SLOVENSKI STANDARD
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Appliance couplers for household and similar general purposes

Appliance couplers for household and similar general purposes

Gerätesteckvorrichtungen für den Hausgebrauch und ähnliche allgemeine Zwecke

Connecteurs pour usages domestiques et usages généraux analogues

Ta slovenski standard je istoveten z: **EN 60320-1:1987/A11:1994**

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English Version

APPLIANCE COUPLERS FOR HOUSEHOLD AND SIMILAR GENERAL PURPOSES

(IEC 320 (1981) 2nd edition including Amendment No. 1 (1984) and Amendment No. 2 (1985), modified)

Connecteurs pour usages domestiques et usages généraux analogues
(CEI 320 (1981 2ème édition avec les modifications N°1 (1984) et N°2 (1985), modifiée)

Gerätesteckvorrichtungen für den Hausgebrauch und ähnliche Zwecke
(IEC 320 (1981) 2. Ausgabe, einschließlich Änderung Nr. 1 (1984) und Änderung Nr. 2 (1985), modifiziert)

This European Standard was ratified by CENELEC on 10th September 1986. CENELEC members are bound to comply with the requirements of the 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 CENELEC General 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 CENELEC General Secretariat has the same status as the official versions.

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C E N E L E C
European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

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BRIEF HISTORY

The CENELEC Questionnaire Procedure performed for finding out whether or not IEC 320 (second edition, 1981) including Amendment No. 1 (1984) and Amendment No. 2 (1985) could be accepted without textual changes, has shown that a number of CENELEC common modifications became necessary for the acceptance of IEC 320 including Amendment No. 1 and Amendment No. 2 as a European Standard (EN). These modifications prepared in two meetings of a Preparatory Working Group which was set up by the Technical Board, were submitted to the CENELEC members for vote and acceptance by CENELEC.

TECHNICAL TEXT

The text of the International Standard IEC 320 (second edition, 1981) including Amendment No. 1 (1984) and Amendment No. 2 (1985) was approved by CENELEC on 10th September 1986 as a European Standard with agreed common modifications and is to be issued as EN 60 320 Part 1. For the sake of clarity these CENELEC common modifications have been incorporated at the appropriate places in the text of IEC 320 (1981) including Amendment No. 1 (1984) and Amendment No. 2 (1985); they are marked by a vertical line at the left-hand margin. The relevant parts of the original IEC text have been quoted as 'INFORMATION' directly after the text of the common modifications.

The following dates were fixed:

doa : 1987-09-01
dop : 1988-01-01
dow : 1988-09-15

Appendices designated 'normative' are part of the body of the standard. Appendices designated as 'informative' are given only for information.

CONTENTS

INFORMATION as to original IEC text
The Foreword of IEC Publication 320 (1981) is not part of this European Standard:
Appendix A (normative), Appendix B (normative), Appendix C (informative) and Appendix D (informative) are not included in IEC 320 (1981)

APPLIANCE COUPLERS FOR HOUSEHOLD AND SIMILAR GENERAL PURPOSES

INFORMATION as to original IEC text
The Foreword of IEC Publication 320 (1981) is not part of the European Standard. It reads:

1) The formal decisions or agreements of the IEC on Technical Committees on which all the National Committees having a special interest therein are represented, express, as nearly as possible, an international consensus of opinion on the subjects dealt with.

2) They have the form of recommendations for international use and they are accepted by the National Committees in that sense.

3) In order to promote international unification, the IEC expresses the wish that all National Committees should adopt the text of the IEC recommendation for their national rules in so far as national conditions will permit. Any divergence between the IEC recommendation and the corresponding national rules should, as far as possible, be clearly indicated in the latter.

4) The IEC has not laid down any procedure concerning marking as an indication of approval and has no responsibility when an item of equipment is declared to comply with one of its recommendations.

