

Part 1 General

1.1 RELATED SECTIONS

1.2 26 05 00 - Common Work Results for Electrical: Product Data; Delivery, Storage and Handling.

1.3 REFERENCES

- .1 Canadian Standards Association (CSA International)
 - .1 CSA C22.2 No. 193-M1983(R2019), High-Voltage Full-Load Interrupter Switches.

1.4 PRODUCT DATA

- .1 Submit product data in accordance with Section 013300 - Submittal Procedures.

Part 2 Products

2.1 LOAD INTERRUPTER SWITCH

- .1 Load Interrupter Switch: to CSA C22.2 No. 193.
- .2 Three pole, quick-make, quick-break assembly, stored energy operating mechanism manual operated, assembled on welded steel base.
- .3 Continuous full load rating: 600 A, interrupting rating: 600 A, rated momentary current 40kA asymmetrical.
- .4 Voltage rating: 25 kV, 150 kV BIL.
- .5 Complete with Inter-phase barriers.
- .6 Non-removable operating handle c/w provision for pad locking in the open or closed position.
- .7 Enclosure: Sprinkler-proof enclosure not less than 11-gauge steel.
- .8 Rear access doors to be hinged with knurled finger operable hardware with slotted or Robertson drives, include a padlocking tab for the client to add padlocks as required.
- .9 Gaskets on all doors
- .10 The following features shall be supplied on every vertical section
 - .1 A high impact viewing window that permits full view of the position of all three switch blades through the closed door.
 - .2 The switch access door shall be interlocked with the switch so that:
 - .1 The switch must be opened before the door can be opened.

- .2 The door must be closed before the switch can be closed.
- .3 Permanent "Open-Closed" switch position indicators.
- .11 Bus: Tin plated copper with full round edge braced for 40kA.

2.2 INFRARED WINDOWS

- .1 Each switchgear compartment containing incoming or outgoing cables, or incoming or outgoing bus connections, shall have 4-inch I.R. windows that will support the use of Long Wave and Short Wave I.R. camera systems.
- .2 Provide enough windows on each rear door to view each visible incoming or outgoing feeder cable or bus connection, with an acceptable viewing angle to each connection.
- .3 The windows shall have 100% transmission of visual wavelengths
- .4 The windows shall have 98% of Infrared wavelengths, both short (0.35 to 5.5 μm) and long (8 to 12 μm) wave
- .5 The windows shall have a removable metallic cover plate.
- .6 Use standard Field of View calculations to determine where to install windows. $\text{FOV} = 2 \times [(\text{tangent of } \frac{1}{2} \text{ the angle}) \times \text{distance}]$, assuming a standard camera FOV of 24°.
- .7 Acceptable Products:
 - .1 IRISS VP100
 - .2 Hawk IR
 - .3 H.VIR Comet
 - .4 Or approved Equivalents

2.3 FABRICATION

- .1 Factory assemble and adjust 3 pole gang operated switch, operating assembly, interphase barriers and interlocks.

Part 3 Execution

3.1 INSTALLATION

- .1 Install load interrupter switches in accordance with manufacturer's instructions.

END OF SECTION