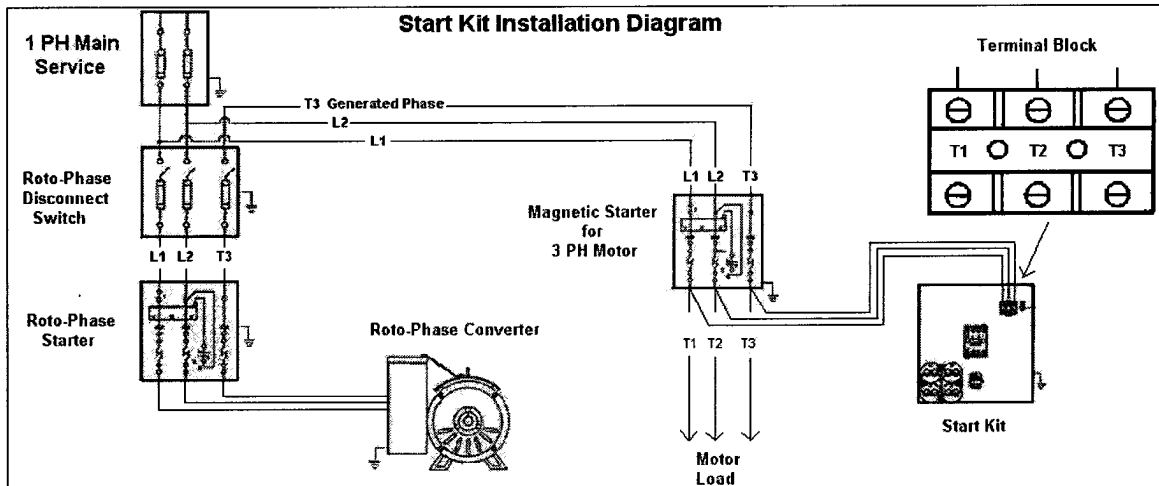


ARCO Electric Products



Correct installation of this equipment is important and plays a major roll in the success of the application. To insure correct installation is achieved, a few simple voltage tests must be performed. The only test equipment required is an analog or digital voltmeter. The Roto-Phase converter must be started and allowed to run idle without any 3 PH load operating. A phase-to-ground voltage measurement must be taken at the "line side" of the Magnetic Starter for the 3 PH motor. The voltage readings taken will be similar to an "open-delta" 3 PH power supply system. The two 1 PH line values to ground will be one half of the "phase-to-phase" voltage reading for the two 1 PH supply voltage lines. The T3 Generated Phase to ground will be almost equal to the value of the phase-to-phase voltage reading for two 1 PH lines. See the example using a 230 VAC 1 PH supply voltage.

EXAMPLE: L1-Ground = 115 VAC, L2-Ground = 115 VAC, and T3-Ground = 240 VAC)

REMEMBER THE POWER LINES COMING FROM THE PHASE CONVERTER MAY NOT ALWAYS BE CONNECTED IN THE SAME POSITIONS - ALWAYS PHASE OUT THE POWER LINES COMING INTO THE MAGNETIC STARTER FOR THE 3 PH MOTOR.

The first step of the installation will be to make a connection from the Terminal Block of the Start Kit marked T3 to the load side of the Magnetic Starter for the 3 PH Motor using the "highest" voltage reading phase-to-ground. While using the T3 Generated Phase as a common point, check voltage phase-to-phase from the T3 Generated Phase to each of the two 1 PH supply lines. (Two different voltage readings should be observed.)

EXAMPLE: L1-T3 = 252 VAC, L2-T3 = 265 VAC

The T2 connection from the Terminal Block of the Start Kit will be to the "highest" phase-to-phase voltage reading from the T3 Generated Phase. The T1 connection from the Terminal Block will be placed in the remaining spot on the load side of the Magnetic Starter for the 3 PH Motor.

WIRE SIZE FORMULA FOR START KIT CONNECTION

Nameplate kVAR Rating x 1000 / Nameplate VAC Rating x 1.35 / 4 = Wire Amperage