PREFACES OF IEC PUBLICATION 320 (1981), AMENDMENT No. 1 (1984) AND AMENDMENT No. 2 (1985)

IEC Publication 320 (1981)

This standard has been prepared by Sub-Committee 23G: Appliance Couplers, of IEC Technical Committee No. 23: Electrical Accessories.

The present second edition supersedes the first edition published in 1970.

Like the first edition, this second edition has been derived from CEE (International Commission for Conformity Certification of Electrical Equipment) Publication 22: Specification for Appliance Couplers for Domestic and Similar General Purposes, draft second edition.

A first draft was discussed at the meeting held in Milan in 1974, as a result of which a revised draft was prepared, and discussed at the meeting held in The Hague in 1975. As a result of this meeting, a draft, Document 23G(Central Office)3, was submitted to the National Committees for approval under the Six Months' Rule in December 1976.

Amendments, Documents 23G(Central Office)9, 11, 18 and 22, were submitted to the National Committees for approval under the Two Months' Procedure in September 1978, October 1978, September 1979 and April 1980.

A first draft for a revision of Clause 11, based upon the work of Sub-Committee 23F, was discussed at the meeting held in Oslo in 1977. As a result of this meeting, a draft, Document 23G(Central Office)8, was submitted to the National Committees for approval under the Six Months' Rule in March 1978.

Amendments, Document 23G(Central Office)13, were submitted to the National Committees for approval under the Two Months' Procedure in January 1979.

A draft concerning the 2.5 A 250 V appliance coupler for Class II equipment was discussed at the meeting held in The Hague in 1975. As a result of this meeting, a draft, Document 23G(Central Office)4, was submitted to the National Committees for approval under the Six Months' Rule in January 1977.

Amendments, Document 23G(Central Office)10, were submitted to the National Committees for approval under the Two Months' Procedure in September 1978. (Document 23G(Central Office)22 mentioned above also contained amendments to Document 23G(Central Office)4.)

A draft concerning gauges for appliance couplers was discussed at the meeting held in Sofia in 1980. As a result of this meeting, a draft, Document 23G(Central Office)21 was submitted to the National Committees for approval under the Six Months' Rule in May 1980.

The National Committees of the following countries voted explicitly in favour of these documents:

Countries \ Documents	23G(CO)3	23G(CO)9	23G(CO)11	23G(CO)18	23G(CO)22	23G(CO)4	23G(CO)10	23G(CO)8	23G(CO)13	23G(CO)21
Australia	+	+	+	+	+	+	+	+	+	+
Austria	+	+	+	+	+	+	+		+	+
Belgium		+	+	+	+	+	+			+
Brazil	+					+				
Bulgaria	+			+				+		
Canada	+	+	+	+	+	+	+	+		+
Denmark	+	+	+				+	+	+	+
Egypt	+			+	+	+		+	+	
Finland		+	+	+	+		+	+	+	
Germany				+	+			+	+	+
Hungary	+	+	+		+	+	+		+	+
Israel	+		+			+				+
Italy	+	+	+	+	+		+	+	+	+
Japan	+	+	+	+		+	+	+	+	+
Netherlands		+ [1]	+ [1]	[1]	+	+	+	+		+
New Zealand					+					
Norway	+	+	+	+	+	+	+	+	+	
Poland		+	+	+	+	+	+	+	+	+
Romania		+	+		+		+			+
South Africa (Republic of)		+	+	+	+	+	+	+	+	+
Sweden	+	+	+	+	+	+	+		[3]	+
Switzerland		+	[2]	+	+	+	+	+	+	+
Turkey	+	+	+	+	+	+	+	+	+	+
United Kingdom		+		+	+	+	+		+	+
Yugoslavia				+	+					+

[1] The National Committee of the Netherlands reaffirms its negative vote on Document 23G(Central Office)3.
[2] The National Committee of Switzerland reaffirms its negative vote on Document 23G(Central Office)3.
[3] The National Committee of Sweden reaffirms its negative vote on Document 23G(Central Office)8.

