

2.6. Electrical:

*General:*

2.6.1. The contractor shall power the air dryer equipment. The contractor shall provide all materials and hardware necessary to complete the installation of the air dryer systems.

*Design:*

2.6.2. The design, selection, and installation of the contractor provided equipment and materials shall comply with the latest editions of NFPA 70 “NEC,” NFPA 70E “Standard for Electrical Safety Requirements for Employee Workplaces,” and NECA 1-2006, “Standard for Good Workmanship in Electrical Construction.”

2.6.3. The characteristics of the system are as follows:

2.6.3.1. Voltage: 480VAC, 3-Ø, 3-Wire + Gnd.

2.6.3.2. Available Fault: Equipment shall be braced for 65kAIC minimum.

2.6.3.2.1 Current limiting means shall be provided if the rated kAIC rating of the proposed equipment is less than 65kAIC. Submit design calculations if current limiting devices are required.

*Conductors:*

2.1.1. The contractor shall provide conductors that meet the following requirements:

2.1.1.1. Copper only.

2.1.1.2. Insulation shall be THHN/THWN. Type TW is acceptable for grounds.

2.1.1.3. Minimum #12 AWG, except control wiring is minimum #14 AWG.

2.1.1.4. #12 AWG & larger - stranded.

2.1.1.5. #14 and smaller – solid.

2.1.1.6. Type “NM” cables are prohibited for new work.

2.5.3.6.1 Existing type “NM” embedded in walls & feeding existing wiring devices and utilization equipment shall be allowed. (Existing utilization equipment relocated to new branch circuits shall be considered as new equipment.)