GCBs protect important assets in power plants by clearing potential harmful short-circuit faults in tens of milliseconds, preventing severe damages and enhancing power plant availability.

Hitachi Energy is a leader in power and automation technologies that enable utility and industry customers to improve their performance while lowering environmental impact.

Hitachi Energy operates in around 100 countries and employs 40,000 talented experts. It has been a leader in the design and manufacturing of generator circuit-breakers (GCBs) since 1954, making more than 8,000 deliveries to over 100 countries. Continuous research and development ensures the broadest and most modern portfolio of GCBs in SF₆ and vacuum technology to meet the demand of all types of power plants around the globe. The award-winning facility is spread over 2,200 square meters and has been designed on the principle of ‘Lean Production’ techniques for manufacturing state-of-the-art GCBs in SF₆ technology.

Lean Enterprise

Based on the ‘Lean Enterprise’ concept, the entire production process at the GCB factory is continuously optimized to:

- Reduce key input requirements like time, space and capital
- Reduce production time from 20 days to 16 hours
- Ensure stable ex-works delivery in only three months for standard GCBs
- Result in speedy performance for a quick resolution of trouble shooting in urgent cases

Common flow production line with one piece flow and pull concept

The total assembly line including testing and packing is divided into a number of assembly stations, called “takt”. The products move with a fixed two-hour takt time from station to station.

Hitachi Energy GCBs are based on standardized platforms with a range of short-circuit ratings from 50 kA to 300 kA and nominal currents from 3,000 A to over 50,000 A.
The work steps are standardized and optimized to reach the highest standards of quality, efficiency, work ergonomics and safety. Use of modern process techniques in the factory helps to achieve top industry standards, such as:

- Optimized production
- Reliable delivery times
- Rapid response to customer requirements
- Highest cost efficiency
- Best performance

**Factory Acceptance Test (FAT) and Remote Factory Acceptance Test (RFAT)**

Customers are more than welcome to attend the FAT at the factory. A quiet and comfortable room is made available to host our guests and we complete the test procedures and issue the relevant test protocols in the shortest possible time.

If customers are not able to join us in the factory, we bring the FAT to them. Via an internet connection, customers can witness the testing of their GCBs in our factory without actually leaving their office premises. Our unique RFAT tool enables us to virtually invite our customers into the GCB factory and offer them a real time customer event experience.

**Application study team**

A highly competent team of GCB experts is available to support customers in the proper selection of GCBs during all phases of power plant design. We have the competence to find the best solution for each customer, from the simplest question to the most complex analysis.

**Training**

A fully-equipped training space is available to all our customers and employees to learn more about GCBs and related applications, particularly safe operation of equipment, cost-efficient performance and minimizing the lifetime cost of the breaker.

**Setting the benchmark in world-class manufacturing**

Hitachi Energy’s GCB factory was awarded Best Factory Europe in 2010 for processes and business operations, enhanced products and best-in-class customer service. In 2014, it won the MX Award in the category of “Customer Orientation” and in 2015 was the overall MX Award winner, including the category of “Information Technology”. In addition, it also won the Swiss LEAN Award in the category of “Sales & Service” in the same year.