

Run Capacitor sizing can vary depending on the incoming supply voltage provided. HOMA Single Phase pumps are provided with a Start and a Run Capacitor sized for 220-230V under load. Frequently, the available line voltage is considerably different than indicated, and the start or run capacitors may need to be resized to match the available field voltage. The following procedure will allow you to verify proper operation of your single phase pump, and/or make necessary changes to your capacitors to correct for your power supply.

After verifying wiring is in accordance with your pump requirements, start pump and record the following readings from each of the (3) pump cable leads. **NOTE: Procedure must be done while pump is under load.**

Common  
U1

Run  
U2

Start  
Z2

Current under load:

U1 \_\_\_\_\_ Amps > U2 \_\_\_\_\_ Amps > Z2 \_\_\_\_\_ Amps  
Should be: (highest reading) (middle reading) (lowest reading)

Lead U1 (common) should have the highest current reading. Lead Z2 (start) should have the lowest reading.

If Z2 current draw is greater than the current draw of either U1 or U2, a smaller size Run capacitor (lower microfarad rating) is required to correct the condition. Example: If a 60 µf Run capacitor was supplied, change to a 50 µf Run capacitor and check current readings. Typically, only one step down in capacitor size is required, but in certain instances 2 steps may be required.

The standard capacitor kit provided includes: \_\_\_\_\_ µf start capacitor  
\_\_\_\_\_ µf run capacitor

Additional run capacitors have been included for use in tuning the pump to match available line voltages for optimum performance:  
\_\_\_\_\_ µf run capacitor  
\_\_\_\_\_ µf run capacitor  
\_\_\_\_\_ µf run capacitor