AS/NZS IEC 60947.7.1:2015
IEC 60947-7-1, Ed. 3.0 (2009)

AS/NZS IEC 60947.7.1:2015

Australian/New Zealand Standard™

Low-voltage switchgear and controlgear

Part 7.1: Ancillary equipment—Terminal blocks for copper conductors

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 27 May 2015 and on behalf of the Council of Standards New Zealand on 29 May 2015.
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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 60947.7.1—2004.

The objective of this Standard is to specify requirements for terminal blocks with screw-type or screwless-type clamping units primarily intended for industrial or similar use and to be fixed to a support to provide electrical and mechanical connection between copper conductors. It applies to terminal blocks intended to connect round copper conductors, with or without special preparation, having a cross-section between 0.2 mm^2 and 300 mm^2 (AWG 24/600 kcmil), intended to be used in circuits of a rated voltage not exceeding 1,000 V a.c. up to 1,000 Hz or 1,500 V d.c.

This Standard is identical with, and has been reproduced from, IEC 60947-7-1, Ed. 3.0 (2009), *Low-voltage switchgear and controlgear*, Part 7.1: *Ancillary equipment—Terminal blocks for copper conductors*.

This Standard shall be read in conjunction with IEC 60947-1. 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 thus applicable are identified by reference to IEC 60947-1, e.g. 1.2 of IEC 60947-1, Table 4 of IEC 60947-1 or Annex A of IEC 60947-1.

As this Standard is reproduced from an International Standard, the following applies:

(a) In the source text ‘this part of IEC 60947’ should read ‘this Australian/New Zealand Standard’.

(b) 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/NZS	
60695	Fire hazard testing	60695	Fire hazard testing
60695-11-5	Part 11-5: Test flames—Needle-flame test method—Apparatus, confirmatory test arrangement and guidance	60695.11.10	Part 11.5: Test flames—Needle-flame test method—Apparatus, confirmatory test arrangement and guidance

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

1.1 Scope

This part of IEC 60947 specifies requirements for terminal blocks with screw-type or screw-less-type clamping units primarily intended for industrial or similar use and to be fixed to a support to provide electrical and mechanical connection between copper conductors. It applies to terminal blocks intended to connect round copper conductors, with or without special preparation, having a cross-section between 0,2 mm^2 and 300 mm^2 (AWG 24/600 kcmil), intended to be used in circuits of a rated voltage not exceeding 1 000 V a.c. up to 1 000 Hz or 1 500 V d.c.

NOTE AWG is the abbreviation of “American Wire Gage” (Gage (US) = Gauge (UK))

kcmil = 1 000 cmil;

1 cmil = 1 circular mil = surface of a circle having a diameter of 1 mil

1 mil = 1/1 000 inch

This standard may be used as a guide for

– terminal blocks requiring the fixing of special devices to the conductors, for example quick connect terminations or wrapped connections, etc.;
– terminal blocks providing direct contact to the conductors by means of edges or points penetrating the insulation, for example insulation displacement connections, etc.;
– special types of terminal blocks, for example with diodes or varistors or similar component holders, etc.

Where applicable in this standard, the term “clamping unit” has been used instead of the term “terminal”. This is taken into account in case of reference to IEC 60947-1.

1.2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60695-11-5:2004, *Fire hazard testing – Part 11-5: Test flames – Needle-flame test method – Apparatus, confirmatory test arrangement and guidance*

IEC 60947-1:2007, *Low-voltage switchgear and controlgear – Part 1: General rules*

ISO 4046-4:2002, *Paper, board, pulp and related terms – Vocabulary – Part 4: Paper and board grades and coverted products*