

1. Title	Repair and maintain packaged air-conditioning systems	
2. Code	EMACOR303A	
3. Range	Perform repair and maintenance, at external sites, with spare parts for typical packaged air-conditioning systems.	
4. Level	3	
5. Credit	9	
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <p>6.1 Knowledge of packaged air-conditioning system repair and maintenance</p> <ul style="list-style-type: none"> ◆ Understand the construction, characteristics and operating process of packaged air-conditioning systems, including being able to: <ul style="list-style-type: none"> • Illustrate the construction, characteristics and operating process of air-cooled packaged air-conditioning systems • Draw the component layouts for air-cooled packaged air-conditioning systems • Illustrate the construction, characteristics and operating process of water-cooled packaged air-conditioning systems • Draw the component layouts for air-cooled packaged air-conditioning systems ◆ Maintain water-cooled packaged air-conditioning systems, including being able to: <ul style="list-style-type: none"> • Perform routine check and maintenance procedures for water-cooled packaged air-conditioning systems • Perform routine check and maintenance procedures for cooling tower and water pump • Perform routine check and maintenance procedures for cooling water quality • Clean and wash the scale of cooling water system <p>6.2 Methods and procedures of packaged air-conditioning system repair and maintenance</p> <ul style="list-style-type: none"> ◆ Maintain water-cooled packaged air-conditioning systems, including being able to: <ul style="list-style-type: none"> • Perform routine check and maintenance procedures for water-cooled packaged air-conditioning systems • Perform routine check and maintenance procedures for cooling tower and water pump • Perform routine check and maintenance procedures for cooling water quality • Clean and wash the scale of cooling water system ◆ Maintain air-cooled packaged air-conditioning systems, including being able to: <ul style="list-style-type: none"> • Perform routine check and maintenance procedures for air-cooled packaged air-conditioning systems 	

	<ul style="list-style-type: none"> ◆ Repair packaged air-conditioning systems, including being able to: <ul style="list-style-type: none"> • Troubleshoot and repair typical faults in water-cooled packaged air-conditioning systems(including electrical control systems, refrigeration systems, air duct systems and cooling systems) • Troubleshoot and repair typical faults in air-cooled packaged air-conditioning systems (including electrical control systems, refrigeration systems, air duct systems and cooling systems) <p>6.3 Professionalism in packaged air-conditioning system repair and maintenance</p> <ul style="list-style-type: none"> ◆ Follow the repair manual instructions to independently, or lead subordinates to, carry out packaged air-conditioning system repair and maintenance
<p>7. Assessment Criteria</p>	<p>The integrated outcome requirements of this unit of competency are:</p> <ul style="list-style-type: none"> (i) Capable to identify and eliminate the faults systematically and efficiently in order to complete repair and maintenance of typical packaged air-conditioning systems; and (ii) Capable to explain clearly to clients the key points of equipment operation, repair and maintenance.
<p>8. Remarks</p>	<p>The credit value of this unit of competency is set on the presumption that the person already possesses elementary knowledge and skills of air-conditioning and refrigeration.</p>