

1. Title	Repair and rewind three-phase motors
2. Code	EMCUIN304A
3. Range	Understand the construction and types of three-phase motors, and repair and rewind them in servicing stations or work sites.
4. Level	3
5. Credits	9
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <p>6.1 Structure, type, working principles and examination method of three-phase motor</p> <ul style="list-style-type: none"> ◆ Understand the structure, types, working principles and range of application of three-phase motor, including: <ul style="list-style-type: none"> • General induction motor • Multipolar three-phase motor • Two-speed three-phase motor ◆ Understand the winding design of three-phase motor, including number of slots for each pole, number of winds, method of winding connection, etc. ◆ Understand the methods to examine the faults of three-phase motor, including: <ul style="list-style-type: none"> • testing of short circuit • testing of circuit break • testing of earth fault • testing of wiring fault • testing of bearing fault ◆ Methods of dismantling and assembling three-phase motor ◆ Methods of replacing bearing <p>6.2 Repair three-phase motor faults</p> <ul style="list-style-type: none"> ◆ Identify the faults of a three-phase motor and repair them according to procedures ◆ Rewind a three-phase motor
7. Assessment Criteria	<p>The integrated outcome requirement of this unit of competency is:</p> <p>(i) Capable to understand the structure, types and working principles of three-phase motor;</p> <p>(ii) Capable to identify the faults of a three-phase motor and repair them according to procedures; and</p> <p>(iii) Capable to rewind a three-phase motor.</p>
8. Remarks	The credit value of this unit of competency is set on the presumption that the person already possesses basic electrical and mechanical knowledge.