



## Compressor Starter Relay Upgrade Instructions - E4 Water Dispensers



You will need a 721028 - Compressor Starter Relay Upgrade Pack containing:

- ePTC Compressor Starter Relay
- Cover for ePTC Compressor Starter Relay
- Cover clip for ePTC Compressor Starter Relay
- Hardware Electronics PCB Version 3.6
- ePTC CSR Installed Label

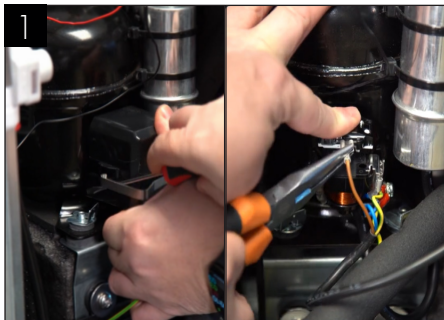


Along with a 721029 - E4 Software Key Pack containing:

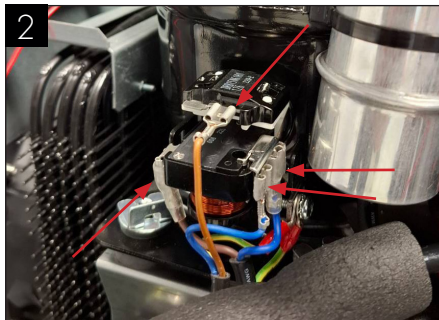
- E4 ePTC Relay Compatibility Software Key
- E4 ePTC Compressor Starter Relay Upgrade Instructions

All replacement kits must be installed by competent engineers.

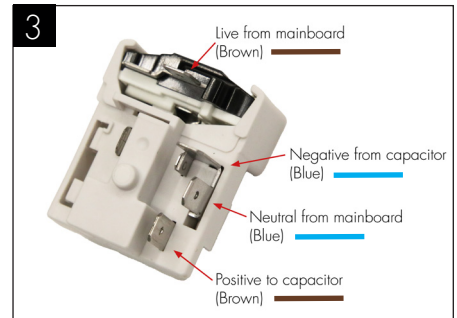
### ① Replace the compressor relay.



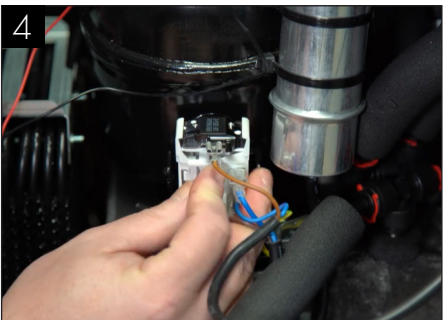
**Turn off and disconnect power to the unit.** Remove the top and left side panel. This will give you access to the relay hidden behind it's protective cover. Remove the relay cover by removing the securing clip.



Remove all four spade connections from both parts of the relay, and remove the relay.



Take the new relay from your kit, and connect all four spade connections following the image above.



Plug the new fully wired relay to the slot on the side of the compressor.



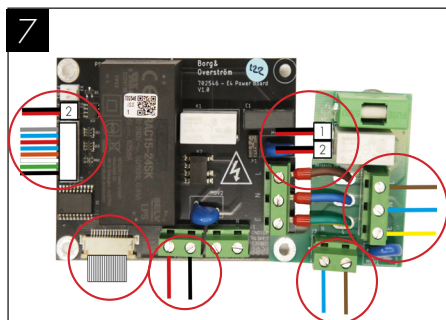
Take a picture of the newly installed relay and save for uploading later.



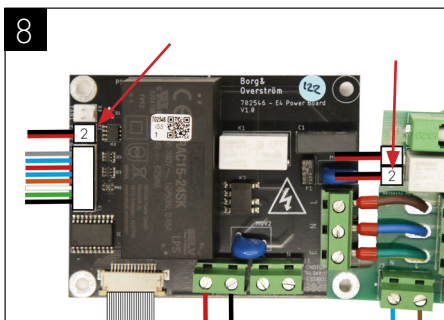
Install the new relay cover and secure with the securing clip, both found in your kit. Your relay replacement is now complete. Now move onto step 2.



