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Edition 2.0 2025-08

INTERNATIONAL STANDARD

**Devices for the connection of luminaires for household and similar purposes –
Part 1: General requirements**

Sample Document

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

Devices for the connection of luminaires for household and similar purposes - Part 1: General requirements

FOREWORD

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IEC 61995-1 has been prepared by subcommittee 23B: Plugs, socket-outlets and switches, of IEC technical committee 23: Electrical accessories. It is an International Standard.

This second edition cancels and replaces the first edition published in 2005 and Amendment 1:2016. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) additional requirements and tests for additional suspension means;
- b) additional requirements and tests for additional functions;
- c) additional requirements and tests for floating type DCLs;
- d) introduction of insulation piercing terminals (IPT);
- e) additional classification according to the connection capacities of the DCL outlet terminals;

- f) modification of maximum withdrawal force for plugs with enabled locking means;
- g) improvements of temperature rise tests.

The text of this International Standard is based on the following documents:

Draft	Report on voting
23B/1573/FDIS	23B/1581/RVD

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

The language used for the development of this International Standard is English.

A list of all the parts in the IEC 61995 series, published under the general title *Devices for the connection of luminaires for household and similar purposes*, can be found on the IEC website.

In this document, the following print types are used:

- compliance statements: *in italic type*.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn, or
- revised.

1 Scope

This document applies to devices for the connection of luminaires (DCL) intended for household and similar purposes, for the electrical connection of fixed luminaires of class I or class II to final circuits rated at not more than 16 A without mechanical support for the luminaires incorporated in the plug/outlet interface. The DCL retention mechanisms are not intended to support the weight of the luminaires.

- DCL plugs and outlets have a rated current of 6 A.
- DCL outlets have an earthing contact.

The rated voltage is 125 V or 250 V at 50/60 Hz.

- DCLs with additional suspension means are limited to a maximum mass of 5 kg.
- DCL plugs and DCL outlets complying with this document are suitable for use at ambient temperatures not normally exceeding +40 °C, but their average over a period of 24 h does not exceed + 35 °C, with a lower limit of the ambient air temperature of –5 °C.
- DCLs are intended for use according to their IP rating as specified in IEC 60529.

This document gives additional requirements for DCL accessories provided with insulation-piercing terminals, see Annex B (normative).

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60068-2-31:2008, *Environmental testing - Part 2-31: Tests - Test Ec: Rough handling shocks, primarily for equipment-type specimens*

IEC 60068-2-75:2014, *Environmental testing - Part 2-75: Tests - Test Eh: Hammer tests*

IEC 60112:2020, *Method for the determination of the proof and the comparative tracking indices of solid insulating materials*

IEC 60227-5:2024, *Polyvinyl chloride insulated cables of rated voltages up to and including 450/750V - Part 5: Flexible cables (cords)*

IEC 60417, *Graphical symbols for use on equipment*, available at <http://www.graphical-symbols.info/equipment>

IEC 60529:1989, *Degrees of protection provided by enclosures (IP Code)*

IEC 60529:1989/AMD1:1999

IEC 60529:1989/AMD2:2013

IEC 60695-2-11:2021, *Fire hazard testing - Part 2-11: Glowing/hot-wire based test methods - Glow-wire flammability test method for end-products (GWEPT)*

IEC 61032:1997, *Protection of persons and equipment by enclosures - Probes for verification*

IEC 61995-2:2025, *Devices for the connection of luminaires for household and similar purposes - Part 2: Standard sheets*

ISO/IEC Guide 51:2014, *Safety aspects - Guidelines for their inclusion in standards*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- IEC Electropedia: available at <https://www.electropedia.org/>
- ISO Online browsing platform: available at <https://www.iso.org/obp>

NOTE 1 Where the terms voltage and current are used, they imply RMS values, unless otherwise specified in this document.

NOTE 2 Throughout this document the word "earthing" is used for "protective earthing".

NOTE 3 The term "accessory" is used as a general term covering DCL plugs and DCL outlets.

3.1 device for connecting a luminaire DCL

system comprising a DCL outlet and a DCL plug providing a fixed luminaire with electrical connection to and disconnection from a fixed installation

Note 1 to entry: The designations DCL, DCL outlet or DCL plug, are used when it is necessary to specify particular requirements and test specifications.

3.2 DCL outlet

device for connecting a luminaire having socket-contacts designed to engage with the pins of a DCL plug and having terminals for the connection of cable

3.3 DCL plug

device for connecting a luminaire having pins designed to engage with the contacts of a DCL outlet

3.4 rewirable DCL plug

DCL plug so constructed that the flexible cable can be replaced

3.5 non-rewirable DCL plug

DCL plug so constructed that it forms a complete unit with the flexible cable after connection and assembly by the manufacturer of the plug (see also 14.1)

3.6 moulded-on DCL plug

non-rewirable DCL plug, the manufacture of which is completed by insulating material moulded around pre-assembled component parts and the terminations of the flexible cable

3.7 rated voltage

voltage assigned by the manufacturer for a specified operating condition of an accessory

[SOURCE: IEC 60050-442:1998, 442-01-03, modified – the specific use "(for accessories)" has been omitted.]

3.8 rated current

current assigned by the manufacturer for specified operating condition of an accessory

[SOURCE: IEC 60050-442:1998, 442-01-02, modified – the specific use "(for accessories)" has been omitted.]

3.9 fixed DCL outlet

DCL outlet intended to be installed at a fixed location and be connected to fixed wiring

Note 1 to entry: An example of a fixed DCL outlet and plug is shown in Figure 1.

