

Revision Date: 12/20/2024

Subject: E389 Error Code

Models: DVM, CHILLER

Title: Outdoor Unit Fan Motor 2 Stopped Due to Overload (V-Limit)

Fan 2 is on the right-hand side of unit

Troubleshooting Steps

1. Remove power to the condensing unit for a minimum of 15 minutes.
2. Inspect the fan blade and make sure there are no obstructions.
3. Verify blade spins freely.
4. There are two plug connections for each fan motor. Power (red, white, and black) and hall effect sensor.
5. Follow and inspect wiring. Make sure there is no damage to wires or plugs.
6. Make sure all plugs and spade connectors are secure and connected properly.
7. Disconnect power plug (Fan motor 1 is white plug, Fan motor 2 is blue plug) Check resistance at plug going to Fan motor. Red-White, Red- Black and White to Black. The resistance value between each winding should be equal, under 10Ω and open to ground



Fan #2 is on the right-hand side of unit

If all values are within range, you have 2 options: Continue on page 2



Option 1- No inverter tester

1. Reverse connector plugs for Fan motor 1 and Fan motor 2. (Fan Motor and Hall Effect plug)
2. Restore power to the unit. If the E389 error returns, replace fan PCB. If the error changes to E489, replace the fan motor.

Option 2- Inverter check

1. Remove power from unit for minimum of 15 minutes. Remove Fan connections from Fan PCB and connect inverter checker.
2. Restore power to unit. Press K2 button 12 times to initiate the inverter test for fan motor 2.
3. If the inverter test fails, replace Fan PCB. If it passes, replace Fan motor.

See the Video showing this troubleshooting technique. Click the icon below:



**** Before reconnecting any wire harnesses, leave the unit powered OFF for 15 – 20 min****