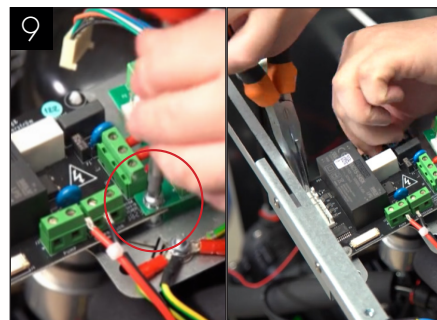
### ② Replace the Hardware Electronics PCB Version 3.6



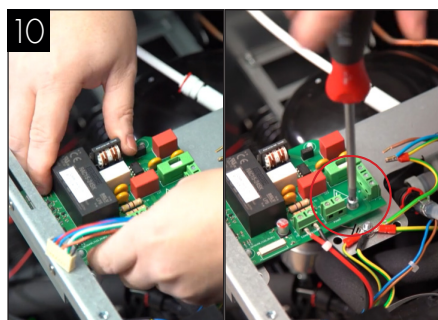
Unscrew and remove all cables from the terminals on the mainboard. Then disconnect the ribbon cable by pressing the clips on the side. Finally disconnect the solenoid loom and fan cable.



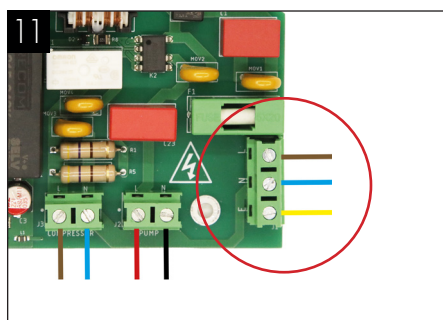
The short link cable to the compressor control board is no longer needed. This can be fully removed and discarded.



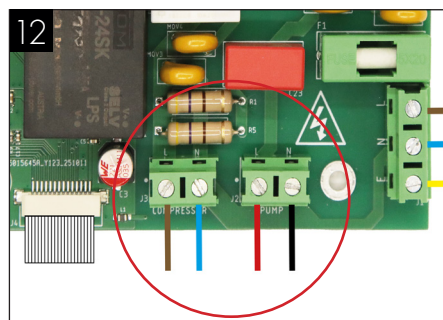
Remove the screw fastening the mainboard to the chassis and save it for later. Using long-nose pliers, free the mainboard from the three snap-in spacers. The mainboard can now be removed.



Take the Hardware Electronics PCB Version 3.6 from your kit and place it over the snap in spacers. Secure the mainboard down using the previously removed screw.

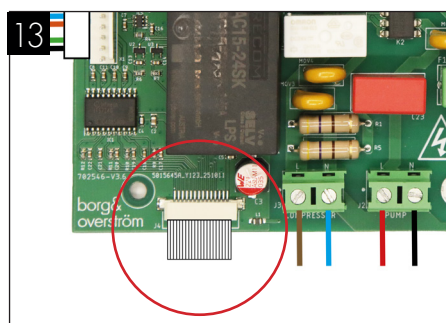


Connect the live and neutral cables to the main power in terminal on the right. If an earth cable is present, connect that too. Polarity is critical for these incoming power supply wires.

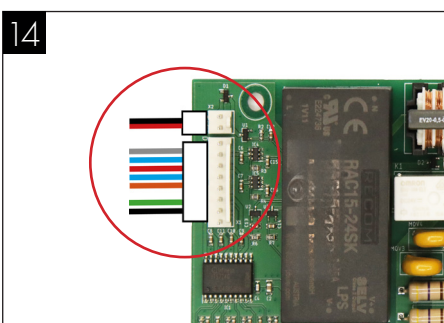


Then connect the second set of live and neutral wires to the compressor terminal, polarity is key.

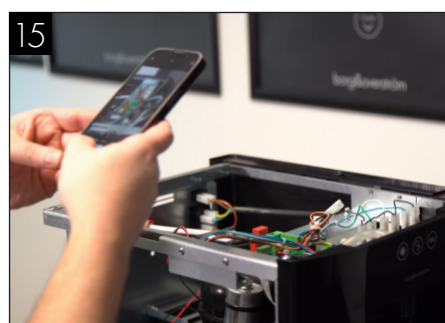
\*If you have a sparkling model, you will need to attach the live and neutral wires to the pump terminal.



Reconnect the ribbon cable, ensuring the blue side of the ribbon faces down.



Finally, reconnect the solenoid loom and fan cables to the left hand side of the board.



Take a picture of the newly installed mainboard and save for later. Now move onto step 3.