Amendment No. 1 (1984)
The amendments contained in this document have been approved under the Six Months' Rule.
The draft amendments were discussed by Sub-Committee 23G of Technical Committee No. 23, and were circulated for approval under the Six Months' Rule as documents 23G(Central Office)26 in May 1982, 23G(Central Office)29 in June 1982, 23G(Central Office)36 in July 1983, 23G(Central Office)38 in August 1983, 23G(Central Office)41 in October 1983 and 23G(Central Office)42 in March 1984.

Amendment No. 2 (1985)
The amendments contained in this document have been approved under the Six Months' Rule.
The draft amendments were discussed by Sub-Committee 23G of Technical Committee No. 23, and were circulated for approval under the Six Months' Rule as Document 23G(Central Office)43 in April 1984.
Further details can be found in the following Report on Voting: Document 23G(Central Office)49.

In this standard, the following print types are used:

— Requirements proper: in roman type.
— *Test specifications: in italic type.*
— Explanatory matter: in smaller roman type.

Note.- Other international publications quoted in this Standard are given in Appendix A (normative). Where those publications have been implemented as Harmonization Documents (HD) reference to the relevant HDs has been included.

INFORMATION as to original IEC text
It reads: Other IEC publications quoted in this Standard.
(The list given under this IEC heading does not include the following publications:

IEC 112, IEC 695-2-1, IEC 730-1, IEC 799)

APPLIANCE COUPLERS FOR HOUSEHOLD AND SIMILAR GENERAL PURPOSES

1. Scope

This standard is applicable to two-pole appliance couplers for a.c. only, with and without earthing contact, with a rated voltage not exceeding 250 V and a rated current not exceeding 16 A, for household and similar general purposes and intended for the connection of a supply flexible cable or cord to electric appliances or other electric equipment for 50 Hz or 60 Hz supply.

Appliance inlets integrated in or incorporated in appliances or other equipment are within the scope of this standard. The dimensional and general requirements of this standard apply to such inlets, but certain tests may not be relevant.

The requirements for connectors are based on the assumption that the temperature of the pins of the corresponding appliance inlets does not exceed:

65 °C for connectors for cold conditions;
120 °C for connectors for hot conditions;
155 °C for connectors for very hot conditions.

Appliance couplers complying with this standard are suitable for use at ambient temperatures not normally exceeding 25 °C, but occasionally reaching 35 °C.

Appliance couplers complying with the standard sheets in this standard are intended for the connection of equipment having no special protection against moisture.

If appliance couplers are used with equipment which may be subject to spillage of liquid in normal use then protection against moisture shall be provided by the equipment.

INFORMATION as to the original IEC text
It reads:
For the connection of other equipment which is subject to spillage of liquid in normal use. Additional requirements are necessary.

Special constructions may be required:

— in locations where special conditions prevail, for example, as in ships, vehicles and the like;
— in hazardous locations, for example, where explosions are liable to occur.

2. Definitions

2.1 Where the terms voltage and current are used, they imply the r.m.s. values, unless otherwise specified.

2.2 The following definitions apply for the purpose of this standard:

- An appliance coupler is a means enabling the connection and disconnection at will, of a flexible cable or cord to an appliance or other equipment. It consists of two parts:
  - a *connector*, which is the part integral with, or intended to be attached to, the flexible cable or cord connected to the supply;
- An appliance inlet, which is the part integrated in or incorporated in the appliance or equipment, or intended to be fixed to it.

  An appliance inlet integrated in an appliance or equipment is an appliance inlet (the shroud and base of) which is formed by the housing of the appliance or equipment.

  An appliance inlet incorporated in an appliance or an equipment is a separate appliance inlet built in or fixed to an appliance or equipment.
- A rewirable connector is an accessory so constructed that the flexible cable or cord can be replaced.

— A *non-rewirable* connector or a non-rewirable plug is an accessory so constructed that it forms a constructional unit with the flexible cable or cord which is assembled by the manufacturer of the accessory. This unit shall be such that:

— the flexible cable or cord cannot be separated from the accessory without making this permanently useless, and

— the accessory cannot be opened by hand or by using a general purpose tool, for example a screwdriver.

