

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Appliance couplers for household and similar general purposes –
Part 3: Standard sheets and gauges**

**Connecteurs pour usages domestiques et usages généraux analogues –
Partie 3: Feuilles de norme et calibres**

IEC 60320-3:2014

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AND SIMILAR GENERAL PURPOSES –****Part 3: Standard sheets and gauges****FOREWORD**

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International Standard IEC 60320-3 has been prepared by subcommittee 23G: Appliance couplers, of IEC technical committee 23: Electrical accessories.

The text of this standard is based on the following documents:

FDIS	Report on voting
23G/336/FDIS	23G/338/RVD

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

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

A list of all the parts in the IEC 60320 series, under the general title *Appliance couplers for household and similar general purposes*, can be found on the IEC website.

This part is to be used in conjunction with IEC 60320-1.

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APPLIANCE COUPLERS FOR HOUSEHOLD AND SIMILAR GENERAL PURPOSES –

Part 3: Standard sheets and gauges

1 Scope

This part of the IEC 60320 sets the dimensions for appliance couplers for two poles and two poles with earth contact

- for the connection of electrical devices for household and similar onto the mains supply and
- for the interconnection of the electrical supply to appliance or equipment
- and dimensions for gauges.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60320-1:—, *Appliance couplers for household and similar general purposes – Part 1: General requirements*

3 Terms and definitions

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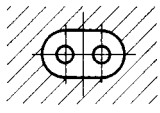
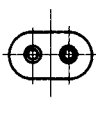
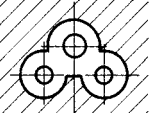
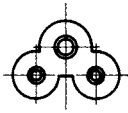
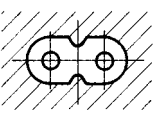
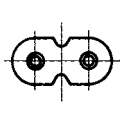
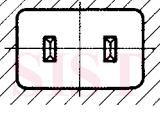
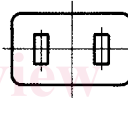
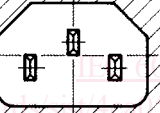
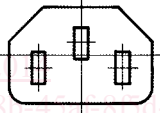
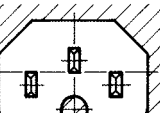
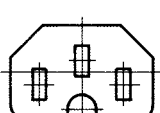
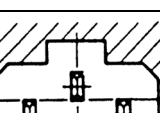
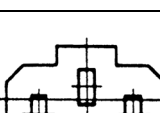
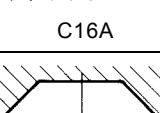
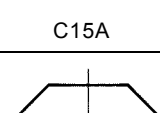
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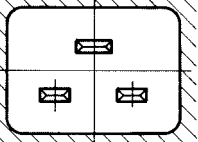
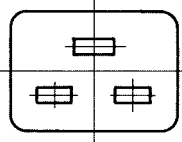
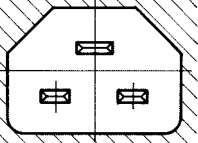
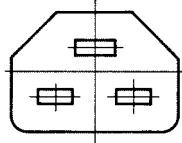
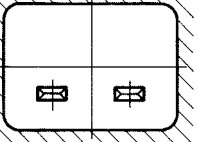
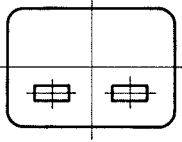
For the purposes of this document, the terms and definitions given in IEC 60320-1 apply.

4 General requirements

The general requirements for connecting appliance couplers to the electrical mains supply are detailed in Table 1.

Table 1 – Appliance couplers C1 up to C24 – Standard sheets

Rated current of appliance coupler A	Class of equipment	Maximum pin temperature of appliance inlet °C	APPLIANCE COUPLER		Type of cord		
			Number of standard sheet for:		Rewirable construction allowed	Lightest type allowed	Minimum cross-section mm ²
			appliance inlet	connector			
0,2	II	70			No	60227 IEC 41	— ^a
2,5	I	70			No	60227 IEC 52	0,75
2,5	II	70			No	60227 IEC 52	0,75 ^b
6	II	70			No	60227 IEC 52	0,75
10	I	70			Yes	60227 IEC 53 or 60245 IEC 53	0,75 ^c
10	I	120			Yes	60245 IEC 53 or 60245 IEC 89	0,75 ^c
10	I	155			Yes	60245 IEC 53 or 60245 IEC 89	0,75 ^c
10	II	70			No	60227 IEC 53 or 60245 IEC 53	0,75 ^c

Rated current of appliance coupler A	Class of equipment	Maximum pin temperature of appliance inlet °C	APPLIANCE COUPLER		Type of cord		
			Number of standard sheet for:		Rewirable construction allowed	Lightest type allowed	Minimum cross-section mm ²
			appliance inlet	connector			
16	I	70			Yes	60227 IEC 53 or 60245 IEC 53	1 ^c
16	I	155			Yes	60245 IEC 53 or 60245 IEC 89	1 ^c
16	II	70			No	60227 IEC 53 or 60245 IEC 53	1 ^c

^a Only for small hand-held appliances, in length not exceeding 2 m, if allowed by the relevant appliance standard.

