

Switches for appliances —

Part 2-4: Particular requirements for independently mounted switches

The European Standard EN 61058-2-4:2005 has the status of a
British Standard

ICS 29.120.40

National foreword

This British Standard is the official English language version of EN 61058-2-4:2005. It is identical with IEC 61058-2-4:2005.

The UK participation in its preparation was entrusted to Technical Committee EPL/23, Switches for appliances and electronic equipment, which has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible international/European committee any enquiries on the interpretation, or proposals for change, and keep UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

A list of organizations represented on this committee can be obtained on request to its secretary.

Cross-references

The British Standards which implement international or European publications referred to in this document may be found in the *BSI Catalogue* under the section entitled “International Standards Correspondence Index”, or by using the “Search” facility of the *BSI Electronic Catalogue* or of British Standards Online.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, the EN title page, pages 2 to 23 and a back cover.

The BSI copyright notice displayed in this document indicates when the document was last issued.

Amendments issued since publication

Amd. No.	Date	Comments

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 30 December 2005

© BSI 30 December 2005

EUROPEAN STANDARD

EN 61058-2-4

NORME EUROPÉENNE

EUROPÄISCHE NORM

August 2005

ICS 29.120.40

English version

Switches for appliances
Part 2-4: Particular requirements for independently mounted switches
(IEC 61058-2-4:1995 + A1:2003)

Interrupteurs pour appareils
Partie 2-4: Règles particulières pour
les interrupteurs à montage indépendant
(CEI 61058-2-4:1995 + A1:2003)

Geräteschalter
Teil 2-4: Besondere Anforderungen
an unabhängig montierte Schalter
(IEC 61058-2-4:1995 + A1:2003)

This European Standard was approved by CENELEC on 2005-06-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

© 2005 CENELEC - All rights of exploitation in any form and by any means reserved worldwide for CENELEC members.

Ref. No. EN 61058-2-4:2005 E

AVA Documents
Document Sharing Hub

Foreword

The text of the International Standard IEC 61058-2-4:1995, prepared by SC 23J, Switches for appliances, of IEC TC 23, Electrical accessories, was submitted to the Unique Acceptance Procedure and was approved by CENELEC as EN 61058-2-4 on 2005-06-01 without any modification.

The following dates were fixed:

- latest date by which the EN has to be implemented
at national level by publication of an identical
national standard or by endorsement (dop) 2006-06-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2008-06-01

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61058-2-4:1995 was approved by CENELEC as a European Standard without any modification.

CONTENTS

1	Scope	5
2	Normative references	6
3	Definitions	6
4	General requirement.....	6
5	General notes on tests.....	6
6	Rating	6
7	Classification.....	7
8	Marking and documentation	8
9	Protection against electric shock.....	8
10	Provision for earthing.....	9
11	Terminals and terminations.....	9
12	Construction.....	10
13	Mechanism.....	17
14	Protection against solid foreign objects, ingress of dust, water, and humid conditions.....	17
15	Insulation resistance and dielectric strength	18
16	Heating	18
17	Endurance.....	18
18	Mechanical strength	18
19	Screws, current-carrying parts and connections.....	18
20	Clearances, creepage distances, solid insulation and coatings of rigid printed board assemblies	19
21	Resistance to heat and fire	19
22	Resistance to rusting	19
23	Abnormal operation and fault conditions for electronic switches	19
24	Components	19
25	EMC requirements.....	19
Annex R (normative) Routine tests		22
Annex S (informative) Sampling tests		22
Annex T (informative) Switch families.....		22
Annex ZA (normative) Normative references to international publications with their corresponding European publications.....		23

Figure 101 – Example of pull apparatus for testing the cord anchorage	20
Figure 102 – Example of torque apparatus for testing the cord anchorage	20
Figure 103 – Example of apparatus for flexing test	21
Table 3 – Switch information	8
Table 101 – Switch information	8
Table 102 – Rated currents for resistor loads and related type of cables	14
Table 103 – Torque values for torque test	15
Table 104 – Torque values for screws of insulating material	19

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.