

MANUAL FOR ONLY TECHNICIANS OR AUTHORIZED PERSONNEL

User manual

KIT UPDATE

EN



**CAREFULLY READ THE FOLLOWING INSTRUCTIONS BEFORE CONNECTING THE DEVICE TO THE MAINS VOLTAGE AND/OR TO THE BATTERY.
ALSO MAKE SURE THAT THE SIZE OF THE DEVICE IS ADEQUATE TO THE BATTERY CONNECTED TO IT.**

INTRODUCTION

The battery chargers produced by T.C.E. Srl offer many unique features comprehensively described in this manual.

Carefully read these instructions to use the device at its best and avoid potential problems in future.

T.C.E. Srl strongly advises to carefully follow all information and advice mentioned to guarantee safe use of the device

The correct utilization of the device will increase its working life and maximize efficiency.

In case of suggestions, advices or error noticed in this manual, your notifications will be very much appreciated to improve the quality of our service.

Thank you for your trust in choosing our product

For further information, technical details, brochures or illustrative material visit our website www.tcechargers.com

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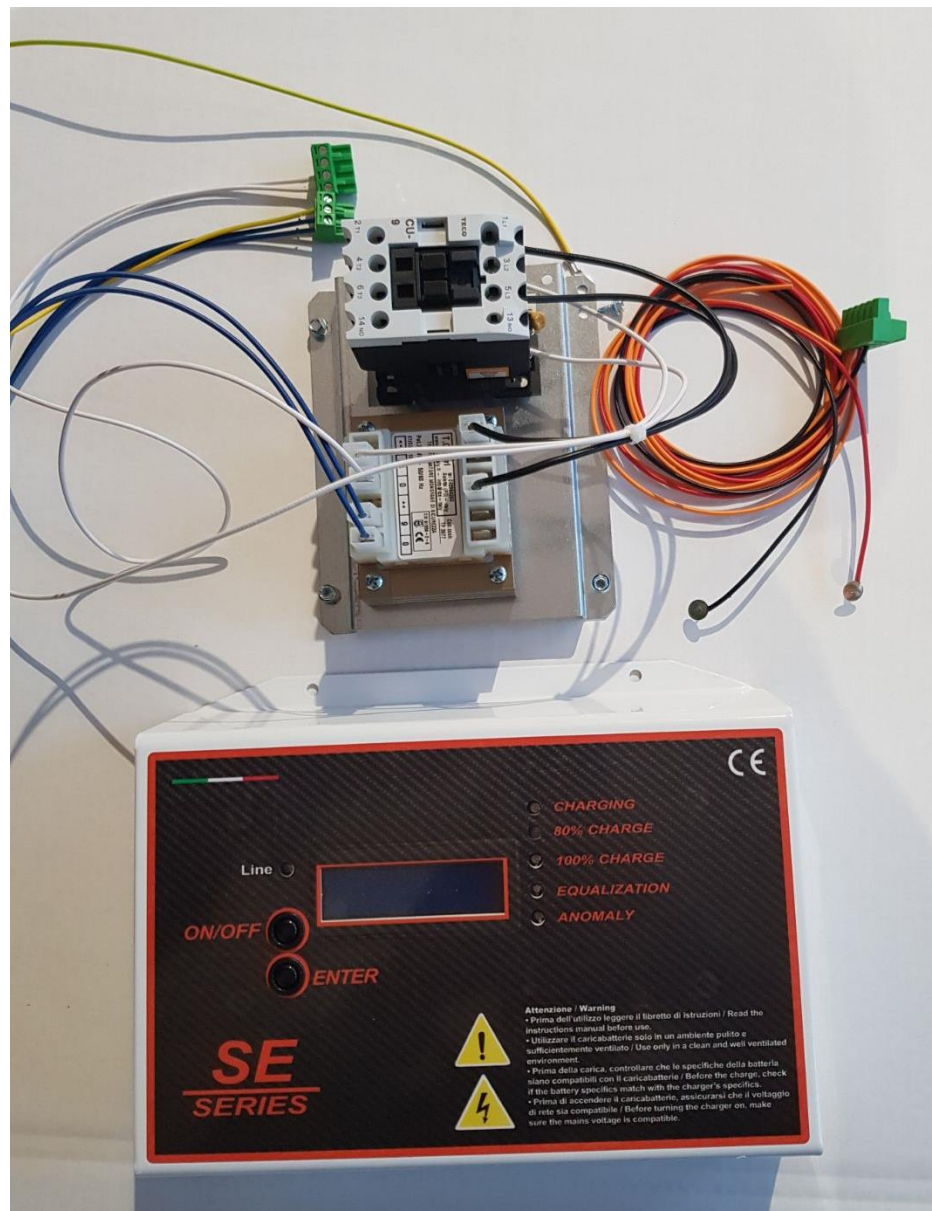
1. GENERAL DESCRIPTION

