



Unit title	Electrical Safety on Merchant Vessels
SQA code	HC3D 04
SCQF level	6
SCQF credit points	3

History of changes

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Version number	Date	Description	Authorised by

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Title	Electrical Safety on Merchant Vessels	
Level	6	
Credit value	3	
Learning Outcomes	Assessment Criteria	
The learner will:	The learner can:	
1 Understand the dangers of working on electrical equipment.	1.1 Identify Permit to Work requirements for work on electrical apparatus.	1.2 Explain why work on electrical apparatus must not be carried out by non-qualified persons.
	1.3 Describe the basic safe isolation procedures to be carried out before work on electrical equipment can take place.	
2 Know the immediate actions to take in the event of electric shock.	2.1 Identify the effects of electric shock.	2.2 Describe the immediate actions in case of electric shock.
3 Know the main terminology and typical layout of marine electrical distribution systems.	3.1 Label the main components on a line diagram of a ships electrical distribution system	3.2 Describe the functions of: <ul style="list-style-type: none"> ◆ Main and emergency busbars ◆ Transformers ◆ Alternators/generators/emergency generators ◆ Circuit breakers ◆ Switches ◆ Batteries ◆ Distribution boards ◆ Rectifiers/invertors

Additional information about the Unit
Unit purpose and aim(s)
<p>To enable persons to work safely in the engine rooms of typical merchant vessels at the support level.</p> <p>To introduce engine-room electrical systems to new entrants to the marine industry.</p>
Details of the relationship between the Unit and relevant national occupational standards (if appropriate)
<p>MNTB/SFIA Marine NOS</p> <p>NOS A11 (part), A31 (part), C02 (part), C32 (part). The other parts of these standards will be met by shipboard training which will also consolidate the knowledge gained in this Unit.</p>
Details of the relationship between the Unit and other standards or curricula (if appropriate)
<p>MNTB/SFIA Underpinning Knowledge Library Documents</p>
Assessment requirements specified by a sector or regulatory body (if appropriate)
<p>Unit to be assessed in accordance with the Maritime Skills Alliance Assessment Strategy.</p>

Assessment (evidence) Requirements

The following evidence is required to demonstrate that learners have the appropriate level of knowledge to undertake Electrical Safety on Merchant Vessels. All Learning Outcomes and Assessment Criteria must be achieved.

Written and/or recorded oral evidence produced either on or off-the-job is required for the following:

Learning Outcomes 1–3

Guidance on Instruments of Assessment

Short answer written questions and/or oral interview could be used for the other Learning Outcomes and Assessment Criteria.

Assessment will be by a combination of the following methods — assignment, knowledge based testing, project work, presentation, practical demonstration, other as agreed by the external verifier.