

1. Title	Apply the knowledge of fire pump motors and control circuits
2. Code	EMFSDE303A
3. Range	Apply the knowledge of fire pump motors and control circuits and, in predicable and regular situations, undertake the tasks of design, installation, testing, commissioning, operation, repair, maintenance and project management of such motors at design offices, workshops or fire pump rooms.
4. Level	3
5. Credit	3
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <p>6.1 Knowledge of fire pump motors and control circuits</p> <ul style="list-style-type: none"> ◆ Understand the types, functions and basic principles of fire pump motors ◆ Understand the starting methods of fire pump motors and their characteristics, including: <ul style="list-style-type: none"> • Direct starting • Star-delta starting • Autotransformer starting ◆ Understand the operation of control circuits, starters, protective devices, and control panels in different motor-starting methods ◆ Understand the calculation of the power, current and voltage of a motor <p>6.2 Apply the knowledge of fire pump motors and control circuits</p> <ul style="list-style-type: none"> ◆ Select proper single-phase or three-phase fire pump motors and starting control circuits in predicable and regular situations according to pump characteristics and loading ◆ Set the line/phase current and the power consumption of a motor ◆ Set the conductor size according to wiring length and physical environment
7. Assessment Criteria	<p>The integrated outcome requirement of this unit of competency is:</p> <p>(i) Capable to apply the knowledge of fire pump motors and control circuits to tasks of design, installation, testing, commissioning, operation, repair, maintenance and project management of such fire pump motors in predicable and regular situations.</p>
8. Remarks	The credit value of this unit of competency is set on the presumption that the person already possesses basic electrical knowledge.