

1. Title	Perform basic testing of electrical wiring for air-conditioning and refrigeration
2. Code	EMACIT201A
3. Range	Perform basic testing of electrical wiring for air-conditioning and refrigeration and install circuit protectors at installation or 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> <p>6.1 Causes of circuit faults, construction of circuit protectors and methods of using electrical measuring instruments</p> <ul style="list-style-type: none"> ◆ Understand the definition, causes and damage of open-circuit, short-circuit and earthed-circuit faults, and insulation resistance ◆ Understand the functions of circuit protector ◆ Understand the construction and application range of fuse, mini circuit breaker (MCB) and molded case circuit breaker (MCCB) ◆ Understand the functions and using method of multimeter and megaohmmeter <p>6.2 Methods and procedures of measuring circuit faults for air-conditioning and refrigeration equipment and installing circuit protectors</p> <ul style="list-style-type: none"> ◆ Install a fuse in an air-conditioning and refrigeration circuit ◆ Install an MCB in an air-conditioning and refrigeration circuit ◆ Measure open-circuit, short-circuit and earthed-circuit faults of an air-conditioning and refrigeration circuit ◆ Measure the insulation resistance of an air-conditioning and refrigeration circuit <p>6.3 Professionalism in testing electrical wiring for air-conditioning and refrigeration</p> <ul style="list-style-type: none"> ◆ Follow the code of practice under the Electricity (Wiring) Regulations to test and measure electrical wiring for air-conditioning and refrigeration safely
7. Assessment Criteria	<p>The integrated outcome requirements of this unit of competency are:</p> <p>(i) Capable to perform basic testing of electrical wiring for air-conditioning and refrigeration and install circuit protectors systematically and efficiently; and</p> <p>(ii) Capable to follow relevant code of practice when performing testing of electrical wiring.</p>
8. Remarks	This unit of competency is applicable to practitioners engaged in general installation and repair of electrical wiring for air-conditioning and refrigeration.