

Micro-Air EasyStart

Installation Instructions

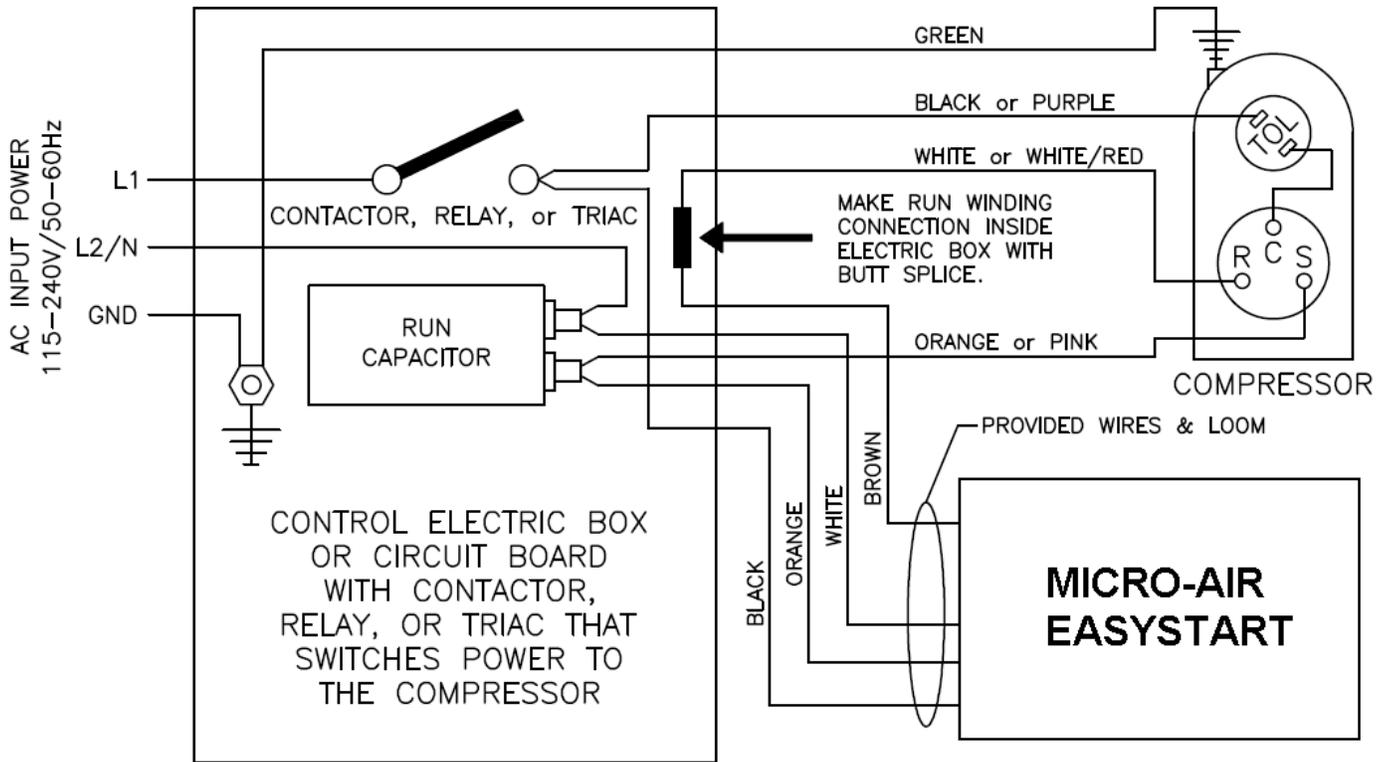


WARNING: Cancer and Reproductive Harm
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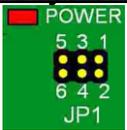
1. Read and understand these instructions completely before proceeding.
2. Improper wiring can result in damage to EasyStart or connected components including but not limited to wiring, compressors, and capacitors. ***Micro-Air is not responsible for damages to any of the aforementioned equipment caused by improper wiring.***
3. Turn off the breaker for the compressor's electrical system.
4. Consult the manufacture's installation manual and wiring diagram for the identification of the following:
 - a. Start capacitor (typically in a plastic can), start relay, or compressor start device. Note that these devices may NOT be installed on some systems.
 - b. Run capacitor (typically in a metal can). Most have 2, multi-point terminal connections (or clusters). Some have 3 terminal connections.
 - c. Control board switched-L1 output or main contactor compressor L1 output connecting to the compressor common terminal (C) wire. Note some systems utilize a contactor to switch power to the compressor, other use a power relay integrated into the main control board.
5. If the system utilizes a start capacitor with a start relay, or a start assist device, disconnect all the wiring connected to the start capacitor or the start assist and remove them from the electric box. Be aware that some connections to the compressor (e.g. compressor common L1 and compressor Run L2) may have junction connections at terminals of the start relay. Therefore, it is best to NOT remove the start relay unless you are able to trace out these wiring junctions and splice them. Disconnecting and removing only the start capacitor from a system with a start cap and start relay will effectively disable the start relay, thus eliminating the need for it being removed.
6. Locate the run capacitor. Locate the wire connected from the run capacitor to the compressor run winding terminal (R), and disconnect it from the run capacitor. Typically this wire is white and is connected to the common (L2) terminal of the run capacitor that has other white wire connected to it as well. If the run capacitor is a dual, compressor/fan type, with 3 clusters of terminals, make sure you do not disturb any of the connections going to the fan. Identify only the connections meant for the compressor, typically labeled "COMP", "C", or "H", and "COM" (common). The compressor run winding terminal wire removed in this step will typically be connected to the "COM" or common run capacitor terminal.
7. Connect (splice) the brown wire from EasyStart to the (white) wire disconnected in step 7 above. This is the wire that connects to the run winding terminal (R) on the compressor.
