Motor Wiring

Basic Centrifuge

Motor is pre-wired and ready to plug into a standard 120VAC outlet.

Extreme Centrifuge

The motor needs to be wired through an external AC Drive. You also need to program the drive to get the full 6000 RPM out of the motor.

Read the Entire Manual Carefully. Wiring for the Extreme Centrifuge must be completed by a licensed electrician.

CAUTION IMPROPER WIRING CAN DAMAGE THE UNIT OR RISK SERIOUS INJURY OR EVEN DEATH!

Your Extreme centrifuge includes an ABB Micro Drive Inverter to convert your standard power to run the 230V, 3 Phase Motor.

Your Extreme (6000 rpm) motor should be a 230VAC, 3 phase motor. The included ABB Drive converts the power from your region's standard voltage, listed on the controller to run the 230V 3 phase motor. So you can run your 120V or 230V single phase power into the ABB Drive.

Model:

- ACS55-01N-02A2-1 accepts 120V single-phase power
- ACS55-01N-02A2-2 accepts 230V single-phase power.

Wiring the Extreme Centrifuge

- L/R, N/S and Ground symbol on the ABB Drive connect to your standard single phase power wiring. Connect the Black (HOT) line to the L/R connection. Connect the White (NEUT) line to the N/S connection. See Figure 1.
- 2. Use switched power to run the drive. An approved 14 AWG extension cord with an incorporated switch may be used for this purpose.
- The T1, T2, T3 connections on the bottom of the ABB Drive connect to the orange, blue and white wires on the motor (order does not matter) using 14 AWG wire. Connect the ground on the drive to the green ground screw on the motor. 14-3 with ground Romex Cable is recommended. All wiring must be done in accordance with local code.

Programming the ABB Drive

- 1. De-energize the drive while programming.
- 2. Attach Speed Pod following instructions included with the Speed Pod. See Figure 2.
- 3. Set the ABB Drive using the settings shown in Figure3.









Figure 2

1st Switch to Local Power Requirements (North America is 60 Hz)

Last Switch (HI FREQ) set to ON

All other switches set to OFF

Figure 3

WVO Designs Raw Power Centrifuge