

Kit Wiring Instructions for HE1XIN Isolation Dampers

Dampers for this model are designed for installation indoors.

*Dampers for this model are designed to be installed in both the Exhaust Air and Fresh Air locations.
 (See airstream location stickers on side of unit).*

Installation

- Insure all electrical power is disconnected from the unit.
- Turn off disconnect switch on door of unit.
- Using a Phillips head screw driver, remove the three (3) ¼"-20 X 1¾" long safety screws from the door.
- Swing door open, and locate the electrical box.
- Using a Phillips head screw driver, remove the two (2) #8 X ½" long screws that hold the cover on the electrical box.
- Remove the electrical box cover.
- Remove the two black outer plugs at the locations where the white Molex connectors will install (See Page 4 dimension drawings).
- From the outside remove the insulation that is behind the black plastic plugs.
- Two identical wire harnesses are supplied. (One for the "EA" damper and one for the "FA" damper.)
- Push the low voltage connecting plug in to the rectangular hole located in the motor mounting plate.
- Apply caulk to seal plug as this is a leak path to outside of unit.
- Route wires in to the electrical box.

Damper Installation

- Remove damper assemblies from carton. The motorized actuator is pre-installed and needs no adjusting.
- Slide damper assembly onto the factory installed round duct collars on the unit at the appropriate location(s).
- Secure damper assembly in appropriate manner.
- Continue ducting the unit as described in the Installation and Operation Manual that came with the unit.
- Plug the dampers actuators in to the Molex connectors that were just installed.
- Use conduit, strain relief etc. as required by code to secure damper wiring.
- Reconnect power and turn the disconnect switch on the unit door to "ON".

NOTE: When the unit calls for ventilation the blowers will not immediately start, the damper blades are opening and when they are approximately 60 % open, the blowers will start. Actuation time is approximately 75 seconds.

When complete, before placing the cover back on the electrical box, apply the supplied wiring schematic label over the old one on the inside of the electrical box cover based on the unit control scheme.

Slide the cover back on the electrical box and re-secure with the two (2) #8 X ½" screws.

Swing door closed and replace the three (3) ¼"-20 X 1¾" long safety screws.

Wiring Installation Instructions Depending on Unit Control

You can determine what unit control your ERV has by digit #19 in the Model # on the unit rating label as follows:

- A = Standard Unit (Non-IBC)
- D = IBC (Independent Blower Control)
- T = ECM (Electronically Commutated Motors)

This damper kit can be installed in models built on or after G12 (July 2012) as found in the Serial Number on the unit rating label.

For any serial # with the first 3 places tp be G, H, I, J, K, L 12 are compatible and any model with 13 and higher are also compatible.

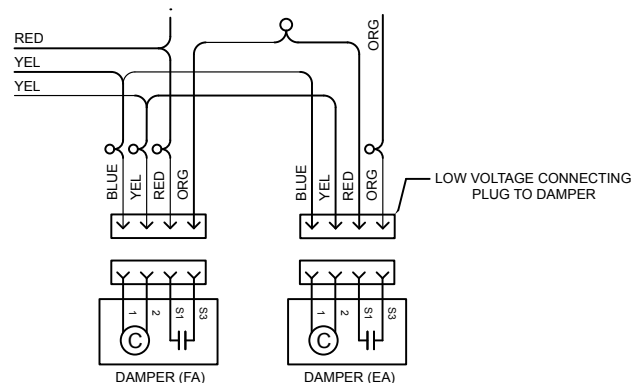
Locate the SPST isolation relay/s:

Non Independent Blower Control (Label 165950):

- Has only has one (1) SPST isolation relay.
- Remove all of the quick connections from the relay (2 yellow wires, 1 red and 1 orange wire).
- Cut off the quick connects and strip wire ends back approximately 3/8"

Using the Heyco connectors (supplied):

- Connect the 2 blue wires on the "EA" and "FA" wire harnesses to one of the yellow wires that came off the relay (NOTE: It doesn't matter which yellow wire you choose).
- Connect the 2 yellow wires on the "EA" and "FA" wire harnesses to the other yellow wire that came off the relay.
- Connect the red wire from the "FA" harness to the red wire that came off the relay.
- Connect the orange wire from the "EA" harness to the orange wire that came off the relay.
- Connect the orange wire from the "FA" harness to the red wire from the "EA" harness.



