

AS/NZS 2947.4:1999

IEC 60383-2:1993

Reconfirmed 2016

Australian/New Zealand Standard™

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**Insulators—Porcelain and glass for  
overhead power lines—Voltages  
greater than 1000 V a.c.**

**Part 4: Test methods—  
Insulator strings and insulator sets**

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[IEC title: Insulators for overhead lines with a nominal voltage above 1000 V, Part 2: Insulator strings and insulator sets for a.c. systems—Definitions, test methods and acceptance criteria]

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee EL/10, Overhead Lines. It was approved on behalf of the Council of Standards Australia on 11 December 1998 and on behalf of the Council of Standards New Zealand on 26 November 1998. It was published on 5 March 1999.

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The following interests are represented on Committee EL/10:

Australasian Railway Association  
Australian Chamber of Commerce and Industry  
Australian Electrical and Electronic Manufacturers Association  
Australian Porcelain Insulators Association  
Electricity Engineers Association of New Zealand  
Electricity Supply Association of Australia

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STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

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**RECONFIRMATION**

**OF**

**AS/NZS 2947.4:1999**

**Insulators—Porcelain and glass for overhead power lines—Voltages greater than  
1000 V a.c.**

**Part 4: Test methods—Insulator strings and insulator sets**

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Technical Committee EL-010 has reviewed the content of this publication and in accordance with Standards Australia procedures for reconfirmation, it has been determined that the publication is still valid and does not require change.

Certain documents referenced in the publication may have been amended since the original date of publication. Users are advised to ensure that they are using the latest versions of such documents as appropriate, unless advised otherwise in this Reconfirmation Notice.

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The following are represented on Technical Committee EL-010:

Australian Industry Group  
Electricity Engineers Association (New Zealand)  
Energy Networks Association

## NOTES

## Australian/New Zealand Standard™

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### **Insulators—Porcelain and glass for overhead power lines—Voltages greater than 1000 V a.c.**

#### **Part 4: Test methods— Insulator strings and insulator sets**

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## PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL/10, Overhead Lines, to supersede, in part, AS 2947.1—1989, *Insulators—Porcelain and glass for overhead power lines—Voltages greater than 1000 V a.c.*, Part 1: *Test Methods*.

This Standard is identical with and has been reproduced from IEC 60383-2:1993, *Insulators for overhead lines with a nominal voltage above 1000 V*, Part 2: *Insulator strings and insulator sets for a.c. systems—Definitions, test methods and acceptance criteria*.

In January 1997, IEC commenced numbering its Standards from 60000 by adding 60000 to the number of each existing Standard. This coordinates IEC numbering with ISO numbering. During the transition period an IEC Standard might be identified by its new number or its old number (e.g. IEC 60050 or IEC 50).

This Standard is Part 4 of a series covering porcelain and glass insulators for overhead power lines with voltages greater than 1000 V a.c. which, when complete, will be as follows:

- Part 1: Test methods—Insulator units
- Part 2: Characteristics
- Part 3: Couplings
- Part 4: Test methods—Insulator strings and insulator sets (this Standard)

The objective of this Standard is to provide users and manufacturers of porcelain and glass insulators for overhead lines with definitions of terms, requirements and acceptance criteria to facilitate the specifications of insulator strings and insulator sets.

For the purposes of this Standard the source text is modified as follows:

- (a) In the source text, ‘this part of IEC 383’ should read ‘this Australian/New Zealand Standard’.
- (b) A full point should substitute for a comma when referring to a decimal marker.

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

| <i>Reference to International Standard</i>                                                      | <i>Australian or Joint Australian/New Zealand Standard</i>                                   |
|-------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| IEC                                                                                             | AS                                                                                           |
| 60050(471) International Electrotechnical Vocabulary (IEV)<br>Chapter 471: Insulators           | 1852 International Electrotechnical Vocabulary<br>1852.471 Chapter 471: Insulators           |
| 60060 High-voltage test techniques                                                              | 1931 High voltage testing techniques                                                         |
| 60060-1 Part 1: General definitions and test requirements                                       | 1931.1 Part 1: General definitions, test requirements, test procedures and measuring devices |
| 60071 Insulation co-ordination                                                                  | 1824 Insulation co-ordination                                                                |
| 60071-1 Part 1: Terms, definitions, principles and rules                                        | 1824.1 Part 1: Definitions principles and rules                                              |
| 60071-2 Part 2: Application guide                                                               | 1824.2 Part 2: Application guide                                                             |
| 60071-3 Part 3: Phase-to-phase insulation co-ordination—Principles, rules and application guide | —                                                                                            |

| IEC     |                                                                                                                                            | AS     |                                                                                      |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------|--------|--------------------------------------------------------------------------------------|
| 60383   | Insulators for overhead lines with a nominal voltage above 1000 V                                                                          | 2947   | Insulators for overhead lines with a nominal voltage above 1000 V                    |
| 60383-1 | Part 1: Ceramic or glass insulator units for a.c. systems—Definitions, test methods and acceptance criteria                                | 2947.1 | Part 1: Test methods—Insulator units                                                 |
| 60437   | Radio interference test on high-voltage insulators                                                                                         | —      |                                                                                      |
| 60507   | Artificial pollution tests on high-voltage insulators to be used on a.c. systems                                                           | —      |                                                                                      |
| 61109   | Composite insulators for a.c. overhead lines with a nominal voltage greater than 1 000 V—Definitions, test methods and acceptance criteria | 4435   | Insulators—Composite for overhead lines—Voltages greater than 1000 V a.c.            |
|         |                                                                                                                                            | 4435.1 | Part 1: Definitions, test methods and acceptance criteria for string insulator units |

The term ‘informative’ has been used in this Standard to define the application of the annex to which it applies. An ‘informative’ annex is only for information and guidance.

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