



# FKG2 | FKG1 | PKG



FKG1 Generator Circuit Breaker

**One of the most important security points in a power plant is the switching connection between the plant and the transformers. Based on decades of experience in the field of high voltage circuit breakers with ratings up to 800 kV, AREVA T&D has been developing and manufacturing these highly specialized Generator Circuit Breakers for more than 35 years.**

Our proven quality speaks for itself as our generator circuit breakers have been selected by major power generating utilities and prestigious electrical contractors all over the world. Whether for thermal, hydraulic, pump storage or nuclear power plants, AREVA T&D manufactures the most reliable generator circuit breakers ranging from 50 to more than 1,500 MW.

The FKG generator circuit breaker with an SF6 breaking chamber is now successfully in service in over 50 countries in a variety of applications and with all types of generators.

AREVA T&D generator circuit breakers provide you with numerous advantages:

- > Greater safety in fault management for crucial transformer/generator protection.
- > Highly flexible operations particularly concerning auxiliary transfers and network synchronization.
- > Custom designed enclosures with a large choice of integrated optional components such as disconnectors and voltage/current transformers.

## Customer Benefits

- Ensures flexible operations and efficient protection for all types of power plants
- Full compliance with international Standard IEEE-C37.013
- Functional under even the most severe climatic conditions
- Highly reliable state-of-the-art technology



AREVA T&D - Your Generator Circuit Breaker solution for all types and sizes of power plants.



# A Wide Range of Possibilities

From the highly adaptable configuration needed on a 50 MW power plant, to the powerful and standardized design of a nuclear power plant, AREVA T&D provides you with a state-of-the-art design, custom made to your specific requirements.



All FKG type generator circuit breakers are designed to fit your specific needs, from the circuit breaker alone, to a combined solution including all internal options: disconnect switch (6), grounding switches (5) and starting switch (8), together with the necessary instrument transformers (1 and 2), capacitors (4) and surge arrestors (3); all within the same enclosure.

## FKG2 Generator Circuit Breaker

24 kV - up to 9,500 A and 63 kA

This is the only Generator Circuit Breaker with a fully spring operated mechanism, type FK, which has been used by AREVA T&D on AIS and GIS equipment for over 50 years. A very adaptable design for power plants with current ratings from 3,000 to 9,500 A. Delivered with or without enclosure, this flexible circuit breaker is also the ideal solution for retrofit applications.

## FKG1 Generator Circuit Breaker

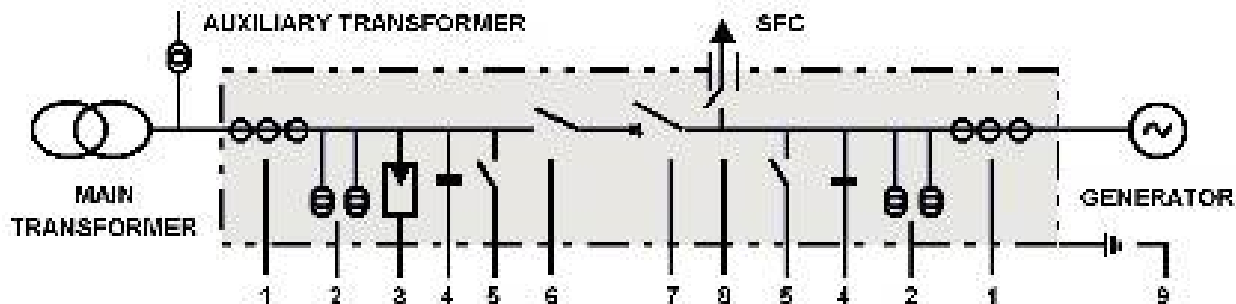
27.5 kV - up to 21,000 A and 80/100/120 kA

Using a common FKG1 SF6 breaking chamber with the power of a fully hydraulic operating mechanism, this model has widely proven its reliability. The FKG1 is offered with natural cooling up to 16,000 A, and external ventilation for higher performance ratings.

## PKG Generator Circuit Breaker

36 kV - up to 50,000 A and 275 kA

Specially dedicated to nuclear applications, this air blast circuit breaker has the highest performance rating available on the market. Its proven reputation is based on more than 35 years of field experience.



Optional Components for the FKG Generator Circuit Breakers

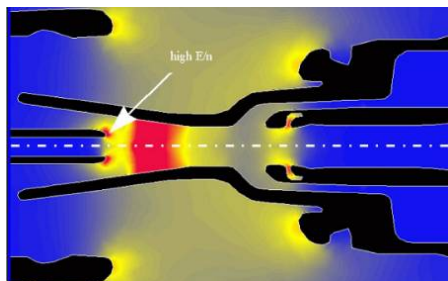


## Areva T&D - Adaptable designs for all your generator circuit breaker needs.

### PROVEN HIGH TECHNOLOGY

**High performance and innovative products are the prime result of research and development by the highly experienced AREVA T&D engineers and technicians.**

Based on fundamental research in arc physics, the SF6 arc interrupting generator switchgear uses thermal blasting interruption technology.



Applied research on arc physics with SF6



FKG Production Line

### TYPE AND ROUTINE TESTING

Our generator circuit breakers are submitted to a complete testing process:

- > All designs are tested in independent laboratories
- > Stringent factory tests throughout the production process guarantees that the units conform to customer requirements
- > Final on-site installation testing.

All tests are performed in full compliance with International Standard IEEE C37.013 (1997), the only relevant standard for generator circuit breakers, as well as other applicable regulations (IEC, BS, etc.).

All our units are ISO 9001: 2000 certified.



Global R&D facilities specialized in Generator Circuit Breakers and high voltage Circuit Breakers.



Green Country - USA: FKG1



Vatnsfell - ICELAND: FKG2



**AREVA T&D is proud of the more than 800 Generator  
Circuit Breakers currently operating around the world.**



Maraba - BRAZIL: PKG2



Xin An Jiang - CHINA: FKG1

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