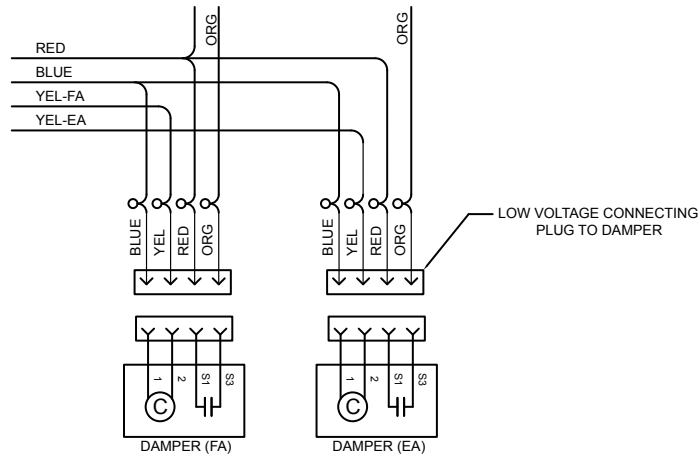
STANDARD UNIT (NON IBC)

Independent Blower Control (Label 165954):

Has two (2) SPST isolation relays.
 Remove all of the quick connections from the two (2) relays (2 yellow wires, 2 blue wires, 2 red wires, 2 orange wires).
 Cut off the quick connects and strip wire ends back approximately 3/8"

Using the Heyco connectors (supplied):

- FA Damper wiring connections:
 - Connect the blue wire on the "FA" wire harnesses to the blue wire that came off the "FA" relay.
 - Connect the yellow wire on the "FA" wire harnesses to the yellow wire that came off the "FA" relay.
 - Connect the red wire on the "FA" wire harnesses to the red wire that came off the "FA" relay.
 - Connect the orange wire on the "FA" wire harnesses to the orange wire that came off the "FA" relay.
- EA Damper wiring connections:
 - Connect the blue wire on the "EA" wire harnesses to the blue wire that came off the "EA" relay.
 - Connect the yellow wire on the "EA" wire harnesses to the yellow wire that came off the "EA" relay.
 - Connect the red wire on the "EA" wire harnesses to the red wire that came off the "EA" relay.
 - Connect the orange wire on the "EA" wire harnesses to the orange wire that came off the "EA" relay.



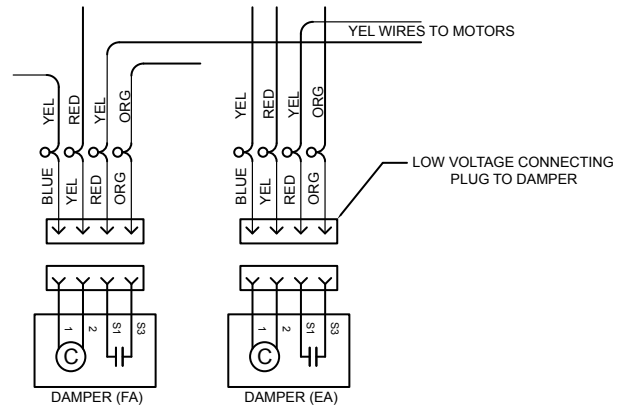
IBC UNIT

Electronically Commutated Motor Control (Label 165957):

Has two (2) SPST isolation relays.
 Remove all of the quick connections from the two (2) relays (4 yellow wires, 2 red wires, 2 orange wires).
 Cut off the quick connects and strip wire ends back approximately 3/8"

