

1. Title	Repair and rewind single-phase motors
2. Code	EMELIN201A
3. Range	Repair and rewind single-phase motors at electric motor repair workshops.
4. Level	2
5. Credit	6
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <p>6.1 Knowledge of single-phase motors</p> <ul style="list-style-type: none"> ◆ Understand the construction, types, working principles and scope of application of single-phase motors, including: <ul style="list-style-type: none"> • Split-phase induction motor • Split-phase capacitance motor • Shaded-pole motor • Repulsion motor • Universal-type motor ◆ Understand the winding design of single-phase motor, including number of slots for each pole, number of winds, method of winding connection, etc. ◆ Understand guidelines on repairing and rewinding single-phase motors <p>6.2 Examine, repair and rewind single-phase motors</p> <ul style="list-style-type: none"> ◆ Examine the faults of single-phase motor according to working guidelines, such as: <ul style="list-style-type: none"> • short circuit fault • open circuit fault • earth fault • wrong wiring • bearing fault ◆ Dismantle and assemble single-phase motor ◆ Examine centrifugal switch and replace bearing ◆ Master the techniques of repairing single-phase motors, know the causes of faults and repair them according to procedures ◆ Rewind single-phase motors according to working guidelines <ul style="list-style-type: none"> • Hand wind and wind with wood former for single-phase motors • Rewind single-phase motors, including: <ul style="list-style-type: none"> ▸ Dismantling electric motors and recording original winding information ▸ Making wood formers for winding

	<ul style="list-style-type: none"> ‣ Winding, coils setting, connecting north and south pole of coils ‣ Winding, wrapping and tappings ‣ Re-assembling ‣ Inspecting and testing
	6.3 Professionalism in repairing and rewinding single-phase motors ♦ Follow the regulations and safety guidelines for the industry to ensure that the rewound single-phase motors can be used safely
7. Assessment Criteria	The integrated outcome requirement of this unit of competency is: (i) Capable to repair and rewind single-phase motors according to working guidelines.
8. Remarks	