AS 4398.2—2005

Australian Standard™

Insulators—Ceramic or glass—
Station post for indoor or outdoor use—
Voltages greater than 1000 V a.c.

Part 2: Tests
(IEC 60168, Ed. 4.2 (2001) MOD)

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Australasian Railway Association
Australian Chamber of Commerce and Industry
Australian Electrical and Electronic Manufacturers Association
Australian Porcelain Insulators Association
Electricity Engineers Association (New Zealand)
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PREFACE

This Standard was prepared by the Australian members of the Joint Standards Australia/ Standards New Zealand Committee EL-010, Overhead Lines, to supersede AS 4398.2—1996. After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to develop this Standard as an Australian, rather than Australian/New Zealand Standard.

The objective of this Standard is to provide users and manufacturers of station post insulators with definitions and terms, test methods and acceptance criteria to facilitate their specification.

This Standard is an adoption with national modifications and has been reproduced from IEC 60168, Ed. 4.2 (2001), *Tests on indoor and outdoor post insulators of ceramic material or glass for systems with nominal voltages greater than 1000 V*.

Variations to IEC 60168, Ed. 4.2 (2001) are indicated at the appropriate places throughout this standard. Strikethrough (~~example~~) identifies IEC text, tables and figures which, for the purposes of this Australian Standard, are deleted. Where text, tables or figures are added, each is set in its proper place and identified by shading (example). Added figures are not themselves shaded, but are identified by a shaded border.

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The term 'informative' is used to define the application of the annex to which it applies. An informative annex is only for information and guidance.

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Section 1 - General

1.1 Scope and object

This International Standard IEC 60168 is applicable to post insulators and post insulator units of ceramic material or glass, for indoor and outdoor use in electrical installations or equipment, operating on alternating current with a nominal voltage greater than 1 000 V and a frequency not greater than 100 Hz.

This standard may be regarded as a provisional standard for post insulators for use on d.c. systems. IEC 60438 gives general guidance for those insulators.

This standard does not apply to composite insulators, or to those indoor post insulators in organic material which are covered by another IEC standard [1]*.

The object of this standard is to define:

– the terms used;
– the electrical and mechanical characteristics of post insulators;
– the conditions under which the specified values of these characteristics are verified;
– the methods of test;
– the acceptance criteria.

Numerical values of characteristics of post insulators are specified in IEC 60273.

This standard does not include requirements dealing with the choice of post insulators for specific operating conditions.

AS 1137.3—1981 has been retained as an obsolescent Standard. It is not recommended for new equipment or to be used in current practice, but is retained to provide for servicing of existing equipment or requirements. In some conditions of high pollution, a purchaser may wish to specify tests in accordance with AS 1137.3—1981.

NOTE 1 A guide for the choice of insulators under polluted conditions is available, see [2].

NOTE 2 This standard does not include radio interference tests or artificial pollution tests. These subjects and relevant test methods are dealt with in other IEC publications, see [3], [4] and [5].

NOTE 3 When this standard is applied to hollow post insulators, other IEC publications should also be taken into account, see [6] and [7].

* The figures in square brackets refer to annex C (Bibliography).

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