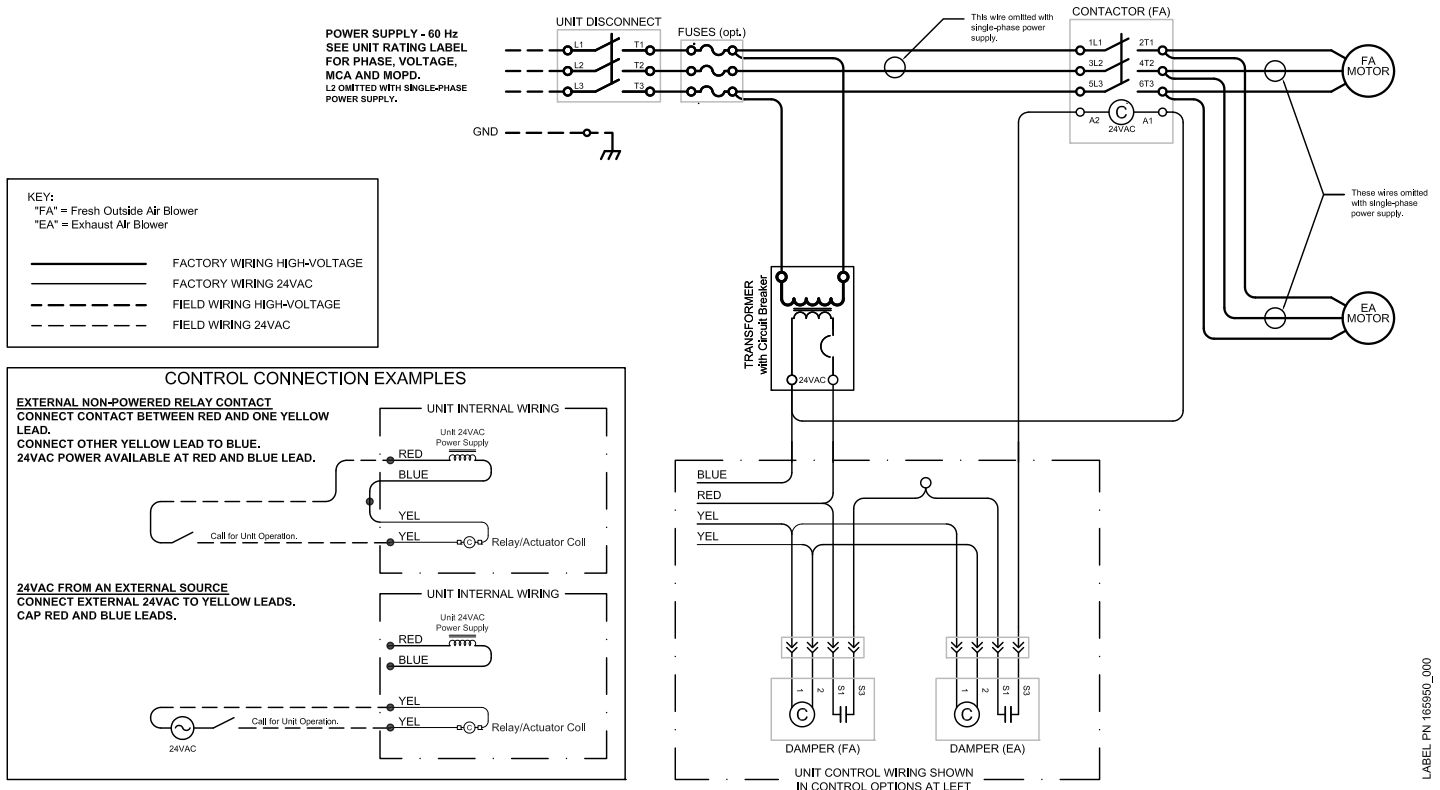
Using the Heyco connectors (supplied):

