

PART 1 GENERAL

- 1.01 Provide controls and necessary contactors or solid-state switches to allow the remote control of headbolt heater panels from the UAF FS Power Plant.
- A. From the contactors or solid state switches provide a 1 inch raceway with control conductors to a 10 inch X 10 inch X 4 inch junction box, mounted on the wall of the closest utilidor below all existing cable trays.
 - B. Provide a $\frac{3}{4}$ inch conduit, for metering purposes, from the contactor or switch to the nearest utilidor cable tray.
- 1.02 Locate a Hand-Off-Auto (HOA) switch in the enclosure for the contactor. The HOA switch is to be key operated. Coordinate with Facilities Services Utilities for keying requirements.
- 1.03 Above contactor or panel board in vicinity of parking lot controlled, locate a green status indicating light in sight of users that will light when headbolt outlets are energized. Lamp to be long-life LED.
- 1.04 Control of headbolt outlets: Provide a conduit from the headbolt contactor to the communications cable tray within the utilidor. All headbolt outlets controlled by FS Division of Utilities from the Power Plant. Coordinate with the FS Division of Utilities.
- 1.05 Discuss with Facilities Services if outlets will be Integrated Power and Load Control (IPLC) type.

PART 2 PRODUCTS

- 2.01 Acceptable manufacturers:
- A. Square D / Schneider Electric
 - B. General Electric
 - C. Westinghouse
 - D. Alternate Brand Request or Substitution Request required
- 2.02 Enclosures:
- A. Lockable.
 - B. Oversized so as to be of sufficient size to install CTs and other required monitoring and control equipment. For example, an oversized enclosure for the Square D 200 amperage contactor would be 22 inch X 39 inch X 8 inch.

C. Weatherproof, depending upon location.

2.03 Contactor:

A. Mechanically-held type with pilot relay included to give 2-wire control.

B. Provide at least one (1) normally open auxiliary contact for contactors.

2.04 Control fusing:

A. On 480 volts systems: a control transformer with 2 primary fuses and 1 secondary fuse.

B. On 208 systems: a single-control power fuse.

2.05 Indicator lights: LED

PART 3 EXECUTION (NOT USED)

END OF SECTION