## GE Grid Solutions



# Generator Circuit Breaker for Power Plants from 50 MW to 150 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 FKG2S generator circuit breaker without enclosure is the ideal product for power plants up to 150 MW per unit.

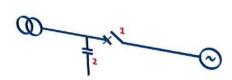
The FKG2S without enclosure is suited with a fully spring-operated mechanism, which is well known for its high reliability and its low maintenance requirements. With different design possibilities (positioning of spring mechanism and high voltage terminal), the FKG2S generator circuit breaker from GE 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 Disconnector





## **Technical Data**

• 9.500 A - 63 kA

## **Key Benefits**

- Utmost reliability of the full spring mechanism
- CBWatch makes proactive maintenance possible
- The FKG2S' 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 may propose an alternative GCB power rating.

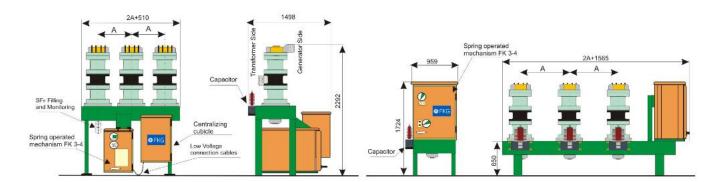


## **Technical Specifications**

#### **FKG2S Without Enclosure**

Rated maximum voltage	kV	24
Short-circuit breaking current	kA	63
Rated out-of-phase breaking current	kA	31.5
Rated breaking time	ms	50
Rated closing time	ms	115
Insulating gas		SF <sub>6</sub>
Rated absolute pressure at 20°C	kPa	850
Minimum absolute pressure at 20°C	kPa	710
Location		Indoor / Outdoor (protected)
Ambient air temperature limits	°C	-25°C/+40°C
Frequency	Hz	50/60
Maximum rated normal current with ambient air 40°C	А	up to 9,500
Phase spacing A with 50 mm step - Spring mechanism in frontal position - Spring mechanism in lateral position	mm mm	550 to 1,100 600 to 1,500
Protection degrees (cubicles)		IP55
SF <sub>6</sub> monitoring by densimeter		3-phase
Pressure reading		Yes
Rated peak withstand current	kA peak	173
Rated short time withstand current	kA	63
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	60 125
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	60 125

## **Dimensions**



For more information please contact GE Grid Solutions

### **Worldwide Contact Center**

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