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High Voltage Pantograph Disconnector 3DN3

123 kV up to 550 kV

Since the 1930s, Siemens has exported disconnectors and related components throughout the world. Based on the “genetic code” of the proven Siemens disconnectors, our portfolio has now been enhanced and harmonized to respond even better to varied customer needs and to make it easier for you to select the right product. All Siemens disconnectors are delivered pre-adjusted and are therefore easy to assemble on site. You will benefit from reduced set-up time and cost.

Pantograph 3DN3

Application and design of the disconnector

The pantograph disconnector 3DN3 is characterized by its typical scissor design: by using vertical instead of horizontal disconnection, the pantograph allows for diagonal arrangement and space-saving plant design. The scissors provide a highly flexible contact zone. The pantograph is applicable for both rigid and flexible busbar connections.

Disconnectors designed for your needs.

Customer-specific solutions

The modular design of Siemens disconnectors ensures the availability of the right product for your requirements. The 3DN3 can be configured according to your technical specifications for voltage ranges from 123 kV up to 550 kV. Further customization is possible to meet your individual requirements. Various colors are available.

Proven quality that serves you a lifetime

The enhanced contact system of the 3DN3 is designed in a way that makes it maintenance-free and extremely reliable. The spherical contacts ensure high mechanical stability and safe operation even unter severe environmental conditions and in seismic zones. Highly resistant flexible aluminum leads minimize the need for maintenance and replacement thanks to their optimized short-circuit and icing behavior. Of course, our pantograph disconnectors fulfill all requirements of international standards like IEC, GOST R and GB, and are proven in extensive type tests.

Long-term partnership

Siemens is not just a supplier for high voltage products, but a long-term, reliable partner. Decades of experience in the high voltage sector and our presence in more than 190 countries worldwide ensure our competence and global availability. Knowing your business, we can provide the best technical solutions for any special requirements and can support you in finding the ideal product type, configuration, and accessories.

Design		Pantograph							
Rated voltage	[kV]	123	145	170	245	300	362	420	550
Rated normal current up to	[A]	2000 – 4000							
Rated peak withstand current up to	[kA]	164 / 200*							
Rated short-time withstand current up to	[kA-s]	63-3 / 80-1*							
Ice coating class (optional)	[mm]	10 / 20							
Temperature range	[°C]	-55 / +55							
Operating mechanism type		Motor or manual operation							
Control voltage		Different variants of motor drives are available. Detailed information can be found in the respective product flyers.							
Motor voltage									
Maintenance period		25 years							

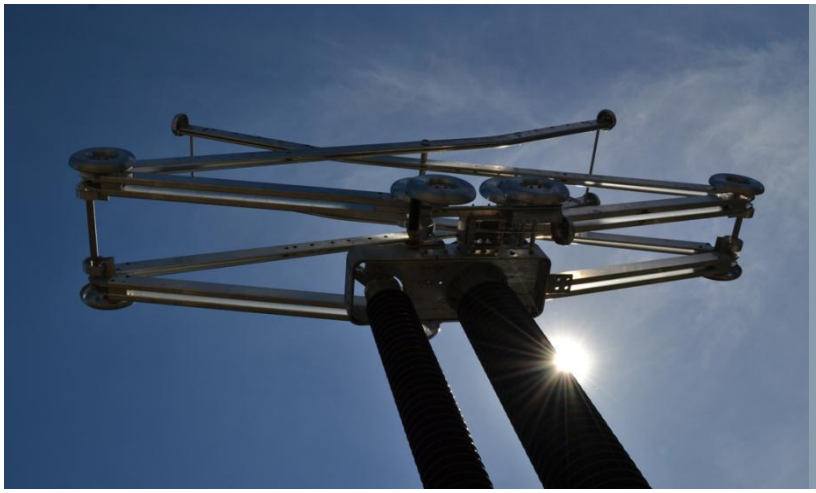
*for 420 kV

Technical structure

Thanks to its structure, the pantograph is the disconnector that leaves the smallest footprint. It has a high contact force and excellent ice-breaking and short-circuit behavior. The 3DN3 has an extremely long service life due to corrosion-free material such as hot-dip galvanized steel parts and weather-proof aluminum alloys. The self-interlocking end position ensures high mechanical stability and safe operation even in the event of external disturbances. Reduction of cast parts in the fixed contact system leads to reduced mechanical load on the supporting structure, compared to the previous design.

Main features:

- Highly reliable spherical contacts
- Easy set-up due to pre-adjusted delivery
- Maintenance-free
- Short-circuit currents up to 80 kA - 1s or 63 kA - 3s
- Bus transfer current switching capability of 1600 A (optional)
- Designed according to IEC 62271-102 standard
- Exceeding the IEC and meeting GOST R and GB



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