AS/NZS 3947.1:1998
IEC 60947-1:1996

Australian/New Zealand Standard®

Low-voltage switchgear and controlgear

Part 1: General rules

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee EL/6, Industrial Switchgear and Controlgear. It was approved on behalf of the Council of Standards Australia on 19 December 1997 and on behalf of the Council of Standards New Zealand on 20 January 1998. It was published on 5 April 1998.

The following interests are represented on Committee EL/6:

Australasian Railway Association
Australian Electrical and Electronic Manufacturers Association
Bureau of Steel Manufacturers of Australia
Electrical Contractors Association of New Zealand
Electricity Supply Association of Australia
Independent Electrical Switchboard Manufacturers Association
Institution of Engineers Australia
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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL/6, Industrial Switchgear and Controlgear, to supersede AS 3947.1—1993.

The Standard is identical with and reproduced from IEC 947-1:1996, *Low-voltage switchgear and controlgear*, Part 1: *General rules*.

The terms 'normative' and 'informative' have been used in this Standard to define the application of the annex 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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For the purpose of this Standard, the IEC text should be modified as follows:

(a) *Terminology* The words 'Australian/New Zealand Standard' should replace the words 'International Standard' wherever they appear.

(b) *Page numbers* Where any references to page numbers appear within the text, these relate to page numbering in the International Standard and are to be disregarded.

(c) *Decimal marker* A full point substitutes for a comma when referring to a decimal marker.

(d) *References* The references to International Standards should be replaced by the references to the following Australian or Australian/New Zealand Standards:

Reference to International Standard		*Australian or Australian/New Zealand Standard*	
IEC		AS	
50	International Electrotechnical Vocabulary (IEV)	1852	International Electrotechnical Vocabulary
50(151)	Chapter 151: Electrical and magnetic devices	1852.151	Part 151: Electric and magnetic devices
50(441)	Chapter 441: Switchgear, controlgear and fuses	1852.441	Part 441: Switchgear, controlgear and fuses
50(604)	Chapter 604: Generation, transmission and distribution of electricity—Operation	1852.604	Part 604: Generation, transmission and distribution of electricity—Operation
50(826)	Chapter 826: Electrical installations of buildings	1852.826	Part 826: Electrical installations of buildings
60	High-voltage test techniques	1931	High-voltage test techniques
68	Environmental testing	1099	Environmental testing
68-2-3	Part 2: Tests—Test Ca: Damp heat, steady state	1099.2.3	Part 2: Tests—Test Ca: Damp heat, steady state
71	Insulation co-ordination	1824	Insulation co-ordination
71-1	Part 1: Definitions, principles and rules	1824.1	Part 1: Definitions, principles and rules
73	Coding of indicating devices and actuators by colours and supplementary means	—	

IEC		AS	
85	Thermal evaluation and classification of electrical insulation	2768	Electrical insulating materials—Evaluation and classification based on thermal endurance
99	Surge arresters	—	
99-1	Part 1: Non-linear resistor type gapped surge arresters for a.c. systems		
		AS/NZS	
		4695	Fire hazard testing of electrotechnical products
112	Method for determining the comparative and the proof tracking indices of solid insulating materials under moist conditions	4695.112	Method for determining the comparative and the proof tracking indices of solid insulating materials under moist conditions
216	Guide for the determination of thermal endurance properties of electrical insulating materials	—	
		AS	
269	Low voltage fuses	2005	Low voltage fuses—Fuses with enclosed fuse-links
269-1	Part 1: General requirements	2005.10	Part 10: General requirements
269-2	Part 2: Supplementary requirements for fuses for use by authorized persons (fuses mainly for industrial application)	2005.20	Part 20: Supplementary requirements for fuses for use by authorized persons (fuses mainly for industrial application)—Common requirements
364	Electrical installations of buildings	3000	Electrical installations—Buildings, structures and premises (known as the SAA Wiring Rules)
364-4	Part 4: Protection for safety	—	
364-4-44	Chapter 44: Protection against overvoltages		
364-4-44-443	Section 443: Protection against overvoltages of atmospheric origin or due to switching		
417	Graphical symbols for use on equipment—Index, survey and compilation of the single sheets	1104	Informative symbols for use on electrical and electronic equipment
439	Low-voltage switchgear and controlgear assemblies	3439	Low-voltage switchgear and controlgear assemblies
439-1	Part 1: Type-tested and partially type-tested assemblies	3439.1	Part 1: Type-tested and partially type-tested assemblies
445	Identification of equipment terminals and of terminations of certain designated conductors, including general rules of an alphanumeric system	—	
447	Man-machine interface (MMI)—Actuating principles	—	
529	Degrees of protection provided by enclosures (IP code)	1939	Degrees of protection provided by enclosures for electrical equipment (IP Code)