

1. Title	Repair and maintain air system of central air-conditioning system
2. Code	EMACOR310A
3. Range	Perform repair and maintenance of air system of central air-conditioning systems at central air-conditioning system machine rooms or air-conditioned areas.
4. Level	3
5. Credit	9
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <p>6.1 Knowledge of repairing and maintaining air system of central air-conditioning system</p> <ul style="list-style-type: none"> ◆ Understand the working principles and installation of typical air system of central air-conditioning system ◆ Understand the causes and handling methods of typical faults of air system of central air-conditioning system ◆ Understand details of general maintenance of air system of central air-conditioning system <p>6.2 Methods and procedures of repairing and maintaining air system of central air-conditioning system</p> <ul style="list-style-type: none"> ◆ Measure and adjust the operating parameters of the air system of central air-conditioning system, including: <ul style="list-style-type: none"> • Measure and check if the supply air velocity, return air velocity, temperature, humidity and fresh air amount of the air system of central air-conditioning system conform to design requirements • Check if the output power of the air-handling equipment conforms to design requirements • Check if the air handling equipment conforms to design requirements ◆ Operate air system equipment of central air-conditioning system , including: <ul style="list-style-type: none"> • Pre-starting preparations for the air system • Start the air system equipment • Check if the air system equipment operate properly • Adjust the air system equipment so that the operating parameters conforms to design requirements • Carry out shut-down operation of the air system ◆ Repair and maintain central air-conditioning air system equipment, including: <ul style="list-style-type: none"> • Repair and maintenance of ventilation fans • Repair and maintenance of fan coil units • Repair and maintenance of air-handling units • Repair and maintenance of air ducts, volume control dampers (V.C.D.) and valves

	<p>6.3 Professionalism in repairing and maintaining air system of central air-conditioning system</p> <ul style="list-style-type: none"> ◆ Follow the instructions of repair and maintenance manual to repair and maintain air system of central air-conditioning system ◆ Understand the safety guidelines required by the law to repair and maintain air system of central air-conditioning system
<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 handle and eliminate the faults systematically and efficiently in order to complete the repair and maintenance of air system of central air-conditioning system ; and (ii) Capable to follow the repair and maintenance manual safely to undertake the tasks of repairing and maintaining air system of central air-conditioning system.
<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 of air system of central air-conditioning system.</p>