



Gas-insulated switchgear type 8DQ1

Technical data

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Technical data of gas-insulated switchgear type 8DQ1

Rated voltage (up to)	245 kV	420 kV	420 kV	550 kV
Rated frequency	60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
Rated short-duration power-frequency withstand voltage (1 min)	up to 460 kV	up to 650 kV	up to 650 kV	up to 740 kV
Rated lightning impulse withstand voltage (1.2 / 50 µs)	up to 1050 kV	up to 1425 kV	up to 1425 kV	up to 1550 kV
Rated switching impulse withstand voltage (250 / 2500 µs)	-	up to 1050 kV	up to 1050 kV	up to 1175 kV
Rated normal current busbar	up to 6300 A	up to 6300 A	up to 6300 A	up to 6300 A
Rated normal current feeder	up to 5000 A	up to 5000 A	up to 5000 A	up to 5000 A
Rated short-circuit breaking current (< 2 cycles)	up to 80 kA	up to 63 kA	up to 80 kA	up to 63 kA
Rated peak withstand current	up to 216 kA	up to 170 kA	up to 216 kA	up to 170 kA
Rated short-time withstand current (up to 3 s)	up to 80 kA	up to 63 kA	up to 80 kA	up to 63 kA
Leakage rate per year and gas compartment (type-tested)	< 0.1 %			
Drive mechanism of circuit-breaker	stored energy spring			
Rated operating sequence	O-0.3 s-CO-3 min-CO CO-15 s-CO			
Bay width	2200 mm		3600 mm	
Bay height, depth (depending on bay arrangement)	3800 mm x 5800 mm		4800 mm x 10000 mm	
Bay weight	11 t		21 t	
Ambient temperature range	-30 °C up to +55 °C		-25 °C up to +55 °C	
Installation	indoor / outdoor			
First major inspection	> 25 years			
Expected lifetime	> 50 years			
Standards	IEEE		IEC / IEEE / GOST	

Other values on request

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