CLIMMA EZ START

INSTALLATION STEPS

Read and understand these instructions completely before proceeding; improper wiring can result in damage to the EZ Start or connected components including but not limited to wiring, compressors, and capacitors. Veco S.p.A. is not responsible for damages to any of the aforementioned equipment caused by improper wiring. Before starting, turn off the breaker for the compressor's electrical system.

1) Remove power supply cables from the electronc control box to the compressor and secure them with tape (both from the electronic box side and from the compressor side - R and C).

2) Connect the long cables from the EZ Start marked as "Electronic Box" to the electronic box connectors to the compressor.

3) Connect the cables marked as "compressor" from the EZ Start to the compressor (white replace the white one, blue replace the blue one)

4) Remove the white cables from the capacitor connected to the compressor.

5) Connect the red and black cables from the EZ Start to the capacitor (red cable side to the already connected red cable, black on one of the free spaces).
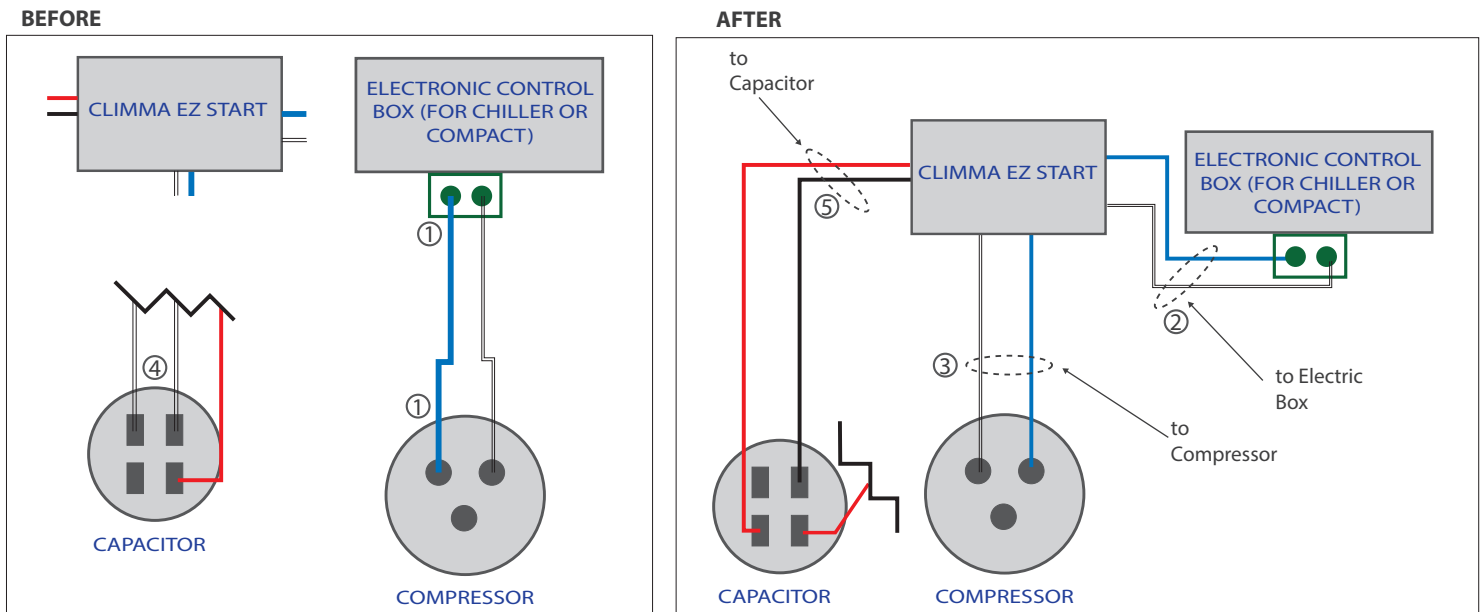
LEARNING

When a compressor is first connected, EZ Start will learn for the first seven to eleven starts of the compressor. After the learning process is complete, EasyStart chooses the best starting characteristic for the compressor. No action is required and the compressor can be used normally during the process.

JUMPER SETTINGS
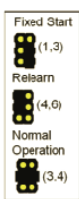
Two options can be selected using the shorting jumper on the electronic board. Power must be removed from EZ Start when changing jumper settings.

When the shorting jumper is placed on pins 1 and 3 in the "Fixed Start" position, EZ Start will use a factory defined short ramp on every start. This is used for diagnosing certain types of system problems and should only be used with manufacturer support.

If a compressor is replaced with a different size, manufacturer or type of compressor, relearning may be required. Place the shorting jumper on pins 4 and 6. Start a cycle with the compressor control device and terminate the cycle. Remove the jumper from the relearn position and return it to the normal position. The learning process will occur as described above.

FAULTS

Three LED lights are provided to help diagnose faults.

All repairs and tests must be done with power removed. The actual LED indications for the following faults are shown in table in the wiring diagram at the end of this document.

- SC to RC Terminal Short: Sort detected between the SC and RC terminals that could indicate improper wiring or a stuck start relay. The relay can be checked by removing the connections and testing continuity between the terminals. If a short exists, the board must be replaced. If this condition is detected, power should be removed quickly to prevent failure of the start capacitor.

- High compressor current: Compressor running current is limited to a maximum of 38 amps; EZ Start will shut down if current exceeds this value.

- Open overload protector: An improper operating condition exists that is consistent with an overload protector opening during operation. Any condition that causes the connection to the compressor to be broken can cause this fault.

- Compressor stalled: An improper operating condition exists that is consistent with a stalled compressor. This condition is triggered by an improper signal on the start winding of the compressor and can be caused by a broken start winding wire connection, a failed start capacitor, as well as a locked compressor rotor, which can be due to a lack of pressure equalization at startup, low voltage at startup, and other causes.

- Power Interrupted: A temporary power loss was detected and EZ Start shut down the compressor. If power is restored before EZ Start completely loses power, EZ Start will restore operation after two minutes and log a fault.

D23	D22	D21	Indication
■	■	□	Power Interrupted
■	■	■	Compressor Stall After Start
■	□	■	Compressor Stall While Starting
□	■	■	SC to RC Terminal Short
□	■	□	Compressor Over Current
□	□	■	Open Compressor Overload
□	□	□	Normal Operation

CLIMMA
MARINE AIR CONDITIONING