



Australian Government

Assessment Requirements for UEEIC0051 Evaluate motor drive systems and diagnose faults

Release: 1

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Modification History

Release 1. This is the first release of this unit of competency in the 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 and performance criteria on at least two separate occasions and include:

- applying relevant work health and safety (WHS)/occupational health and safety (OHS) requirements and sustainable energy principles and practices
- applying logical diagnostic methods
- applying problem-solving techniques
- documenting fault identification activities and outcomes
- evaluating motor drive systems
- identifying faults and recommending components and process needed to rectify them
- inspecting, testing and verifying that the electrical system operates correctly
- using fault scenarios to test the cause of system faults.
- completing and reporting evaluation and fault diagnosis activities.

Knowledge Evidence

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

- relevant job safety assessments or risk mitigation processes
- relevant manufacturer specifications
- relevant problem-solving techniques
- relevant WHS/OHS legislated requirements
- relevant workplace policies and procedures and documentation
- variable speed drive (VSD) systems for a.c. and d.c. motors, including:
 - methods and operating principles
 - installation requirements
 - filtering
 - performance characteristics
 - set-up and commissioning
 - common faults, their symptoms, causes and solutions.

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 workplace operational situations where it is appropriate to do so; where this is not appropriate, assessment must occur in 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 simulations
- relevant and appropriate materials, tools, facilities, equipment currently used in industry
- resources that reflect current industry practices in relation to diagnosing and rectifying faults in motor drive systems
- applicable documentation, including workplace procedures, equipment specifications, regulations, 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>