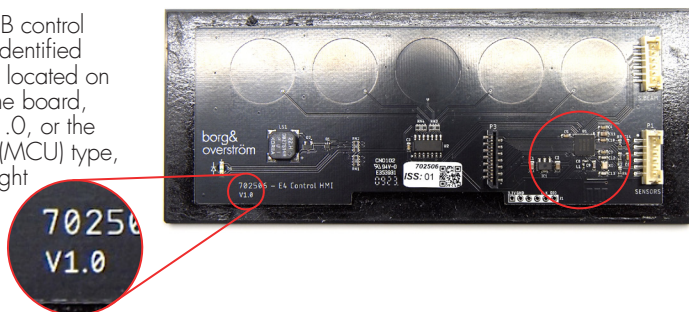


### ③ Installing the new firmware.

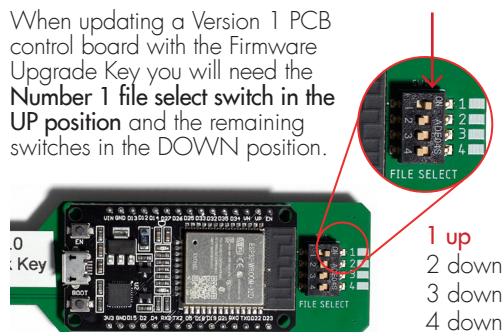
#### Version 1

##### PCB control board

A Version 1 PCB control board can be identified by the wording located on the bottom of the board, which states V1.0, or the microcontroller (MCU) type, visible on the right hand side of the board.



When updating a Version 1 PCB control board with the Firmware Upgrade Key you will need the **Number 1 file select switch in the UP position** and the remaining switches in the DOWN position.



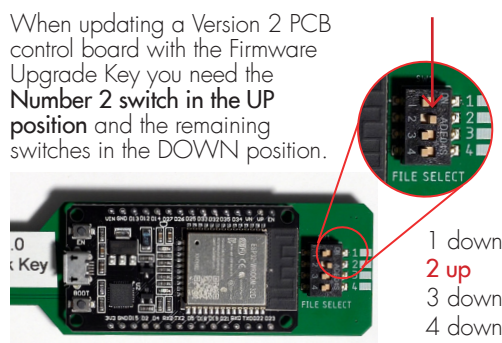
#### Version 2

##### PCB control board

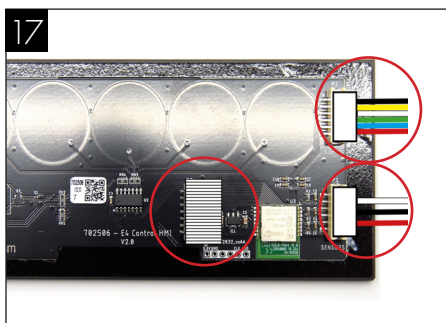
A Version 2 PCB control board can be identified by the wording located on the bottom of the board, which states V2.0. You can also identify a Version 2 board by the larger size of the touch areas and the microcontroller (MCU) type, on the right hand side of the board.



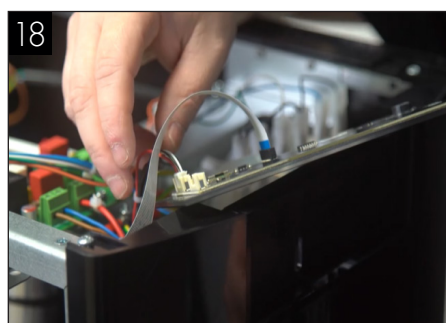
When updating a Version 2 PCB control board with the Firmware Upgrade Key you need the **Number 2 switch in the UP position** and the remaining switches in the DOWN position.



Remove the touch panel by firmly prising on the top edge.

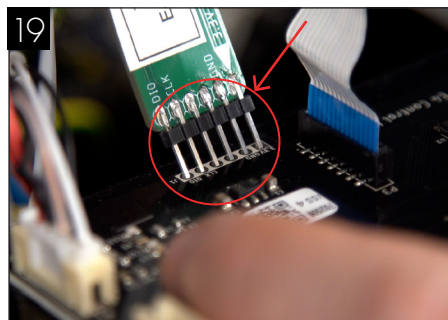


Disconnect the ribbon cable and sensor loom from the touch control board PCB. Disconnect the Sensorbeam® connection, if your dispenser has it.