An accessory is considered to be permanently useless when for re-assembling the accessory, parts or materials other than the original are to be used.

– A *cord set* is an assembly consisting of a flexible cable or cord fitted with a non-rewirable plug and a non-rewirable connector, intended for the connection of an electrical appliance or equipment to the electrical supply.

–A *retaining device* is a mechanical arrangement which holds a connector in proper engagement with the corresponding appliance inlet and prevents its unintentional withdrawal.

— *Rated voltage* is the voltage assigned to the connector or the appliance inlet by the manufacturer.

— *Rated current* is the current assigned to the connector or the appliance inlet by the manufacturer.

— A *terminal* is the part to which a conductor is attached, providing a re-usable connection.

— A *termination* is the part to which a conductor is permanently attached.

— A *screw-type terminal* is a terminal for the connection and subsequent disconnection of a conductor, the connection being made, directly or indirectly by means of screws or nuts of any kind.

— A *pillar terminal* is a screw-type terminal in which the conductor is inserted into a hole or cavity, where it is clamped under the shank of a screw. The clamping pressure may be applied directly by the shank of the screw or through an intermediate clamping plate to which pressure is applied by the shank of the screw.

— A *screw terminal* is a screw-type terminal in which the conductor is clamped under the head of a screw. The clamping pressure may be applied directly by the head of the screw or through an intermediate part, such as a washer, clamping plate or anti-spread device.

— A *stud terminal* is a screw-type terminal in which the conductor is clamped under a nut. The clamping pressure may be applied directly by a suitably shaped nut or through an intermediate part, such as a washer, clamping plate or anti-spread device.

— A *mantle terminal* is a screw-type terminal in which the conductor is clamped against the base of a slot in a threaded stud by means of a nut. The conductor is clamped against the base of the slot by a suitably shaped washer under the nut, by a central peg if the nut is a cap nut, or by equally effective means for transmitting the pressure from the nut to the conductor within the slot.

— A *screwless terminal* is a connecting terminal for the connection and subsequent disconnection of a conductor, the connection being made, directly or indirectly, by means of springs, wedges, eccentrics or cones, etc.

2.3 The term "accessory" is used as a general term covering connectors and/or appliance inlets (and, in some cases, plugs as well).

3. General requirements

Appliance couplers shall be so designed and constructed that in normal use their performance is reliable and without danger to the user or surroundings.

In general, compliance is checked by carrying out all the tests specified.

Note: It is to be understood that appliance couplers according to this standard are to be capable of meeting all the relevant requirements and tests specified herein.

INFORMATION as to original IEC text
Note not included

4. General notes on tests

4.1 *Tests according to this standard are type tests.*

4.2 *Unless otherwise specified, the samples are tested as delivered and under normal conditions of use, at an ambient temperature of 20 ± 5 °C; they are tested with a.c. at 50 Hz or 60 Hz.*

Non-rewirable connectors, other than those forming part of a cord set, must be submitted with a flexible cable or cord at least 1 m long.

4.3 *Unless otherwise specified, the tests are carried out in the order of the clauses.*

4.4 *Unless otherwise specified, connectors and appliance inlets are tested in conjunction with an appropriate appliance inlet or connector, complying with this standard.*

4.5 *For appliance inlets, three samples are subjected to the tests specified.*

For all connectors, nine samples are required:

- *three are subjected to the tests specified, with the exception of those of Clauses 13, 14, 15, 18, 19 and 20 and Sub-clause 23.2:*
- *three are subjected to the tests of Clauses 13, 14, 15, 18, 19 and 20 (including the repetition of the test of Sub-clause 15.2);*
- *three are subjected to the test of Sub-clause 21.4, using the H05RR-F type cords.*

INFORMATION as to original IEC text
IEC cord type replaced by HD type

For 10 A rewirable connectors for Class I equipment and hot or very hot conditions, three additional samples are required for the test of Sub-clause 21.4, using the H03RT-F type cord.