^b 0,5 mm² is allowed for lengths not exceeding 2 m.

^c If the cord has a length exceeding 2 m or is of the retractable coiled (pre-coiled) type, nominal cross-sectional areas shall be

- 1 mm² for 10 A connectors
- 1,5 mm² for 16 A connectors.

Table 2 gives the general requirements for appliance couplers for the interconnection of the electrical supply to appliance or equipment.

Table 2 – Appliance couplers A up to L – Standard sheets

Rated current A	Class of equipment	Maximum contact temperature of appliance outlet °C	Appliance coupler		Type of cord		
			Number of standard sheet for:		Rewirable version allowed	Lightest type allowed	Minimum cross section mm ²
			Plug connector	Appliance outlet			
2,5	I	70			No	60227 IEC 52	0,75
2,5	II	70			No	60227 IEC 52	0,75 ^b
10	I	70			Yes	60227 IEC 53 or 60245 IEC 53	0,75 ^c
10	II	70			No	60227 IEC 53 or 60245 IEC 53	0,75 ^c
16	I	70			Yes	60227 IEC 53 or 60245 IEC 53	1,0 ^c
16	II	70			No	60227 IEC 53 or 60245 IEC 53	1,0 ^c

^a VOID^b 0,5 mm² is allowed for lengths not exceeding 2 m

^c If the cord has a length exceeding 2 m or is of the retractable coiled (pre-coiled) type, nominal cross-sectional areas shall be

- 1 mm² for 10 A plug connectors
- 1,5 mm² for 16 A plug connectors

5 Standard sheets for appliance couplers

5.1 General

The appliance couplers shall comply with the requirements of IEC 60320-1.

Appliance couplers shall comply with the appropriate standard sheets as specified in this standard.

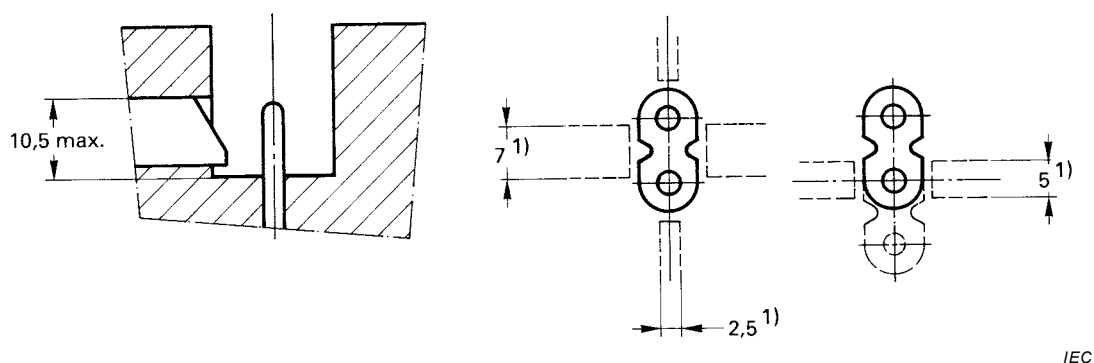
NOTE 1 The sketches are not intended to govern design, except as regards the dimensions shown.

NOTE 2 For the symbols indicating the tolerance of form or of position, see ISO 1101.

NOTE 3 If limits and fits according to ISO 286-1 are used in the standard sheets and figures, the envelope principle is used.

5.2 Position of switch cams

The operation of the switch shall be effected 1,5 mm before full engagement of the connector for appliance inlets according standard sheets C8, C8A and C8B the switch cams shall be positioned as shown in Figure 1.



For appliance inlets to
standard sheets C8 and C8A

For appliance inlets to
standard sheet C8B

¹⁾ Minimum dimensions of the switch cams. A key is not required where a switch cam is situated.

Figure 1 – Position of switch cams

6 Gauges

6.1 General

The gauges are used with the force as mentioned in the relevant standard sheet of the gauge.

NOTE For the purpose of verifying whether or not the appliance coupler is fully inserted, it is recommended that the gauge be provided with an aperture.

Gauges and pins shall be made of hardened steel.

6.2 Distance to the point of first contact

The distance from the engagement face of connectors / appliance outlets to the point of first contact of socket contacts shall be checked by means of the relevant gauge shown in Figure 31 and Table 3.

