

1. Title	Install motor control and starter circuits of particular design		
2. Code	EMELIN308A		
3. Range	Master the operating principles of various kinds of motor control and starter circuits; install and connect motor control and starter circuit components in switchboard or control box at installation or repair locations according to the drawings of specially designed motor control, protection and starter circuits.		
4. Level	3		
5. Credit	9		
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <div> <div>6.1 Knowledge of motor control circuit operation, installation and configuration</div> <div> <ul style="list-style-type: none"> <li>◆ Understand the working principles of various kinds of single-phase and three-phase electric machine control, protection and starter circuits</li> <li>◆ Master motor control, protection and starter circuit diagrams such as: <ul style="list-style-type: none"> <li>• Motor operation control, protection and starter circuit diagram</li> <li>• Configuration and wiring diagram for components in the control box</li> </ul> </li> <li>◆ Master the configuration and installation methods for motor control, protection and starter circuit components</li> </ul> </div> </div> <div> <div>6.2 Install motor control and starter circuits of particular design</div> <div> <ul style="list-style-type: none"> <li>◆ Install and connect motor control, protection and starter circuits, including: <ul style="list-style-type: none"> <li>• Estimating the number of components according to engineering drawings and installation requirements, including push-button switch, overload protector, limit switch, relay, contactor and timer, for installation of operation control, protection and starter circuits</li> <li>• Install and connect specially designed power control, electrical interlock and sequence control and starter circuits for various kinds of single-phase and three-phase motors</li> <li>• Install and connect linkage and starter control circuits for backup generators</li> <li>• Conduct electrical and operation tests for various kinds of motor control, protection and starter circuits</li> </ul> </li> </ul> </div> </div> <div> <div>6.3 Professionalism in installing motor control and starter circuits of particular design</div> <div> <ul style="list-style-type: none"> <li>◆ Follow the Code of Practice for the Electricity (Wiring) Regulations to install and connect various kinds of electric machine control, protection and starter circuits safely</li> </ul> </div> </div>		

7. Assessment Criteria	<p>The integrated outcome requirements of this unit of competency are:</p> <ul style="list-style-type: none"> <li>(i) Capable to install and connect various kinds of electric machine control, protection and starter circuits according to drawings; and</li> <li>(ii) Capable to conduct electrical and operation tests for various kinds of motor control and starter circuits.</li> </ul>
8. Remarks	