

Title	Carry out routine inspection and service on a high voltage circuit breaker		
Level	4	Credits	6

Purpose	People credited with this unit standard are able to carry out routine inspection and service on a high voltage circuit breaker.
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Classification	Electricity Supply > Electricity Supply - Power System Maintenance
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Available grade	Achieved
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Prerequisites	Unit 14287, <i>Use and maintain test instruments used in the high voltage electricity supply industry</i> , or demonstrate equivalent knowledge and skills.
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Guidance Information

- Evidence presented for assessment against this unit standard must be consistent with safe working practices and be in accordance with applicable legislative and industry requirements.
- Legislation, regulations and/or industry standards relevant to this unit standard include but are not limited to the current version of the Health and Safety at Work Act 2015; Electricity Act 1992; Electricity (Safety) Regulations 2010; and any subsequent amendments and replacements; Electricity supply industry codes of practice and documented enterprise procedures, including *Safety Manual – Electricity Industry (SM-EI) (2015)* Wellington: Electricity Engineers' Association, available at www.eea.co.nz.
- Definitions
Asset owner refers to a participant who owns or operates assets used for generating or conveying electricity.
Diagnostic tests may include but are not limited to – oil breakdown tests, insulation resistance tests, time travel tests, contact resistance, timing tests, minimum operating voltage, trip tests, auxiliary contact tests, oil insulation tests, alarm and pressure settings, compressor pump up time.
Function tests may include but are not limited to – oil breakdown tests, insulation resistance tests, time travel tests, contact resistance, timing tests, minimum operating voltage, trip tests, auxiliary contact tests, oil insulation tests, alarm and pressure settings, compressor pump up time.
Industry requirements include all asset owner requirements; manufacturers' specifications; and enterprise requirements which may include the documented

workplace policies, procedures, specifications, business, and quality management requirements relevant to the workplace in which assessment is carried out.

Outcomes and performance criteria

Outcome 1

Carry out routine inspection and service on a high voltage circuit breaker.

Range evidence is required of three different high voltage circuit breakers.

Performance criteria

1.1 Equipment is prepared for inspection and service.

Range procedures, test specifications, manufacturer’s guidelines, maintenance records, equipment operational release, diagnostic test equipment.

1.2 An access permit, or its approved equivalent, is obtained and a safe work zone is prepared.

Range includes – additional isolation from other energy sources, safety measures to protect the environment and personnel; briefing of work party.

1.3 Circuit breaker is inspected for damage or defects.

1.4 Diagnostic tests are carried out.

1.5 The test results are analysed and recorded.

1.6 Circuit breaker is serviced.

1.7 Function tests and pre-service checks are performed.

1.8 Documentation is completed.

Range may include – return of access permit, work authority, maintenance records updated.

Planned review date	31 December 2025
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	27 February 2020	N/A

Consent and Moderation Requirements (CMR) reference	0120
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Comments on this unit standard

Please contact Connexis – Infrastructure Industry Training Organisation
qualifications@connexis.org.nz if you wish to suggest changes to the content of this unit standard.