- FA Damper wiring connections:
 - Connect the blue wire on the "FA" wire harnesses to the yellow wire that came off the "FA" relay.
 - Connect the yellow wire on the "FA" wire harness to the red wire that came off the "FA" relay.
 - Connect the red wire on the "FA" wire harness to the second yellow wire that came off the "FA" relay. (NOTE: This is the yellow wire coming from the "FA" motor).
 - Connect the orange wire on the "FA" wire harnesses to the orange wire that came off the "FA" relay.
- EA Damper wiring connections:
 - Connect the blue wire on the "EA" wire harnesses to the yellow wire that came off the "EA" relay.
 - Connect the yellow wire on the "EA" wire harness to the red wire that came off the "EA" relay.
 - Connect the red wire on the "EA" wire harness to the second yellow wire that came off the "EA" relay. (NOTE: This is the yellow wire coming from the "EA" motor).
 - Connect the orange wire on the "EA" wire harnesses to the orange wire that came off the "EA" relay.



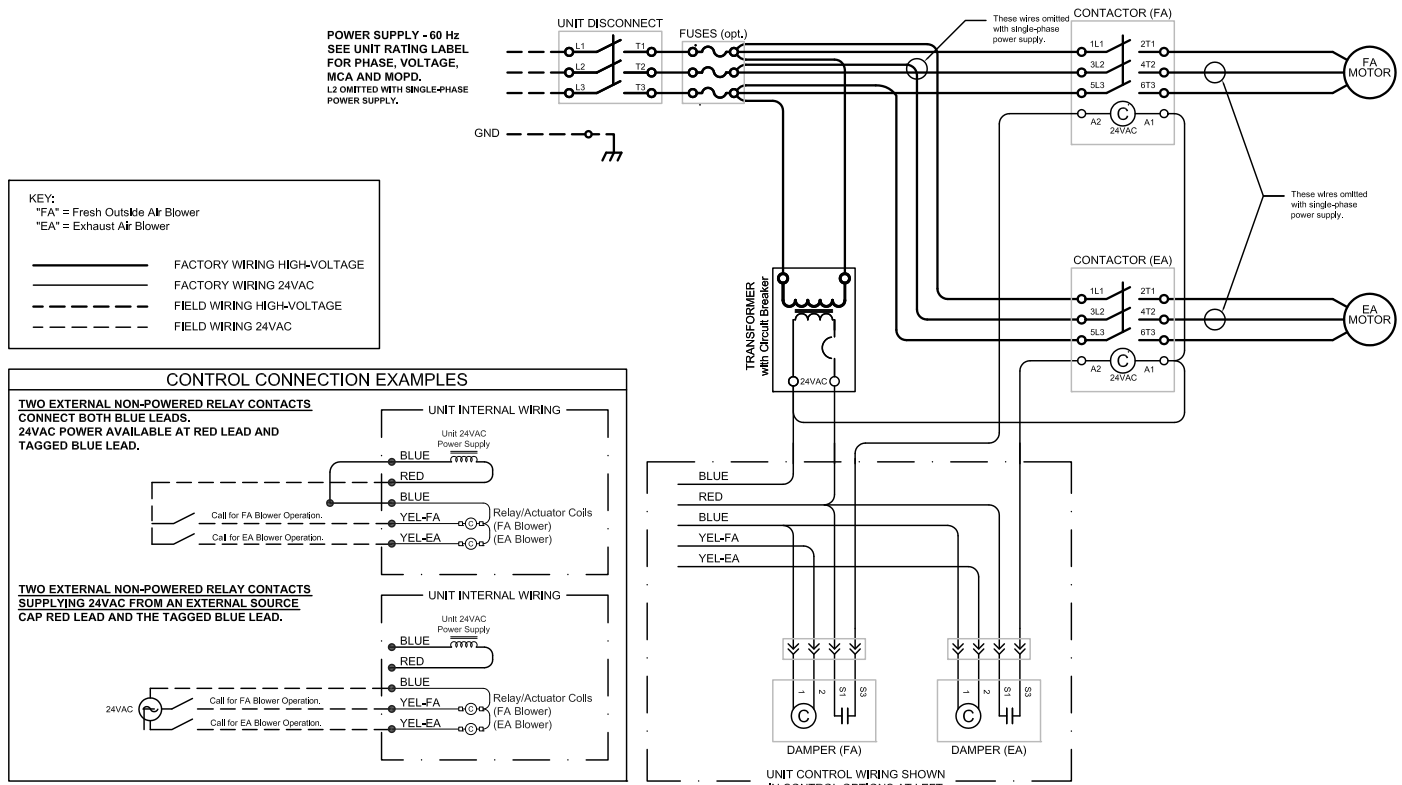
ECM UNIT

Non Independent Blower Control (Label 165950)



