MNS Low Voltage Withdrawable Switchgear

Summary

MNS model LV switchgear is suitable for AC 50~60Hz, 660V and below power system. It is applied into power plant, substation, oil field, chemistry industry, metallurgy, mineral enterprises etc. To receive and distribute power with the function of control, protection and monitor. Different types of switch is used inside the cabinet.

The LV Switchgear conforms to IEC60439 VDE0660, part five, GB7251 * LV Switchgear and controlgear " standard and JB/T9661 * LV draw out switchgear " standard.

Ambient condition

1. Ambient temperature: +5~+40°C, daily temperature +35°C.
2. Relative humidity at highest temperature +40°C ≤ 50%RH, allowed max. relative humidity at low temperature, for example, +20°C is 90%RH, it will occur moderate moist due to temperature change;
3. Altitude: ≤2000m;
4. The device is suitable for transportation and storage as the following temperature: -25°C~55°C. The device should not be suffered from non-recovery damage.

Technical specification

<table>
<thead>
<tr>
<th>Type</th>
<th>Rated current (A)</th>
<th>Rated current of over current release (A)</th>
<th>Rated insulation voltage (V)</th>
<th>Rated breaking current</th>
<th>Short time withstand current (1s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DW45-600</td>
<td>600</td>
<td>250,400,630</td>
<td>660</td>
<td>42/88.2</td>
<td>22/46.2</td>
</tr>
<tr>
<td>DW45-1000</td>
<td>1000</td>
<td>250,400,630</td>
<td>660</td>
<td>50/105</td>
<td>30/61</td>
</tr>
<tr>
<td>DW45-1600</td>
<td>1600</td>
<td>1000,1250,1600</td>
<td>660</td>
<td>30/61</td>
<td>30/61</td>
</tr>
<tr>
<td>DW45-2000</td>
<td>2000</td>
<td>1250,2000</td>
<td>660</td>
<td>30/61</td>
<td>30/61</td>
</tr>
<tr>
<td>DW45-3200</td>
<td>2000</td>
<td>1250,2000</td>
<td>660</td>
<td>30/61</td>
<td>30/61</td>
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<tr>
<td>DW45-2000G</td>
<td>3200</td>
<td>2000,3200</td>
<td>660</td>
<td>30/61</td>
<td>30/61</td>
</tr>
<tr>
<td>DW45-2000G</td>
<td>3200</td>
<td>2000,3200</td>
<td>660</td>
<td>30/61</td>
<td>30/61</td>
</tr>
<tr>
<td>DW45-5000</td>
<td>5000</td>
<td>5000</td>
<td>660</td>
<td>30/61</td>
<td>30/61</td>
</tr>
</tbody>
</table>

Outline and installation dimension

Fig.1 Draw out type MCC panel

Fig.2 Removable type MCC panel

GCS Low Voltage Withdrawable Switchgear

Summary

LV withdrawable switchgear is suitable for distribution system of power plant, high building and some lines, such as petroleum chemistry and industry, metallurgy, textile, etc. It is applicable for distribution, motor centralized control, reactive power compensation in power generation and power supply system of three phase AC 50/60Hz, rated voltage 380V(400V,600V), rated current 4000A and below, where require high automation and interfaces with computers.

Ambient condition

1. Ambient temperature: -5~+40°C, daily average +35°C. It should reduce capacity according to real condition when out of stipulation;
2. Indoors. Altitude ≤2000m;
3. The change of ambient relative temperature will cause a little moist by accident;
4. The slit between device installation position and vertical section ≤5%;
5. Occasions without flammable and explosive matter, without corrosive chemical and frequent severe vibration.

Structure feature

1. Main frame adopts 8MF open type steel which bended by 2.5mm cold rolled steel sheet. There are module with 20mm, 100mm, 9.2 mm installation hole located on three side, high strength for modelling installation conveniently.
2. The drawer divided into 1/2 unit, 1 unit, 2 unit, 3 unit, loop rated current is 400A and below.
3. Flexible assembly, compact structure, strong versatility, perfect secure performance, convenient assembly.
4. Improve thermal capacity of patchboard, reduce additional temperature rise of plug in, cable terminal, isolating board due to temperature rise of transition element.
5. It can not influence others unit when any unit appears to fault between function unit and isolating unit, limit the emergency in a small scope.
6. Busbar horizontal is good for dynamic and thermal stable performance.
7. The maximum 32 loops for MCC single panel, take consideration of requirement of auto motor door group about large unit capacity power plant, petroleum chemistry system line.
8. It finish connection of device and outer cable in cable compartment, upper and down inlet and outlet is available. The zero sequence current transformer is installed in the cable isolating compartment.
9. It can limit short circuit current depend on limited reactor in the same power distribution system, to stabilize busbar voltage, reduce short circuit intensity requirement.
GCK Low Voltage Withdrawable Switchgear

Summary

The product is suitable for power plant, substation, industrial enterprise, etc. It takes a role of power distribution, motor control in 50/60Hz, Max. working voltage 660V, Max. working current 3150A distribution system. The product is high breaking capacity, perfect dynamic stable, reasonable structure, effective electric scheme, strong versatility, multi loops, save ages, excellent appearance, high protection degree, convenient maintenance, secure and reliable.

Ambient condition

1. Ambient temperature: -5℃~+40℃;
2. Relative humidity: daily average 95%, monthly average 90%;
3. Indoor type, altitude ≤ 2000m;
4. Earthquake intensity ≤ 8 degree;
5. Occasions without flammable and explosive matter, without corrosive chemical and frequent severe vibration.

Model

GCK panel is combination structure with bolt. The complete panel is compose of door, terminal board, baffle, plate, supporting frame and drawer, busbar, etc.

Basic frame adopts FA 28 type or KB type (C type) to combine with together. Total structural components of frame are connected by self-tapping screw. It should add to door, faceplate, baffle plate, supporting frame and drawer to finish complete panel by requirements.

Able installation hole of body and components modulus E=25mm change, flexible and convenient to install.

Drawer unit height divide into 1/2 unit, 200mm, 300mm, 400mm, 500mm and 600mm series. The loop current decide the drawer height, virtual installation height is 1800mm.

In short, the frame and inner metal components are galvanized to assure reliable earthing.

Structure feature

GCK panel is combination structure with bolt. The complete panel is compose of door, terminal board, baffle plate, supporting frame and drawer, busbar, etc. Basic frame adopts FA 28 type or KB type (C type) to combine with together. Total structural components of frame are connected by self-tapping screw. It should add to door, faceplate, baffle plate, supporting frame and drawer to finish complete panel by requirements.

The installation hole of body and components modulus E=25mm change, flexible and convenient to install.

Drawer unit height divide into 1/2 unit, 200mm, 300mm, 400mm, 500mm and 600mm series. The loop current decide the drawer height, virtual installation height is 1800mm.

GCK panel withdrawable function unit adopts special push (pull) mechanism, light structure, perfect interchange. It indicate of working position, test position and isolating position mechanical locking condition. Install additional padlock for operating handle.

The frame and inner metal components are galvanized to assure reliable earthing.