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INTERNATIONAL STANDARD

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Switches for appliances –
Part 2-5: Particular requirements for change-over selectors

IEC 61058-2-5:2018-11 RLV(en)

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

SWITCHES FOR APPLIANCES –

Part 2-5: Particular requirements for change-over selectors

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International Standard IEC 61058-2-5 has been prepared by subcommittee 23J: Switches for appliances, of IEC technical committee 23: Electrical accessories.

This third edition cancels and replaces the second edition published in 2010 and constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

a) updated references due to new structure of IEC 61058-1;

b) changes on conducting the heating test due to the corresponding changes in IEC 61058-1.

The text of this International Standard is based on the following documents:

FDIS	Report on voting
23J/447/FDIS	23J/449/RVD

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

This standard is to be used in conjunction with IEC 61058-1:2016 and IEC 61058-1-1:2016.

This document supplements or modifies the corresponding clauses in IEC 61058-1, so as to convert that publication into the IEC standard: *Particular requirements for change-over selectors*.

When a particular subclause of IEC 61058-1 is not mentioned in this document, that subclause applies as far as reasonable. Where this document states "addition" or "replacement", the relevant text of IEC 61058-1 is to be adapted accordingly.

In this standard:

1) the following print types are used:
   - requirements proper: in roman type;
   - *test specifications: in italic type*;
   - notes/explanatory matter: in smaller roman type.
2) subclauses, figures and tables which are additional to those in IEC 61058-1 are numbered starting from 101.

A list of all the parts in the IEC 61058 series, published under the general title *Switches for appliances*, can be found on the IEC website.

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- withdrawn,
- replaced by a revised edition, or
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SWITCHES FOR APPLIANCES –

Part 2-5: Particular requirements for change-over selectors

1 Scope

Replacement:

~~1.1~~ This Part of IEC 61058 applies to change-over selectors (mechanical or electronic) for appliances actuated by hand, by foot or by other human activity, to operate or control electrical appliances and other equipment for household or similar purposes with a rated voltage not exceeding 480 V and a rated current not exceeding 63 A.

These change-over selectors are intended to be operated by a person, via an actuating member or by actuating a sensing unit. The actuating member or sensing unit can be integral with or arranged separately, either physically or electrically, from the switch, and ~~may~~ can involve transmission of a signal, for example electrical, optical, acoustic or thermal, between the actuating member or sensing unit and the switch.

Change-over selectors which incorporate additional control functions governed by the switch function are within the scope of this document.

This document also covers the indirect actuation of the switch when the operation of the actuating member or sensing unit is provided by a remote control or a part of an appliance or equipment such as a door.

NOTE 1 Electronic change-over selectors ~~may~~ can be combined with mechanical change-over selectors giving full disconnection or micro-disconnection.

NOTE 2 Electronic change-over selectors without a mechanical switch in the supply circuit provide only electronic disconnection. Therefore, the circuit on the load side is always considered to be live.

NOTE 3 For change-over selectors used in tropical climates, additional requirements ~~may be necessary~~ can apply.

NOTE 4 Attention is drawn to the fact that the standards for appliances ~~may~~ can contain additional or alternative requirements for change-over selectors.

NOTE 5 Throughout this document, the word "appliance" means "appliance or equipment".

~~1.2~~ This document applies to change-over selectors intended to be incorporated in, on, or with an appliance.

~~1.3~~ This document also applies to change-over selectors incorporating electronic devices.

2 Normative references

This clause of Part 1 is applicable except as follows.

Addition:

IEC 61058-1:2016, *Switches for appliances – Part 1: General requirements*

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3 Terms and definitions

This clause of Part 1 is applicable, except as follows.

3.3 Terms and definitions relating to the different types of switches

Additional term and definition:

3.3.101
change-over selector
device designed to carry, but not to make or break, current, used for changing the connections of one or more electric circuits

4 General requirements

This clause of Part 1 is applicable.

