Revision Date: 12/26/2024
Subject: E464 Error Code
Models: DVM, CHILLER, WATER
Title: Overcurrent on Compressor 1

Always refer to wiring diagram for specific model. Use the link below for a model search and see the technical data book for the wiring diagram.
https://www.samsunghvac.com/downloads

DVM S2 Main PCB

DVM ODU Main PCB

Troubleshooting Steps

E464 Diagnostics

1. Disable the compressor with the error code
   - Press and hold K2 for 3 seconds (00 00)
   - Press K2 to select the compressor to disable

   00 01 = Disable Comp 1 00 02 = Disable Comp 2

   - Hold K2 for 2 seconds to save selection
2. Run system in Heat or Cool test depending on conditions
   - Heat Test: Press K1 2 times
   - Cool Test: Press K2 2 times

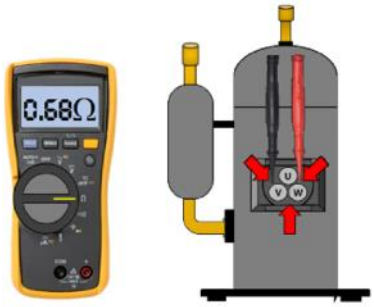
   Running the system without the compressor in fault is critical in determining a constant value of working compressor. There must be a working circuit to accurately diagnose this error without an inverter checker.

   If the system operates without error, continue to step 3.

   If the system shows a compressor fault, skip to step 6.
3. Remove power to the condensing unit for a minimum of 15 minutes before continuing to the next step
4. Remove the leads to the compressor with error and Ohm the compressor

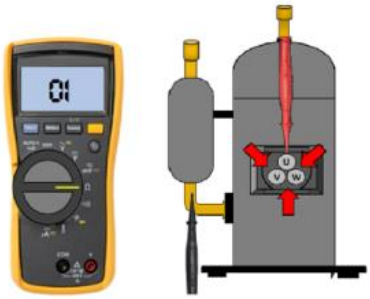
   Compressor Ohm values between terminals must be equal or lesser than 2Ω. If testing with a megohmmeter, the value between terminals to ground should be higher than 1MΩ. With a meter each winding should be open to ground. If the readings are not the same, have open windings, or is grounded, replace the compressor. If the readings are normal, continue to step 5.

Measure U-V, V-W, U-W



Terminals	Ohm (Ω)
U-V	Less Than or Equal to 2
V-W	Less Than or Equal to 2
U-W	Less Than or Equal to 2

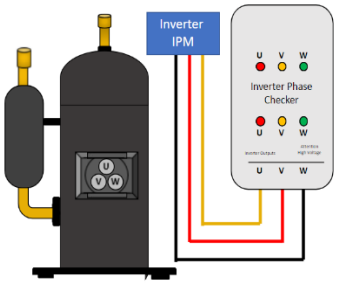
Measure U, V, W to GND



Terminals	Ohm (Ω)	Megaohm
U-GND	OL	> 1 MΩ
V-GND	OL	> 1 MΩ
W-GND	OL	> 1 MΩ

5. Remove the leads at compressor 1 and connect them to compressor 2. Run system in Cool or Heat test mode
   - If Compressor 1 operates when wired to Inverter 2, replace Inverter 1
   - If the error changes to E364, Replace Compressor 1

6. Inverter Check Mode using an Inverter Checker
   - Remove leads at compressor and connect to an inverter checker
   - Use inverter check mode with the K buttons on Main PCB
   - If all LEDs light and flicker on the Inverter Checker, the Inverter PCB output is correct
   - If any single LED is not flashing or remains solid, the Inverter PCB is faulty and must be replaced



Inverter 1 Check Mode
Press K2 - 9 times

Inverter 2 Check Mode
Press K2 - 10 times

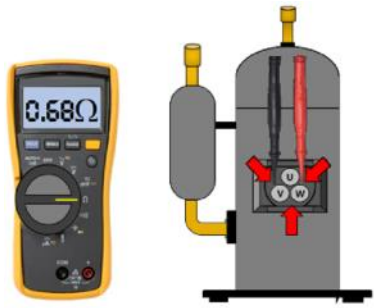
Proper Personal Protective Equipment (PPE) Required. These photos may not represent your exact system.
For use by Samsung HVAC Trained & Licensed Service Providers Only. www.SamsungHVAC.com

E464 Single Compressor System Diagnostics

1. Remove power to the condensing unit for a minimum of 15 minutes before continuing to the next step
2. Remove the leads to the compressor with error and ohm the compressor

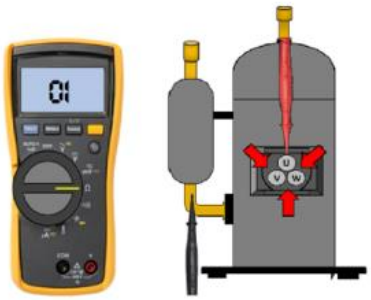
Compressor Ohm values between terminals must be equal or less than 2Ω. If testing with a megohmmeter, the value between terminals to ground should be higher than 1 meg. With a meter, each winding should be open to ground. If the readings are not the same, have open windings, or is grounded, replace the compressor. If the readings are normal, continue to step 3.

Measure U-V, V-W, U-W



Terminals	Ohm (Ω)
U-V	Less Than or Equal to 2
V-W	Less Than or Equal to 2
U-W	Less Than or Equal to 2

Measure U, V, W to GND

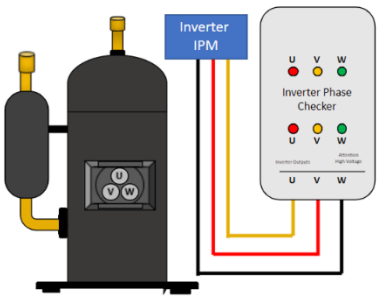


Terminals	Ohm (Ω)	Megaohm
U-GND	OL	> 1 MΩ
V-GND	OL	> 1 MΩ
W-GND	OL	> 1 MΩ

3. Inverter Check Mode using an Inverter Checker
   - Remove leads at compressor and connect to an inverter checker
   - Use inverter check mode using the K buttons on Main PCB
   - If all LEDs light and flicker on the inverter checker, the Inverter PCB output is correct
   - If any single LED is not flashing or remains solid, the Inverter PCB is faulty and must be replaced

If all LEDs light and flicker on the Inverter Checker, the Inverter PCB is good.

If any single LED is not lit, the Inverter PCB is bad and must be replaced.



Proper Personal Protective Equipment (PPE) Required. These photos may not represent your exact system.
For use by Samsung HVAC Trained & Licensed Service Providers Only. www.SamsungHVAC.com