1 References

- ANSI/IEEE C37.71 - Subsurface Load Interrupting Switches.
- ANSI/IEEE 386 Separable Connections and Bushings.
- IEEE C37.20.3

2 General Information

2.1 Power fuses shall be utilized to provide primarily short circuit protection for cables and transformers. The fuse rating shall be selected to appropriately provide 125 percent of the transformers full-load rating continuously, sustain no damage from magnetizing in-rush currents, and provide protection against thermal damage from internal or secondary faults. The interrupting rating shall be sufficient to quickly and safely interrupt fault currents and prevent extensive damage to equipment.

3 Medium Voltage Switch Ratings

3.1 The quality of components is to be that represented by G & W Electric Co model numbers:
- 2-Way – GRA21-376-40SF
- 3-Way – GRAM33-376M-40SF
- 4-Way – GRAM44-376M-40SF
- 5-Way – GRAM55-376M-40SF

3.2 Voltage

<table>
<thead>
<tr>
<th>System Voltage</th>
<th>12.47 kV, three phase, 3 wire, 60 Hz, grounded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Design Voltage</td>
<td>15 kV</td>
</tr>
<tr>
<td>Basic Impulse Level</td>
<td>95 kV</td>
</tr>
<tr>
<td>Rated Continuous Current</td>
<td>600 amperes</td>
</tr>
<tr>
<td>Fault-Close Rating</td>
<td>40/64 kA asymmetrical</td>
</tr>
<tr>
<td>Momentary Current Withstand</td>
<td>40/64 kA asymmetrical</td>
</tr>
</tbody>
</table>

4 Switch Construction

4.1 Switch shall have bottom cable entrances and shall be 600 ampere, apparatus bushings.

4.2 Switches shall have entranceways and switched ways as called for on the drawings.

4.3 Switch internal bus and wiring shall be copper, shall not require field contact alignment before energizing, shall have a compression spring operator with position indicator padlockable in any position and shall be operated from outside the tank by a removable, breakaway handle.

4.4 Tank shall be 1/4” stainless steel, welded lid, corrosion resistant, primed and painted with no external aluminum parts.

4.5 Tank shall withstand 15 PSIG internal and 14 PSIG external without affecting switch performance.

4.6 Tank shall include gas filling valve and pressure gauge, four lifting eye provisions, viewing windows to permit inspection of the switch contacts in the open position for each way, one 1/2” - 13 grounding provision for the tank and each switch way.

4.7 Tank shall have single line diagram and stainless steel nameplate attached with stainless steel mechanical fasteners.

4.8 Tank shall be factory filled with SF6 gas and AC hi-pot tested prior to shipment.

4.9 A bolted, galvanized steel channel frame with galvanized enclosing panels to allow clearance below the tank, shall be supplied as requested for each switch.

4.10 Switch is to be of waterproof construction

5 Switch Factory Finishes

5.1 Clean surfaces before applying paint.

5.2 Apply corrosion-resisting primer to all surfaces.

5.3 Apply finish coat of vinyl paint to 3 mils thick.

5.4 Finish Color: ANSI Z55.1; Type 61 - Light Gray.