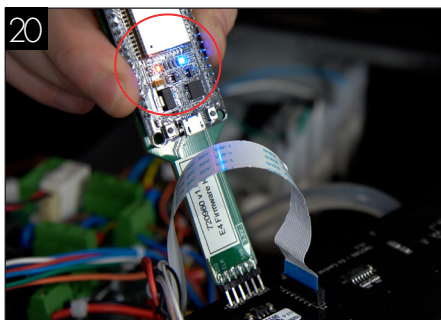


Feed the ribbon cable and sensor loom through the front panel and reconnect to the touch control board PCB. This will make connecting the firmware key easier.

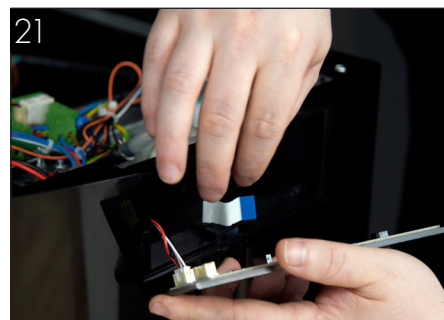




Connect power to the unit however DO NOT turn it on. Place the pins into the program slot on the board, ensuring the 3.3V pin is aligned with the 3.3V slot on the board. Whilst holding the key in place, turn on power to the unit.



You will see a solid red light and a flashing blue light while the firmware is being installed. When the blue light turns solid, the firmware has been successfully updated. Turn off power to the unit again before removing the firmware key.



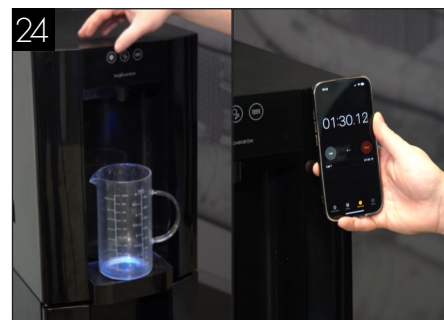
After removing the firmware key, remove the sensor loom and ribbon cable from the touch control board PCB. Push the sensor loom and the ribbon cable back through the slots in the front panel and reconnect them to the HMI control panel. Also reconnect the Sensorbeam® connection, if your dispenser has it.



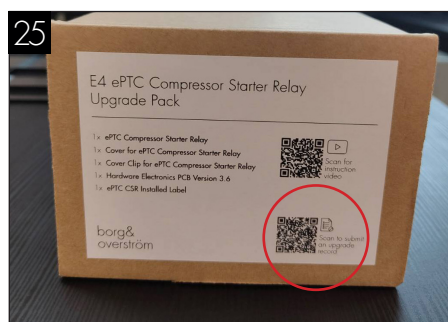
Re-apply the HMI control panel to the front of the dispenser. Press firmly around all edges to ensure a strong bond.



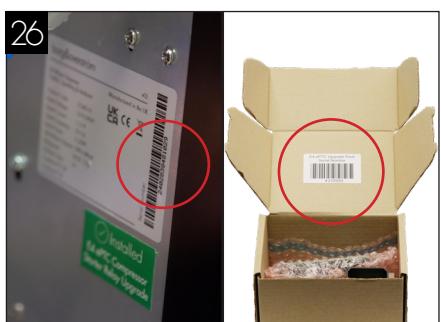
Place the ePTC compressor starter relay upgrade sticker from your pack onto the back of the dispenser, covering up the existing compressor control board sticker.



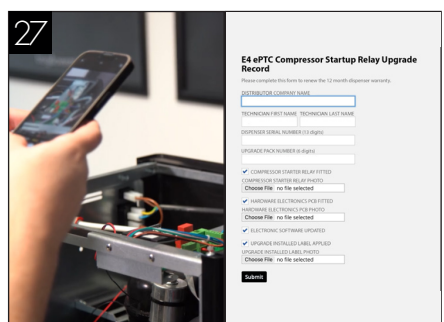
Turn on the dispenser and test all dispense options. The new firmware includes a change that starts the compressor after ninety seconds of initial power on.



Scan the second QR code on the front of the kit and fill in the upgrade record form online. Once completed correctly, this will renew the dispenser's warranty for an additional 12 months.



When completing the upgrade form, you need to input the dispenser's serial number, found on the back panel and the upgrade pack's serial number, found inside your upgrade pack box.



Finally, complete all fields on the online record and upload the images saved earlier. **You have now successfully completed the upgrade.**

