

COURSE DESCRIPTION

G3851V

ACS880 Functional Safety Configuration with FSO



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 a remote classroom course with hands-on lab activities supported remotely by an instructor. Before this course the courses, listed in the prerequisites, need to be studied.

This course contains hands-on safety exercises and remote video instructions/support. Mandatory exercises have to be done for ABB safety certification.

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.



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 Objective

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



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.



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.



Student equipment

At least one ACS880 democase/demorack, FSO-12/21 module installed, FSO I/O box, PC with drive composer pro program and USB C-mini cable are mandatory. Two students can work together with equipment.

Programme A**Day 1**

13:00 Course Information and Safety Responsibilities
13:45 Exercises
14:15 Coffee Break
14:30 Exercises
16:00 End of the Day

Day 2

09:00 Exercises
10:00 Coffee Break
10:15 Exercises
12:00 Lunch
13:00 Exercises
14:15 Coffee Break
14:30 Exercises
16:00 End of the course

Programme B**Day 1**

9:00 Course Information and Safety Responsibilities
10:00 Coffee Break
10:15 Exercises
12:00 Lunch
13:00 Exercises
14:15 Coffee Break
14:30 Exercises
16:00 End of the Day

Day 2

09:00 Exercises
10:00 Coffee Break
10:15 Exercises
12:00 End of the course