

FKG2S

Generator Circuit Breaker for Power Plants from 50 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.

Higher Reliability

FKG Generator circuit breakers are equipped with a fully spring-operated mechanism for high reliability, maximum energy stability and low maintenance requirements. This model is also available without enclosure.

Keep an Eye on your Generator Circuit-Breaker

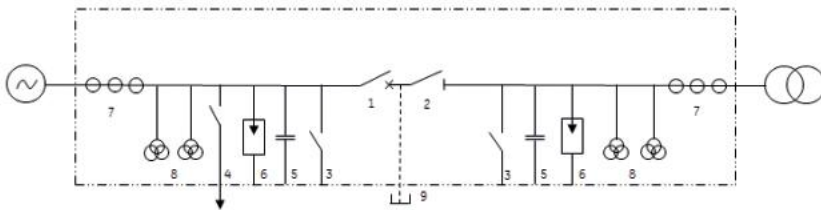
The FKG2S figures out optional add-on CBWatch monitoring system (automatic diagnosis) for maintenance on real status of the switchgear.

Higher Safety

A true electro-mechanical sequential interlocking system assures a reliable mechanical and electrical coordination for higher safety.

Components and Single Line Diagram

- | | |
|---------------------|---------------------------------|
| 1 - Circuit breaker | 6 - ZnO Surge arresters |
| 2 - Disconnecter | 7 - Current transformers |
| 3 - Earthing switch | 8 - Voltage transformers |
| 4 - Starting switch | 9 - Manual short-circuiting bar |
| 5 - Capacitors | |



Technical Data

- 6,800 A - 63 kA - 50 Hz
- 6,650 A - 63 kA - 60 Hz

Key Benefits

- Utmost reliability of the full spring mechanism
- CBWatch makes proactive maintenance possible
- Ideal for small & medium turbines or generators

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

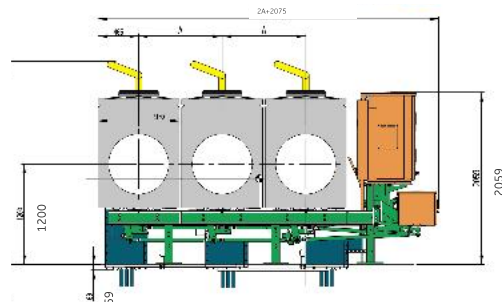
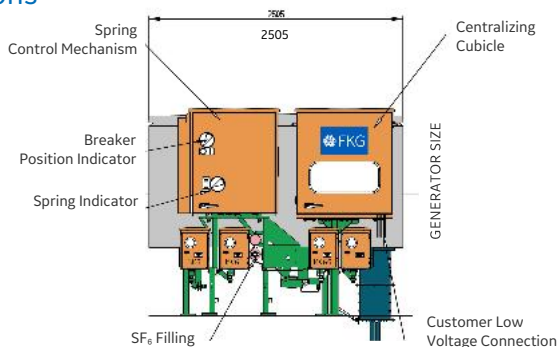
Technical Specifications

FKG2S

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 ₆			
Rated absolute pressure at 20°C	kPa	850			
Minimum absolute pressure at 20°C	kPa	710			
Location		Indoor / Outdoor			
Breaker cooling type		Natural			
Ambient air temperature limits	°C	-25°C/+40°C			
Busbar temperature limit/Enclosure temperature limit	°C	90/70°C		105/80°C	
Frequency	Hz	50	60	50	60
Maximum rated normal current (natural cooling)					
- Indoor with ambient air 40°C	A	6,800	6,650	6,200	6,050
- Outdoor with ambient air 40°C	A	6,600	6,450	6,000	5,850
Phase spacing A with 100 mm step	mm	1,000 to 1,500			
Protection degrees (enclosure / cubicles)		IP65 / IP55			
SF ₆ monitoring by densimeter		3-phase			
Pressure reading		Yes			

		FKG2S	SKG2 Disconnecter	MKG2 Earthing switch	IKG2 Starting switch
Rated peak withstand current	kA peak	173	173	173	173
Rated short time withstand current	kA	63	63	63	63
Rated duration of short-circuit	s	3	3	3	1
Rated insulation level (at sea level) - Phase to earth					
- Rated power frequency withstand voltage	kV	60	60		30
- Rated lightning impulse withstand voltage: wave 1,2/50 μs	kVpeak	125	125		60
Rated insulation level (at sea level) - Across terminals					
- Rated power frequency withstand voltage	kV	60	70	60	60
- Rated lightning impulse withstand voltage: wave 1,2/50 μs	kVpeak	125	145	125	125

Dimensions



For more information please contact
GE Power
Grid Solutions

Worldwide Contact Center

Web: www.GEGridSolutions.com/contact
Phone: +44 (0) 1785 250 070

GEGridSolutions.com

IEC is a registered trademark of Commission Electrotechnique Internationale.
IEEE is a registered trademark of the Institute of Electrical Electronics Engineers, Inc.

GE and the GE monogram are trademarks of General Electric Company.

GE reserves the right to make changes to specifications of products described at any time without notice and without obligation to notify any person of such changes.

FKG2S-Brochure-EN-2018-07-Grid-AIS-0143. © Copyright 2018, General Electric Company.
All rights reserved.



Imagination at work