

FKG1N WITHOUT ENCLOSURE

Generator Circuit Breaker for Power Plants from 150 to 300 MW*

Power plant owners are concerned with the availability and reliability of their plants. That is why it is crucial to rely on equipment capable of safely interrupting fault conditions while protecting connected equipment and reduce outage periods.

Advanced Architecture

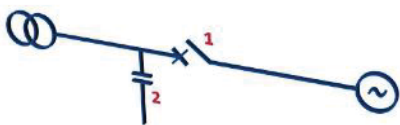
Specifically developed for the retrofit market, the FKG1N generator circuit breaker without enclosure is the ideal product for power plants up to 300 MW per unit.

The FKG1N without enclosure is suited with a fully spring-operated mechanism, which is well known for its high reliability and its low maintenance requirements. With different design possibilities (positioning of spring mechanism and high voltage terminal), the FKG1N generator circuit breaker from GE Vernova is suitable for all your specific adaptations.

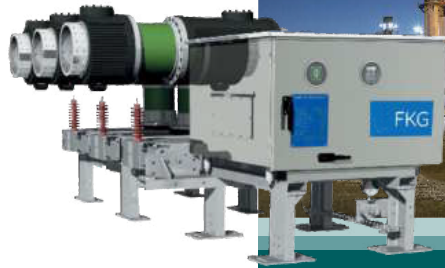
Keep an Eye on Your Generator Circuit-Breaker

The FKG1N figures out optional add-on CBWatch monitoring system (automatic diagnosis) for maintenance on real status of the switchgear.

Components and Single Line Diagram



1. Circuit breaker
2. Disconnecter



Technical Data

- 10,800 A - 120 kA - 50 Hz

Key Benefits

- Utmost reliability of the full spring mechanism
- CBWatch makes proactive maintenance possible
- The FKG1N's flexibility and compactness make it ideal for retrofit projects

Testing and Quality

- Product in full compliance with IEC/IEEE 62271-37-013 GCB standard
- Manufacturing ISO 9001 and ISO 14001 certified
- S.E.I. - S.N.E. and national packing procedures

** Depending upon the power station's specifications, GE Vernova may propose an alternative GCB power rating.*

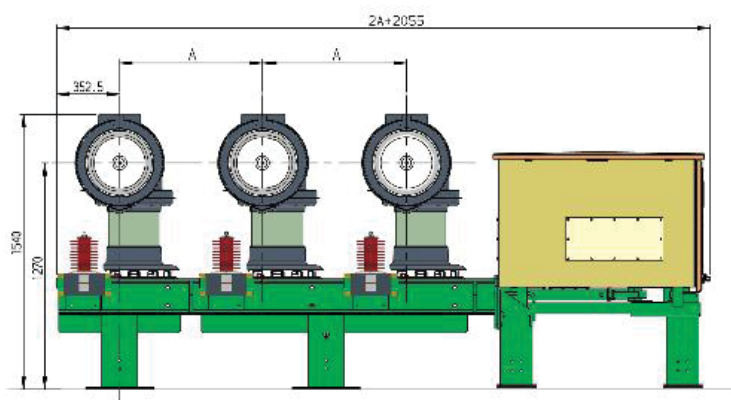
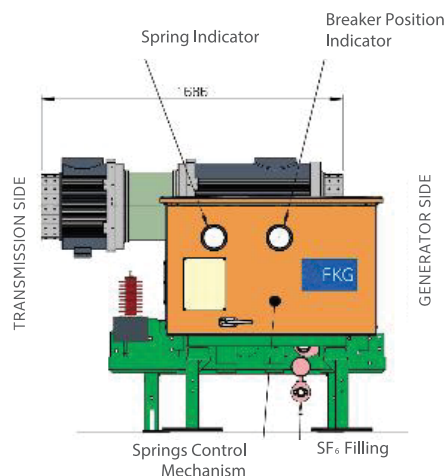


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Technical Specifications

	FKG1N WITHOUT ENCLOSURE	
Rated maximum voltage	kV	27
Short-circuit breaking current	kA	up to 120
Rated out-of-phase breaking current	kA	Up to 80
Rated breaking time	ms	75
Rated closing time	ms	100
Insulating gas		SF ₆
Rated absolute pressure at 20°C	kPa	950
Minimum absolute pressure at 20°C	kPa	800
Location		Indoor/Outdoor (protected)
Ambient air temperature limits	°C	-20°C(-25°C)/+40°C
Frequency	Hz	50/60
Maximum rated normal current	A	10,800
Phase spacing A with 100 mm step	mm	700 to 2,000
Protection degrees (cubicles)		IP55
SF ₆ monitoring by densimeter		3-phase
Pressure reading		Yes
Rated peak withstand current	kA _{peak}	330
Rated short time withstand current	kA	120
Rated duration of short-circuit	s	3
Rated insulation level (at sea level) - Phase to earth - Rated power frequency withstand voltage - Rated lightning impulse withstand voltage: wave 1,2/50 μs	kV kV _{peak}	80 150
Rated insulation level (at sea level) - Across terminals - Rated power frequency withstand voltage - Rated lightning impulse withstand voltage: wave 1,2/50 μs	kV kV _{peak}	80 150

Dimensions



For more information, visit
gevernova.com/grid-solutions

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