



Australian Government

**Assessment Requirements for UEEEL0033
Conduct electrical tests on LV electrical
machines**

Release: 1

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Modification History

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

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 identifying safety requirements prior to undertaking electrical tests on low voltage (LV) electrical machines
- applying sustainable energy principles and practices
- completing workplace reports
- conducting electrical inspection and tests LV electrical machines, including:
 - conducting testing, including continuity, insulation resistance, short circuit and hi-pot on a magnetic circuit
 - connecting of test/measuring devices into the circuits of LV electrical machines
 - determining the status of the machine correctly from test results
 - documenting machine serviceability status clearly
 - setting up tests correctly
 - taking inspection and test readings accurately
- ensuring circuits are effectively isolated prior to undertaking tests on LV electrical machines
- identifying faults in LV machines from data recorded when testing LV electrical machines
- planning to conduct electrical inspection and tests on LV electrical machines
- taking and interpreting readings from test/measuring devices while undertaking tests on LV electrical machines
- using tools safely in accordance with workplace procedures.

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:

- connection of test/measuring devices into a circuit, including safety procedures and circuit arrangement
- current industry practices and technologies

- electric motor/machine mechanical measuring, inspecting and testing devices and techniques, including:
 - LV motor/machine inspection and testing devices and techniques
- relevant job safety assessments or risk mitigation processes
- relevant manufacturer specifications
- relevant safe working practices, including safety procedures when using test/measuring devices
- relevant WHS/OHS legislated requirements
- relevant workplace documentation
- relevant workplace policies and procedures
- storage, maintenance and care of test/measuring devices
- sustainable energy principles and practices
- taking and interpreting readings for continuity, insulation resistance, and short circuit tests on a magnetic circuit
- test/measuring devices and their application, including a multimeter, growler, insulation resistance, continuity and short circuit testers.

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 suitable simulated 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 other simulations
- relevant and appropriate materials, tools, facilities, equipment and personal protective equipment (PPE) currently used in industry
- resources that current industry practices in relation to conducting electrical inspection and tests on LV electrical machines
- applicable documentation, including workplace procedures, equipment specifications, regulations, relevant industry standards, codes of practice and operation manuals.

Links

Companion Volume implementation guides are found in VETNet - -

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

