

Part 1 General

1.1 RELATED WORK

- .1 Division 15 – Mechanical Specifications
- .2 Section 16050 – Basic Electrical Materials & Methods
- .3 Section 16111 – Conduit
- .4 Section 16120 – Wire and Cable
- .5 Section 16134 – Outlet Boxes and Fittings
- .6 Section 16155 – Motor Starters
- .7 Section 16170 – Motor and Circuit Disconnects

1.2 SYSTEM DESCRIPTION

- .1 Provide complete electrical power and control connections for mechanical equipment, except as noted herein, or as noted on the drawings.

Part 2 Products

2.1 MATERIALS

- .1 Include motor starters, disconnects, conduit, wire, fittings, interlocks, outlet boxes, junction boxes, and all associated equipment required to provide power wiring for mechanical equipment, unless otherwise indicated.
- .2 Include pushbutton stations, motor protective switches, interlocks, conduit, wire, devices, and fittings required to provide control wiring for mechanical equipment, except for temperature/humidity control systems.
- .3 Unless otherwise noted, motors and control devices shall be supplied by Division 15. Motor horsepower ratings shall be as shown in the Division 15 specifications. Motor voltage and phase ratings shall be as shown on the Division 16 drawings.

2.2 EXTERIOR EQUIPMENT

- .1 All equipment, mounted on the exterior of the building, shall be weatherproof.

Part 3 Execution

3.1 POWER WIRING

- .1 Install power feeders, starters, disconnects, and associated equipment and make connections to all mechanical equipment.
- .2 Install branch circuit wiring for mechanical system control panels, time clocks, and control transformers.
- .3 Install main power feeders to starter/control panels furnished by Division 15. Install branch wiring from starter/control panels to controlled equipment such as motors, electric coils, etc.
- .4 Conduit, wire, devices and fittings required to wire and connect low voltage temperature control systems, shall be supplied and installed by the trade supplying the temperature control system. Control wiring shall be installed in conduit.
- .5 Wire and connect electrical interlocks for starters supplied by Division 15.

- .6 Wire and connect hi-limit cut-outs for remotely mounted electric heating coils provided by Division 15.
- .7 Wire and connect thermistor control devices, built-in to large motors, to motor starters, as per wiring diagrams provided by Division 15.

3.2 CONTROLS

- .1 Install all electrical controls, except low voltage temperature controls, unless otherwise noted herein. Controls which have both electrical and mechanical connections shall be installed by the trade supplying the control.
- .2 Wire and connect line voltage remote thermostats and P/E switches for furnaces, condensing units, force flows, gas-fired unit heaters, electric heaters and rooftop units.
- .3 Wire and connect float switches, pressure switches, alternators, alarms, etc. for sump pumps, sewage pumps, domestic hot water re-circulating pumps, booster pumps, jockey pumps and compressors.
- .4 Conduit, wire, devices and fittings required to wire and connect low voltage controls, which are an integral part of a packaged unit, shall be supplied by the trade supplying the packaged unit, unless otherwise indicated. Control wiring shall be installed in conduit.
- .5 Wire and connect electrical interlocks for starters supplied by Division 15.
- .6 Wire and connect hi-limit cut-outs for remotely mounted electric heating coils provided by Division 15.
- .7 Wire and connect thermistor control devices, built-in to large motors, to motor starters, as per wiring diagrams provided by Division 15.

3.3 CO-ORDINATION

- .1 Refer to mechanical drawings for the exact location of motor control devices, and other mechanical equipment requiring an electrical connection.
- .2 Obtain full information from Division 15, regarding wiring controls, overload heaters, equipment ratings and over-current protection. Notify the Division 15, at once, if any information provided is incorrect or unsatisfactory.
- .3 Refer to Division 15 specifications for any further electrical requirements.
- .4 Review both electrical and mechanical drawings and specifications and co-ordinate all controls with Mechanical Contractor. Report all discrepancies to both mechanical and electrical consultants before close of tender. No additional money will be justified for assumptions made on any duplication of information.
- .5 Submit to Mechanical Contractor, as part of the tender submission, a list of controls and wiring to be provided in the Electrical Contract.

END OF SECTION