

The Siemens logo is displayed in a white box at the top left of the page. The background of the entire top section is a photograph of a high-voltage electrical substation with silhouettes of power lines and equipment against a clear blue sky.

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

# High Voltage Knee-type Disconnecter 3DN5

362 kV and 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 simple to assemble on site. You will benefit from reduced set-up time and cost.



Knee-type disconnector  
3DN5 in closed position

## Application and design of the disconnector

Thanks to its small space requirements in both vertical and horizontal direction, the knee-type disconnector is mainly applied in substations with limited phase distances. The knee joint in the main current path reduces the space for vertical opening and increases the distance of the opened disconnector to adjacent substation equipment. High disconnection visibility is proof of our 3DN5's safety indication.

**Disconnectors  
designed for your needs.**

## Customer-specific solutions

Our 3DN5 knee-type disconnector is available for rated voltage of 362 kV and 550 kV. The 3DN5 can be easily customized to your supporting structure and any special substation layouts, since its modular design allows for maximum flexibility. We offer individualized solutions for the most sophisticated requirements, while the standard version of our new highly adaptable 3DN5 is available for immediate delivery.

## Proven quality that serves you a lifetime

Thanks to the elaborate contact system with special contact fingers, the 3DN5 is highly reliable and has excellent short-circuit behavior. Additionally, the contact coating contributes to the 3DN5's extreme reliability. Of course, our knee-type 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 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 support you in finding the ideal product type, configuration, and accessories.



Design		Knee-type	
Rated voltage	[kV]	362	550
Rated normal current up to	[A]	3150 / 4000	
Rated peak withstand current up to	[kA]	164	
Rated short-time withstand current up to	[kA-s]	63-3	
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	

### Technical structure

The 3DN5's enhanced kinematic chain of the current path is easily adjustable, lubrication-free, and extremely reliable. The self-interlocking end position ensures high mechanical stability and safe operation even in the event of external disturbances. Our knee-type disconnector has maintenance-free contacts which guarantee that conductivity is maintained even under severe environmental conditions resulting in an extremely long service life. Furthermore, the 3DN5 is very easy to handle: the modular design ensures easy assembly on site, and a low operational torque allows for manual operation with reduced effort.

### Main features:

- R design and easy assembly
- Pre-adjusted delivery
- Nominal currents up to 4000
- Short-circuit currents up to 63 kA 3 s
- Load switching capability of 1600 A optional
- Designed according to IEC 62271-102 standard
- Exceeding the IEC and meeting GOST R and GB
- Available in different colors



Siemens AG  
 Energy Management  
 Freyeslebenstrasse 1  
 91058 Erlangen  
 Germany

Customer Support Center  
 Phone +49 180 524 7000

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