SIEMENS

Distance protection SIPROTEC 4 7SA6x. (7SD52x or 7SD53x) (H-SIP4DB)

Short Description

In this 1-day course, you will learn how to use DIGSI 4 to implement classical distance protection as a protection function for lines and cables for the SIPROTEC 4 protections. This course focuses on the protection function itself, the settings that can be made and their meanings. It also covers how to practically test this function with an OMICRON test case and how to handle the online display of the measurements.

Target Group

This course is intended for individuals involved in the engineering process, determining settings, programming, and reading distance protections of the SIPROTEC 4 series. Engineers, commissioning personnel, and maintenance technicians.

Content

General principle of SIPROTEC 4.

Theory of distance protection.

- Basic requirements, settings, nominal and short-circuit measurements within distance protection, disadvantages, arc resistances, earth fault factors, triggering, zones, recognizing earth faults, direction determination, additional points, oscillation, signal transmission, transfer of pickup.
- Settings of distance protection.
- Settings of SIPROTEC 4 distance protection.
- Creating relays, CT and VT connections, linking outputs and inputs, function keys and LEDs.
- Power system data.
- Distance protection function settings.
- RIO – OMICRON.
- Tolerances of the distance module.
- Transfer reactions within the working communication port.
- Ground impedance matching.
- The saturation indicator on parameter A1140 I.
- Testing using OMICRON test equipment.

Prerequisites

Basic knowledge of the different types of protections as covered in the H-BM or H-BI course. Knowledge of SIPROTEC 4 and DIGSI 4 as covered in the SIPROTEC 4 Basic Course with DIGSI 4.

Note

- This course is based on the specific distance protection within the SIPROTEC 4 and contains a lot of theory. Therefore, it is more about following along rather than actively participating on your own or a training PC.
- Distance protection can also be activated in the protection of the type 7SD52x and 7SD53x. This course is also suitable for this protection if no attention is paid to the line differential protection.
- If you want to actively program yourself, we can add a separate practical day where you can work with the available distance protection model and a training PC or your own PC, provided the correct software is installed.
- For testing the distance protection, the existing advanced OMICRON course is recommended.
- This course can be scheduled from 4 people. For more information or special requests, please contact the Power Academy.

Type

Face-to-face training

Duration

1 day

Language

nl

Fee

800 EUR

Face-to-face