Title	Select and install electric motor starters		
Level	4	Credits	2

Purpose	This unit standard covers selection and installation of motor starters. It is intended for people wishing to qualify as electricians.
	People credited with this unit standard are able to:  - establish and report on the suitability of selected motor starters to meet job requirements; and  - install and test motor starters.

Classification	Electrical Engineering > Electrical Installation and Maintenance	
Available grade	Achieved	

## **Guidance Information**

1 This unit standard has been developed for learning and assessment on-job.

# 2 Definition

Safe and sound practice – as it relates to the installation of electrical equipment is defined in AS/NZS 3000:2007, *Electrical Installations (known as the Australian/New Zealand Wiring Rules).* 

# 3 Range

- a Evidence of five three-phase electric motor starters is required of which two must be different.
- b Motor starters may include but are not limited to direct on line, reversing, soft starter, star delta.
- c Candidates may refer to current legislation and Standards during assessment.
- d Demonstration of safe working practices and installation in accordance with safe and sound practice are essential components of assessment of this unit standard.
- e All activities and evidence presented for all outcomes and performance criteria in this unit standard must be in accordance with:
  - i legislation;
  - ii policies and procedures;
  - iii ethical codes;
  - iv Standards may include but are not limited to those listed in Schedule 2 of the Electricity (Safety) Regulations 2010;
  - v applicable site, enterprise, and industry practice; and,
  - vi where appropriate, manufacturers' instructions, specifications, and data sheets.

# Outcomes and performance criteria

#### **Outcome 1**

Establish and report on the suitability of selected motor starters to meet the job specifications.

## Performance criteria

1.1 Ensure the selected motor starters meet the electrical and environmental requirements based on drawings and client requirements and prepare a report on their suitability in terms of motor load requirements.

#### Outcome 2

Install and test motor starters.

## Performance criteria

- 2.1 Install motor starters in accordance with energy supplier and customer requirements.
- 2.2 Install all other components in accordance with drawings where available, and manufacturers' instructions.
- 2.3 Establish and set overload settings.
- 2.4 Establish expected test results before connection.
- 2.5 Connect and carry out current tests and prepare test report.

This unit standard is expiring. Assessment against the standard must take place by the last date for assessment set out below.

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	21 July 2016	31 December 2027
Review	2	24 March 2022	31 December 2027
Rollover and Revision	3	25 May 2023	31 December 2027

Consent and Moderation Requirements (CMR) reference	0003
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This CMR can be accessed at http://www.nzqa.govt.nz/framework/search/index.do.