

Mobile Forced Air-Cooling Services, Inc.

Electric Service for our 2-port cooler:

The control panel utilizes 300-amp main disconnect. Voltage required is 460V/3 /60. It is preferable to have a disconnect between the pole and the cooling unit. We have run 1/0 thhn wire two wires per phase using 3 phase power to the control panel from a weather head located on the front left side of the cooling unit 10' back from the front of the trailer and projecting up about 15' in the air, with one (1) ground.

The 7 cables have lugs at their tie in ends to allow bolt on of the power from the pole or generator. The bolt end connection requires sufficient covering with proper materials to prevent electrical shorting and water incursion.

The wires from the pole must be feed from the pole or disconnect to the cooling unit. Once the connection is made and powered the incoming voltage is measured for the correctness across each of the legs. If voltage is correct on all three legs, with all switches in the off position energize the main disconnect. Inspect the phase and voltage monitor for a red light indicating the phase is correct and the motors will turn in the correct direction. If the red light is on showing correct phase rotation, turn on one small such as the condenser motor and check for rotation. If the motor is running backwards check the phase monitor for a possibility a jumper installed. If there is no jumper and the system appears to be operable check all motors one at a time for correct rotation.

If the red phase monitor light is not lit, two of the three sets of phase wires must be switched, preferably in the remote panel between the pole power and the disconnect before weather head tie in, or if using a generator do so at the lugs at the generator power feed.

The phase monitor should only allow the motors to operate in the direction set at our facility. Changing contractor or motors in the field requires the mechanic to check the motor rotation prior to starting the entire cooling system.

Full load amperage of the system is 228 FLA.