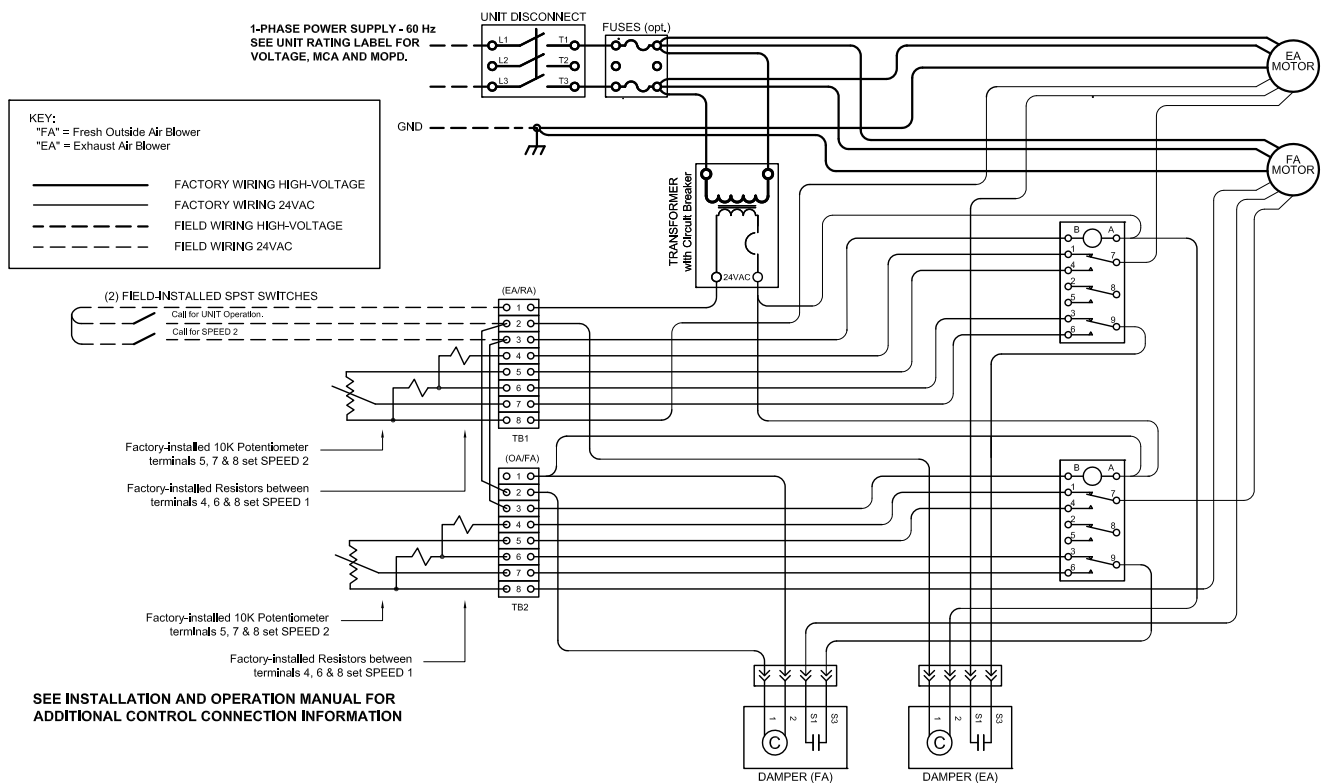
Label PN 165950_000

Independent Blower Control (Label 165954)



