

NORD DC Disconnect Switch 1500VDC

Fouilleret NORD DC Disconnect Switch

The NORD is a high quality, extremely robust product. This safety device is simple, transparent to the network, and reliable over time in all environments. The NORD is a deformable switch, which moves with the expansion and retraction of the busbar system, eliminating the need for flexible shunt connections. Its individual spring system helps to distribute the current throughout the switch, and provides a very low and constant voltage drop. The NORD DC Disconnect Switch is mainly used with copper busbar systems. The NORD switch is bolted directly to the busbar with bolted copper connections for easy installation. The electrical contact is made with silver contacts, which provide strong mechanical endurance up to 50,000-cycles.

Features/Benefits:

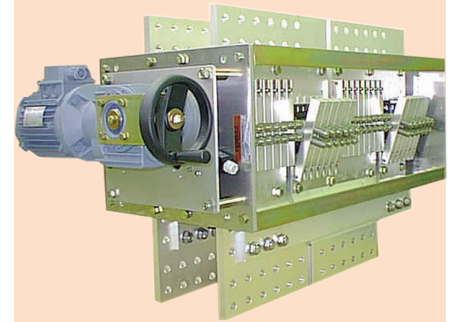
- Visible break by direct seeing of the mobile silver-plated copper contacts
- Mechanically independent mobile contact arms with high-pressure springs
- Electrical contact with silver to silver contact
- Insulation with Fiberglass reinforced polyester insulators
- Operation mechanism of bichromate galvanized steel by a toggle closed system
- Disconnects are self-supporting. Busbar support must be sized to withstand the disconnect's additional weight
- Upon request, choice of input and output terminals in aluminium or silver-plated copper
- Upon request, two-poles or change-over design by side association of two disconnects

Highlights:

- Accepts busbar dilatations thanks to built-in deformability (flexible shunts are not necessary)
- Low and constant voltage drop
- Self-cleaning effect on contact
- High short-circuit current withstand
- Large insulation and creepage distances
- Easy connections to:
 - Aluminum busbar by welding
 - Copper busbar by bolting
- Large customization possible with:
 - Actuators (motor, pneumatic, manual)
 - Auxiliaries (limit switches, locks, control boxes)
 - Adaptation to the connecting busbar.

Applications:

- Output rectifier isolation
- Large power supply disconnect



Ratings:

Amps : 14kA to 140kA

Approvals:

- Designed according to IEC 60947-3 / IEC 60077-1 (NFF 16101 / 16102)

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Main Technical Characteristics

Electrical Data:

- Temperature rise at nominal current (with 40°C max. Ambient temperature) less than : 65°C
- Typical temperature rise at nominal current (with 40°C max.) : 15°C above busbar
- Typical voltage drop at nominal current : 30 mV
- Peak short-circuit current withstand (upon circuit configuration)
 - In one pole configuration : 10 x (Nominal current)
 - In two poles configuration : 5 x (nominal current)
- Dielectric withstand strength
 - Between live parts in open position : 10 kV - 50 Hz - 1 min
 - Between live parts and earth : 10 kV - 50 Hz - 1 min
 - Between auxiliary contacts and earth : 2.5 kV - 50 Hz - 1 min
 - Between motor and earth : 2 kV - 50 Hz - 1 min
- SCR leakage current breaking capacity (upon request) : 1 A - 100 V DC
- Power breaking capacity up to 100 kA - 100 V DC - L/R < 20 msec : Upon request

Mechanical Data:

- Mechanical endurance (with respect to maintenance instructions) : 20,000 cycles
- Typical duration of opening or closing operation:
 - With motor operation : 3 to 12 seconds
 - With pneumatic operation : Less than 1 second
- Ponctual temperature withstand without equipment damage : 140°C

