

**1. GENERAL**

**1.1 Product Data**

- .1 Submit product data in accordance with Section 16010 - Electrical General Requirements.

**2. PRODUCTS**

**2.1 Switches**

- .1 Interrupting rating of 6 times continuous current on contacts on manual operation. Interrupting capacity to withstand and close onto circuits having available fault currents of 100,000 A rms symmetrical, with HRC-L fuses.
- .2 Switch contacts and terminals silver plated copper with drilled holes and surface ground to ensure high quality surface contact.
- .3 Replaceable arcing contacts of silver tungsten construction with first-in, last-out operation.
- .4 Positive switching action of operating mechanism independent of speed at which handle is operated.
- .5 Quick make, quick break, stored energy operating mechanism for manual closing operation.
- .6 Door interlock to prevent access with fuse energized.
- .7 Provision for double padlocking switch in open position.
- .8 Operating mechanism arranged to prevent "teasing" operation of contacts.
- .9 Mechanism designed so that it is impossible to close switch without first charging opening spring.
- .10 Opening and closing springs of switch must be charged sequentially not simultaneously.
- .11 Opening of switch no longer than 3 cycles.
- .12 Operating handle to remain static when opening on shunt trip or by mechanical push button.
- .13 Switches front accessible for quick and easy installation or removal.
- .14 Removable interphase barriers and fibre reinforced arc chute fusible power circuit protector.
- .15 Open type load break fusible power circuit protector for switchboard mounting.
- .16 Blown fuse trip device to open switch and indicate faulted phase when fuse has blown.
- .17 Must be CSA approved.

**2.2 Enclosure**

- .1 Refer to Unit Substation To 15 kV Section 16311.

**2.3 Switch Location**

- .1 Two (2) load interrupter switch fusible (fuses not required at this time, suitable for 300 E fuses), 600 A continuous load at 4.16 kV (future pumping equipment).
- .2 One load interrupter switch fusible with 350 E fuses, 600 A continuous load at 4.16 kV (300 kVA transformer).

**2.4 Equipment Identification**

- .1 Provide equipment identification in accordance with Section 16010 – Electrical General Requirements.
- .2 Equipment labels: Name Plate size 7.

**2.5 Acceptable Products**

- Cutler – Hammer
- Schneider
- S & C Electric.

**3. EXECUTION**

**3.1 Installation**

- .1 Install in unit substation as indicated on drawing and specified herein.

**3.2 Field Quality Control**

- .1 Perform tests in accordance with Section 16980 - Testing, Adjusting and Balancing of Electrical Equipment and Systems.
- .2 Operate switch on line under normal load conditions 3 times in presence of Contract Administrator and prove out operating functions.

**END OF SECTION**