XGN2-12 Box-Type Fixed AC Metal-enclosed high voltage Switchgear

1. Range of application
XGN2-12 Box-type Fixed AC Metal-clad high voltage Switchgear (hereafter switch equipment) is suitable for the application in three phase AC electric power system with rated voltage of 12kV and rated frequency of 50Hz, for the acceptance and distribution of the power. It is specially suitable for places which needs frequent operation. Main cable system is single main cable.

The switch equipment is made, on the basis of general switchgear, for the application in areas of high altitude, with wholly meeting the five-protection requirements.

Accordant criterion
GB3906<3~35kV AC metallic packing switch equipment>
GB/T11022<General Technical Specifications for High-voltage Switch Equipment and Control Equipment>
IEC60298<AC Metallic Packing Switch Equipment Which Rated Voltage Between 1kV And 52kV>
IEC60694<Common Terms for HV switchgear and Control Equipment>

2. Model and meaning

XGN2-12

3. Regular service condition:
3.1 -25℃≤Ambient temperature≤40℃ and the AVG in 24h is more than 35℃.
3.2 Altitude ≤1000m (Plateau type switchgear≤3000m)
3.3 Places have no fire, no explosion danger, no serious pollution, no chemical corrosion and no violent vibration.
3.4 Relative Humidity
AVG of Daily Relative Humidity≤95%
AVG of Daily Steam Pressure≤2.2kpa
AVG of Monthly Relative Temperature≤90%
AVG of Monthly Steam Pressure≤1.8kpa
3.5 Vertical inclination when installing the switch equipment:
3.6 The equipment should be installed in districts without strenuous vibration and shocks.
4. Parameters for switchgear:

<table>
<thead>
<tr>
<th>No.</th>
<th>Item</th>
<th>Unit</th>
<th>Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Rated voltage</td>
<td>KV</td>
<td>3.6/7.2/12</td>
</tr>
<tr>
<td>2</td>
<td>Max working voltage</td>
<td>KV</td>
<td>12</td>
</tr>
<tr>
<td>3</td>
<td>Rated current</td>
<td>A</td>
<td>630 1000 1250 2000 2500 3150</td>
</tr>
<tr>
<td>4</td>
<td>Rated short circuit breaking current</td>
<td>KA</td>
<td>20 31.5 40</td>
</tr>
<tr>
<td>5</td>
<td>Rated short time withstand current</td>
<td>KA/(4s)</td>
<td>20 31.5 40</td>
</tr>
<tr>
<td>6</td>
<td>Rated withstand current (peak value)</td>
<td>KA</td>
<td>50 80 100</td>
</tr>
<tr>
<td>7</td>
<td>Rated short time withstand current lasting time</td>
<td>KA</td>
<td>50 80 100</td>
</tr>
<tr>
<td>8</td>
<td>Operation</td>
<td></td>
<td>Electro-magnetic,spring(store type)</td>
</tr>
<tr>
<td>9</td>
<td>Dimension (width<em>depth</em>height) mm</td>
<td></td>
<td>1100x1200x2650(1250A below)</td>
</tr>
<tr>
<td>10</td>
<td>Protection degree</td>
<td></td>
<td>IP2X</td>
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</tbody>
</table>

Notice: Rated current of Plateau type switchgear is 630/1000/1250A
Dimension of Plateau type switchgear is 1200x1350x2900mm.

5. Structure
XGN2-12 steel-clad movable-type AC metallic packing switch equipment features steel-clad and box-type structure and steel angle welded framework which leads to a beautiful appearance and short production circle. The equipment inside includes breaker room, bus room, cable room and relay room, each of which is separated by a steel plate.

5.1 Breaker room is on the front and bottom of the equipment, and its operation comes from the connection between pulley rod and actuator. Terminal Blocks of the breaker connects the CT and the CT connects the disconnector then. Pressure-releasing aisle is set up to free the gas when internal arc generates.

5.2 Bus room is above and behind the equipment to decrease the attitude, bus connects the upper disconnector. Two close bus rooms can be separated.

5.3 Cable room is above and behind the switch equipment and Voltage monitoring device can be installed in it.

5.4 Actuator of the breaker is installed below the equipment, breaker room and chain operation system are above the switch. The switch is on double sided maintenance which on the one hand, examining the secondary element of the the relay house and the breaker and maintaining the normal operation of actuator mechanical linkage and the linkage section and on the other hand, maintaining the the main bus and cable terminal. Bus room is above and behind the equipment to decrease the attitude, bus connects the upper disconnector. Two close bus rooms can be separated. Cable room is above and behind the switch equipment and Voltage monitoring device can be installed in it and cable terminal.
5.5 Mechanical interlock: Mechanical interlock is installed in case of the separation of disconnector.

6. Ordering instructions:
When placing the order, you should provide the following information:
6.1 Main circuit system diagram;
6.2 Auxiliary circuit electrical schematic diagram, auxiliary circuit voltage;
6.3 Components listing (including components model, name, specification, quantity);
6.4 Switch equipment layout;
6.5 The color of cabinet (If there is no requirement by the company standard supply);
6.6 The required spare parts list.
6.7 Other special requirements do not tally with the normal use of products.