

# GCB HECS Maintenance Training Level 4

## COURSE DESCRIPTION



Course goal:

The participants acquire in-depth knowledge to overhaul Generator Circuit Breakers from the HECS series. The goal is to understand the process and execution of a complete overhaul, including all the parts and components. Additionally, the trainee will learn how to use the special tools and how to prepare himself for the Field intervention. He will also obtain important insights for effective on-site work management.

Main learning objectives:

- Understand the functions of all components inside a breaker system of the HECS family
- Handling of the components with the crane
- Perform a complete overhaul on the arcing chamber, disconnector, and earthing switches

Participant profile

Field service engineer for Hitachi Energy, preferably on high voltage products or high current systems. Willingness to travel and work for the global service network.

Prerequisites:

- Electrical or mechanical degree.
- Ability to read technical drawings is **required!**
- Must have passed GCB certification level 3 (commissioning & diagnostic)
- Fluent in English
- SF6 handling certificate

Topics

- Removing the SF6 gas from the arcing chambers
- Disassembling and assembling the arcing chamber
- Disassembling and assembling the disconnector
- Disassembling and assembling earthing switch
- Alignment of disconnector and GCB
- preparation of assembly drawings

This is a practical and theoretical training course.

Certification:

A confirmation will be issued after successful participation in this course, as part of the certification process. Within 24 months, an on-site assessment must be carried out along with a final review to complete certification.

Duration:

5 days

Enrolments:

Send your request to  
[GIS-GCB\\_Training@hitachienergy.com](mailto:GIS-GCB_Training@hitachienergy.com)

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Course agenda:

	Day 1	Day 2	Day 3	Day 4	Day 5
Subject	Preparation for overhaul	Arcing chamber overhaul	Overhaul disconnector	Overhaul earthing switch	Testing
Topics	<div><div>❖</div><div>Health &amp; Safety induction</div></div> <div><div>❖</div><div>Removing SF6 gas</div></div> <div><div>❖</div><div>Lifting out the arcing chambers from the breaker system</div></div>	<div><div>❖</div><div>Overhaul arcing chamber and install it back into the breaker system</div></div>	<div><div>❖</div><div>Overhaul disconnector, re-install and align with GCB</div></div> <div><div>❖</div><div>Filling SF6 Gas</div></div>	<div><div>❖</div><div>Overhaul and adjust earthing switches</div></div>	<div><div>❖</div><div>Final testing of the equipment</div></div>
Time	9:00 – 16:00	9:00 – 16:00	9:00 – 16:00	9:00 – 16:00	9:00 – 16:00