Electrical Guide

PET-400 / PET-550

BIO-RESPONSE SOLUTIONS | AQUAMATION

Modified: 01-14-2021

Electrical Guide

PET-400 & PET-550

The PET-400 and PET-550 are made to order based on the building specifications provided to us.

Standard PET-400 or PET-550 Configurations Available:

a. 208V/220V Single-Phase; requires 90 amp service

b. 240V Single-Phase; requires 90 amp service

c. 208V/220V 3-Phase; requires 70 amp service

d. 380V/460V/600V 3-Phase available.

e. Any custom variations are possible. Please Inquire.

STEP 1: PRE-INSTALLATION SITE VISIT

1. REQUIRED: MEASURE VOLTAGE

    a. Before we will begin building the panel, we require that the actual voltage be measured at the site. This is not reading the voltage from the panel, it is actually testing and certifying the voltage to us.

    b. We have had situations where the machine was ordered based on the panel's marking, but the actual voltage output was significantly higher or lower. This caused significant cost to the customers.

2. RECOMMENDED: DETERMINE FACILITY'S ELECTRICAL NEEDS

    a. Our customer needs to inform you of any other equipment they will be operating (or plans for adding additional PET systems in the future) so you can give advice and make recommendations. Many customers also have a convection oven and/or dehumidifier, a remains processor/cremulator, refrigeration unit/room (some home-built cool rooms use a window air conditioner with "Coolbot" device), and a water heater.

    b. A water heater is required to provide our equipment with hot water, however we recommend this be a propane or natural gas unit if possible (they can achieve higher temperatures and flow rates than electric heaters). This topic is covered on the Plumber's Guide.

    c. A single-phase unit has an advantage over 3-phase: if one of two elements on a 15kw single-phase heater goes out, the heater still has a 7.5kw element to limp the unit along until a replacement heater can be acquired. If one element on a 3-phase 15kw heater goes out, it will effectively take out two and the heater will only have a 5kw element to finish a cycle.

d. All units come shipped with an Ethernet connection port on the left side of the control panel to hook to the provided EWON device for factory support. If you do not have ethernet available an EWON upgrade is available that has WIFI and can be connected through a hotspot or your cell phone if put on hotspot mode, thus allowing factory support.

3. RECOMMENDED: DISCUSS PLACEMENT OF SYSTEM

   a. Please refer to ***PET400_Drawings.pdf***. The PET-400 has a left-mounted control cabinet that requires 3' of space to the left of the unit for opening the control cabinet (by code). The touch screen HMI faces the front.

4. REQUIRED: RETURN ***Electrical Verification Sheet.pdf***

   a. This form (attached) must be returned to us before we will start building the panel.

   b. If the customer does not provide us with this information upon order, the quoted delivery time for their unit will be delayed.

   c. For convenience, we will also accept this information other ways, if it is in writing (example: you can text or email us a photo of the signed form, provided the photo is legible. Text to 317-987-9099.)

STEP 2: INSTALLATION

The unit will arrive in a crate, and the customer or rigging team will uncrate the unit and set it in to place.

1. Power Connection

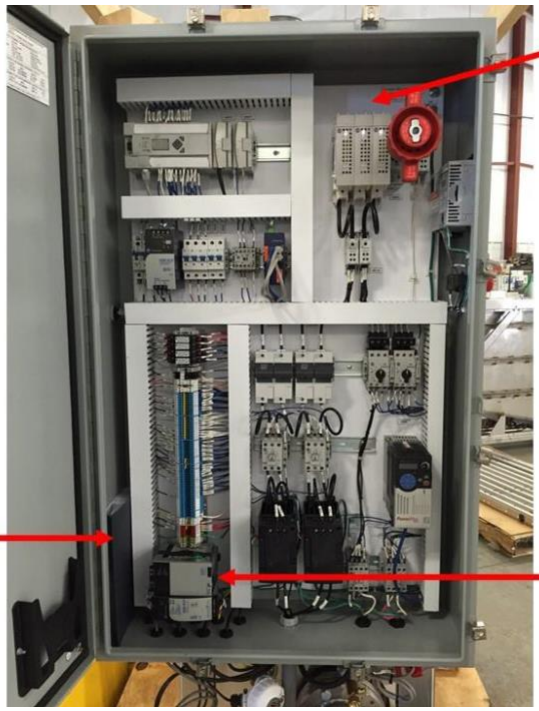
   a. It is imperative to use the proper connectors when connecting power to the panel.

   b. WARNING: On 3-Phase machines- if the system has a pump, phase must be correct for the pump to operate properly. Please contact us for assistance with checking phase rotation.

2. Ethernet Connection

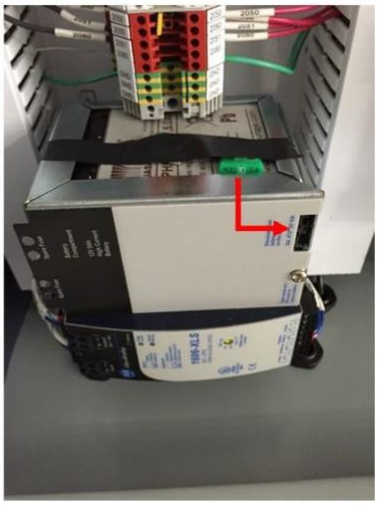
   a. All units come shipped with an Ethernet connection port on the left side of the control panel. It is highly recommended that the customer uses this connection to allow us to give full range of support should the need arise.

Control Panel



Power Connection

UPS



The unit is shipped with the fuse removed from the UPS (uninterruptable power supply). We do this to prevent battery drain. You will find the fuse taped to the top of the UPS (see above right photo); it needs to be inserted prior to power-up. In the unlikely event, the UPS battery does become drained prior to startup, it will take approximately 1-3 hours to recharge, before starting the unit.
A steady "green status" light indicates it is ready to power on.

Do not plug in the fuse until ready to power up, then leave the power on after powering up.

Please call 317-386-3500 with any questions. Office hours are 8:00am - 5:00pm EST. Thank you for your assistance!

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