

INTERNATIONAL STANDARD

IEC 61058-2-4

Edition 1.1
2003-03

Edition 1:1995 consolidated with amendment 1:2003

Switches for appliances –

Part 2-4: Particular requirements for independently mounted switches

*This **English-language** version is derived from the original **bilingual** publication by leaving out all French-language pages. Missing page numbers correspond to the French-language pages.*



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Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

SWITCHES FOR APPLIANCES –

**Part 2-4: Particular requirements for
independently mounted switches**

FOREWORD

- 1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, the IEC publishes International Standards. Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. The IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of the IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested National Committees.
- 3) The documents produced have the form of recommendations for international use and are published in the form of standards, technical specifications, technical reports or guides and they are accepted by the National Committees in that sense.
- 4) In order to promote international unification, IEC National Committees undertake to apply IEC International Standards transparently to the maximum extent possible in their national and regional standards. Any divergence between the IEC Standard and the corresponding national or regional standard shall be clearly indicated in the latter.
- 5) The IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with one of its standards.
- 6) Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. The IEC shall not be held responsible for identifying any or all such patent rights.

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

This standard shall be used in conjunction with IEC 61058-1, *Switches for appliances – Part 1: General requirements* (third edition, 2000). It lists the changes necessary to convert that standard into the IEC standard: Particular requirements for independently mounted switches.

This part constitutes the first edition of IEC 61058-2-4.

This consolidated version of IEC 61058-2-4 consists of the first edition (1995) [documents 23J/132/FDIS and 23J/143/RVD] and its amendment 1 (2003) [documents 23J/253/FDIS and 23J/255/RVD].

The technical content is therefore identical to the base edition and its amendment and has been prepared for user convenience.

It bears the edition number 1.1.

A vertical line in the margin shows where the base publication has been modified by amendment 1.

The annex R forms an integral part of this standard.

The annexes S and T are for information only.

The committee has decided that the contents of the base publication and its amendment 1 will remain unchanged until 2007. At this date, the publication will be

- reconfirmed;
- withdrawn;
- replaced by a revised edition, or
- amended.

In this part:

- a) The following print types are used:
 - requirements proper: in roman type;
 - *test specifications: in italic type;*
 - explanatory matter: in smaller roman type.
- b) Subclauses, figures or tables which are additional to those in part 1 are numbered starting from 101.

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SWITCHES FOR APPLIANCES –

Part 2-4: Particular requirements for independently mounted switches

1 Scope

This clause of part 1 is applicable except as follows:

1.1 *Replacement:*

This International Standard applies to independently mounted switches for appliances (mechanical or electronic) 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 switches 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 involve transmission of a signal, for example electrical, optical, acoustic or thermal, between the actuating member or sensing unit and the switch.

Switches which incorporate additional control functions governed by the switch function are within the scope of this standard.

This standard 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 switches may be combined with mechanical switches giving full disconnection or micro-disconnection.

NOTE 2 Electronic switches 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 switches used in tropical climates, additional requirements may be necessary.

NOTE 4 Attention is drawn to the fact that the standards for appliances may contain additional or alternative requirements for switches.

NOTE 5 Throughout this standard, the word “appliance” means “appliance or equipment”.

1.2 This subclause of Part 1 is not applicable

1.3 This subclause of Part 1 is applicable.

1.4 This subclause of Part 1 is not applicable.

2 Normative references

This clause of part 1 is applicable except as follows:

Addition:

IEC 60227-3:1997, *Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V – Part 3: Non-sheathed cables for fixed wiring*

3 Definitions

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

Additional definitions:

3.3.101

independently mounted switch

switch intended to be mounted away from the controlled appliance or equipment and intended to be connected to the fixed wiring on the supply side

3.3.102

design A switch

switch where the cover or coverplate can be removed without displacement of the conductor(s)

NOTE Displacement means movement of the conductor, see IEC 60669-1, subclause 7.1.7.

3.3.103

design B switch

switch where the cover or coverplate cannot be removed without displacement of the conductors

NOTE Displacement means movement of the conductor, see IEC 60669-1, subclause 7.1.7.

4 General requirement

This clause of part 1 is applicable.

5 General notes on tests

This clause of part 1 is applicable.

6 Rating

This clause of part 1 is applicable.

7 Classification

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

Replacement:

7.1.5 According to the degree of protection provided by the switch, when mounted as declared:

7.1.5.1.1, 7.1.5.1.2 and 7.1.9.1 are not applicable.

7.1.15.2 This subclause of Part 1 is not applicable.

Additional subclauses:

7.1.101 According to design:

7.1.101.1 – design A switch;

7.1.101.2 – design B switch.

NOTE 1 See definitions 3.3.102 and 3.3.103.

NOTE 2 If a switch has a base which cannot be separated from the cover or cover plate, and requires an intermediate plate which can be removed for redecorating the wall, it is considered to be of design A, provided the intermediate plate meets the requirements specified for covers and cover plates.

7.1.102 According to outlet facilities:

7.1.102.1 – switch with inlet/outlet facilities for rigid cables;

7.1.102.2 – switch with inlet facilities for rigid cables and outlet facilities for flexible cables.