The KIT Update allows the update of the charging cycle controls of any traditional industrial battery charger.

Through the innovative control cards developed by TCE Group Srl, the charge is constantly monitored to guarantee safety and reliability.

The kit comprehends:

- 1- KIT Control card
- 2- Contactor
- 3- Auxiliary transformer
- 4- KIT Cables for connections
- 5- Instructions
- 6- Kit screws



2. INSTALLATION

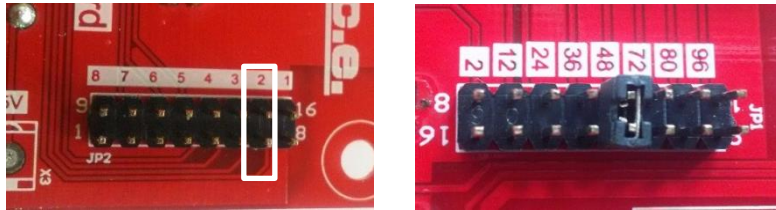
Before attempting any action on the device, make sure that it's not connected to the mains voltage network and/or to the battery.

Also make sure that the conditions of the old components (diode's bridge and power transformer) that will not be replaced are in an acceptable condition to guarantee the correct functioning of the device and new TCE Group Srl parts installed.

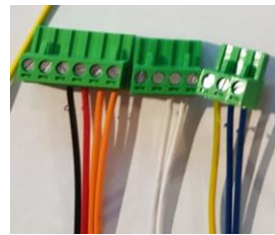
Remove the old components paying attention not to damage the components that will be left installed inside the device (ex. Power transformer).

Follow this procedure to install the kit:

- Make sure that the **“Jumper” selector is on the number 2 position** on the plug for the FLAT Cable on the upper right part of the control card to activate the dedicated software and make sure that the voltage selector is correct based on the battery charger voltage.



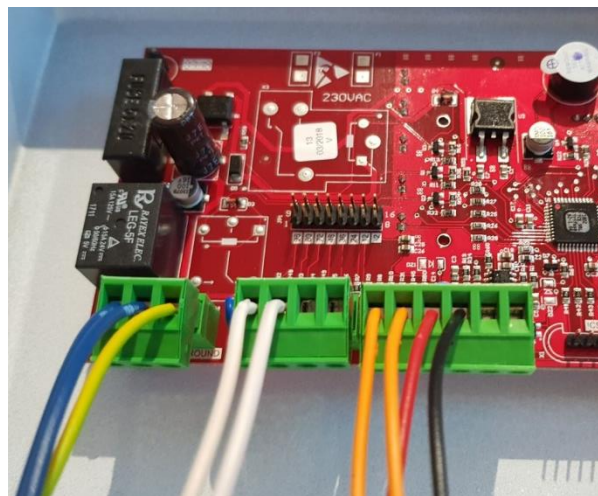
- Remove the old control card from the battery charger and make sure that enough space is left for the connectors to go through and be connected to the new control card



- Let the cable through the space left from the previous control card (in case there isn't enough space, create an opening)

Make sure that the connectors are connected to the control card in the correct slot.

IMPORTANT: a wrong connection will result in a malfunction of the control card.



IMPORTANT: Once completed the connection, make sure that the cables are properly tightened away from parts that could damage them because of high temperatures (ex. Heatsink and power transformer) and to be positioned in a way that opening the charger will not cut and/or harm them in any way.

- Install the front panel outside the charger by using the screws supplied with the kit.

