

## Proper Electrical Hookup Worksheet.

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- A) Your wire and breaker size **must be specified using the NEC and/or your local authority.**
- B) The decision on this sizing is based partially on the supplied FLA, **F**ull **L**oad **A**mps of the dryer.
- C) An on-site qualified technician is best to review the application which **includes these factors:**
  - 1) **FLA of machine-** This is NOT the breaker or line size. This is the approximate amperage draw at a certain voltage. The voltage at the installation is likely to be different than the tested voltage. \*As per NEC 210.20(A) a MINIMUM safety factor is 25% over FLA.
  - 2) **Length of the line-** (Wire from breaker or disconnect to Vastex Dryer).
  - 3) **Wire Type & Temp rating-** SOO, SOOW, are typical. **Never use Romex or Aluminum wire.**
  - 4) **Breaker Amperage-** Minimum of 25% over FLA, rounded up to availability.
  - 5) **Breaker Lugs-** Temperature rating of breaker and disconnect lugs.

**Note:** The FLA is a snapshot of the amp draw when we test the machine at a given voltage. FLA is located on the machine Spec Tag. Variations of up to 10% at installation can be normal. Variations of your final amp draw as compared to the spec tag FLA are mainly due to, actual voltage at customers facility.

With these factors, the breaker and power cord should be sized minimum 25% over the FLA. Use the section below to help figure out your requirements. Provide this to your electrician for installation of your Vastex dryer and this can help you be sure you are purchasing the correct machine.

Model of Vastex dryer purchasing \_\_\_\_\_ FLA as shown in Vastex catalog Specs \_\_\_\_\_

Your voltage (read with a voltmeter) \_\_\_\_\_ Available amperage \_\_\_\_\_ Three Phase available? \_\_\_\_\_

**NOTE: FLA plus 25% is your required minimum breaker size and wire capacity.**

### Technical background.

NEC 210.20(A) Where a branch circuit supplies continuous loads or any combination of continuous and noncontinuous loads, the rating of the overcurrent device shall not be less than the noncontinuous load plus 125 percent of the continuous load. Since our dryers have the ability to run as a continuous load (which is defines as a load where the maximum current is expected to continue for three hours or more as per NEC Article 100), this justifies the above rule. Wire sizing has numerous variables to consider such as continuous loads, terminal temperature ratings, conductor insulation, special applications, whether the wire is in conduit or not, in raceways or open air, wire length, etc. as per Article 310. In addition to the NEC, the local township/city/municipality must be contacted because they are the Authority Having Jurisdiction (Article 100 of the NEC). They set the standards to follow. Meaning they MAY have rules that are even more strict than the NEC. AND they also are in the position to inform the electrician/contractor which version of the NEC is in effect.