

Gas-insulated switchgear type 8DN8

Technical data



Technical data of gas-insulated switchgear type 8DN8

Rated voltage	up to 145 kV	up to 170 kV
Rated frequency	50/60 Hz	50/60 Hz
Rated short-duration power-frequency withstand voltage (1 min)	up to 275 kV	up to 325 kV
Rated lightning impulse withstand voltage (1.2 / 50 μs)	up to 650 kV	up to 750 kV
Rated switching impulse withstand voltage (250 / 2500 μs)		
Rated normal current busbar	up to 3150 A	up to 4000 A
Rated normal current feeder	up to 3150 A	up to 4000 A
Rated short-circuit breaking current	up to 40 kA	up to 63 kA
Rated peak withstand current	up to 108 kA	up to 170 kA
Rated short-time withstand current (up to 3 s)	up to 40 kA	up to 63 kA
Rated break time	< 3 cycles	< 3 cycles
Leakage rate per year and gas compartment (type-tested)	< 0.1 %	< 0.1 %
Drive mechanism of circuit-breaker	stored energy spring	stored energy spring
Rated operating sequence	O-0.3 s-CO-3 min-CO CO-15 s-CO	O-0.3 s-CO-3 min-CO CO-15 s-CO
Bay width	800 mm	1000 mm
Bay height, depth (depending on bay arrangement)	2600 mm x 4100 mm	3200 mm x 5500 mm
Bay weight	3 t	4.7 t
Ambient temperature range	-30 °C up to +55 °C	-30 °C up to +55 °C
Installation	indoor / outdoor	indoor / outdoor
Rated supply voltage	48 – 250 V DC	48 – 250 V DC
First major inspection	> 25 years	> 25 years
Expected lifetime	> 50 years	> 50 years
Standards	IEC / IEEE / GOST	IEC / IEEE / GOST

Other values on request

Published by

Siemens Energy Global GmbH & Co. KG Switching Products & Systems Freyeslebenstraße 1 91058 Erlangen, Germany

For more information, please visit our website: siemens-energy.com/gas-insulated-switchgear or contact us: support.energy@siemens-energy.com circuit-breakers@siemens-energy.com

For the U.S. published by

Siemens Energy, Inc Switching Products & Systems 444 Hwy 49 South Richland, MS 39218, USA

Subject to changes and errors. The information given in this document only contains general descriptions and/or performance features which may not always specifically reflect those described, or which may undergo modification in the course of further development of the products. The requested performance features are binding only when they are expressly agreed upon in the concluded contract.

Siemens Energy is a trademark licensed by Siemens AG.