

ABB Marine Academy course description

H860 – Marine power plant basics for technical staff

Course goal

Upon completion of this course the participants will have an understanding of a marine power plant's design and function and an understanding of the ABB propulsion system.

Learning objectives

Upon completion of this course the participant will be able to

- communicate effectively with other technical staff
- identify the components of a marine power plant
- explain the limitations of a marine power plant
- troubleshoot fault conditions within a marine power plant
- critically assess the marine power plant in terms of efficiency and relevant actions

Contents

- Marine power plant overview
- Regulation principles
- Frequency convertors
- Motors and generators
- Basic electrical occupational safety and risk assessment
- Azipod® system overview (if required)

Methods

Lectures and demonstrations

Workshop exercises on simulator console

Visits to machine factory and Azipod® assembly factory if required

Student profile

Marine engineers and electro-technical personnel at the support and operational level

Prerequisites

None

Duration

3 days (plus 1 day for Azipod® if required)

Venue

Helsinki

Singapore

Genoa

Houston

Rotterdam

Customer defined location (subject to separate agreement)

Additional information

Minimum 6, maximum 12 participants

On-site training is available on request



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Course outline

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Day 1

- Course opening
- Technical introduction
- Power plant overview
- Transformers

Day 2

- ABB drives
- Generators and motors
- Generator interface/ distribution network
- Protective functions

Day 3

- Machines and drives
- Switchboard
- Electrical safety
- Factory visit
- Assessment

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