



Australian Government

UEEEL0023 Terminate cables, cords and accessories for low voltage circuits

Release: 2

UEEEL0023 Terminate cables, cords and accessories for low voltage circuits

Modification History

Release 2. This is the second release of this unit of competency in the UEE Electrotechnology Training Package.

Workplace evidence requirements updated in Performance Evidence and Assessment Conditions.
Assessor requirements updated in Assessment Conditions.

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 terminate cables, cords and their conductors at accessories and current-using devices, designed to operate at voltages up to 1,000 volts (V) alternating current (a.c.) or 1,500 V direct current (d.c.).

It includes working safely to industry standards, wiring systems, cable types and applications; selecting appropriate termination accessories; preparing and terminating cables and cords; terminating cables/cord conductors; and ensuring completed termination complies with industry standard requirements.

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 V a.c. or 120 V 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.

Pre-requisite Unit

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

UEECD0019 Fabricate, assemble and dismantle utilities industry components

UEECD0020 Fix and secure electrotechnology equipment

UEECD0051 Use drawings, diagrams, schedules, standards, codes and specifications
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 terminate cables, cords and conductors

2 Terminate cables, cords and conductors

PERFORMANCE CRITERIA

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

- | | |
|------------|--|
| 1.1 | WHS/OHS requirements and workplace procedures for a given work area are identified and applied |
| 1.2 | Hazards are identified, risks assessed and risk control measures and workplace procedures implemented in accordance with workplace procedures |
| 1.3 | Safety hazards that have not previously been identified are noted on job safety assessments and existing risk control measures are implemented |
| 1.4 | Junction box/terminal enclosures and terminal types are inspected to determine the type and size of cable and conductor termination devices needed |
| 1.5 | Tools, materials and testing devices needed for terminating cables and cords are obtained in accordance with workplace procedures and checked for correct operation and safety |
| 2.1 | WHS/OHS risk control measures and procedures for carrying out the work are followed |
| 2.2 | Circuits/machines/plant are checked as isolated, as |

required, in accordance with WHS/OHS requirements and workplace procedures

- 2.3 Cable/cord ends are cut and sheath/insulation stripped with sufficient length to prevent strain on terminations and without undue waste
 - 2.4 Cable glands/retaining devices are fitted and secured to ensure cable/cord cannot be pulled out of entry into junction box/terminal enclosure
 - 2.5 Conductors are prepared to suit the terminal type they are to be connected to
 - 2.6 Conductors are terminated to ensure continuity across the terminal
 - 2.7 Methodology for dealing with unplanned situations are discussed with appropriate person/s and documented
 - 2.8 Unplanned situations are responded to safely in accordance with workplace procedures, in a manner that minimises risk to personnel, equipment and with the approval of an authorised person
- 3 Test terminated cables and cords**
- 3.1 WHS/OHS work completion risk control measures and workplace procedures are followed
 - 3.2 Terminated cables are tested to ensure continuity and insulation resistance comply with relevant industry standards

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.

Terminating cables, cords and accessories must include at least five of the following types of cables each at a junction box and a

- circular thermoplastic sheathed (TPS)
- flat TPS
- flexible cables

device terminal enclosure:

- flexible cords
- fire protection cables
- steel wire armoured (SWA) cables
- thermoplastic insulated (TPI) cables.

Terminating conductors must include the following terminal types:

- screw terminal
- stud terminal
- tunnel terminal.

Unit Mapping Information

This unit replaces and is equivalent to UEENEEG106A Terminate cables, cords and accessories for low voltage circuits.

Links

Companion Volume Implementation Guides are found in VETNet -

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