

The Siemens logo is displayed in a white box with a teal background. The word "SIEMENS" is written in a bold, teal, sans-serif font.

[siemens.com/energy/disconnector](https://www.siemens.com/energy/disconnector)

# High Voltage Center Break Disconnecter 3DN1

72.5 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, the portfolio has now been enhanced and harmonized to respond even better to varied customer needs and 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.



Center break  
disconnector 3DN1

## Application and design of the disconnector

The center break is the most frequently used disconnector type worldwide. Its design is characterized by two rotatable insulators mounted on the switch base. The current path opening to the side creates a bigger phase distance than with other disconnector types. Thanks to its convenient design, the center break is particularly versatile and can be applied in parallel, diagonal or in-line arrangements.

**Disconnectors  
designed for your needs.**

## Customer-specific solutions


The 3DN1 is available in a broad voltage range from 72.5 to 550 kV. Thanks to its modular design it can be easily customized to fulfill any special customer or market requirements. The base frame can be flexibly adapted to your supporting structure which allows for easy set-up and commissioning, saving time and labor costs. Moreover, various colors are possible.

## Proven quality that serves you a lifetime

Thanks to a sophisticated contact system with its high quality coating, the 3DN1 has a particularly long service life and requires zero maintenance effort. Extended RIV limits for each voltage level reduce magnetic interference and thereby contribute to increased efficiency and extreme reliability. Of course, our center break disconnectors fulfill all requirements of different international and national standards like IEC, GOST R and GB, and are proven in extensive type tests.

## Long-term partnership

Siemens is not just a supplier of high voltage products, but a long-term, reliable partner. Decades of experience 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 support you in finding the ideal product type, configuration, and accessories.

	Design	Center Break								
	Rated voltage [kV]	72.5	123	145	170	245	300	362	420	550
	Rated normal current up to [A]	4000								
	Rated peak withstand current up to [kA]	160								
	Rated short-time withstand current up to [kA-s]	63-3								
	Ice coating class [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								

### Technical structure

The total weight of our new center break disconnect has been reduced considerably through the use of fewer steel parts, especially in the base frame, thus reducing installation effort and transport costs. At the same time, our 3DN1 is capable of withstanding very high terminal and mechanical loads and has supreme seismic capabilities. Corrosion-free components, such as hot-dip galvanized steel parts, ensure a particularly long service life. The 3DN1 is designed for ambient temperature limits from -55 up to +55°C and has a high short-circuit capability, and excellent ice breaking behavior. Like all Siemens disconnectors, the center break is delivered in completely routine tested and pre-adjusted assembly groups, thus reducing your assembly effort to a minimum.

### Main features:

- Maintenance-free
- Easy set-up due to pre-adjusted delivery
- Short-circuit currents up to 63 kA 3 s
- 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
- Available in various colors



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