8. Connect the white wire from EasyStart to the same terminal of the run capacitor from which you disconnected the (white) run winding (R) wire in step 7 above.
9. Connect the orange wire from EasyStart to the opposite terminal on the run capacitor that connects to the compressor start winding terminal (S). This terminal will typically have one or more orange or pink wires connected to it. If the run capacitor is a dual, compressor/fan type, make sure to choose the correct capacitor terminal, typically labeled "COMP", "C", or "H".
10. Connect the black wire from EasyStart to the switched-L1 connection emanating from the main control board or main contactor that typically has a black or purple wire that connects to the compressor common (C) terminal wire.
11. Wiring is now complete. Remove any remaining unused or disconnected wires and close all open electrical boxes and panels.
12. Securely mount the EasyStart using the four holes provided on the mounting flange, locating it close to the original system electric box (limited by wire harness length).
13. Turn on the system circuit breaker using shore power. Start a heating or cooling cycle with the thermostat.
14. EasyStart will now learn the characteristics of the compressor for the next five starts. This operation will be done during normal operation and does not require any intervention or special actions. Once the learning process is completed, the EasyStart can be operated on either shore or generator power.

Important Installation Note: When installing EasyStart into applications that use a high-current triac to switch power to the compressor, it is necessary to replace the triac with a relay. If the triac is preserved, the EasyStart and other devices connected to the switched compressor power may suffer damage and ultimately fail. A replacement relay specifically designed for this application is available in the Micro-Air webstore listed alongside the EasyStart.

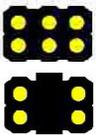
Example EasyStart Installation Wiring Diagram



EasyStart Jumper Configurations:



Jumpers can be placed on JP1 for certain special functions. Do not place jumpers except as shown.



Most operation should be done without a jumper installed on JP1 or with the jumper installed across pins 3 and 4 as shown.

RELEARN (4,6)



If a compressor, start capacitor, or run capacitor is replaced, place a jumper on pins 4 and 6 as shown. Cycle power on then off again. Remove the jumper. Cycle the compressor on then off eleven times (preferably on shore power) to complete the learning process setup.

DEFAULT (1,3)



A compressor may be operated with a factory defined start characteristic. This may not be the optimal start for the connected compressor and is generally used for factory diagnostics. No optimization is done with this setting.

DISABLE (5,6)



This setting disables the microprocessor on the board so no operation can occur.