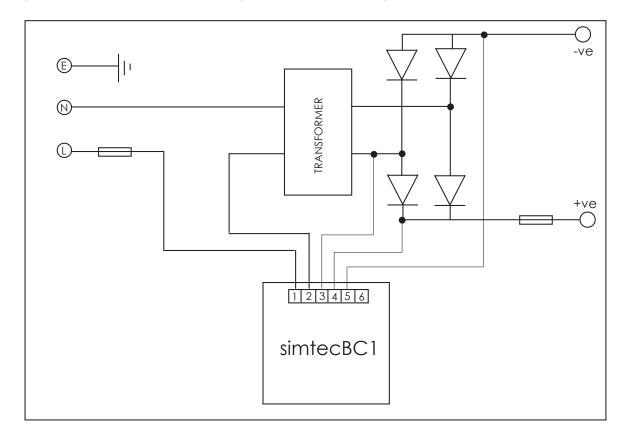
Identify a suitable location for the front cover plate to fit on the outside of the charger case. Use the drilling mask supplied to drill the holes through the charger case as per the sizes stated. Be sure to remove any burrs from the holes.

Remove the 4 screws that hold the front cover plate on and place on the outside of the charger case. Place the circuit card inside the charger and locate the screws as to sandwich the charger case.

Ensure all screws and connections are tight.

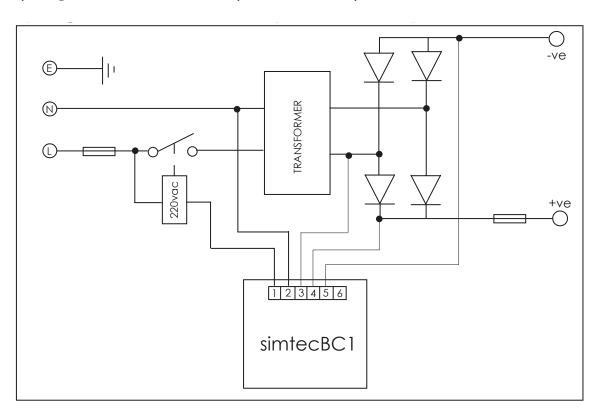
The AC mains supply and the DC battery can now be energised.

# 4) Single Phase Connection (without contactor) 15Aac MAX





# 5) Single Phase Connection (with contactor):



# 6) Three Phase Connection (with contactor):

