

1. Title	Perform basic repair of electric motors for air-conditioning and refrigeration									
2. Code	EMACOR204A									
3. Range	Inspect, test and repair typical faults of electric motors for air-conditioning and refrigeration at 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> <table border="0"> <tr> <td style="vertical-align: top;">6.1</td> <td style="vertical-align: top;">Construction and working principles of typical air-conditioning and refrigeration motors</td> <td style="vertical-align: top;"> <ul style="list-style-type: none"> <li>◆ Understand the working principles of typical electric motors for air-conditioning and refrigeration</li> <li>◆ Understand the construction and applications of typical electric motors for air-conditioning and refrigeration</li> <li>◆ Understand the working principles of starter relays of typical electric motors for air-conditioning and refrigeration</li> </ul> </td> </tr> <tr> <td style="vertical-align: top;">6.2</td> <td style="vertical-align: top;">Methods and procedures of inspecting, testing and repairing simple faults of typical electric motors for air-conditioning and refrigeration</td> <td style="vertical-align: top;"> <ul style="list-style-type: none"> <li>◆ Wire up starter relay circuits for single-phase motors</li> <li>◆ Wire up typical single-phase electric motors for air-conditioning and refrigeration to the power supply</li> <li>◆ Use typical instruments to inspect, test and repair typical faults of electric motors for air-conditioning and refrigeration</li> <li>◆ Perform routine maintenance and repair for typical electric motors for air-conditioning and refrigeration</li> </ul> </td> </tr> <tr> <td style="vertical-align: top;">6.3</td> <td style="vertical-align: top;">Professionalism in basic repair of electric motors for air-conditioning and refrigeration</td> <td style="vertical-align: top;"> <ul style="list-style-type: none"> <li>◆ Follow the code of practice under the Electricity (Wiring) Regulations to inspect, test and repair electric motors for air-conditioning and refrigeration safely</li> </ul> </td> </tr> </table>	6.1	Construction and working principles of typical air-conditioning and refrigeration motors	<ul style="list-style-type: none"> <li>◆ Understand the working principles of typical electric motors for air-conditioning and refrigeration</li> <li>◆ Understand the construction and applications of typical electric motors for air-conditioning and refrigeration</li> <li>◆ Understand the working principles of starter relays of typical electric motors for air-conditioning and refrigeration</li> </ul>	6.2	Methods and procedures of inspecting, testing and repairing simple faults of typical electric motors for air-conditioning and refrigeration	<ul style="list-style-type: none"> <li>◆ Wire up starter relay circuits for single-phase motors</li> <li>◆ Wire up typical single-phase electric motors for air-conditioning and refrigeration to the power supply</li> <li>◆ Use typical instruments to inspect, test and repair typical faults of electric motors for air-conditioning and refrigeration</li> <li>◆ Perform routine maintenance and repair for typical electric motors for air-conditioning and refrigeration</li> </ul>	6.3	Professionalism in basic repair of electric motors for air-conditioning and refrigeration	<ul style="list-style-type: none"> <li>◆ Follow the code of practice under the Electricity (Wiring) Regulations to inspect, test and repair electric motors for air-conditioning and refrigeration safely</li> </ul>
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7. Assessment Criteria	<p>The integrated outcome requirements of this unit of competency are:</p> <p>(i) Capable to inspect, test and repair simple faults of electric motors for air-conditioning and refrigeration; and</p> <p>(ii) Capable to follow relevant code of practice when inspecting, testing and repairing electric motors for air-conditioning and refrigeration.</p>									
8. Remarks	This unit of competency is applicable to practitioners engaged in general installation and repair of electrical control systems for air-conditioning and refrigeration.									