

1. Title	Inspect, test and commission low voltage power systems
2. Code	EMELIT306A
3. Range	Applicable to simple power supply systems directly fed by low voltage underground distribution cables. Inspect, test and commission low voltage power systems and associated installations.
4. Level	3
5. Credit	6
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <p>6.1 Know about the structure of low voltage power distribution system, and keypoints for inspecting, testing and commissioning different installations or circuit protection devices</p> <ul style="list-style-type: none"> ◆ Know about the content of documents for testing and commissioning low voltage power systems and associated installations directly fed by low voltage underground distribution cables. The documents include contract terms, drawings, proposals for inspection, testing and commissioning, and manufacturers' inspection and testing guides for electrical equipment ◆ Know about the keypoints and criteria for inspecting, testing and commissioning low voltage power system installations and devices <p>6.2 Carry out simple inspection, testing and commissioning</p> <ul style="list-style-type: none"> ◆ Assist in basic inspection, testing and commissioning for low voltage power systems and associated installations directly fed by low voltage underground distribution cables, including various kinds of switches, busbar box, distribution board, mains, power supply quality control system, operation control system, earthing system, lightning protection system, lighting system, etc. with the use of various kinds of testing instruments such as multi-meter, clamp meter, insulation resistance tester and earth fault loop impedance meter <p>6.3 Professionalism in inspecting, testing and commissioning low voltage power systems</p> <ul style="list-style-type: none"> ◆ Judge whether the low voltage power systems and associated installations examined meet the standard according to the inspection, testing and commissioning report, the client's requirements and specifications required by international standards
7. Assessment Criteria	<p>The integrated outcome requirements of this unit of competency are:</p> <p>(i) Capable to understand the inspection, testing and commissioning items according to specified contract terms, drawings and proposals for inspection, testing and commissioning;</p> <p>(ii) Capable to carry out inspection, testing and commissioning for low voltage power systems and associated installations; and</p> <p>(iii) Capable to judge whether the installations examined meet the standard according to the inspection, testing and commissioning results.</p>
8. Remarks	