



SLOVENSKI STANDARD
SIST EN 60570:1999

01-julij-1999

Electrical supply track systems for luminaires (IEC 60570:1995)

Electrical supply track systems for luminaires

Elektrische Stromschiensysteme für Leuchten

Systèmes d'alimentation électrique par rail pour luminaires

Ta slovenski standard je istoveten z: EN 60570:1996

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ICS:

29.140.50	Instalacijski sistemi za razsvetljavo	Lighting installation systems
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en

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 60570

CLEC/TC 342

August 1996

ICS 29.060.10; 29.140.40

Supersedes EN 60570:1993 and its corrigendum 1993

Descriptors: Luminaire, track systems, tests, supply connection, electrical grounding, thermal endurance, operating temperatures, polarity

English version

**Electrical supply track systems for luminaires
(IEC 570:1995)**

Systèmes d'alimentation électrique par
rail pour luminaires
(CEI 570:1995)

Elektrische Stromschienen-Systeme für
Leuchten
(IEC 570:1995)

This European Standard was approved by CENELEC on 1995-11-28. CENELEC members are bound to comply with the CEN/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 Central 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 Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

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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

Foreword

The text of document 34D/376/FDIS, future amendment to IEC 570:1985, prepared by SC 34D, Luminaires, of IEC TC 34, Lamps and related equipment, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as amendment A3 to EN 60570:1993 on 1995-11-28.

The text of this document, together with that of IEC 570:1985 and its amendments 1:1990 and 2:1993, was published by IEC as the third edition of IEC 570 in November 1995. According to a decision of principle taken by the Technical Board of CENELEC, the approval of EN 60570:1993/A3 has been converted into the approval of a new EN 60570.

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) 1996-09-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 1996-09-01

For products which have complied with EN 60570:1993 and its corrigendum December 1993 before 1996-09-01, as shown by the manufacturer or by a certification body, this previous standard may continue to apply for production until 2001-09-01.

Endorsement notice

The text of the International Standard IEC 570:1995 was approved by CENELEC as a European Standard without any modification.

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Annex ZA (normative)**Special national conditions**

Special national condition: National characteristic or practice that cannot be changed even over a long period, e.g. climatic conditions, electrical earthing conditions. If it affects harmonization, it forms part of the European Standard or Harmonization Document.

For the countries in which the relevant special national conditions apply these provisions are normative, for other countries they are informative.

<u>Clause</u>	<u>Special national condition</u>
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6	Netherlands, Norway
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Luminaire track systems provided with a means of connection to socket-outlets are required to have a current rating of 16 A.

Annex ZB (informative)**A-deviations**

A-deviation: National deviation due to regulations, the alteration of which is for the time being outside the competence of the CEN/CENELEC member.

This European Standard falls under Directive 73/23/EEC.

NOTE (from CEN/CENELEC IR Part 2, 3.1.9): Where standards fall under EC Directives, it is the view of the Commission of the European Communities (OJ No C 59; 1982-03-09) that the effect of the decision of the Court of Justice in case 815/79 Cremonini/Vrankovich (European Court Reports 1980, p. 3583) is that compliance with A-deviations is no longer mandatory and that the free movement of products complying with such a standard should not be restricted except under the safeguard procedure provided for in the relevant Directive.

A-deviations in an EFTA-country are valid instead of the relevant provisions of the European Standard in that country until they have been removed.

<u>Clause</u>	<u>Deviation</u>
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10	Sweden (Wiring regulations ELSÄK-FS 1994:7, 521.4.6.1)
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The track shall be marked with the minimum allowed mounting height in accordance with the requirements of the wiring regulations (ELSÄK-FS 1994:7, 521.4.6.1). Information regarding the minimum allowed mounting height shall also appear in the mounting instructions delivered with the track.