INFORMATION as to original IEC text
IEC cord type replaced by HD type

For connectors of rubber or similar material, four additional samples are required, two of which are subjected to the test of Sub-clause 23.2.1 and the other two to the test of Sub-clause 23.2.2.

For connectors of polyvinylchloride (PVC) or similar material, two additional samples are subjected to the test of Sub-clause 23.2.3.

Accordingly, for connectors the total number of samples is:

Connector made of	Connector type
Rigid insulating material	9 (12)
Rubber or similar material	13 (16)
PVC or similar material	11 (14)

The numbers in brackets apply to 10 A connectors for Class I equipment and hot or very hot conditions.

4.6 Appliance inlets integrated in or incorporated in an appliance or equipment are tested under the conditions of use of the equipment, the number of samples then being the same as the number of samples of equipment required according to the relevant standard for the equipment.

4.7 Connectors and appliance inlets are considered not to comply with this standard if there are more failures than that of one sample in one of the tests. If one sample fails in a test, that test and those preceding which may have influenced the result of that test are repeated on another set of samples of the number specified in Sub-clause 4.5, all of which shall then comply with the repeated tests.

In general, it will be necessary to repeat only the test which caused the failure, unless the sample fails in one of the tests of Clauses 18 to 22 inclusive, in which case the tests are repeated from that of Clause 17 onwards.

The applicant may submit, together with the first set of samples, the additional set which may be wanted should one sample fail. The testing station will then, without further request, test the additional samples and will only reject if a further failure occurs. If the additional set of samples is not submitted at the same time, a failure of one sample will entail a rejection.

5. Standard ratings

5.1 The standard rated voltage is 250 V.

5.2 Standard rated currents are 0.2 A, 2.5 A, 6 A, 10 A and 16 A, as specified in Sub-clause 8.1.

Compliance with the requirements of Sub-clauses 5.1 and 5.2 is checked by visual inspection of the marking.

6. Classification

6.1 Appliance couplers are classified:

6.1.1 According to maximum pin temperature of the corresponding appliance inlet:

- appliance couplers for cold conditions (pin temperature not exceeding 65 °C);
- appliance couplers for hot conditions (pin temperature not exceeding 120 °C);
- appliance couplers for very hot conditions (pin temperature not exceeding 155 °C).

6.1.2 According to type of equipment to be connected:

- appliance couplers for Class I equipment;
- appliance couplers for Class II equipment.

For a description of the classes, see IEC 536: Classification of Electrical and Electronic Equipment with Regard to Protection against Electric Shock.

6.2 Connectors are, moreover, classified according to the method of connecting the flexible cable or cord:

- rewirable connectors;
- non-rewirable connectors.

Figure 1 shows the various types of appliance couplers standardized and their application.

0.2 A appliance couplers are intended only for the connection of small hand-held Class II equipment, if allowed by the relevant standard for the equipment.

Appliance inlets for cold conditions must not be used with heating appliances having external metal parts the temperature rise of which may, under normal operating conditions, exceed 75 K and which might be touched in normal use by the flexible cable or cord.

Appliance couplers for hot conditions may also be used under cold conditions; appliance couplers for very hot conditions may also be used under cold or hot conditions.

7. Marking

7.1 Connectors shall be marked with:

— rated current in amperes, except for 0.2 A connectors;

— rated voltage in volts;

— symbol for nature of supply;

- name, trade mark or identification mark of the maker or of the responsible vendor;

- type reference

The type reference may be a catalogue number.

7.2 Appliance inlets other than those integrated in or incorporated in an appliance or equipment shall be marked with the name, trade mark or identification mark of the maker or of the responsible vendor and a type reference, the latter being not visible after the appliance inlet is correctly mounted or a connector is in engagement. The marking of 0.2 A and 2.5 A appliance inlets may be visible, provided that there can be no doubt with regard to the marking of the appliance itself.

