



Australian Government

UEEEL0064 Rewind HV three phase induction machines rated for voltages above 3.3 kV

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.

Application

This unit involves the skills and knowledge required to rewind high voltage (HV) three phase induction machines rated for voltages above 3.3 kilovolt (kV).

It includes preparing and rewinding three phase induction machines rated voltage above 3.3 kV, applying technical and quality industry standards and keeping winding records.

No 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

UEECD0019 Fabricate, assemble and dismantle utilities industry components

UEECD0051 Use drawings, diagrams, schedules, standards, codes and specifications

UEEEL0074 Wind electrical coils

UEEEL0056 Place and connect electrical coils

UEEEL0068 Rewind three phase low voltage induction machines

UEEEL0065 Rewind HV three phase induction machines rated for voltages to 3.3 kV

and

UEECD0043 Solve problems in direct current circuits

or

UEECD0044 Solve problems in multiple path circuits

UEECD0046 Solve problems in single path circuits

Competency Field

Electrical

Unit Sector

Electrotechnology

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Prepare to rewind three phase induction machines

PERFORMANCE CRITERIA

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

- 1.1** Work health and safety (WHS)/occupational health and safety (OHS) requirements and workplace procedures for a given work area are identified, obtained and applied
- 1.2** WHS/OHS risk control measures for work preparation are followed
- 1.3** Scope of work is determined in accordance with workplace procedures for work specifications and relevant industry standards
- 1.4** Advice is sought from the work supervisor to ensure work is coordinated effectively with others
- 1.5** Induction machine is dismantled, parts tagged and stored to prevent loss or damage
- 1.6** Winding data is obtained from records or from measurements of stator and recorded in accordance with workplace procedures
- 1.7** Winding is stripped from stator in accordance with workplace procedures
- 1.8** Materials required for the work are obtained in accordance with workplace procedures
- 1.9** Tools, equipment and testing devices required for work are obtained and checked for operation and safety

2 Rewind three phase induction machines

- 2.1** WHS/OHS risk control work measures and workplace procedures are followed
- 2.2** Machines/equipment are isolated in accordance with WHS/OHS requirements and workplace procedures
- 2.3** Stator is wound and insulated to 3.3 kV standards in

		accordance with workplace procedures and relevant industry standards
	2.4	Machine is assembled and prepared for final testing in accordance with workplace procedures
	2.5	Problem-solving techniques are used to resolve unplanned events
	2.6	Quality checks are conducted to ensure coils are correctly wound with correct wire, number of turns and shape in accordance with workplace procedures and work instructions
	2.7	Work is completed in accordance with timeframe, environment and workplace procedures
3	Complete work report	
	3.1	WHS/OHS work completion risk control measures and workplace procedures are followed
	3.2	Work report and forms/data sheets are completed accurately 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.

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| Dismantling and winding stators must include at least two of the following: | <ul style="list-style-type: none">• three phase induction machines rated for HV above 3.3 kV |
| Hazard and risk control measures must include at least the following: | <ul style="list-style-type: none">• high voltage (HV) hazards• isolating machine/equipment for HV |

Unit Mapping Information

This unit replaces and is equivalent to UEENEEG156A Rewind HV three phase induction machines rated for voltages above 3.3 kV.

Links

Companion Volume implementation guides are found in VETNet - -

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