Motor Wiring

Basic Centrifuge - Motor is already wired and ready to plug into a standard 120V outlet.

Extreme Centrifuge—Motor need to be wired through GS1. You also need to program the GS1 to get the full 6000 RPM out of the motor. Read the Manual! Wire with caution.

Your Extreme centrifuge includes the GS1 controller to convert your standard power to run the 230V, 3 Phase Motor.



Your Extreme (6000 rpm) motor should be 230v 3 phase motor. The included GS1 controller 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 GS1 Controller, GS1-10P5 accepts 120V single-phase power, while the GS1-20P5 accepts 230V single phase power.

Wiring of the Extreme centrifuge is done as follows:

L1, L2 and Ground symbol on the GS1 controller connect to your standard single phase power wiring. You can purchase a cord that has a plug for a standard outlet on one side and loose wires on the other end for connecting to the GS1. Use an old extension cord if you'd like. 14 awg wire is recommended. The order of the L1, L2 wires do not matter, the grounds need to be matched however. Reference user manual page 2-8, bottom figure.

T1,T2,T3 on the bottom GS1 controller connect to the orange, blue and white wires on the motor(order does not matter). The 4th wire will be from the ground on the controller to the green screw on the motor. You can use something called "1½ with ground" wire rolls from the hardware store. Wiring should be done according to local code. Use 14 awg wire.

Programming of GS1

The GS1 drive needs to be programmed to run the motor for 6000RPM. Refer to Section 3-2 in the manual. We also made a video at www.vimeo.com/8093365

You will need use the parameters off the motor for programming. Hit the Program/Enter button to get to the right parameter setting.

Settings:

Parameter 0-00: 230 Parameter 0-01: 1.4 Parameter 0-02: 60 Parameter 0-03: 3450 Parameter 0-04: 6000