



Australian Government

Assessment Requirements for UEERA0060 Produce HVAC/R control system diagrams

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.

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 one occasion and include:

- understanding the extent of the drawing work accurately
- determining appropriate types of diagrams and their layouts correctly
- including appropriate technical data parameters in the diagrams
- checking and correcting diagrams accurately
- filing copies of completed drawing securely
- dealing with unplanned events
- applying relevant work health and safety (WHS)/occupational health and safety (WHS/OHS) requirements, including using risk control measures
- completing and reporting heating, ventilation and air conditioning/refrigeration (HVAC/R) control system diagrams
- preparing to produce HVAC/R control system diagrams
- producing HVAC/R control system diagrams.

Knowledge 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 and include knowledge of:

- HVAC/R control system fundamentals, safe working practices and relevant standards, codes and regulations, including:
 - control fundamentals:
 - control terminology
 - refrigeration system characteristics
 - HVAC system characteristics
 - control system characteristics
 - control system components
 - control system diagrams and symbols

- product knowledge
- types of control equipment:
 - electrical:
 - classification of circuits
 - two position control
 - floating control
 - sensors
 - controllers
 - flow control devices
 - control systems diagrams
 - electronic:
 - operating principles
 - sensors
 - controllers
 - control system diagrams
- control systems applications:
 - refrigeration
 - air conditioning
 - air handling system controls
 - ventilation
 - heating
 - building airflow system control
 - airflow control
 - singles and multi-zones
 - chiller/boiler and distribution system control (chilled water, boiler and distribution systems)
- relevant manufacturer specifications
- relevant safe job safety assessments or risk mitigation processes
- relevant software tools and equipment
- relevant WHS/OHS legislated requirements
- relevant workplace documentation
- relevant workplace policies and procedures.

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>