SubDrive300

Drive Cooling Fans Install Guide

Franklin Electric
The cooling fans should run if the drive is running over 2000 watts or exceeds the temperature limit. The fan provides cooling to allow the drive to operate efficiently and safely.

**WARNING**

Serious or fatal electrical shock may result from contact with internal electrical components. **DO NOT,** under any circumstances, **ATTEMPT TO CHANGE FAN** until power has been removed from drive, capacitors are discharged, and 5 minutes have passed for internal voltages to discharge! Before replacing fan, make sure fan is not working properly by performing the simple fan test below:

**Fan Test**

- Fans can be unplugged from the drive and tested with a 9V battery to show functionality.
  - Connect the red (+) lead from the battery to the red fan connector and the black (-) lead from the battery to the black fan connector.
  - Connect the battery clip to the 9V battery. The fan should spin freely and quietly.
- To make sure fan power supply works properly; the drive must be run and powered above 2000 watts.

If the fan does not perform as stated above, note the error and consult your local Franklin Electric Representative or call Franklin Electric’s Submersible Service Hotline at 1-800-348-2420.
STEP 1:
Remove the 4 screws holding the fan grill in place and remove fan grill.

STEP 2:
Unplug both fans from control board connectors.

STEP 3:
Remove feed-through nut to replace fan assembly from drive.
**STEP 4:**
To remove the fans from the grill housing, angle fan and pull out from center.

**STEP 5:**
When replacing the fans, make sure the arrow on the fans is pointing away from the grill housing. Fan wires should be facing each other in the center of the grill housing.

**STEP 6:**
To install new fans in the drive, feed fan wires through opening.
STEP 7:
Place feed-through nut over fan wires.

STEP 8:
Place feed-through connector through hole and screw nut firmly.

STEP 9:
Place fan grill housing back onto drive and tighten the 4 screws into place.
STEP 10:
Connect fan connectors to board terminals (labeled PFC and Inverter fan).

STEP 11:
Fan installation complete. Verify that fans turn on and are working properly.

If you experience any difficulty in performing these steps, consult your local Franklin Electric representative or call Franklin Electric’s Submersible Service Hotline.

Submersible Service Hotline: 1-800-348-2420