

# SIEMENS

*Ingenuity for life*



up to  
40.5 kV



## NXPLUS – More Features

Gas-insulated medium-voltage switchgear



When it comes to medium-voltage power distribution, Siemens has developed a wide range of products and solutions, based on experience, innovation, and reliability. The factory-assembled, type-tested, and metal-enclosed NXPLUS switchgear impresses with the advantages of the proven vacuum switching technology – a technology that made gas insulation economical in its class.



Hermetically tight, welded switchgear vessels made of stainless steel as well as single-pole solid insulation make the parts of the primary circuit under high voltage of NXPLUS switchgear insensitive to certain aggressive ambient conditions such as saline air, air humidity, dust, and condensation. The hermetically sealed primary enclosure is independent of environmental effects such as pollution, humidity and small animals. Furthermore, the application is independent of the site altitude.



The use of digital secondary systems and combined protection and control devices ensures clear integration in process control systems, flexible and highly simplified adaptation to new system conditions and thus to cost-efficient operation. A thoroughly convincing switchgear concept that will, under normal operating conditions, be expected to have a service life of at least 35 years, probably 40 to 50 years, taking the

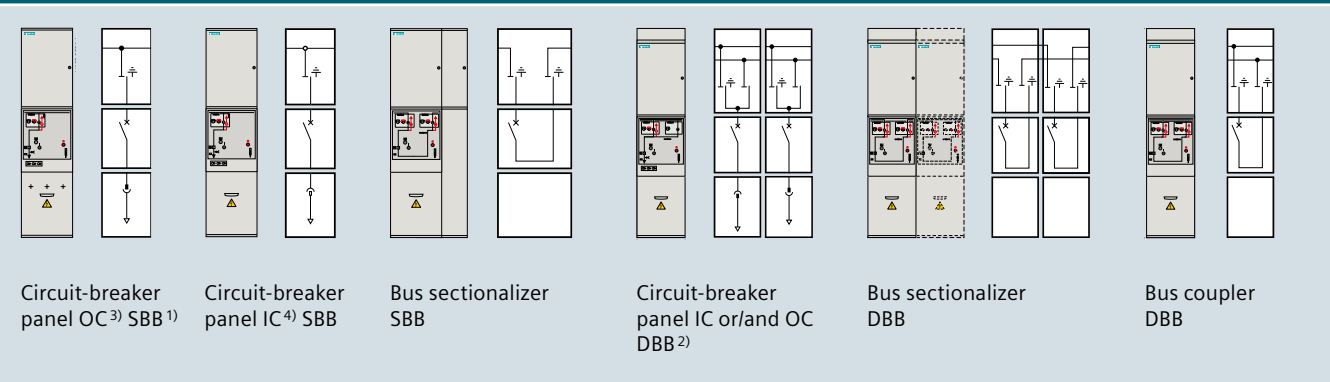
tightness of the enclosed high-voltage part into account. As an option, resistance against shock, vibration, and earthquakes can be provided. Meanwhile, Siemens has delivered more than 22,000 NXPLUS panels.

The gas-insulated switchgear NXPLUS is a prime choice for use in transformer and switching substations, e.g. in power supply companies, power stations, cement industry, automobile industry, iron and steel works, rolling mills, mining industry, textile, paper and food industries, chemical and petroleum industry, pipeline and offshore installations, and so on. It is also commonly used in traction power supply systems.

### Your advantages

- Independent of environment and climate
- Maintenance-free
- Compact
- Safe for operators
- Cost-efficient
- Ecological
- Reliable and safe operation

**NXPLUS Medium-Voltage Switchgear – Product range** (The following selection is not complete)



¹) SBB: Single busbar    ²) DBB: Double busbar    ³) OC: Outside cone type C    ⁴) IC: Inside cone size 2 and 3

**Technical data of NXPLUS**

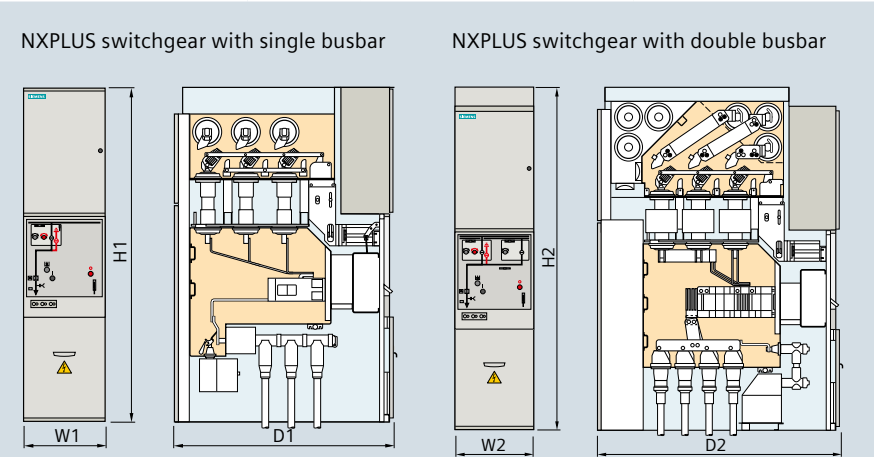
Rated	Busbar system	
	Single, double	Single
Voltage	up to <b>36 kV</b>	<b>40.5 kV</b>
Frequency	Hz 50/60	50/60
Short-duration power-frequency withstand voltage	kV 70	85
Lightning impulse withstand voltage	kV 170	185
Short-circuit breaking current	max. kA 31.5	31.5
Short-time withstand current, 3 s	max. kA 31.5	31.5
Short-circuit making current	max. kA 80/82	80/82
Peak withstand current	max. kA 80/82	80/82
Normal current for busbar	max. A 2,500	2,000 <sup>*)</sup>
Normal current for feeders	max. A 2,500	2,000 <sup>*)</sup>

<sup>\*)</sup> Optionally 2,500 A

**Performance features**

- Type-tested according to IEC 62271-200
- Sealed pressure system with SF<sub>6</sub> filling for the entire service life
- Safe-to-touch enclosure and standardized connections for plug-in cable terminations
- Separate 3-pole gas-insulated modules for busbar with three-position disconnect, and for circuit-breaker
- Interconnection of modules with 1-pole insulated and screened module couplings
- Operating mechanisms and transformers are arranged outside the switchgear vessels and are easily accessible
- Metal-enclosed, partition class PM
- Loss of service continuity category for switchgear: LSC 2
- Internal arc classification: IAC A FLR 31.5 kA, 1 s
- No gas work during installation or extension
- Optionally with horizontal pressure relief duct

**Dimensions of NXPLUS**



Dimensions	Dimensions in mm		
Width (spacing)	W1	Feeders up to 2,000 A	600
	W2	Feeders up to 2,500 A	1,200
Height	H1	Single-busbar switchgear	2,450
	H2	Double-busbar switchgear	2,600
Depth	D1	Single-busbar switchgear	1,585
	D2	Double-busbar switchgear	1,825

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