Australian/New Zealand Standard™

# Switches for household and similar fixed electrical installations

Part 2.1: Particular requirements— Electronic switches (IEC 60669-2-1, Ed.4.1 (2009) MOD)





#### AS/NZS 60669.2.1:2013

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee EL-004, Electrical Accessories. It was approved on behalf of the Council of Standards Australia on 19 February 2013 and on behalf of the Council of Standards New Zealand on 28 February 2013. This Standard was published on 18 March 2013.

The following are represented on Committee EL-004:

Australian Industry Group Consumer Electronics Suppliers Association Consumers Federation of Australia Electrical Compliance Testing Association Electrical Regulatory Authorities Council Engineers Australia International Accreditation New Zealand Ministry of Economic Development, New Zealand New Zealand Manufacturers and Exporters Association NSW Office of Fair Trading Office of the Technical Regulator, SA Plastics Industry Pipe Association of Australia

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This Standard was issued in draft form for comment as DR AS/NZS 60669.2.1.

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### PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-004, Electrical Accessories, and Sub-Committee EL-004-14, Switches and Thermostats. This Standard is a specific standard for electronic switches which were formerly covered under the general requirements of AS/NZS 3100, *Approval and test specification—General requirements for electrical equipment*.

The objective of this Standard is to provide Australian and New Zealand electrical industries with requirements for electronic switches, intended for household and similar fixed installations, either indoors and outdoors.

This Standard is an adoption with national modifications and has been reproduced from IEC 60669-2-1, Ed.4.1 (2009), *Switches for household and similar fixed electrical installations*—Part 2-1: *Particular requirements*—*Electronic switches* and has been varied as indicated to take account of Australian/New Zealand conditions. The modifications are specified in Appendix ZZ.

This Standard is to be used in conjunction with AS/NZS 60669.1:2013, *Switches for household and similar fixed-electrical installations*, Part 1: *General requirements*, which provides general requirements on this subject. Where the source document refers to 'part 1', AS/NZS 60669.1 should be consulted.

The source document, IEC 60669-2-1, comprises the fourth edition (2002) and its amendment 1 (2009) which has been incorporated into the text and the changes indicated by lines in the margin.

This Standard is structured in the following layout:

- (a) Preface.
- (b) IEC 60669-2-1 (unedited from the contents page to the final clause of the source document).
- (c) Appendix ZZ—Australian/New Zealand variations to the source document.

The variations listed in Appendix ZZ address issues including the following:

- (i) M rating test for all switches marked as suitable for controlling motors.
- (ii) Requirements for the fitting of field-installed insulation when required to comply with the requirements for IP protection, insulation resistance and high voltage.

As this Standard is reproduced from an International Standard, a full point substitutes for a comma when referring to a decimal marker. Test specifications are indicated with *italic type*.

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

Reference	to	International	Standard
110,010100	•••	1	S

Australian/New Zealand Standard

IEC	Audio, video and similar electronic apparatus—Safety requirements	AS/NZS	Audio, video and similar electronic
60065		60065	apparatus—Safety requirements
(2001)		(2012)	(IEC 60065, Ed.7.2 (2011) MOD)
60227 60227-5 (1997)	Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V Part 5: Flexible cables (cords)	60227 60227.5 (2003)	Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V Part 5: Flexible cables (cords)

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60998-2-1	purposes Part 2-1: Particular requirements for connecting devices as separate entities with screw-type clamping units
IDO	
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61000-2-2	Part 2-2: Environment—
(2002)	Compatibility levels for
(2002)	low-frequency conducted
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	low-voltage power supply systems
61000-3-2	Part 3-2: Limits—Limits for
(2000)	harmonic current emissions
	(equipment input current ≤16 A per phase)
61000-3-3	Part 3-3: Limits—Section 3:
(1994)	Limitation of voltage fluctuations
	and flicker in low-voltage supply
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61000-4-2	Part 4-7. Testing and measurement
61000-4-2 (1995)	Part 4-2: Testing and measurement techniques—Section 2: Electrostatic
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	techniques—Section 2: Electrostatic discharge immunity test
(1995)	techniques—Section 2: Electrostatic
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61000.3.2 (2007)	Part 3.2: Limits—Limits for harmonic current emissions (equipment input current ≤16 A per phase) (IEC 61000-3-2, Ed. 3.0 (2005) MOD)
61000.3.3 (2012)	Part 3.3: Limits—Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current $\leq 16$ A per phase and not subject to conditional connection
61000.4.2 (2002)	Part 4.2: Testing and measurement techniques—Electrostatic discharge immunity test
61000.4.3 (2006)	Part 4.3: Testing and measurement techniques—Radiated, radio- frequency, electromagnetic field immunity test
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61000.4.11 (2005)	Part 4.11: Testing and measurement techniques—Voltage dips, short interruptions and voltage variations immunity tests (IEC 61000-4-11, Ed.

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