AS/NZS 60669.1:2013

Australian/New Zealand Standard™

Switches for household and similar fixed electrical installations

Part 1: General requirements (IEC 60669-1, Ed.3.2 (2007) MOD)

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.
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Consumer Electronics Suppliers Association
Consumers Federation of Australia
Electrical Compliance Testing Association
Electrical Regulatory Authorities Council
Engineers Australia
International Accreditation New Zealand
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We also welcome suggestions for improvement in our Standards, and especially encourage readers to notify us immediately of any apparent inaccuracies or ambiguities. Please address your comments to the Chief Executive of either Standards Australia or Standards New Zealand at the address shown on the back cover.

This Standard was issued in draft form for comment as DR AS/NZS 60669.1.

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Part 1: General requirements (IEC 60669-1, Ed.3.2 (2007) MOD)

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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 will run in parallel with AS/NZS 3133, *Approval and test specification—Air-break switches*.

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

This Standard is an adoption with national modifications and has been reproduced from IEC 60669-1, Ed.3.2 (2007), *Switches for household and similar fixed-electrical installations*—Part 1*: General requirements* and has been varied as indicated to take account of Australian/New Zealand conditions. The modifications are specified in Appendix ZZ.

The source document, IEC 60669-1, comprises the third edition (1998) and its amendment 1 (1999) and amendment 2 (2006), which have 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 60669-1 (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.

(iii) Testing requirements for rotary switches.

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

(A) In the source text ‘this part of IEC 60669’ should read ‘this Australian/New Zealand Standard’.

(B) A full point substitutes for a comma when referring to a decimal marker.

(C) 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		*Australian/New Zealand Standard*	
IEC		AS/NZS	
60245	Rubber insulated cables—Rated voltages up to and including 450/750 V	60245	Rubber insulated cables—Rated voltages up to and including 450/750 V
60245-4	Part 4: Cords and flexible cables	60245.4	Part 4: Cords and flexible cables
		AS/NZS IEC	
60998	Connecting devices for low voltage circuits for household and similar purposes	60998	Connecting devices for low voltage circuits for household and similar purposes
60998-2-1	Part 2-1: Particular requirements for connecting devices as separate entities with screw-type clamping units	60998.2.1	Part 2.1: Particular requirements for connecting devices as separate entities with screw-type clamping units

ISO 2093	Electroplated coatings of tin—Specification and test methods	AS 4169	Electroplated coatings—Tin and tin alloys (ISO 2093:1986, MOD)

Only international references that have been adopted as Australian or Australian/New Zealand Standards have been listed.

The terms ‘normative’ and ‘informative’ are used to define the application of the annex or appendix to which they apply. A normative annex or appendix is an integral part of a standard, whereas an informative annex or appendix is only for information and guidance.

CONTENTS

1 Scope 7

2 Normative references 8
3 Definitions 9
4 General requirements 12
5 General notes on tests 12
6 Ratings 13
7 Classification 14
8 Marking 16
9 Checking of dimensions 20
10 Protection against electric shock 20
11 Provision for earthing 23
12 Terminals 23
13 Constructional requirements 35
14 Mechanism 41
15 Resistance to ageing, protection provided by enclosures of switches, and resistance to humidity 42
16 Insulation resistance and electric strength 45
17 Temperature rise 49
18 Making and breaking capacity 51
19 Normal operation 53
20 Mechanical strength 57
21 Resistance to heat 63
22 Screws, current carrying parts and connections 64
23 Creepage distances, clearances and distances through sealing compound 66
24 Resistance of insulating material to abnormal heat, to fire and to tracking 68
25 Resistance to rusting 70
26 EMC requirements 70

Annex A (normative) Survey of specimens needed for tests 92
Annex B (normative) Additional requirements for switches having facilities for the outlet and retention of flexible cables 93

Table 1 – Preferred combinations of numbers of poles and ratings 16
Table 2 – Relationship between rated currents and connectable cross-sectional areas of copper conductors 24
Table 3 – Tightening torque for the verification of the mechanical strength of screw-type terminals 25
Table 4 – Test values for flexion and pull out for copper conductors 26
Table 5 – Test values for pulling out test 27

