

CAUTION! Use caution when working with electricity. High electrical current can cause serious injury or death. When possible, disconnect the power source to avoid accidents.

1. On a three phase service line, there will be three wire called legs. One leg will be at the rated service voltage while the other two will be half that voltage. The higher voltage leg should be marked red and the other two blue and yellow or white.
2. The red leg should be the middle leg coming into the driver panel and connected to L2 as shown in the picture. The other two legs will be connected to L1 and L3.
3. Check the starting amp overload dial and make sure this is set to 125% of the full load amp rating of the motor (FLA). This rating can be found on the motor nameplate. Make sure the correct amperage is read. The correct FLA number is the one associated with the voltage and frequency being used. This can be 208, 230, or 460 volts at 50 or 60 Hz.
4. The next thing that should be done when the electrical service is connected to the motor is to check the rotational direction of the motor. To do this, remove the plastic cover to the housing that connects the motor to the pump. The pump will have an arrow on it indicating the desired direction of rotation. While watching the coupler inside the housing, push the start button on the panel and push the stop button immediately afterwards. If the motor is rotating in the opposite direction from what the arrow indicates, switch the wires going into L1 and L3. Check the motor rotation again to make it is now correct. Fasten the plastic cover back on the housing.
5. After all of the hydraulics are setup the first thing to do it check how much current the motor is pulling. Connect an ammeter onto one of the legs in the driver panel just before it exits the panel and connects to the motor. Push the start button to turn the motor on. Read the number of amperes on the ammeter. Check each leg wire to see if the amperage reads within 6% of each other. For 30 amps this range would be within 1.8 amps. For 20 amps the range is 1.2 amps.
6. Connect the ammeter onto one leg as described before. If the amperage is higher than the full load amps of the motor, the proportional valve on the hi-lo block must be screwed in. This will dump a portion of the fluid coming from the higher volume gear back to the tank. The proportional valve should be set according to the FLA of the motor or a maximum pressure of 850 PSI on the hi-lo block is reached, whichever occurs first.