



**Australian Government**

**Assessment Requirements for MEM18093  
Maintain and repair integrated industrial  
refrigeration and/or large air handling  
system controls**

**Release: 1**

# **Assessment Requirements for MEM18093 Maintain and repair integrated industrial refrigeration and/or large air handling system controls**

## **Modification History**

Release 1. Supersedes and is equivalent to MEM18093B Maintain and repair integrated industrial refrigeration and/or large handling system controls

## **Performance Evidence**

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria on at least two (2) occasions, on at least two (2) systems, and include:

- following work instructions, standard operating procedures (SOPs) and safe work practices
- identifying and interpreting charts, lists, catalogues, specifications, drawings and relevant legislation with respect to maintaining and repairing integrated industrial refrigeration and/or large air handling system controls
- selecting and using appropriate tools, techniques and equipment necessary to check integrated industrial refrigeration and/or large air handling system controls for conformance against specifications
- checking and performing adjustments to control sequence using appropriate test equipment meeting/aligning to operational requirements and specifications
- recording any modifications complying with manufacturers' specifications and making all changes in site drawings/documents and documenting in accordance with SOPs
- testing and assessing control system/circuit parts using appropriate test equipment and application principles against operational specifications
- performing maintenance procedures, including testing of all control sequences and safety devices to specifications
- identifying and localising faulty components and confirming malfunction by inspection/testing, and making required adjustments to achieve specifications
- undertaking calculations and numerical operations associated with maintaining and repairing integrated industrial refrigeration and/or large air handling system controls
- removing/dismantling and reassembling faulty system control components and selecting replacement parts from manufacturers' catalogues to meet the required specifications
- checking and adjusting sequence system control circuit to meet operational specifications and confirming correct operation
- commissioning refrigeration/air handling system controls to service and adopting appropriate follow-up procedures
- completing all service/maintenance reports in accordance with SOPs.

## Knowledge Evidence

Evidence required to demonstrate the required knowledge for this unit must be relevant to and satisfy the requirements of the elements and performance criteria and include knowledge of:

- safe work practices and procedures and use of personal protective equipment (PPE)
- system operational requirements and specifications
- application of common refrigeration/air handling system components and controllers
- importance of following installation procedures in terms of control operation, safety and reliability
- measuring instruments/equipment and specifications for checking air temperatures, air flows, air quality and air properties
- tools, equipment, techniques and procedures for rectifying faulty conditions
- procedures for returning to service or commissioning refrigeration/air handling control systems
- refrigeration/air conditioning test equipment and application
- operational sequence of systems
- typical adjustments to correct sequencing variations from specification
- typical causes of component failure
- maintenance schedule and procedures
- common adjustments that can be made to control systems and their effect
- maintenance/service recording/reporting requirements
- procedures for reporting/recording modifications/alterations maintenance and reporting non-conformances.

## Assessment Conditions

- Assessors must:
  - have vocational competency in maintaining and repairing integrated industrial refrigeration and/or large handling system controls at least to the level being assessed with relevant industry knowledge and experience
  - satisfy the assessor requirements in the *Standards for Registered Training Organisations 2015* or its replacement and comply with the *National Vocational Education and Training Regulator Act 2011*, its replacement or equivalent legislation covering VET regulation in a non-referring state/territory as the case requires
- Where possible assessment must occur in operational workplace situations. Where this is not possible or where personal safety or environmental damage are limiting factors, assessment must occur in a sufficiently rigorous simulated environment that reflects realistic operational workplace conditions. This must cover all aspects of workplace performance, including environment, task skills, task management skills, contingency management skills and job role environment skills
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications
- 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.

## **Links**

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b7050d37-5fd0-4740-8f7d-3b7a49c10bb2>