

1. Title	Understand the operating principle and assess the performance of three phase transformers in different power network		
2. Code	111490L3		
3. Range	Applicable to design and installation of electrical work, which involves understanding the construction and working principle of three phase transformers, and use turns ratio and winding connection to assess the current and voltage output of different power transformers.		
4. Level	3		
5. Credit	3		
6. Competency			<u>Performance Requirements</u>
	6.1	Understand the basic construction, working principles and basic data of three phase transformers	◆ Understand the basic construction of three phase transformers. ◆ Understand three phase transformers working principles. ◆ Understand the delta and star winding connection principles. ◆ Understand various types of basic data for three-phase transformers such as winding vector group, load current, voltage regulation control, cooling performance data, terminal marking etc.
	6.2	Master the design concept in application of three phase transformers in power transmission and distribution network	◆ Master the design concept of using three phase transformers in different power network, ➤ Assess the current and voltage output performance of transformers using turns ratio and winding connection ➤ Understand the precaution for parallel operation of three phase transformers in power industry.
	6.3	Exhibit professionalism in application of three phase transformers in electrical power system	◆ Follow the Code of Practice for the Electricity (Wiring) Regulations and relevant standards in application of three phase transformers in electrical power system.
7. Assessment Criteria	The integrated outcome requirements of this unit of competency are:		

	(i) Capable to understand the basic construction, working principles and basic data of three-phase transformers. (ii) Capable to master the design concept in application of three phase transformers in power transmission and distribution network, assessing the current and voltage output performance of different power transformers using turns ratio and winding connection.
8. Remarks	The credit value of this unit of competency is set on the presumption that the person already possesses basic electrical and mechanical knowledge.