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BS 7657:2010



BSI Standards Publication

Specification for cut-out assemblies up to 100 A rating, for power supply to buildings

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ISBN 978 0 580 62875 7

ICS 29.120.50, 91.140.50

The following BSI references relate to the work on this standard:

Committee reference PEL/17

Draft for comment 09/30181298 DC

Publication history

First published July 1993

Second (present) edition, February 2010

Amendments issued since publication

Date	Text affected
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Summary of pages

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Publishing information

This British Standard is published by BSI and came into effect on 28 February 2010. It was prepared by Technical Committee PEL/17, *Switchgear, Controlgear, and HV-LV co-ordination*. A list of organizations represented on this committee can be obtained on request to its secretary.

Supersession

This British Standard supersedes BS 7657:1993, which is withdrawn.

Relationship with other publications

This British Standard is to be read in conjunction with BS EN 60947-1:2007, *Low-voltage switchgear and controlgear – Part 1: General rules*. The provisions of the general rules dealt with in BS EN 60947-1:2007 are only applicable when specifically cited and they may be supplemented or modified as detailed in the standard.

The clause numbering of this British Standard follows that of BS EN 60947-1:2007 as closely as possible. Where a subclause of BS EN 60947-1:2007 is not relevant to this British Standard, it is marked as "Vacant" or omitted.

Information about this document

This is a full revision of the standard and introduces the following principal changes:

- the standard has been aligned as closely as possible with the principal reference standard, BS EN 60947-1:2007;
- all other references have been updated;
- the standard is more performance based and less prescriptive, particularly in respect to insulating materials;
- more stringent heat and fire performance requirements for insulating materials have been introduced;
- the temperature-rise testing has been extended to include typical installation conditions (in a meter box) and three-phase applications.

Hazard warnings

WARNING. This British Standard calls for the use of substances and/or procedures that can be injurious to health if adequate precautions are not taken. It refers only to technical suitability and does not absolve the user from legal obligations relating to health and safety at any stage.

Use of this document

It has been assumed in the preparation of this British Standard that the execution of its provisions will be entrusted to appropriately qualified and experienced people, for whose use it has been produced.

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The provisions of this standard are presented in roman (i.e. upright) type. Its requirements are expressed in sentences in which the principal auxiliary verb is "shall".

Commentary, explanation and general informative material is presented in smaller italic type, and does not constitute a normative element.

Contractual and legal considerations

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 cannot confer immunity from legal obligations.

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1.1 Scope

This standard specifies the requirements for cut-out assemblies up to 100 A rating, for power supply to buildings. Each cut-out assembly provides a means of terminating service cables, fuse protection, a neutral facility and/or a means of earthing the supply, and anti-tamper protection. Cut-out assemblies are suitable for use on single-phase or three-phase low-voltage public electricity supply systems with a maximum voltage up to 440 V a.c. and at a frequency of 50 Hz, the neutral being effectively earthed.

The provisions of the general rules dealt with in BS EN 60947-1:2007 are applicable to this standard when specifically called for.

NOTE Clauses and subclauses, tables, figures and annexes of the general rules thus applicable are identified by reference to BS EN 60947-1:2007, for example, BS EN 60947-1:2007, 1.2.3; BS EN 60947-1:2007, Table 1; BS EN 60947-1:2007, Annex A.

1.2 Normative references

The following referenced documents are indispensable for the application 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.

BS 88-3, *Low-voltage fuses – Part 3: Supplementary requirements for fuses for use by unskilled persons (fuses mainly for household or similar applications) – Examples of standardized systems of fuses A to F*

BS 923-1, *Guide on high-voltage testing techniques – Part 1: General*

BS 5372, *Specification for dimensions of cable terminations for multi-core extruded solid dielectric insulated distribution cables of rated voltages 600/1000 V and 1900/3300 V having copper or aluminium conductors*

BS 5467, *Electric cables – Thermosetting insulated, armoured cables for voltages of 600/1000 V and 1900/3300 V*

BS 6004, *Electric cables – PVC insulated, non-armoured cables for voltages up to and including 450/750 V, for electric power, lighting and internal wiring*

BS 7870-3.10, *LV and MV polymeric insulated cables for use by distribution and generation utilities – Part 3: Specification for distribution cables of rated voltage 0.6/1 kV – Section 3.10: PVC insulated combined neutral and earth copper wire concentric cables with copper or aluminium conductors*

BS 7870-3.11, *LV and MV polymeric insulated cables for use by distribution and generation utilities – Part 3: Specification for distribution cables of rated voltage 0.6/1 kV – Section 11: XLPE insulated combined neutral and earth copper wire concentric cables with copper or aluminium conductors*

BS EN 60085, *Electrical insulation – Thermal evaluation and designation*