



Australian Government

UEEEL0011 Evaluate performance of low voltage electrical apparatus

Release: 1

UEEEL0011 Evaluate performance of low voltage electrical apparatus

Modification History

Release 1. This is the first release of this unit of competency in the UEE Electrotechnology Training Package.

Application

This unit involves the skills and knowledge required to evaluate performance of low voltage (LV) electrical apparatus.

It includes preparing evaluations, determining performance requirements, inspecting and setting up performance tests, evaluating inspection and test results and documenting test outcomes.

The skills and knowledge described in this unit require a licence or permit to practice in the workplace where work is carried out on electrical installations which are designed to operate at voltages greater than 50 volt (V) alternating current (a.c.) or 120 V direct current (d.c.).

Competency development activities in this unit are subject to regulations directly related to licensing. Where a licence or permit to practice is not held, a relevant contract of training, such as an Australian Apprenticeship, may be required.

Additional and/or other conditions may apply in some jurisdictions subject to regulations related to electrical work. Practice in the workplace and during training is also subject to work health and safety (WHS)/occupational health and safety (OHS) regulations.

Permits may also be required for some work environments, such as confined spaces, working aloft, near live electrical devices and site rehabilitation.

No other licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

UEECD0007 Apply work health and safety regulations, codes and practices in the workplace

Competency Field

Electrical

Unit Sector

Electrotechnology

Elements and Performance Criteria

ELEMENTS

PERFORMANCE CRITERIA

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

1 Prepare to evaluate electrical apparatus

- 1.1** WHS/OHS processes and workplace procedures for a given work area are identified, obtained and applied
- 1.2** WHS/OHS risk control measures and workplace procedures in preparation for the work are followed
- 1.3** Inspection and testing area are checked for safety hazards and risk control measures implemented in accordance with WHS/OHS and workplace procedures
- 1.4** Relevant documentation is obtained and interpreted to identify the certification/approval specifications of the electrical apparatus to be assessed.
- 1.5** Advice is sought from the work supervisor to ensure the work is coordinated effectively with others
- 1.6** Tools, testing devices and materials required for work are obtained and checked for correct operation and safety

2 Evaluate electrical apparatus

- 2.1** WHS/OHS risk control measures and workplace procedures for carrying out the work are followed
- 2.2** The need to test and measure live work is determined in accordance with WHS/OHS requirements and workplace procedures
- 2.3** Circuits/apparatus/plant are checked and isolated in accordance with WHS/OHS requirements and workplace procedures
- 2.4** Assessment process of electrical apparatus performance requirements and testing methods applied are in accordance with relevant industry standards and workplace procedures
- 2.5** Apparatus inspection and test methods for relevant parameter/s are prepared in accordance with workplace procedures and relevant person/s advised
- 2.6** Apparatus inspection and tests are carried out in accordance with workplace procedures and results

	documented
	2.7 Unplanned situations are dealt with safely and with the approval of relevant person/s
	2.8 Assessment is carried out without damage to systems circuits, environment and/or services using sustainable energy practices
3 Complete work and document evaluated results	3.1 WHS/OHS work completion risk control measures and workplace procedures are followed
	3.2 Worksite is cleaned and made safe in accordance with workplace procedures
	3.3 Inspection and test results are evaluated and non-compliance issues identified in accordance with workplace procedures
	3.4 Inspection and test results and comments on non-compliance issues are documented and reported to relevant person/s in accordance with workplace procedures

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Non-essential conditions may be found in the UEE Electrotechnology Training Package Companion Volume Implementation Guide.

Reporting performance of two different electrical apparatus must include at least the following:

- WHS/OHS
- electrical safety
- ergonomic operation
- testing against specification
- fit for purpose
- sustainable energy principles

Unit Mapping Information

This unit replaces and is equivalent to UEENEEG131A Evaluate performance of low voltage electrical apparatus.

Links

Companion Volume implementation guides are found in VETNet - -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b8a8f136-5421-4ce1-92e0-2b50341431b6>

Assessment Requirements for UEEEL0011 Evaluate performance of low voltage electrical apparatus

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Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements, performance criteria and range of conditions on at least two separate occasions and include:

- applying relevant work health and safety (WHS)/occupational health and safety (OHS) requirements, including
 - using risk control measures
- checking and isolating circuits/machines/plant
- dealing with unplanned situations in accordance with workplace procedures and safe work practices
- evaluating electrical apparatus
- identifying non-compliance defects
- interpreting compliance documents of equipment for assessments
- obtaining and checking tools, testing devices and materials required for work
- preparing to evaluate electrical apparatus
- reporting inspection and test results and non-compliance issues
- requesting advice and coordinating work with relevant person/s
- setting up and conducting appropriate inspections and tests of electrical apparatus
- testing and measuring live work environments
- using sustainable energy practices.

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements, performance criteria and range of conditions and include knowledge of:

- problem-solving techniques
- relevant electrical machines and performance monitoring
- relevant machine inspection and test methods
- relevant manufacturer specifications and operating instructions
- relevant performance standards and regulatory requirements for electrical equipment
- relevant job safety assessments or risk mitigation processes

- relevant tools, testing devices and materials
- relevant WHS/OHS legislated requirements
- relevant workplace documentation
- relevant workplace instructions, policies and procedures
- sustainable energy principles.

Assessment Conditions

Assessors must hold credentials specified within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must satisfy the Principles of Assessment and Rules of Evidence and all regulatory requirements included within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must occur in suitable workplace operational situations where it is appropriate to do so; where this is not appropriate, assessment must occur in simulated suitable workplace operational situations that replicate workplace conditions.

Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

Resources for assessment must include access to:

- a range of relevant exercises, case studies and/or simulations
- relevant and appropriate materials, tools, facilities and equipment currently used in industry
- resources that reflect current industry practices in relation to evaluating performance of electrical apparatus
- applicable documentation, including workplace procedures, equipment specifications, regulations, codes of practice and operation manuals.

Links

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