Course type and description

The ACS880 functional safety configuration with FSO learning event comprises of two parts: e-learning courses and classroom course.

This is the second part of the learning event: a classroom course with hands-on lab activities supported by an instructor. This course contains hands-on safety exercises. Mandatory exercises have to be done for ABB safety certification.

The first part of the learning event includes the theory based e-learning courses mentioned below. Please note that the e-learning course material is not covered during the classroom course. You are required to complete the e-learning part before the classroom part, which is essential in order to be able to succeed in the hands-on lab activities during classroom days. The status of e-learning course completion is monitored.

Prerequisites

- Basic knowledge of electronics
- Experience in using a Windows PC
- G380 or 3881
- E-learning courses G111e and G376e or corresponding knowledge about functional safety and G3850e, G3851e, G3853e and G3854e.

Course duration

The course duration is 1.5 day.

Student profile

This course is intended for electricians, technicians, and engineers who configure and service ACS880 drives with FSO option.

Course goal

The goal of this course is to learn how to use basic software features of safety functions with FSO – module, ACS880 primary control program and Drive tool.

Course objectives

Upon completion of this course, students will be able to:

- Configure and measure ACS880 drives values for safety applications
- Use Drive composer pro tool safety features
- Commission, backup and restore ACS880 drive with safety application
- Do basic fault tracing for ACS880 with safety option

Main topics

- Safety parameters using Drive composer pro tool
- I/O connections for FSO safety module
- STO function for FSO module
- SBC function for FSO module
- POUS function for FSO module
- SSE function for FSO module
- SS1 functions for FSO module
- SLS functions for FSO module
- SMS function for FSO module
- SAR functions with FSO module
### AGENDA

**G3851**  
ACS880 functional safety configuration with FSO

#### Program A:

**Day 1**
- 12:00 Lunch
- 13:00 Course Information and Safety responsibilities
- 13:45 Coffee break
- 14:00 Exercises
- 16:00 End of the day

**Day 2**
- 08:30 Exercises
- 10:00 Coffee break
- 10:15 Exercises
- 12:00 Lunch
- 13:00 Exercises
- 14:15 Coffee break
- 14:30 Exercises
- 15:40 Course evaluation
- 16:00 End of the day

#### Program B:

**Day 1**
- 09:00 Course Information and Safety responsibilities
- 09:45 Coffee break
- 10:00 Exercises
- 12:00 Lunch
- 13:00 Exercises
- 14:15 Coffee break
- 14:30 Exercises
- 16:00 End of the day

**Day 2**
- 08:30 Exercises
- 10:00 Coffee break
- 10:15 Exercises
- 11:40 Course evaluation
- 12:00 Lunch
- 13:00 End of the day