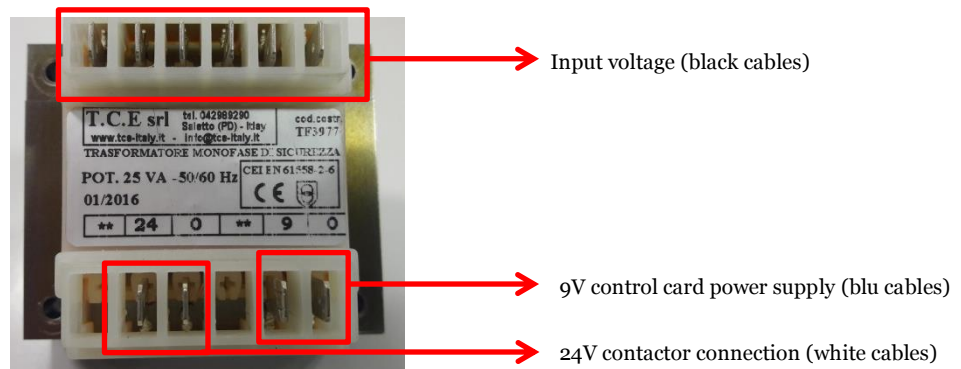


- Install inside the device the contactor and auxiliary power transformer supplied already mounted on the dedicated support. Use the supplied screws to fix it inside the charger and make sure to pay attention to the correct connections of the cables.

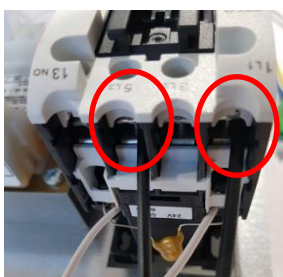
IMPORTANT: it is advised to install the contactor and auxiliary power transformer in the proximity of the old contactor because the cables for the connection might result to be too short for a proper connection to the new system.



Make sure that the ground cable is positioned between the support and the charger cabinet before attaching the support to the charger

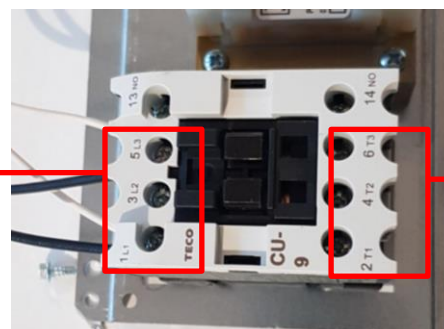


ATTENTION: It is suggested to connect the input black cables based on the network voltage available. In case of wrong connection, the control card might not function properly.



Connect the black cables on 2 of the input phases of the contactor

INPUT
Mains voltage cables connection and auxiliary power transformer connection



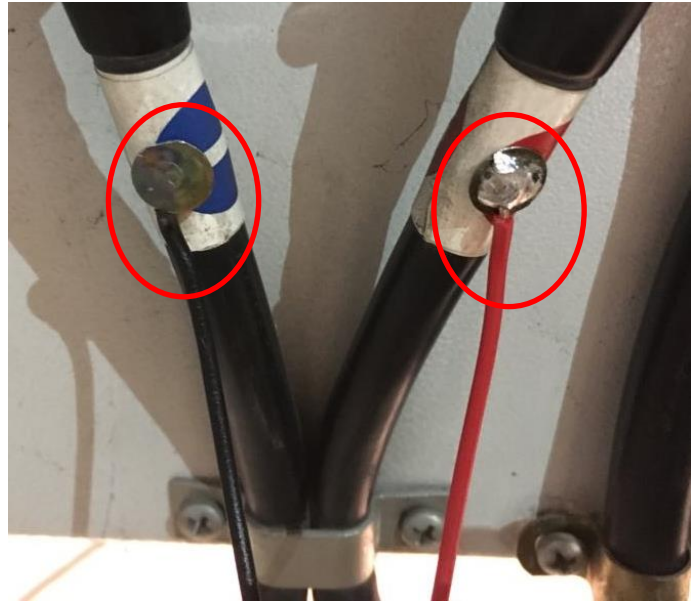
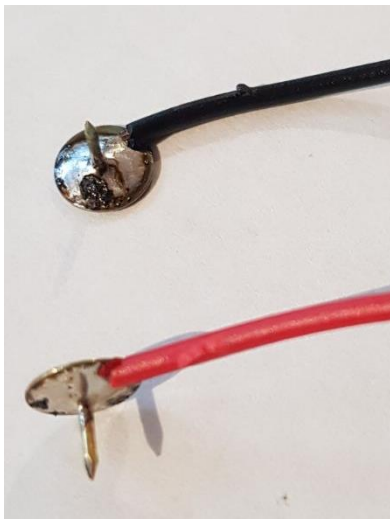
OUTPUT
Power transformer cables connection

