

PHASE QUEST Converters

set up guide (wall mounted)

Wiring your converter

Step one: wiring your single phase power

First use a double pole 60 amp circuit breaker in your single phase panel. From this circuit breaker you will run 6 awg wires and connect them to the leads in the control panel number 1 and 2.

Step two: wiring the idler motor

Make sure to follow the connect diagram on the idler motor and use 230 volt connection. From the idler motor locate the 3 wire leads using number 8 awg wires. These leads will now connect inside the control panel at the terminal block labelled C, A, and B. Your 3-phase equipment can be wired in on the same terminal block (see figure 1). You can connect a ground wire to the metal enclosure of the control panel and to the junction box on the idler motor. Finally the control panel and idler motor should be kept within close proximity of your single phase panel to avoid line resistance.

Starting the converter

Now that you have wired up your converter, you should be ready to start it up. First make sure that your three phase equipment is turned off (you can not try to start up the converter and your three phase equipment at the same time). Make sure that your single phase breaker is turned on. As you look at the front of the control panel you will notice 2 push button switches on the upper left side of the control panel (see figure 2). The top push button is your start button and the lower push button is your stop button. When you push the start button your converter will start and come up to speed within 2 to 3 seconds. When the first time you start up the converter, pay attention to the power contactor in the control panel (figure 3). When you push the start button on, this contactor will turn on. But after 2 to 3 seconds this contactor will turn off by the potential relay. **WARNING** if this contactor stays turn on for more then 3 to 5 seconds, push the stop button to turn off the converter. Try turning the converter on again, if this contactor still stays turned on more then 3 to 5 seconds, turn the converter off again. Turn off your single phase breaker and check all of your connections in the control panel and at the idler motor. If you still have the same problem free feel to contact us. When your converter is up to speed and running, you can measure your 3 phase voltage at the terminal block in the control panel. The voltage drawn should be within 10%. If you measure your voltage from phase to ground, you should have a reading of C = 110 - 125 Vac, A = 110 - 125Vac and B = 165 - 205Vac.

Finally the complete assembly should appear similar to that of (figure 4).

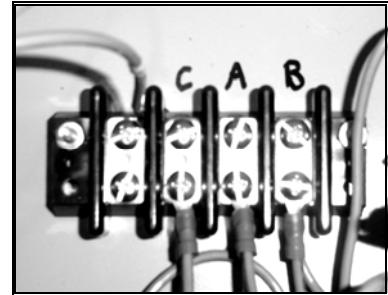


Figure -1-

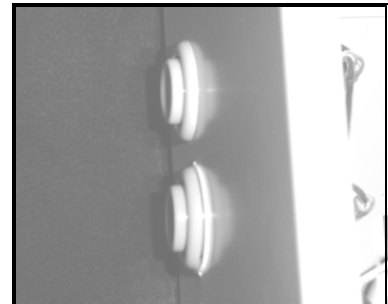


Figure -2-

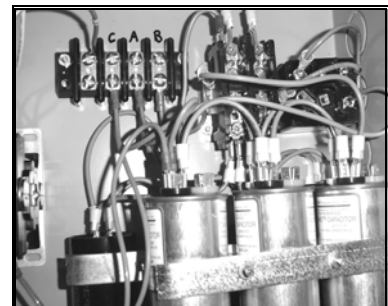


Figure -3-



Figure -4-