AS/NZS IEC 60947.2:2015
IEC 60947-2, Ed. 4.2 (2013)

AS/NZS IEC 60947.2:2015

Australian/New Zealand Standard™

Low-voltage switchgear and controlgear

Part 2: Circuit-breakers

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee EL-006, Industrial Switchgear and Controlgear. It was approved on behalf of the Council of Standards Australia on 26 May 2015 and on behalf of the Council of Standards New Zealand on 29 May 2015.
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This Standard was issued in draft form for comment as DR AS/NZS IEC 60947.2:2015.

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Part 2: Circuit-breakers

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-006, Industrial Switchgear and Controlgear, to supersede AS 60947.2—2005.

The objective of this Standard is to state—

(a) the characteristics of circuit-breakers;

(b) the conditions with which circuit-breakers are required to comply with reference to—

  (i) operation and behaviour in normal service;

  (ii) operation and behaviour in case of overload and operation and behaviour in case of short-circuit, including co-ordination in service (selectivity and back-up protection);

  (iii) dielectric properties;

(c) tests intended for confirming that these conditions have been met and the methods to be adopted for these tests; and

(d) information to be marked on or given with the apparatus.

This Standard is identical with, and has been reproduced from, IEC 60947-2, Ed. 4.2 (2013), *Low-voltage switchgear and controlgear*, Part 2: *Circuit-breakers*. A vertical line in the margin shows where IEC 60947-2, Ed. 4.0 (2006), has been modified by its Amendments 1 (2009) and 2 (2013).

As this Standard is reproduced from an International Standard, a full point substitutes for a comma when referring to a decimal marker.

References to International Standards should be replaced by references to Australian or Australian/New Zealand Standards, as follows:

Reference to International Standard		*Australian/New Zealand Standard*	
IEC		AS	
60068	Environmental testing	60068	Environmental testing
60068-2-14	Part 2-14: Tests. Test N: Change of temperature Amendment 1 (1986)	60068-2.14	Part 2.14: Tests. Test N: Change of temperature
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		AS/NZS	
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60695-2-10	Part 2-10: Glowing/hot-wire based test methods—Glow-wire apparatus and common test procedure	60695.2.10	Part 2.10: Glowing/hot-wire based test methods—Glow-wire apparatus and common test procedure
60695-2-11	Part 2-11: Glowing/hot-wire based test methods—Glow-wire flammability test method for end-products	60695.2.11	Part 2.11: Glowing/hot-wire based test methods—Glow-wire flammability test method for end-products
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60695-2-13	Part 2-13: Glowing/hot-wire based test methods—Glow-wire ignitability test method for materials	60695.2.13	Part 2.13: Glowing/hot-wire based test methods—Glow-wire ignitability test method for materials

IEC		AS/NZS IEC	
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		AS/NZS	
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22	Information technology equipment—Radio disturbance characteristics—Limits and methods of measurement	22	Information technology equipment—Radio disturbance characteristics—Limits and methods of measurement

Only normative references that have been adopted as Australian or Australian/New Zealand Standards have been listed.

The terms ‘normative’ and ‘informative’ have been used in this Standard to define the application of the annexes to which they apply. A ‘normative’ annex is an integral part of a Standard, whereas an ‘informative’ annex is only for information and guidance.

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1 General

The provisions of the general rules dealt with in IEC 60947-1 are applicable to this standard, where specifically called for. Clauses and subclauses, tables, figures and annexes of the general rules thus applicable are identified by reference to IEC 60947-1, for example, 1.2.3 of IEC 60947-1, Table 4 of IEC 60947-1, or Annex A of IEC 60947-1.

1.1 Scope and object

This standard applies to circuit-breakers, the main contacts of which are intended to be connected to circuits, the rated voltage of which does not exceed 1 000 V a.c. or 1 500 V d.c.; it also contains additional requirements for integrally fused circuit-breakers.

It applies whatever the rated currents, the method of construction or the proposed applications of the circuit-breakers may be.

The requirements for circuit-breakers which are also intended to provide earth-leakage protection are contained in Annex B.

The additional requirements for circuit-breakers with electronic over-current protection are contained in Annex F.

The additional requirements for circuit-breakers for IT systems are contained in Annex H.

The requirements and test methods for electromagnetic compatibility of circuit-breakers are contained in Annex J.

The requirements for circuit-breakers not fulfilling the requirements for over-current protection are contained in Annex L.

The requirements for modular residual current devices (without integral current breaking device) are contained in Annex M.

The requirements and test methods for electromagnetic compatibility of circuit-breaker auxiliaries are contained in Annex N.

Supplementary requirements for circuit-breakers used as direct-on-line starters are given in IEC 60947-4-1, applicable to low-voltage contactors and starters.

The requirements for circuit-breakers for the protection of wiring installations in buildings and similar applications, and designed for use by uninstructed persons, are contained in IEC 60898.

The requirements for circuit-breakers for equipment (for example electrical appliances) are contained in IEC 60934.