

Connecting devices for low-voltage circuits for household and similar purposes —

Part 2-2: Particular requirements for connecting devices as separate entities with screwless-type clamping units

The European Standard EN 60998-2-2:2004 has the status of a
British Standard

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National foreword

This British Standard is the official English language version of EN 60998-2-2:2004. It was derived by CENELEC from IEC 60998-2-2:2002. It supersedes BS EN 60998-2-2:1994 which will be withdrawn on 1 April 2006.

The CENELEC common modifications have been implemented at the appropriate places in the text and are indicated by tags [C] <C>.

The UK participation in its preparation was entrusted by Technical Committee PEL/23, Electrical accessories, to Subcommittee PEL/23/2, Connecting devices, 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 the UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

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

Cross-references

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Summary of pages

This document comprises a front cover, an inside front cover, the EN title page, pages 2 to 21 and a back cover.

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English version

**Connecting devices for low-voltage circuits
for household and similar purposes
Part 2-2: Particular requirements for connecting devices
as separate entities with screwless-type clamping units
(IEC 60998-2-2:2002, modified)**

Dispositifs de connexion
pour circuits basse tension
pour usage domestique et analogue
Partie 2-2: Règles particulières
pour dispositifs de connexion
en tant que parties séparées
avec organes de serrage sans vis
(CEI 60998-2-2:2002, modifiée)

Verbindungsmaterial
für Niederspannungs-Stromkreise
für Haushalt und ähnliche Zwecke
Teil 2-2: Besondere Anforderungen
für Verbindungsmaterial
als selbständige Betriebsmittel
mit schraubenlosen Klemmstellen
(IEC 60998-2-2:2002, modifiziert)

This European Standard was approved by CENELEC on 2004-03-01. 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

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Foreword

The text of the International Standard IEC 60998-2-2:2002, prepared by SC 23F, Connecting devices, of IEC TC 23, Electrical accessories, together with common modifications prepared by the CENELEC Reporting Secretariat SR 23F, was submitted to the formal vote and was approved by CENELEC as EN 60998-2-2 on 2004-03-01.

This European Standard supersedes EN 60998-2-2:1993.

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) 2005-03-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2007-03-01

This Part 2-2 is intended to be used in conjunction with EN 60998-1:2004.

It supplements or modifies the corresponding clauses in EN 60998-1, so as to convert it into the European Standard: Particular requirements for connecting devices as separate entities with screwless-type clamping units.

Where a particular subclause of Part 1 is not mentioned in this Part 2-2, that subclause applies as far as is reasonable. Where this standard states “addition”, “modification” or “replacement”, the relevant text in Part 1 should be adapted accordingly.

In this standard,

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 and figures which are additional to those in Part 1 are numbered starting from 101; additional annexes are lettered AA, BB, etc.

Endorsement notice

The text of the International Standard IEC 60998-2-2:2002 was approved by CENELEC as a European Standard with agreed common modifications.

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CONNECTING DEVICES FOR LOW-VOLTAGE CIRCUITS FOR HOUSEHOLD AND SIMILAR PURPOSES –

Part 2-2: Particular requirements for connecting devices as separate entities with screwless-type clamping units

1 Scope

This clause of Part 1 is applicable.

Addition:

This standard applies to connecting devices with screwless-type clamping units primarily suitable for connecting unprepared conductors.

In this standard, screwless-type terminals are referred to as terminals.

NOTE This standard does not include insulation piercing connecting devices (IEC 60998-2-3), twist-on connecting devices (IEC 60998-2-4) and flat, quick-connect terminations (IEC 60998-2-5).

2 Normative references

This clause of Part 1 is applicable.

3 Definitions

This clause of Part 1 is applicable except as follows:

Addition:

3.101

screwless-type terminal

terminal for the connection and subsequent disconnection of two or more conductors, the connection being made directly or indirectly by means of springs, wedges, or the like

NOTE Examples of screwless-type terminals are given in Figure 102.

3.101.1

universal terminal

terminal for the connection and disconnection of all types of conductors (rigid and flexible)

3.101.2

non-universal terminal

terminal for the connection and disconnection of a certain kind of conductor only (for example, solid conductors only or rigid [solid and stranded] conductors only)

3.101.3

push-wire terminal

non-universal terminal in which the connection is made by pushing in rigid (solid or stranded) conductors

4 General

This clause of Part 1 is applicable.

5 General notes on tests

This clause of Part 1 is applicable except as follows:

5.3 *Replacement:*

The tests are carried out in the sequence listed for each set in Annex AA.

5.4 *Replacement of the first sentence by the following:*

The necessary number of new samples to be submitted to the tests are divided into sets as detailed in Annex AA and this standard is met if all tests are satisfied.

6 Main characteristics

This clause of Part 1 is applicable.

7 Classification

This clause of Part 1 is applicable except as follows:

Addition:

7.101 Classification according to the types of conductors which the terminal can accept

7.101.1 Universal terminal

7.101.2 Non-universal terminal

- terminals for solid conductors ;
- terminals for rigid conductors;
- terminals for flexible conductors.

8 Marking

This clause of Part 1 is applicable except as follows:

8.101 *Addition:*

Non-universal terminals classified according to 7.101.2 shall be marked as follows:

- with the letter(s) “s” or “sol” for terminals declared for solid conductors;
- with the letter “r” for terminals declared for rigid conductors;
- with the letter “f” for terminals declared for flexible conductors.

This marking shall appear where it is practical on the end product or on the smallest package unit or in technical information and/or catalogues.

8.102 *Addition:*

An appropriate marking indicating the length of insulation to be removed before insertion of the conductor into the terminal shall be shown on the product or on the smallest package unit or in technical information and/or catalogues.

9 Protection against electric shock

This clause of Part 1 is applicable.

10 Connection of conductors

This clause of Part 1 is applicable except as follows:

Addition:

10.101 The connection or disconnection of conductors shall be made

- either by the use of a general purpose tool or a convenient device integral with the terminal to open it and to assist the insertion or the withdrawal of the conductors (for example, for universal terminals);
- or by simple insertion. For the disconnection of the conductors an operation other than a pull on the conductor only shall be necessary (for example, for push-wire terminals).

10.102 Terminals shall accept two or more conductors of the same or of different nominal cross-sectional areas or compositions if applicable.

Universal terminals shall accept rigid (solid or stranded) and flexible unprepared conductors.

Non-universal terminals shall accept the types of conductors declared by the manufacturer.

The relationship between the rated connecting capacity of clamping units and connectable conductors as well as data on diameters of conductors are given in Table 101.