

1. Title	Perform basic wiring of electric motor starting circuits for air-conditioning and refrigeration
2. Code	EMACIN210A
3. Range	Perform basic wiring of electric motor starting circuits for air-conditioning and refrigeration at installation or servicing stations under a certain degree of instruction.
4. Level	2
5. Credit	3
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <p>6.1 Functions and working principles of typical motor starting circuits for air-conditioning and refrigeration</p> <ul style="list-style-type: none"> <li>◆ Understand the functions of motor starting circuits</li> <li>◆ Understand the working principles of the direct-on-line motor starting circuit</li> <li>◆ Understand the working principles of the star-delta motor starting circuit</li> <li>◆ Understand the working principles of the part-winding motor starting circuit</li> </ul> <p>6.2 Methods and procedures of wiring up typical motor starting circuits for air-conditioning and refrigeration</p> <ul style="list-style-type: none"> <li>◆ Wire up the direct-on-line motor starting circuit according to the drawing</li> <li>◆ Wire up the star-delta motor starting circuit according to the drawing</li> <li>◆ Wire up the part-winding motor starting circuit according to the drawing</li> </ul> <p>6.3 Professionalism in wiring up typical motor starting circuits for air-conditioning and refrigeration</p> <ul style="list-style-type: none"> <li>◆ Follow the code of practice under the Electricity (Wiring) Regulations to wire up motor starting circuits safely</li> </ul>
7. Assessment Criteria	<p>The integrated outcome requirements of this unit of competency are:</p> <p>(i) Capable to wire up direct-on-line, star-delta and part-winding motor starting circuits; and</p> <p>(ii) Capable to follow relevant code of practice when performing electrical wiring work.</p>
8. Remarks	This unit of competency is applicable to practitioners engaged in typical installation and repair work of electrical control system for air-conditioning and refrigeration