The type reference may be a catalogue number.

7.3 Connectors and appliance inlets for Class II equipment shall not be marked with the symbol for Class II construction.

7.4 When symbols are used, they shall be as follows:

amperes . . . . . A;
volts . . . . . V;
alternating current . . . . . ~;
earth . . . . . ⏚ or ⏚

NOTE: Preferably the earthing symbol in a circle should be used.

INFORMATION as to original IEC text
The earth symbol in a circle and note not included.

For the marking of rated current and rated voltage, figures may be used alone, the figure for rated current being placed before or above that for rated voltage and separated from the latter by a line. The symbol for nature of supply shall be placed next to the marking for rated current and rated voltage.

The marking for current, voltage and nature of supply may accordingly be as follows:

10 A 250 V ~ or 10/250 ~ or $\frac{10}{250}$ ~ or $\frac{10}{250}$ ~

Lines formed by the construction of the tool are not considered as part of the marking.

7.5 The marking specified in Sub-clause 7.1 shall be easily discernible when the connector is wired ready for use.

The term "ready for use" does not imply that the connector is in engagement with an appliance inlet.

7.6 In non-reversible connectors, the contact positions shall be established by looking at the engagement face of the connectors as shown in Figure 1 and their disposition shall be as follows:

earthing contact:	upper central position;
line contact:	lower right-hand position;
neutral contact:	lower left-hand position.

In rewirable, non-reversible connectors, terminals shall be indicated as follows:

earthing terminal:	the symbol ⏚;
neutral terminal:	the letter N.

In non-rewirable, non-reversible connectors, no marking of contacts is necessary, but cores shall be connected as specified in Sub-clause 21.1.

Appliance inlets other than those integrated in or incorporated in an appliance or equipment, for use with connectors according to this sub-clause, shall have terminal markings to correspond with this sub-clause.

The marking symbol or letters shall not be placed on screws, removable washers or other removable parts.

The requirement concerning the marking of terminals and the connection of conductors has been introduced to take account of those countries who already require a polarized supply system and with regard to a possible future introduction of a unified plug and socket-outlet system, which will be to a great extent a polarized system. It is recommended to take this requirement into account already now in countries which at present have no polarized plug and socket-outlet system.

7.7 Marking shall be durable and easily legible.

Compliance with the requirements of Sub-clauses 7.1 to 7.7 is checked by inspection and by rubbing the marking by hand for 15 s with a piece of cloth soaked with water and again for 15 s with a piece of cloth soaked with petroleum spirit.

The petroleum spirit used should consist of a solvent hexane with a content of aromatics of maximum 0.1 volume percentage, a kauri-butanol value of 29, an initial boiling point of approximately 65°C, a dry-point of approximately 69°C and a specific gravity of approximately 0.68 g/cm³.

8. Dimensions and compatibility

8.1 Appliance couplers shall comply with the appropriate Standard sheets as specified below, except as permitted by Sub-clause 8.6:

0.2 A 250 V appliance coupler for Class II equipment and cold conditions:

— connector	Sheet C 1
— appliance inlet	Sheet C 2

2.5 A 250 V appliance coupler for Class I equipment and cold conditions:

— connector	Sheet C 5
— appliance inlet	Sheet C 6

2.5 A 250 V appliance coupler for Class II equipment and cold conditions:

— connector	Sheet C 7
— appliance inlet, standard type	Sheets C 8 and C 8A
— appliance inlet, for alternative connection of the equipment to two different mains voltages	Sheet C 8B

