BS EN 60570:2003+A2:2020

BSI Standards Publication

Electrical supply track systems for luminaires

bsi.

National foreword

This British Standard is the UK implementation of EN 60570:2003+A2:2020. It is derived from IEC 60570:2003, incorporating amendment 1:2017 and amendment 2:2019. It supersedes BS EN 60570:2003+A1:2018, which will be withdrawn on 15 January 2023.

The start and finish of text introduced or altered by amendment is indicated in the text by tags. Tags indicating changes to IEC text carry the number of the IEC amendment. For example, text altered by IEC amendment 1 is indicated by ▌A1〉 〈A1▐.

The CENELEC common modifications have been implemented at the appropriate places in the text. The start and finish of each common modification is indicated in the text by tags ▌C〉 〈C▐.

The UK participation in its preparation was entrusted to Technical Committee CPL/34/4, Luminaires.

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

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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Compliance with a British Standard cannot confer immunity from legal obligations.

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 24 September 2003.

Amendments/corrigenda issued since publication

Date	Text affected
30 June 2018	Implementation of IEC amendment 1:2017 with CENELEC endorsement A1:2018
30 April 2020	Implementation of IEC amendment 2:2019 with CENELEC endorsement A2:2020

EUROPEAN STANDARD **EN 60570:2003+A2**

NORME EUROPÉENNE

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ICS 29.120.20; 29.140.40

Supersedes EN 60570:1996 + A1:1998 + A2:2000 & EN 60570-2-1:1994 + A1:1996

English version

Electrical supply track systems for luminaires
(IEC 60570:2003, modified)

Systèmes d'alimentation électrique par rail pour luminaires (CEI 60570:2003, modifiée)

Elektrische Stromschienensysteme für Leuchten (IEC 60570:2003, modifiziert)

CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

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European Foreword

The text of document 34D/770/FDIS, future edition 4 of IEC 60570, prepared by SC 34D, Luminaires, of IEC TC 34, Lamps and related equipment, was submitted to the IEC-CENELEC parallel vote. Together with existing common modifications in EN 60570:1996, it was approved by CENELEC as EN 60570 on 2003-03-18.

This European Standard supersedes EN 60570:1996 + A1:1998 + A2:2000 and EN 60570-2-1:1994 + A1:1996.

This standard is to be used in conjunction with EN 60598-1.

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) 2004-02-01

– latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2010-03-01

Annexes designated "normative" are part of the body of the standard.
In this standard, annex ZA is normative.
Annex ZA has been added by CENELEC.

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Endorsement notice

The text of the International Standard IEC 60570:2003 was approved by CENELEC as a European Standard with agreed common modifications.

European foreword to amendment A1

The text of document 34D/1221/CDV, future edition 1 of IEC 60570:2003/A1:2017, prepared by IEC/SC 34D "Luminaires" of IEC/TC 34 "Lamps and related equipment" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60570:2003/A1:2018.

The following dates are fixed:

• latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2018-11-18
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2021-05-18

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC shall not be held responsible for identifying any or all such patent rights.

This document has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For the relationship with EU Directive see informative Annex ZZ, which is an integral part of this document.

Endorsement notice

The text of the International Standard IEC 60570:2003/A1:2017 was approved by CENELEC as a European Standard without any modification.

European foreword to amendment A2

The text of document 34D/1502/FDIS, future IEC 60570/A2, prepared by SC 34D "Luminaires" of IEC/TC 34 "Lamps and related equipment" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60570:2003/A2:2020.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2020-10-15
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2023-01-15

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This document has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For the relationship with EU Directive(s), see informative Annex ZZ, included in EN 60570:2003/A1:2018.

Endorsement notice

The text of the International Standard IEC 60570:2003/A2:2019 was approved by CENELEC as a European Standard without any modification.

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IEC 60570:2003+A2:2019

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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FOREWORD

1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the IEC is to promote international cooperation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, the IEC publishes International Standards. Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. The IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
2) The formal decisions or agreements of the IEC on technical matters express, as nearly as possible, an international consensus of opinion on relevant subjects since each technical committee has representation from all interested National Committees.
3) The documents produced have the form of recommendations for international use and are published in the form of standards, technical specifications, technical reports or guides and they are accepted by the National Committees in that sense.
4) In order to promote international unification, IEC National Committees undertake to apply IEC International Standards transparently to the maximum extent possible in their national and regional standards. Any divergence between the IEC Standard and the corresponding national or regional standard shall be clearly indicated in the latter.
5) The IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with one of its standards.
6) Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. The IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 60570 has been prepared by subcommittee 34D: Luminaires, of IEC technical committee 34: Lamps and related equipment.

This fourth edition cancels and replaces the third edition published in 1995 as well as the first edition of IEC 60570-2-1 published in 1994 and constitutes a minor revision.

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

FDIS	Report on voting
34D/770/FDIS	34D/774/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 standard shall be used in conjunction with IEC 60598-1.

NOTE In this standard, the following print types are used:

– requirements proper: in roman type;
– *test specifications: in italic type;*
– notes: in smaller roman type.

The committee has decided that the contents of this publication will remain unchanged until 2005. At this date the publication will be

- reconfirmed;
- withdrawn;
- replaced by a revised edition; or
- amended.

IEC 60570:2003+A2:2019

ELECTRICAL SUPPLY TRACK SYSTEMS FOR LUMINAIRES

1 Scope

This International Standard applies to the following track systems with two or more poles for the connection of luminaires to the electrical supply consisting of, either

– a system with a rated voltage not exceeding 440 V between poles (live conductors) with provision for earthing (class I) and a rated current not exceeding 16 A per conductor, or

– 〈A2〉 a SELV system without provision for protective earthing (class III) and a rated current not exceeding 25 A per conductor, or 〈A2〉

– a combination of the two systems mentioned above (mixed supply system) for the connection of both mains voltage luminaires (class I or II) and SELV supplied luminaires (class III) simultaneously, but in different sector openings (mains or SELV).

The track systems may also provide for the mechanical support of the luminaires.

It applies to track systems designed for ordinary interior use for mounting on, or flush with, or suspended from walls and ceilings. These track systems are not intended for locations where special conditions prevail as in ships, vehicles and the like and in hazardous locations, for example, where explosions are liable to occur.

〈A2〉 This document does not cover operational or performance compatibility between different track systems. Protection against unsafe compatibility between Class I and Class III circuit is covered by this document.

The track system can be provided with auxiliary circuits for the purpose of a control or audio signal other than supply.

NOTE 1 At present, the following types of control systems are available on the market:

– control signal, with basic insulation to LV supply (e.g. digital addressable lighting interface, 1 V to 10 V DC signal);

– control signal, SELV/PELV insulated to LV supply (e.g. DMX);

– control signal, not insulated to LV supply (e.g. push button control/phase cut/step dim).

Track systems can also be provided with conductors specifically identified for emergency lighting luminaires.

NOTE 2 Requirements for PELV are under consideration, pending modification in IEC 60598-1. 〈A2〉

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.

IEC 60417-2, *Graphical symbols for use on equipment – Part 2: Symbol originals*

〈A2〉 IEC 60598-1:2014, *Luminaires – Part 1: General requirements and tests*
IEC 60598-1:2014/AMD1:2017

NOTE The 9th edition of IEC 60598-1 is under preparation. Stage at the time of publication IEC PRVC 60598-1:2019. This 9th edition provides a cross link between IEC 60598-1 and IEC 60570 for track mounted luminaires.