

# Checking a Run Capacitor Under a Load

This method is a practical method and is a composite of two different test practices combined –

## Step 1:

Measure the amperage of just the start wire (wiring connecting to the start winding), this will be the wire between your capacitor and the compressor. In the case of 4 wire motors it will usually be the brown wire NOT the brown with white stripe. Note your amperage on this wire..

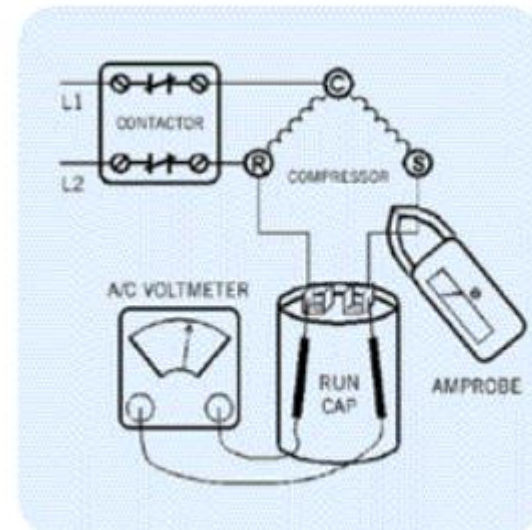


Figure 3. How to test a capacitor under load

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## Step 2:

Measure the voltage between the two capacitor terminals, for the compressor that would be between HERM and C, for the cond fan motor that would be between FAN and C. Note the voltage readings

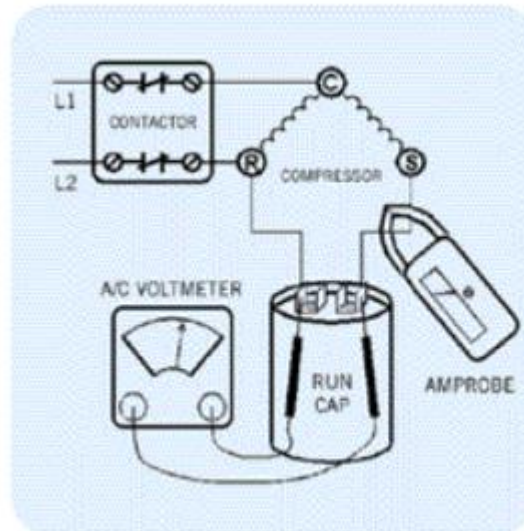


Figure 3. How to test a capacitor under load

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## Step 3:

Now take the amp reading you took on the start wire (wire from the capacitor) and multiply by 2,652 (some say 2650 but 2652 is slightly more accurate) then divide that total by the capacitor volts you measured. the simple formula is **Start Winding**

**Amps X 2,652 ÷ Capacitor Voltage = Microfarads**