6.3 "GO" gauge for connectors to standard sheet C1

It shall be possible to insert the connector fully into the gauge shown in Figure 2 with a force not exceeding 60 N.

Dimensions in millimetres

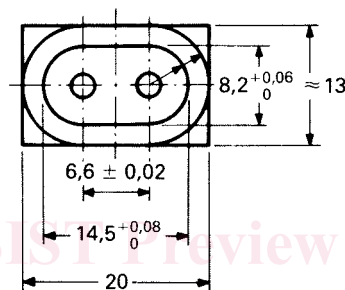
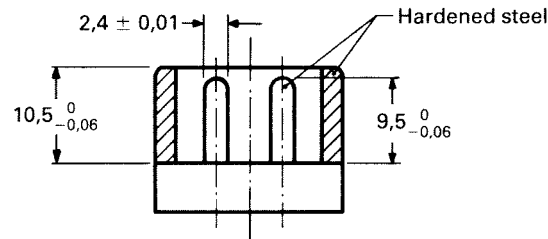


Figure 2 – "GO" gauge for connectors to standard sheet C1

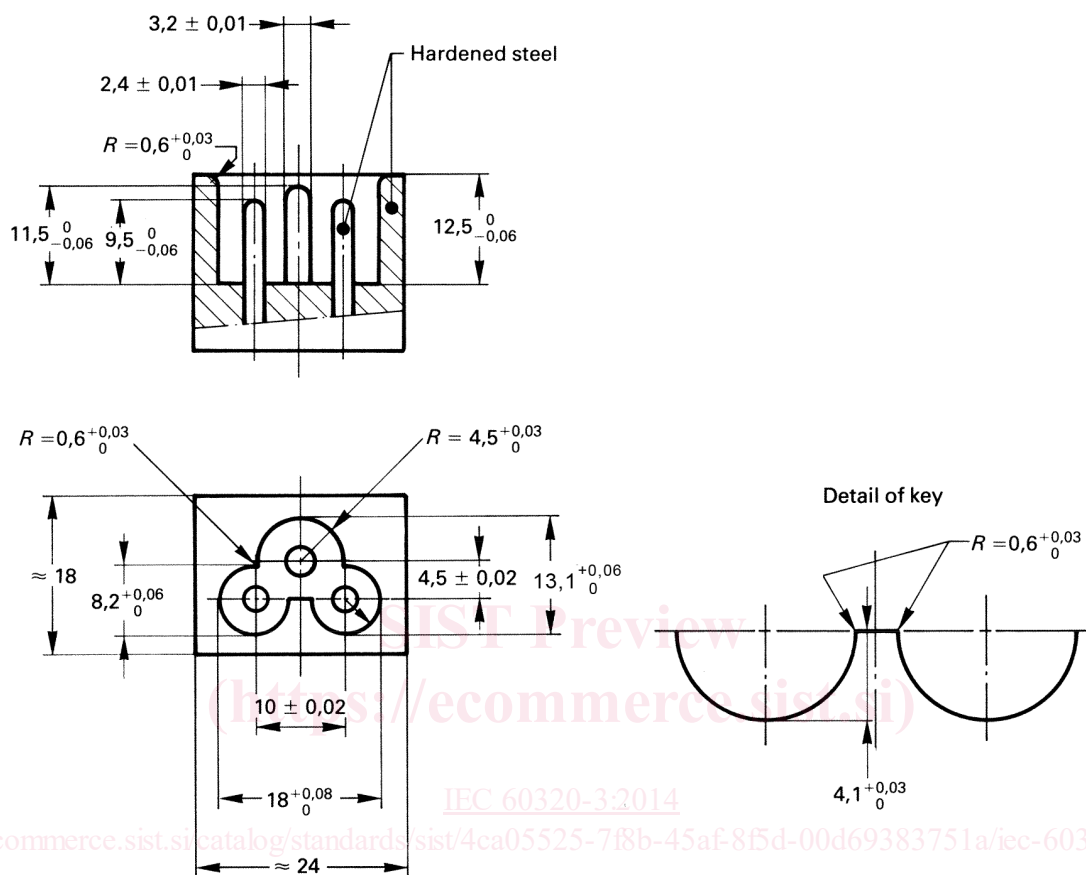
IEC 60320-3:2014

<https://ecommerce.sist.si/catalog/standards/sist/4ca05525-7f8b-45af-8f5d-00d69383751a/iec-60320-3-2014>

6.4 "GO" gauge for connectors to standard sheet C5

It shall be possible to insert the connector fully into the gauge shown in Figure 3 with a force not exceeding 60 N.

Dimensions in millimetres



IEC

Figure 3 – "GO" gauge for connectors to standard sheet C5