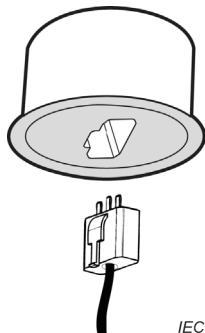


Figure 1 – Example of fixed DCL outlet and plug

3.10 mounting box

box in or on a wall or ceiling, etc., for flush or surface application, intended to house a DCL outlet

3.11 terminal

insulated or non-insulated connecting device intended for reusable electrical connection of the external conductors

3.12 termination

insulated or non-insulated connecting device intended for non-reusable electrical connection of the external conductors

3.13 clamping unit

part(s) of the terminal necessary for the mechanical clamping and the electrical connection of the conductor(s), including the parts which are necessary to ensure correct contact pressure

[SOURCE: IEC 60050-442:1998, 442-06-12]

3.14 screw-type terminal

terminal for the connection and subsequent disconnection of one conductor or the interconnection and subsequent disconnection of two or more conductors, the connection being made, directly or indirectly, by means of screws or nuts of any kind

Note 1 to entry: The terms of definitions 3.14 to 3.17 are examples of screw-type terminals.

3.15**pillar terminal**

screw-type terminal in which the conductor is inserted into a hole or cavity, where it is clamped under the end of the screw or screws

Note 1 to entry: The clamping pressure may be applied directly by the end of the screw or through an intermediate clamping member to which pressure is applied by the end of the screw.

3.16**screwless-type terminal**

connecting device for the connection and subsequent disconnection of a rigid (solid or stranded) or flexible conductor or the interconnection of two or more conductors capable of being dismantled, the connection being made, directly or indirectly, by means of springs, parts of angled, eccentric or conical form, etc., without special preparation of the conductor concerned, other than removal of insulation

3.17**thread-forming screw**

screw having an uninterrupted thread, which by screwing in, forms a thread by displacing material

Note 1 to entry: An example of a thread-forming screw is shown in Figure 2.

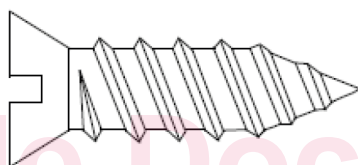


Figure 2 – Example of thread-forming screw

3.18**thread-cutting screw**

screw having an uninterrupted thread, which by screwing in, forms a thread by removing material

Note 1 to entry: An example of a thread-cutting screw is shown in Figure 3.

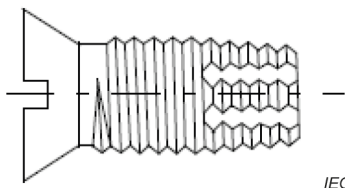


Figure 3 – Example of thread-cutting screw

3.19**loop terminal**

supply terminal intended for the interconnection of live conductors

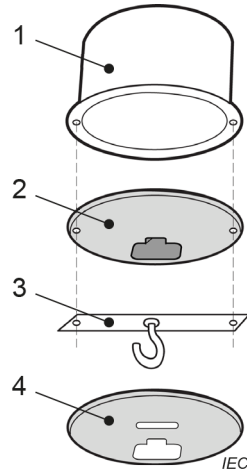
3.20**DCL temporary lampholder**

independent lampholder integral with a DCL plug, designed in order to be temporarily connected to a DCL outlet

3.21**additional suspension means**

means comprising any necessary component (hooks, brackets, etc) which is a part of the DCL, used to fix the luminaire

Note 1 to entry: An example of additional suspension means is shown in Figure 4.

**Key**

- 1 Mounting box (flush-type or surface-type)
- 2 Fixed DCL outlet
- 3 Additional suspension means
- 4 Cover-plate

Figure 4 – Example of additional suspension means

3.22**base**

part of the DCL outlet supporting the outlet contacts

3.23**live part**

conductor or conductive part intended to be energized in normal use, including a neutral conductor, but by convention, not a PEN conductor

3.24**cord anchorage**

part of an accessory which has the ability to limit the displacement of a fitted flexible cable against pull, push and turning forces

3.25**main part**

assembly consisting of the base and other parts

Note 1 to entry: This assembly is not intended to be dismantled at any time after manufacture

3.26**protective earthing****protective grounding, US**

earthing a point or points in a system or in an installation or in equipment, for purposes of electrical safety

3.27**type test**

test of one or more devices made to a certain design to show that the design meets certain specifications

3.28**floating type DCL outlet**

DCL outlet not intended to be fixed to a mounting box

Note 1 to entry: An example of a floating type DCL outlet is shown in Figure 5.

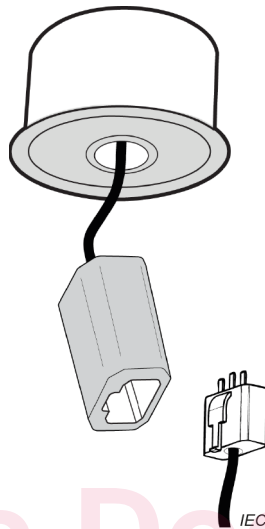


Figure 5 – Example of floating type DCL outlet

3.29**stroke**

insertion or withdrawal of the DCL plug

3.30**insulation-piercing terminal****IPT**

connecting device for the connection and possible disconnection of one or more conductors, the connection being made by piercing, boring through, cutting through, displacing, or making ineffective in some other manner the insulation of the conductor(s) without previous stripping

Note 1 to entry: The removal of the sheath of the cable, if necessary, is not considered as a previous stripping.

Note 2 to entry: Examples of IPTs are given in Figure B.1.

4 General requirements

DCL systems shall be so designed and constructed that in normal use their performance is reliable, and safety is achieved by reducing risk to a tolerable level, as defined in ISO/IEC Guide 51.

Compliance is checked by meeting all the relevant requirements and tests specified.