

Australian/New Zealand Standard™

Low-voltage switchgear and controlgear

**Part 7.2: Ancillary equipment—
Protective conductor terminal blocks for
copper conductors**



AS/NZS IEC 60947.7.2:2015

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. This Standard was published on 29 June 2015.

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Originally as AS 3947.7.2—1996.
Revised and redesignated as AS/NZS IEC 60947.7.2:2015.

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Jointly published by SAI Global Limited under licence from Standards Australia Limited, GPO Box 476, Sydney, NSW 2001 and by Standards New Zealand, Private Bag 2439, Wellington 6140.

ISBN 978 1 76035 084 0

PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-006, Industrial Switchgear and Controlgear, to supersede AS 60947.7.2—2004.

The objective of this Standard is to specify requirements for protective conductor terminal blocks with PE function up to 120 mm² (250 kcmil) and for protective conductor terminal blocks with PEN function equal to and above 10 mm² (AWG 8) with screw-type or screwless-type clamping units, primarily intended for industrial applications.

This Standard is identical with, and has been reproduced from, IEC 60947-7-2, Ed. 3.0 (2009), *Low-voltage switchgear and controlgear, Part 7.2: Ancillary equipment—Protective conductor terminal blocks for copper conductors*.

This Standard shall be read in conjunction with IEC 60947-1 and IEC 60947-7-1. The provisions of the general rules dealt with in IEC 60947-1 and the requirements for terminal blocks of IEC 60947-7-1 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 or IEC 60947-7-1, e.g. 1.2 of IEC 60947-1, Table 4 of IEC 60947-7-1 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:

<i>Reference to International Standard</i>		<i>Australian/New Zealand Standard</i>	
IEC		AS/NZS IEC	
60947	Low-voltage switchgear and controlgear	60947	Low-voltage switchgear and controlgear
60947-7-1	Ancillary equipment—Terminal blocks for copper conductors	60947.7.1	Ancillary equipment—Terminal blocks for copper conductors

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

The term ‘normative’ has been used in this Standard to define the application of the annex to which it applies. A ‘normative’ annex is an integral part of a Standard.

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NOTES

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AUSTRALIAN/NEW ZEALAND STANDARD

Low-voltage switchgear and controlgear

Part 7.2:

Ancillary equipment—Protective conductor terminal blocks for copper conductors

1 General**1.1 Scope**

This part of IEC 60947 specifies requirements for protective conductor terminal blocks with PE function up to 120 mm² (250 kcmil) and for protective conductor terminal blocks with PEN function equal to and above 10 mm² (AWG 8) with screw-type or screwless-type clamping units, primarily intended for industrial applications.

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

Protective conductor terminal blocks are used to form the electrical and mechanical connection between copper conductors and the fixing support.

It is applicable to protective conductor terminal blocks for the connection of round copper conductors with or without special preparation having a cross-section between 0,2 mm² and 120 mm² (AWG 24 and 250 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., most commonly in conjunction with terminal blocks according to IEC 60947-7-1.

This standard may be used as guide for

- protective conductor terminal blocks requiring the fixing of special devices to the conductors, for example quick connect terminations or wrapped connections, etc.;
- protective conductor terminal blocks providing direct contact to the conductors by means of edges or points penetrating the insulation, for example insulation displacement connections, 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 60439-1:1999, *Low-voltage switchgear and controlgear assemblies – Part 1: Type-tested and partially type-tested assemblies*
Amendment 1 (2004)

IEC 60715:1981, *Dimensions of low-voltage switchgear and controlgear – Standardized mounting on rails for mechanical support of electrical devices in switchgear and controlgear installations*
Amendment 1 (1995)

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