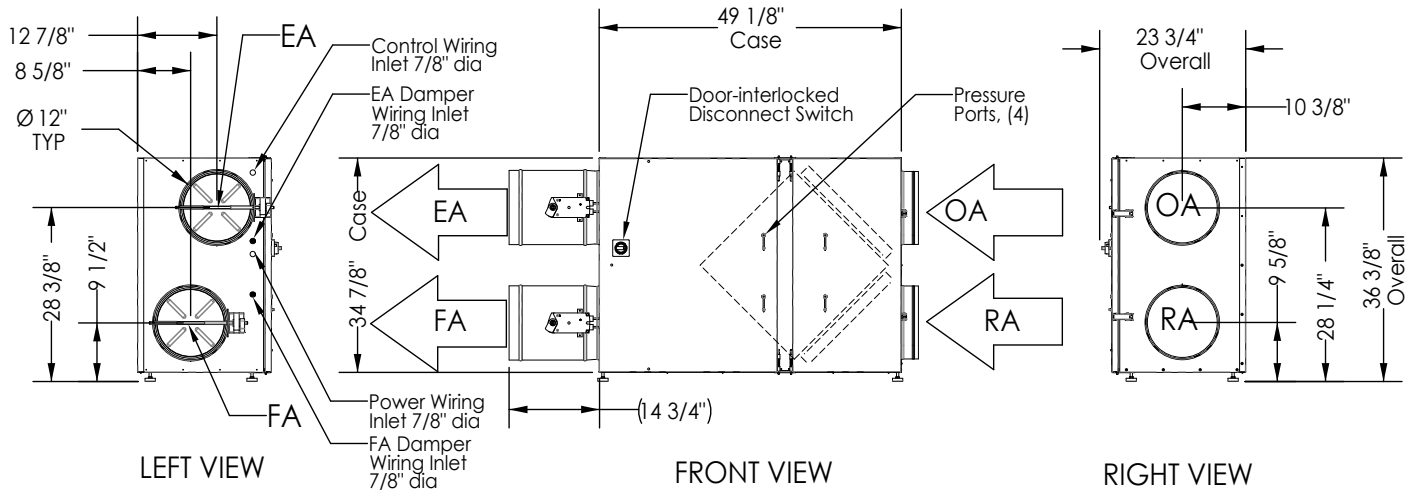
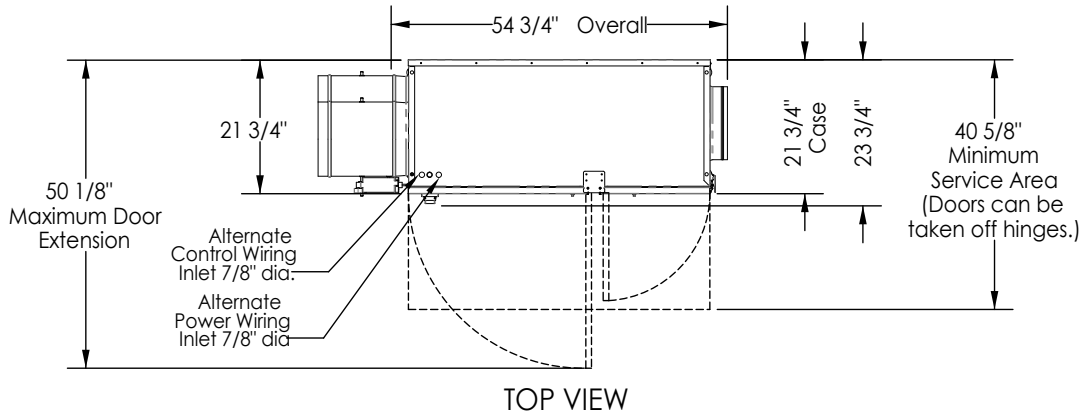
LABEL PN 165954_000

Electronically Commutated Motor Control (Label 165957)



LABEL PN 165957_000

HE1XINH



HE1XINV

