

1. Title	Inspect, test and commission low voltage power systems fed by a single transformer
2. Code	EMELIT305A
3. Range	Use basic inspection tools and testing instruments to inspect, test and commission low voltage power systems and associated installations directly fed by a single transformer, and record the testing data to judge their effectiveness at switch rooms and similar locations.
4. Level	3
5. Credit	6
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <p>6.1 Understand the using methods of basic inspection tools and testing instruments</p> <ul style="list-style-type: none"> ◆ Understand the methods of using basic inspection tools and carry out inspection for low voltage power systems and associated installations directly fed by a single transformer, such as torque wrench, level guage, etc. ◆ Understand the methods of using basic testing instruments and carry out testing and commissioning for low voltage electrical installations, such as insulation resistance tester, high voltage withstand tester, primary and secondary injection test instruments, etc. <p>6.2 Inspect, test and commission low voltage electrical installations</p> <ul style="list-style-type: none"> ◆ Inspect, test and commission low voltage electrical installations such as: low voltage power distribution switches, cables, electric motors, capacitors, generators, protection device, protection and control circuits, earthing systems, lightning protection system, etc. ◆ Record the inspection and testing data effectively ◆ Understand various standards for testing, summarize the testing data and judge the effectiveness <p>6.3 Professionalism in inspecting, testing and commissioning low voltage electrical installations</p> <ul style="list-style-type: none"> ◆ Follow the regulations and safety guidelines for the industry to ensure that low voltage electrical installations can be used safely
7. Assessment Criteria	<p>The integrated outcome requirements of this unit of competency are:</p> <p>The integrated outcome requirements of this unit of competency are:</p> <p>(i) Capable to understand the methods of using basic inspection tools and testing instruments;</p> <p>(ii) Capable to perform inspection, testing and commissioning on specified low voltage power systems and associated installations, and record the testing data systematically; and</p> <p>(iii) Capable to master various standards for testing, summarize the testing data and judge the effectiveness.</p>
8. Remarks	