Annex ZC (normative)**Normative references to international publications
with their corresponding European publications**

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

NOTE: When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 598-1 (mod)	1992	Luminaires Part 1: General requirements and tests	EN 60598-1	1993

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NORME
INTERNATIONALE
INTERNATIONAL
STANDARD

CEI
IEC
570

Troisième édition
Third edition
1995-11

**Systèmes d'alimentation électrique par rail
pour luminaires**

Electrical supply track systems for luminaires

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International Electrotechnical Commission
Международная Электротехническая Комиссия

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

ELECTRICAL SUPPLY TRACK SYSTEMS FOR LUMINAIRES

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 the 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 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. IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 570 has been prepared by sub-committee 34D: Luminaires, of IEC technical committee 34: Lamps and related equipment.

This third edition cancels and replaces the second edition published in 1985 and amendment 2 (1993); it constitutes a technical revision.

The text of this standard is based on the second edition of 1985, amendment 1 (1990), amendment 2 (1993) and on the following documents:

SIST EN 60570:1999	
FDIS	Report on voting
34D/376/FDIS	34D/393/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.

ELECTRICAL SUPPLY TRACK SYSTEMS FOR LUMINAIRES

1 Scope

This standard applies to track systems with two or more poles for the connection of luminaires to the electrical supply, either of rated voltage not exceeding 440 V between poles with provision for earthing (class I) and a rated current not exceeding 16 A per conductor, or of a rated SELV not exceeding 25 V without provision for earthing (class III) and rated current not exceeding 25 A per conductor. 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.

This standard shall be read in conjunction with the sections of IEC 598-1 to which reference is made.

1.1 Normative reference

The following normative document contains provisions which, through reference in this text, constitute provisions of IEC 570. At the time of publication, the editions indicated were valid. All normative documents are subject to revision, and parties to agreements based on IEC 570 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 598-1: *Luminaires – Part 1: General requirements and tests*

2 Definitions

For the purposes of this standard, the definitions of section one of IEC 598-1 apply together with the following definitions:

NOTE – The use of the term luminaire (see IEC 598-1) hereinafter also includes components of the luminaire track system.

2.1 luminaire track system: A system, including a track with conductors, for the connection of luminaires to an electrical supply in a range of different positions determined only by the length and location of the track and comprising some or all of the components defined in 2.2 to 2.8 (see also figure 1).

2.2 track: A generally linear assembly of conductors within a housing providing for the mechanical support and electrical connection of luminaires.

NOTE – Luminaires can be positioned or repositioned along the length of track in a simple manner (that is, without the use of tools).

2.3 coupler: A component enabling electrical or mechanical connection to be made between tracks.

2.4 track supply connector: A component used for the electrical connection of a mains supply to the track.

NOTE – The functions of a coupler and a track supply connector may be combined.

2.5 luminaire supply connector: A component for the electrical connection of a luminaire to the track. A connector does not provide mechanical connection of a luminaire to the track.

2.6 adaptor: A component used for the electrical and mechanical connection of a luminaire to the track.

NOTE – An adaptor may incorporate a switch or a fuse.

2.7 track suspension device: A component used for the mechanical connection of the track system to the supporting surface.

2.8 luminaire suspension device: A component used for the mechanical connection of a luminaire to the track.

2.9 rated current: Current assigned to the track or the component by the manufacturer.

NOTE – Where the term current is used, it implies the r.m.s. value, unless otherwise specified.

2.10 end cover: A component intended to be fixed at the end of a track, providing electrical and mechanical protection of the ends of the conductors.

2.11 functional insulation: That insulation necessary only to ensure correct operation.

NOTE - A class III SELV supplied system need not have insulation to protect against electric shock, due to its inherently safe nature.

2.12 class III track: A generally linear assembly of conductors and housing designed to be operated from a SELV supply and providing for the mechanical support and electrical connection of class III luminaires only.

3 Classification

Luminaire track systems shall be either class I or class III in accordance with the provisions of section two of IEC 598-1.

Luminaire/adaptor assemblies that are inseparable can be class II in accordance with the provisions of section two of IEC 598-1 provided they contain no earthing facilities.

Separate adaptors shall not be classified as class II, but may be used with class II luminaires.

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4 General test requirements

4.1 The requirements and tests of this standard shall not be applied to equipment already subject to its own separate IEC standard.

4.2 Tests according to this standard are type tests.

One test sample as described in 4.3 shall be subjected to all relevant tests.