

SIEMENS

Ingenuity for life



up to
36 kV



NXPLUS C – The Multi-Tool

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 C 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 busbar insulation make the parts of the primary circuit under high voltage of NXPLUS C switchgear insensitive to certain aggressive ambient conditions such as saline air, air humidity, dust, and condensation. It is tight to ingress of foreign objects, such as dust, pollution, humidity and small animals. Furthermore, the application is independent of the site altitude.



Thanks to the use of SF₆ insulation, compact dimensions are possible and thus existing switchgear rooms and substation rooms can be used effectively, new constructions cost less due to lower space requirements and so costly city-area space is saved.

The use of digital secondary systems and combined protection and control devices ensures clear integration in process control

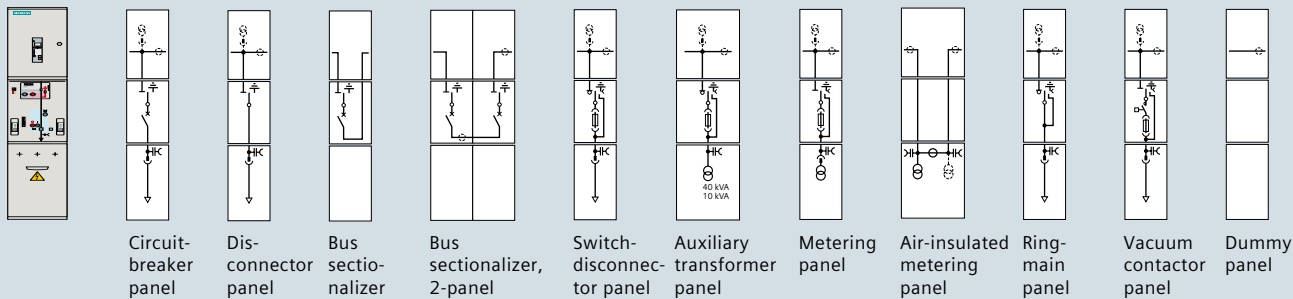
systems, flexible and highly simplified adaptation to new system conditions and thus to cost-efficient operation. A thoroughly convincing switchgear concept that will, under normal operating conditions, be expected to have a service life of at least 35 years, probably 40 to 50 years, taking the tightness of the enclosed high-voltage part into account. As an option, resistance against shock, vibration, and earthquakes can be provided.

The gas-insulated switchgear NXPLUS C is a prime choice for use in transformer and switching substations, e.g. in power supply companies, power stations, cement industry, automobile industry, shipbuilding 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 C Medium-Voltage Switchgear – Product range

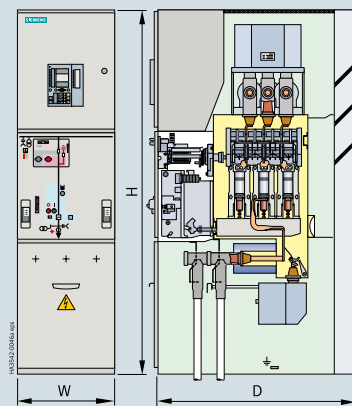


Technical data of NXPLUS C

Rated				
Voltage	up to	17.5 kV	24 kV	36 kV
Frequency	Hz	50/60	50/60	50/60
Short-duration power-frequency withstand voltage	kV	38	50	70
Lightning impulse withstand voltage	kV	95	125	170
Short-circuit breaking current	max. kA	31.5	25	25
Short-time withstand current, 3 s	max. kA	31.5	25	25
Short-circuit making current	max. kA	80/82	63/65	63/65
Peak withstand current	max. kA	80/82	63/65	63/65
Normal current for busbar	max. A	2,500	2,500	1,250
Normal current for feeders	max. A	1,250	1,250	1,250

Dimensions of NXPLUS C

Circuit-breaker panel



Dimensions		Dimensions in mm	
Width (spacing)	W	630 A/800 A	450
		630 A/800 A/1,000 A/1,250 A	600
Height	H	Standard design	2,250
		With horizontal pressure relief duct	2,640
Depth	D	Cable connection front bottom	1,225
		Cable connection rear top/rear bottom	1,850

Performance features

- Type-tested according to IEC 62271-200
- Sealed pressure system with SF₆ filling for the entire service life
- Safe-to-touch enclosure and standardized connections for plug-in cable terminations
- Loss of service continuity category for switchgear: LSC 2 (for air-insulated metering panel: LSC 1)
- 1-pole insulated and screened busbar
- 3-pole, gas-insulated switchgear vessels with three-position switch and circuit-breaker or vacuum contactor
- Operating mechanisms and transformers are located outside the switchgear vessel and are easily accessible
- Metal-enclosed, partition class PM
- Optionally with horizontal pressure relief duct
- Extended number of operating cycles (up to 15 kV, up to 31.5 kA, up to 1,250 A)
 - Disconnecting function: 5,000 ×, 10,000 ×
 - Ready-to-earth function: 5,000 ×, 10,000 ×
 - Circuit-breaker function: 30,000 ×
- Internal arc classification for:
 - Wall-standing arrangement: IAC A FL 25 kA/31.5 kA, 1 s
 - Free-standing arrangement: IAC A FLR 25 kA/31.5 kA, 1 s

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