



Australian Government

UEEAS0009 Mount and wire control panel equipment

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 mount and wire control panel equipment.

It includes working safely, following layout and circuit diagrams, selecting and mounting equipment, installing and terminating wiring, functional testing and completing necessary documentation.

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

UEECD0020 Fix and secure electrotechnology equipment

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

UEEEL0003 Arrange circuits, control and protection for general electrical installations

UEEEL0020 Solve problems in low voltage a.c. circuits

UEEEL0023 Terminate cables, cords and accessories for low voltage circuits

UEEEL0005 Develop and connect electrical control circuits

UEEEL0019 Solve problems in direct current (d.c.) machines

UEEEL0021 Solve problems in magnetic and electromagnetic devices

UEEEL0024 Solve problems in alternating current (a.c.) rotating machines

UEEEL0025 Test and connect transformers

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

Assembly

Unit Sector

Electrotechnology

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Plan to mount and wire control panel equipment

PERFORMANCE CRITERIA

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

1.1 Wire control panel equipment installation is determined and planned in accordance with job specifications, wiring and schematic diagrams

1.2 Work health and safety (WHS)/occupational health and safety (OHS) requirements and workplace procedures for a given work area are identified and applied

1.3 Work instructions, including layout and wiring diagrams, are applied in accordance with workplace procedures

1.4 Advice is sought from supervisor to ensure work is coordinated effectively with others

1.5 Materials required for the control panel work are obtained in accordance with workplace procedures

1.6 Tools, equipment and measuring devices required to carry out control panel work are obtained and checked for correct operation and safety in accordance with workplace procedures

2 Mount and wire control panel equipment

2.1 Control panel equipment and electrical hazards are identified, risks assessed and control measures implemented

2.2 Circuits are checked and isolated in accordance with WHS/OHS workplace requirements and procedures

2.3 Components are laid out in accordance with job specifications, wiring and schematic diagrams

- 2.4 Control panel components including switch gear, interconnecting plugs and sockets and earthing are fitted in accordance with work instructions, industry standards, manufacturer specifications and workplace procedures
 - 2.5 Control panel wiring is installed in accordance with wiring and schematic diagrams, work instructions, industry standards, manufacturer specifications and workplace procedures
 - 2.6 Regular quality checks are carried out in accordance with workplace procedures
 - 2.7 Completed control panel is visually inspected and tested in accordance with workplace procedures, industry standards and manufacturer specifications
 - 2.8 Labelling and cable numbering are undertaken in accordance with industry standards, wiring and schematic diagrams
 - 2.9 Unplanned events are referred to supervisor for directions in accordance with workplace procedures
 - 2.10 Work is carried out without waste of materials or damage to apparatus, the surrounding environment or services and using sustainable energy practices
- 3 **Finalise and inspect control panel installation**
 - 3.1 Assembled control panel is tested against work instructions, industry standards and manufacturer specifications in accordance with workplace procedures
 - 3.2 Problem-solving techniques are used, where corrective actions to assembled components are required, in accordance with regulatory requirements and industry standards
 - 3.3 Work completion is documented and relevant person/s notified 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.

Assembling must include at least two different control panels including the following:

- controls for more than two electrical machines, electro-mechanical and/or electronic control and devices such as relays, timers, logic controllers, indicators and switches/push buttons

Unit Mapping Information

This unit replaces and is equivalent to UEENEEA113A Mount and wire control panel equipment.

Links

Companion Volume implementation guides are found in VETNet - -

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