6 A 250 V appliance coupler for Class II equipment and cold conditions:

— connector . . . . Sheet C 9
— appliance inlet . . . . Sheet C 10

10 A 250 V appliance coupler for Class I equipment and cold conditions:

— connector . . . . Sheet C 13
— appliance inlet . . . . Sheet C 14

10 A 250 V appliance coupler for Class I equipment and hot conditions:

— connector . . . . Sheet C 15
— appliance inlet . . . . Sheet C 16

10 A 250 V appliance coupler for Class I equipment and very hot conditions:

– connector . . . . Sheet C 15A
– appliance inlet . . . . Sheet C 16A

10 A 250 V appliance coupler for Class II equipment and cold conditions:

— connector . . . . Sheet C 17
— appliance inlet . . . . Sheet C 18

16 A 250 V appliance coupler for Class I equipment and cold conditions:

— connector . . . . Sheet C 19
— appliance inlet . . . . Sheet C 20

16 A 250 V appliance coupler for Class I equipment and very hot conditions:

— connector . . . . Sheet C 21
— appliance inlet . . . . Sheet C 22

16 A 250 V appliance coupler for Class II equipment and cold conditions:

— connector . . . . Sheet C 23
appliance inlet . . . . Sheet C 24

Dimensions are checked by means of gauges or by measurement. In case of doubt, gauges shall be used.

The test is carried out at an ambient temperature of 35 ± 2 °C, both the accessories and the gauges being at this temperature.

The gauges to be used are shown in:

Figure 2, for 0.2 A connectors;
Figures 4, 5 and 5 bis *for 2.5 A connectors;*
Figures 9A to 9 T, *for other connectors and appliance inlets.*

The distance from the engagement face of connectors to the point of first contact of socket contacts is checked by means of the relevant gauge shown in Fig 27.

Dimensions for the fixing of appliance inlets are under consideration.

8.2 Provision, if any, for retaining the connector in the appliance inlet shall comply with Standard sheet C 25.

Compliance is checked by measurement.

8.3 It shall not be possible to make single-pole connections between connectors and appliance inlets.

Appliance inlets shall not allow improper connections with portable socket-outlets complying with IEC 83: Plugs and Socket-outlets for Domestic and Similar General Use. Standards.

Connectors shall not allow improper connections with plugs complying with the same IEC 83.

Compliance is checked by manual test.

"Improper connections" include single-pole connection and other connections which do not comply with the requirements concerning protection against electric shock.

Conformity to the Standard sheets ensures compliance with these requirements.

8.4 It shall not be possible to engage:

— connectors for Class II equipment with appliance inlets for other equipment;

— connectors for cold conditions with appliance inlets for hot conditions or very hot conditions;

— connectors for hot conditions with appliance inlets for very hot conditions;

— connectors with appliance inlets having a higher rated current than the connector.

Compliance is checked by inspection, by manual test and by means of the gauges shown in Figures 6 to 9.

For 6 A, 10 A and 16 A connectors and appliance inlets, compliance is checked by means of the gauges shown in Figures 9A to 9T as applicable.

The test is carried out an ambient temperature of 35 ± 2 °C, both the accessories and the gauges being at this temperature.

Conformity to the Standard sheets ensures compliance with the requirements, other than those verified by means of the gauges shown in Figures 6 to 9.

8.5 If appliance inlets are arranged countersunk in the outer surface of equipment, and if this surface is curved or inclined with respect to the axis of the appliance inlet, the arrangement shall be such that, under any circumstances, the pin ends do not protrude beyond the limiting surface of the shroud.

Compliance is checked by connecting all pins, including the earthing pin, if any, together with one pole of a contact indicator, the other pole being connected to a metal straight-edge ruler, having a width wider than the largest inside dimension of the appliance inlet, which is placed in all possible directions over the opening of the shroud. The ruler shall not come into contact with the pin ends.

For 10 A or 16 A appliance inlets for Class II equipment, the test shall be carried out with a simulated earthing pin.

An electrical indicator with a voltage between 40 V and 50 V is used to show contact with the relevant part.

8.6 Appliance couplers of design other than those shown on standard sheets may be made, provided that their dimensions do not affect interchangeability. Such non-standard appliance couplers shall, however, comply with all other requirements of this standard as far as they apply.

INFORMATION as to the original IEC text.
See Appendix C.