Table 6 – Composition of conductors 27
Table 7 – Relationship between rated currents and connectable cross-sectional areas of copper conductors for screwless terminals 30
Table 8 – Test current for the verification of electrical and thermal stresses in normal use of screwless terminals 32
Table 9 – Cross-sectional areas of rigid copper conductors for deflection test of screwless terminals 34
Table 10 – Deflection test forces 34
Table 11 – Forces to be applied to covers, cover-plates or actuating members whose fixing is not dependent on screws 36
Table 12 – External cable diameter limits for surface type switches 39
Table 12a – Limits of external dimensions of flexible cables 94
Table 13 – Points of application of the test voltage for the verification of insulation resistance 46
Table 14 – Test voltage, points of application and minimum values of insulating resistance for the verification of dielectric strength 48
Table 15 – Temperature-rise test currents and cross-sectional areas of copper conductors 49
Table 16 – Fractions of total number of operations 52
Table 17 – Number of operations for normal operation test 53
Table 18 – Height of fall for impact test 59
Table 19 – Torque for the verification of the mechanical strength of glands 61
Table 20 – Creepage distances, clearances and distances through insulating sealing compound 67

Figure 1 – Pillar terminals 71
Figure 2 – Screw terminals and stud terminals 73
Figure 3 – Saddle terminals 74
Figure 4 – Lug terminals 75
Figure 5 – Mantle terminals 76
Figure 6 – Thread-forming screw 77
Figure 7 – Thread-cutting screw 77
Figure 8 – Classification according to connections 78
Figure 9 – Void 79
Figure 10 – Test apparatus for checking damage to conductors 80
Figure 11a – Principle of the test apparatus for deflecting test on screwless terminal 81
Figure 11b – Example of test arrangement to measure the voltage drop during deflecting test on screwless terminal 81
Figure 12 – Apparatus for making and breaking capacity and normal operation tests 82
Figure 13 – Circuit diagrams for making and breaking capacity and normal operation 83
Figure 14 – Circuit diagrams for testing switches for use on fluorescent lamp loads 83
Figure 15 – Impact test apparatus 84

Figure 16 – Pendulum impact test apparatus (striking element) 84
Figure 17 – Mounting support for sample 85
Figure 18 – Mounting block for flush-type switches 85
Figure 19 – Arrangement for test on cover-plates 86
Figure 20 – Gauge (thickness: about 2 mm) for the verification of the outline of covers, cover-plates or actuating members 86
Figure 21 – Example of application of the gauge of figure 20 on covers fixed without screws on a mounting surface or supporting surface 87
Figure 22 – Examples of applications of the gauge of figure 20 in according with the requirements of 20.7 88
Figure 23 – Gauge for verification of grooves, holes and reverse tapers 89
Figure 24 – Sketch showing the direction of application of the gauge of figure 23 89
Figure 25 – Ball-pressure apparatus 90
Figure 26 – Diagrammatic representation (24.1.1) 90
Figure 27 – Test wall in accordance with the requirements of 15.2.2 91

AUSTRALIAN/NEW ZEALAND STANDARD

Switches for household and similar fixed electrical installations

Part 1:
General requirements (IEC 60669-1, Ed.3.2 (2007) MOD)

1 Scope

This part of IEC 60669 applies to manually operated general purpose switches, for a.c. only with a rated voltage not exceeding 440 V and a rated current not exceeding 63 A, intended for household and similar fixed electrical installations, either indoors or outdoors.

For switches provided with screwless terminals the rated current is limited to 16 A.

Switches covered by this standard are intended for the control in normal use of:

– a circuit for a tungsten filament lamp load; or
– a circuit for a fluorescent lamp load (including electronic ballast); or
– a circuit for a substantially resistive load with a power factor not less than 0,95; or
– a monophase circuit for motor load with a rated current up to 10 A and a power factor not less than 0,6; or
– a combination of these.

NOTE 1 An extension of the scope to switches for rated voltages higher than 440 V is under consideration.

NOTE 2 An increase of the rated current of 10 A for motor load is under consideration.

NOTE 3 For the time being, switches with a rated current more than 10 A are considered as a 10 A current for motor load switch.

The standard also applies to boxes for switches, with the exception of mounting boxes for flush type switches.

NOTE 4 General requirements for boxes for flush-type switches are given in IEC 60670.

It also applies to switches such as:

– switches incorporating pilot lights;
– electromagnetic remote control switches (particular requirements are given in the relevant part 2);
– switches incorporating a time-delay device (particular requirements are given in the relevant part 2);
– combinations of switches and other functions (with the exception of switches combined with fuses);
– electronic switches (particular requirements are given in the relevant part 2);
– switches having facilities for the outlet and retention of flexible cables (see annex B);
– isolating switches (particular requirements are given in the relevant Part 2).

NOTE 5 The minimum length of the flexible cable used with these switches may be governed by National Wiring Rules.