

## Diagnostica di azionamenti SINAMICS (TIA-DIAG-DRV)

---

### Short Description

---

This course provides the basic skills needed to understand the structure of SINAMICS devices and to carry out diagnostic and maintenance activities. The aim is to enable technical staff to quickly identify any operating issues and reduce machine downtime. During the course, the main components of SINAMICS G converters and SINAMICS S drives will be analyzed, with particular attention to the interactions between the different system modules. Part of the course will be dedicated to the use of the SINAMICS Startdrive engineering environment, integrated into TIA Portal, for drive parameterization and diagnostics. Participants will learn how to navigate the main device parameters and how to use the online functions for troubleshooting. The course also covers the operational procedures for replacing and restoring hardware components, including firmware version management and configuration project recovery.

### Objectives

---

After attending the course, you will be able to:

- Understand the main components of SINAMICS drives and how they interact
- Use SINAMICS Startdrive for diagnosing and parameterizing a SINAMICS device
- Replace and restore a SINAMICS device

### Target Group

---

- Electrical maintenance technicians
- Mechanical maintenance technicians
- Service personnel
- Machine testers
- Commissioning personnel
- Operators

### Content

---

- Main components of SINAMICS G converters and SINAMICS S drives
  - Overview of integrated terminal strips in the CUs and of connections between components (electrical, DRIVECLiQ)
  - Basic introduction to the SINAMICS Startdrive engineering environment
  - Overview of key parameters of SINAMICS drives
  - Diagnostics of a SINAMICS drive using TIA Portal online functions
  - Replacement and restoration of a hardware component (firmware management, project restore, etc.)
- The theoretical knowledge will be reinforced through practical exercises on a SINAMICS G120 converter.

### Prerequisites

---

No prerequisites required.

### Type

---

Face-to-face training

### Duration

---

1 day

### Language

---

it