

AS 2374.6—1994
IEC 551:1987
(Incorporating Amendment No. 1)

AS 2374.6

Australian Standard™

Power transformers

**Part 6: Determination of transformer
and reactor sound levels**

This Australian Standard was prepared by Committee EL/8, Power Transformers. It was approved on behalf of the Council of Standards Australia on 16 May 1994 and published on 11 July 1994.

The following interests are represented on Committee EL/8:

- Australian Chamber of Commerce and Industry
- Australian Electrical and Electronic Manufacturers Association
- Australian Institute of Petroleum
- Electricity Supply Association of Australia
- Electricity Supply Engineers Association of New South Wales
- Institution of Engineers, Australia
- Railways of Australia Committee
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PREFACE

This Standard was prepared by the Standards Australia Committee EL/8 on Power Transformers to supersede AS 2374.6—1982, *Power transformers*, Part 6: *Sound levels*.

This Standard incorporates Amendment No. 1 (June 2000). The changes required by the Amendment are indicated in the text by a marginal bar and amendment number against the clause, note, table, figure, or part thereof affected.

It is identical with and has been reproduced from IEC 551—1987, *Determination of transformer and reactor sound levels*, with the exception that Appendix AA has been added.

This Standard is Part 6 of a series, including:

AS

2374	Power transformers
2374.1	Part 1: General requirements
2374.2	Part 2: Temperature rise
2374.3	Part 3: Insulation levels and dielectric tests
2374.3.0	Part 3.0: General requirements
2374.3.1	Part 3.1: External clearances in air
2374.4	Part 4: Tappings and connections
2374.5	Part 5: Ability to withstand short-circuit

The principal difference between this Standard and the previous edition is that sound levels will now be expressed as sound power, not sound pressure. This is in line with current practice.

It is emphasized that care should be taken when comparing sound power levels determined from this Standard with sound pressure levels determined from the previous edition. The user is reminded that, for a given sound level, the numerical value of sound power will be significantly higher than the sound pressure reading, and that both quantities are represented in decibels (dB).

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

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

- (a) Its number does not appear on each page of text and its identity is shown only on the cover and title pages.
- (b) In the source text, ‘this International Standard’ should read ‘this Australian Standard’.
- (c) A full point substitutes for a comma when referring to a decimal marker.

References to international Standards should be replaced by equivalent Australian Standards, as follows:

<i>Reference to International Standards</i>		<i>Australian Standard</i>	
IEC		AS	
76	Power transformers	2374	Power transformers
76-1	Part 1: General	2374.1	Part 1: General requirements
289	Reactors	1028	Power reactors and earthing transformers
651	Sound level meters	1259	Acoustics—Sound level meters
		1259.1	Part 1: Non-integrating
726	Dry-type power transformers	2735	Dry-type power transformers
A1 1043	Electroacoustics—Instruments for the measurement of sound intensity—Measurements with pairs of pressure sensing microphones	A1 4241	Acoustics—Instruments for the measurement of sound intensity—Measurement with pairs of pressure sensing microphones
ISO		—	
3746	Acoustics—Determination of sound power levels of noise sources—Survey method		
A1 9614-1	Acoustics—Determination of sound power levels of noise sources using sound intensity—Part 1: Measurement at discrete points		
A1	Appendices A, B and C form an integral part of this standard.		

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