- Press the pin at the end of the red and black cables directly on the charging cables to allow the control card to read the battery voltage.

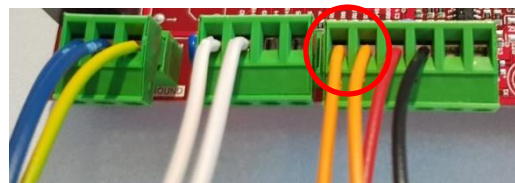
Make sure that the pins are properly pressed inside the cables by using a plier if the cable is too hard to puncture by hand.

Tight the pin cable to the charging cable with a cable tier and cover the pin's upper part to make it completely isolated.

IMPORTANT: make sure that the upper parts of the pins are completely covered with a nonconductive material.



- Connect the two orange cables from the control card connector to the thermo coupler installed inside the power transformer (if available).



In case the power transformer doesn't have the thermo coupler, simply connect the two cables together to create a connection as shown in the following images:



OR



- Connect the device to the mains voltage to perform the first calibration of the control card.

Select the voltage by using the “ENTER” button and confirm with the “ON/OFF” button.

Following the voltage selection visual, the nominal current visual will appear. Use the “ENTER” button to select the correct current of the device and confirm with the “ON/OFF” button.

IMPORTANT: the voltage and current selected must be the same of the power transformer or as shown on the serial number label of the charger. A wrong setting will result in anomalies during the charging cycle.



ATTENTION: in case of wrong selection of the charger values or battery voltage reading from display are not correct, follow these procedures:

CONTROL CARD RESET

- Keep the two buttons pressed together at the same time (“ENTER” and “ON/OFF”), then turn on the device

As soon as the first visualization to select the charger nominal voltage (ex. 24V), release the two buttons and repeat the previous procedure to calibrate the control card.

VOLTAGE READING CALIBRATION

- Connect the battery to the charger **BUT DO NOT BEGIN THE CHARGE**. Go to the “BUZZER” visualization by using the “ENTER” button then press the two button together for a few seconds. **A new visual will appear to calibrate the battery voltage reading.**



By using a tool to read the battery voltage, increase or diminish the % based on the initial charger readings.

Make sure that the voltage reading is correct while the charger is functioning. While the charger is not functioning, the reading can be off or not correct.

WARRANTY

This device is built by following high qualitative standards to assure its high quality. Every single construction phase is overviewed by specialized personnel.

The warranty is granted ONLY AND IF TCE Group Srl agrees that the damage claimed is caused by faulty parts installed during the construction or assembly of the device.

In the event of a warranty claim, the customer will have to dispatch the unit in question to TCE Group Srl, if it is then deemed that the fault/damage was caused by faulty parts installed during the constructions or assembly, TCE Group Srl will provide a replacement of the faulty part/component to restore the optimal state of the device.

The duration of the warranty is 12 months from the moment when the unit leaves TCE Group Srl warehouse.

The warranty IS NOT GRANTED if:

- The unit has been tampered with
- The unit has been damaged by misuse and/or bad installation
- The unit has been damaged by a use that is not what it was built for
- The unit has been damaged by third party or environment causes (ex. Heavy rain, storms, etc etc)
- The unit has been damaged by the surrounding environment (ex. Alkaline environment)
- The unit has been damaged during transportation

This warranty does not cover in any case the replacement of the device or any compensation for costs, injuries, direct or indirect damages caused by unit fault (production stop included).

For any legal claims, the court of Padova (Italy) will be responsible and will handle the matter.

To request assistance or in case of problems, contact the closest authorized dealer or directly contact TCE Group Srl.