ELECTRONIC OVERLOAD RETROFIT KIT
for
3 Phase Blue Flames (after 2002) and
Turbo Boosters (after 2004)

(Retrofit Instructions)
Helps protect motors against phase loss.

423-383-001A
Retrofit Kit, Electronic Overload

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DANGER

ELECTROCUTION HAZARD
Make sure all power is disconnected and locked out. Only skilled, qualified persons may carry out the following operations.

1) Remove the motor wires from the motor contactor and connect them to the T1, T2, and T3 terminals on the electronic overload. Keep the orientation the same, or the motor may spin the wrong direction.

2) Mount the electronic overload in the control box so it can be wired to the motor starter. Drill 0.140" (9/64") diameter pilot holes and fasten the overload with #8-3/8" screws (F-1061).

   BLUE FLAME MOUNTING
(108H-001A, 109H-001A)

   TURBO MOUNTING
(121B-001A, 121C-001A)

3) Cut, strip, and form the 8 Gauge wire. Connect the wires from the electronic overload L1, L2, and L3 terminals, to the motor contactor. Keep the orientation the same, or the motor may spin the wrong direction.

   BLUE FLAME WIRES

   1/2" Strip (TYP)

   5 1/2"

   TURBO WIRES

   1/2" Strip (TYP)

   9"
4) The electronic overload switch can either be wired in series with the motor "J" leads or the "J" leads can be unhooked and not used. This manual will show wiring the overload in series with the "J" leads.

For Blue Flame or Turbo Booster: Remove motor "J" lead from terminal strip #8 and connect it to terminal 96 NC on the electronic overload. Connect wire on terminal 95 NC on the electronic overload to terminal strip #8 (where the "J" lead was removed from).

BEFORE

Motor Contactor
Coil

8
Blue Flame or Turbo
Terminal Strip

Motor Thermal
Switch "J" Lead

AFTER

Motor Contactor
Coil

8
Blue Flame or Turbo
Terminal Strip

Electronic
Overload Relay

95 NC
96 NC

Motor Terminal
Switch "J" Lead

5) Make sure all terminals on the motor contactor and electronic overload are tight.

6) Configure the electronic overload. Lift the clear plastic cover.

Reset button should be set to "M" (Manual) reset

Dip switches should be set for CLASS 20 trip delay

Trip flag indicator should be dark (not florescent green)

For Blue Flame and Turbo Booster

FLA current dial should be set for motor nameplate amps.

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\begin{align*}
208V & = 38 \text{ Amp} \\
230V & = 36 \text{ Amp} \\
460V & = 18 \text{ Amp} \\
\end{align*}
\]

Each division is 2.25 Amps
7) Close the clear plastic cover. Take a small screw driver and insert it at an angle into the slot marked TEST until the trip flag indicator shows fluorescent green. It won't take much force.

8) Make sure everyone is clear of all equipment and turn power back on.

9) The fan should not start, because the electronic overload is tripped. Using a well insulated screwdriver, press the red reset button on the electronic overload. The fan should now start. Verify proper rotation (air should be blowing into the bin). If overload trips on motor startup, change DIP switches to Class 30.

10) Place decal inside the cover of the control box.
Part Identification

E-5043
8 Ga. Black Wire
(See page 1 for length of wires)

E-5074 (14")
16 Ga Black Wire

F-1061 (2)
#8 X 3/8 Sheet Metal Screw

E-6495
Electronic Overload Relay, 9-45 Amps

108-077P
Elect. Overload Bracket