5 General ~~notes~~ information on tests

This clause of Part 1 is applicable, except as follows:

~~5.5.1 to 5.5.3~~ Subclauses 5.2.2 and 5.2.9 of IEC 61058-1:2016 are not applicable.

Addition at the end of 5.4:

~~**5.5.101**~~ For the tests ~~of~~ referred to in Clauses 13 to 18, three specimens ~~Nos. 3 to 5~~ are used.

6 Rating

This clause of Part 1 is applicable.

7 Classification

This clause of Part 1 is applicable, except as follows.

~~7.1.2~~ Subclause 7.2 of IEC 61058-1:2016 is not applicable.

Additional subclause:

7.4 According to number of operating cycles

7~~.1~~.4.101 50 operating cycles.

Additional subclauses:

7.101 According to type of actuation of the switch

~~**7.1.7.101**~~ **7.101.1** – locked change-over selector;

~~**7.1.7.102**~~ **7.101.2** – unlocked change-over selector;

~~**7.1.7.103**~~ **7.101.3** – change-over selector actuated with a tool.

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NOTE ~~101~~ Complex actuation of the actuating member (e.g. by the subsequent actuation in at least two different directions to complete the operation of the switch) is regarded as being a locking means.

8 Marking and documentation

This clause of Part 1 is applicable, except as follows.

~~In Table 3, items Nos. 4.5 to 4.7 and 4.16 to 4.17 are not applicable.~~

Addition:

8.1.3 By documentation

Table ~~101~~ 3 – ~~Change-over selector information~~ Switch information and loads placed in groups

No	Characteristic ~~of change-over selector~~	Subclause	Means of information	
			Common type reference CT	Unique type reference UT
101	**TYPE OF CHANGE-OVER SELECTOR**			
101.1	Symbol for change-over selector		Marking	Documentation

~~8.3~~ 8.2 Symbols

Addition:

Symbol for change-over selector, given as a box around the symbol for the number of operating cycles 1E3

Additional subclause:

8.2.101 The different positions of the actuating member shall be clearly marked.

Compliance is checked by inspection.

9 Protection against electric shock

This clause of Part 1 is applicable.

10 Provision for earthing

This clause of Part 1 is applicable.

11 Terminals and terminations

This clause of Part 1 is applicable.

12 Construction

This clause of Part 1 is applicable, except as follows.

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12.2 Constructional requirements relating to safety during mounting and normal operation of the switch

12.2.1 *Addition ~~at the end of Subclause 12.2.1~~:*

The locking means for the actuating member shall be fixed in such a way that it cannot be displaced or removed, except by use of a tool.

Additional subclause:

12.2.101 A change-over selector shall be capable of carrying specified rated currents, and shall also be capable of carrying ~~for a specified time~~ currents under specified abnormal circuit conditions, such as those of short circuit, for a specified amount of time.

13 Mechanism

This clause of Part 1 is applicable, except as follows.

Subclause 13.1 is not applicable to change-over selectors classified according to ~~7.1.7.101 and 7.1.7.103~~ 7.101.1 and 7.101.3.

14 Protection against ingress of solid foreign objects, ingress of water and humid conditions

This clause of Part 1 is applicable.

15 Insulation resistance and dielectric strength

This clause of Part 1 is applicable.

16 Heating

This clause of Part 1 is applicable, except as follows.

~~For the test of Subclause 16.2.2 item j), the specimens are not subjected to the 20 operating cycles.~~

16.4 Heating test

Item i) does not apply.

17 Endurance

This clause of Part 1 is ~~applicable except as follows~~ replaced by the following:

~~17.2.1 and 17.2.3.4.1 to 17.2.4.9 are not applicable.~~

~~*Addition:*~~

17.101 Mechanical endurance tests

Change-over selectors classified according to ~~7.1.4.1 to 7.1.4.6 are~~ 7.4.1 to 7.4.6 of IEC 61058-1:2016 shall be submitted to a mechanical endurance test. The thermal and

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