

1. Module details

Module name

Disconnect and reconnect explosion-protected electrical equipment connected to fixed wired supply up to 1000 volts AC or 1500 volts DC work performance

Module duration

The time taken to complete this module will vary depending on the opportunities in the work place for student's to develop their skills and the method used to obtain evidence of competent performance. Where evidence is obtained through formalised assessment event(s) under simulated conditions it would normally take a student 4 hours to successfully complete the module.

Module code

NEWP211

Discipline code

0703110 Electrical Installation & Maintenance

2. Module purpose

This module provides methods and criteria for gathering evidence that shows a person has achieved the levels of performance specified in Unit NES211*A "Disconnect and reconnect explosion-protected electrical equipment connected to fixed wired supply up to 1000 volts AC or 1500 volts DC".

* Note: This competency standard has attached endorsements designated by the following suffixes. More than one endorsement may be achieved.

S Motors

R Electrical Heaters

Q Single Enclosed Control Device

P Single Enclosure

N Pre-assembled Neon Signs

3. Prerequisites

This module shall be undertaken in conjunction with modules that provide the knowledge and skills underpinning performance.

4. Relationship to competency standards

This module supports Unit NES211*A “Disconnect and reconnect explosion-protected electrical equipment connected to fixed wired supply up to 1000 volts AC or 1500 volts DC” of the Electrotechnology Competency Standards.

* Note: This competency standard has attached endorsements designated by the following suffixes. More than one endorsement may be achieved.

S Motors

R Electrical Heaters

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5. Assessment strategy

Assessment methods

Evidence of competent performance may be gathered from real work activities, which are recorded by the use of work reports, logbooks, profiles or portfolios. The student’s immediate supervisor shall confirm the accuracy of the evidence the student presents in this way. The supervisor must be competent in the area.

Alternatively, evidence may be obtained through formalised assessment events that simulate relevant work activities.

Conditions of assessment

Evidence of competent performance can be gathered from the workplace or a simulated work environment. A simulated environment would necessarily include equipment and wiring systems similar to those encountered in a real workplace. As well as the generic aspects of competency, assessment should take into account variations between particular industry sectors and different enterprises. For example equipment used in process industry will be different in some respects to that used in mining.

Assessment criteria

In judging work performance it is essential that evidence regarding the following aspects of competency is considered.

- Performance is autonomous and to requirements and occurs on **at least 3 occasions** for each of the following elements:
 - Prepare for disconnection or reconnection
 - Disconnect electrical equipment
 - Reconnect electrical equipment
 - Prepare electrical equipment for service
- and **one or more** of the following apparatus and associated circuits:
 - Motors: single or three phase motor
 - Electrical heaters: water heaters, duct heaters, heaters incorporated as
 - part of a machine or appliance
 - Control devices: solenoids, limit switches, pressure switches, thermostats
 - A single controlled device contained in an enclosure which is not part of a
 - Control Panel or Distribution/Switch Board or
 - Pre-assembled Type 1 and Type 2 cathode Neon signs only
- Applying **techniques, procedures, information and resources** relevant to performance.

Judgement should be made on evidence gathered from a number of events and over a period showing the development of competent work performance.

Resource requirements

Resources should be sufficient for participants to carry out activities, from which evidence may be gathered, on an individual basis. This will include access to tools, equipment, standards and other documents that are necessary to perform the activities required.

Occupational health and safety requirements

A safe and healthy environment will be provided for participants and assessors as well as safety procedure with regard to assessment activity.