



Australian Government

Assessment Requirements for UEEAS0009 Mount and wire control panel equipment

Release: 2

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Modification History

Release 2. Minor Change. Typographic error in prerequisites corrected.

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 labelling and numbering to cables and using terminal numbering in accordance with relevant industry standards and workplace procedures
- applying relevant work health and safety (WHS)/occupational health and safety (OHS) requirements and workplace procedures and practices, including using risk control measures
- applying sustainable energy principles and practices
- dealing with unplanned events in accordance with workplace procedures in a manner that minimises risk to personnel and equipment
- following layout and wiring diagrams
- inspecting and checking installation of control panel equipment
- laying out components, including:
 - selecting and placing switchgear and control gear in accordance with industry standards, wiring and schematic diagrams, including low voltage (LV) and extra-low voltage (ELV) devices
 - segregating of cables at different voltages in accordance with relevant industry standards
 - interconnecting plugs and sockets
- mounting and wiring control panel equipment in accordance with relevant industry standards
- selecting switchgear and control gear to required specifications, including voltage ratings, current ratings and overload settings
- using problem-solving techniques when determining the nature of a fault.

Knowledge Evidence

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

- control panel types and mounting techniques, including:

- clearances
- DIN mounted switchgear
- direct mounting on insulated panels
- metallic and non-metallic (insulated)
- rear connections
- strapped harness wiring and use of duct to support and channel wiring
- cable labelling and numbering, including:
 - cable and component labelling/identification
 - use of terminal strips to assist fault finding
- component layout, including:
 - interconnecting plugs and sockets
 - placement/layout of power and control circuit devices and components
 - segregation of cables at different voltages
 - wiring and schematic diagrams
- choice of switchgear and control gear, including:
 - current ratings
 - number of operations
 - overload and fuse settings
 - voltage ratings
- other considerations, including:
 - earthing of panels
 - effect of high current devices on electromagnetic components or programmable logic controllers (PLC)
 - effects of electronic components on other devices
 - size of power and control circuit conductors
- relevant industry standards
- problem solving techniques including quality checks
- relevant manufacturer specifications
- relevant WHS/OHS legislated requirements
- relevant workplace documentation
- relevant workplace policies and procedures
- risk mitigation processes.

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 other simulations
- relevant and appropriate materials, tools, equipment and personal protective equipment (PPE) currently used in industry
- 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>