

Valgustiridade elektritoitesüsteemid

Electrical supply track systems for luminaries

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 60570:2001 sisaldab Euroopa standardi EN 60570:1996+A1,2,11,12:2000 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 12.07.2001 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 60570:2001 consists of the English text of the European standard EN 60570:1996+A1,2,11,12:2000.

This standard is ratified with the order of Estonian Centre for Standardisation dated 12.07.2001 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

The standard is available from Estonian standardisation organisation.

ICS 29.060.10, 29.140.40

electrical grounding, luminaire, operating temperatures, polarity, supply connection, tests, thermal endurance, track systems

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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.

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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.

This document is a preview

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

This document is a preview

ICS 29.120.20;29.140.40

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

English version

Electrical supply track systems for luminaires
(IEC 60570:1995/A1:1998)

Systèmes d'alimentation électrique
par rail pour luminaires
(CEI 60570:1995/A1:1998)

Elektrische Stromschienensysteme
für Leuchten
(IEC 60570:1995/A1:1998)

This amendment A1 modifies the European Standard EN 60570:1996; it was approved by CENELEC on 1998-04-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this amendment 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 amendment 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.

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Foreword

The text of document 34D/475/FDIS, future amendment 1 to IEC 60570:1995, 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 A1 to EN 60570:1996 on 1998-04-01.

The following dates were fixed:

- latest date by which the amendment has to be implemented
at national level by publication of an identical
national standard or by endorsement (dop) 1999-01-01
- latest date by which the national standards conflicting
with the amendment have to be withdrawn (dow) 2001-01-01

Endorsement notice

The text of amendment 1:1998 to the International Standard IEC 60570:1995 was approved by CENELEC as an amendment to the European Standard without any modification.

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English version

Electrical supply track systems for luminaires
(IEC 60570:1995/A2:2000)

Systèmes d'alimentation électrique par rail
pour luminaires
(CEI 60570:1995/A2:2000)

Elektrische Stromschienensysteme für
Leuchten
(IEC 60570:1995/A2:2000)

This amendment A2 modifies the European Standard EN 60570:1996; it was approved by CENELEC on 2000-11-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this amendment 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.

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Europäisches Komitee für Elektrotechnische Normung

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

Foreword

The text of document 34D/555/FDIS, future amendment 2 to IEC 60570:1995, prepared by SC 34D, Luminares, of IEC TC 34, Lamps and related equipment, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as amendment A2 to EN 60570:1996 on 2000-11-01.

This amendment A2 supersedes the amendments A11:1998 and A12:2000 to EN 60570.

The following dates were fixed:

- latest date by which the amendment has to be implemented
at national level by publication of an identical
national standard or by endorsement (dop) 2001-08-01
- latest date by which the national standards conflicting
with the amendment have to be withdrawn (dow) 2003-11-01

Endorsement notice

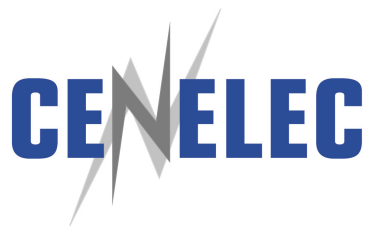
The text of amendment 2:2000 to the International Standard IEC 60570:1995 was approved by CENELEC as an amendment to the European Standard without any modification.

NOTE: Following the withdrawal of the A-deviation for Sweden, Annex ZB to EN 60570 is deleted.

Annex ZA
(normative)

**Normative references to international publications
with their corresponding European publications**

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
Add:				
IEC 60364-7-715	1999	Electrical installations of buildings Part 7-715: Requirements for special installations or locations - Extra-low-voltage lighting installations	-	-



Corrigendum to EN 60570:1996/A2:2000

English version

Foreword

Replace the latest date of withdrawal of conflicting national standards (dow) by:

- latest date by which the national standards conflicting with the amendment have to be withdrawn (dow) 2001-08-01
-

December 2000

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 60570/A11

November 1998

ICS 29.060.10; 29.140.40

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

English version

Electrical supply track systems for luminaires

Systèmes d'alimentation électrique
par rail pour luminaires

Elektrische Stromschienensysteme
für Leuchten

This amendment A11 modifies the European Standard EN 60570:1996; it was approved by CENELEC on 1998-10-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this amendment the status of a national standard without any alteration.

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Europäisches Komitee für Elektrotechnische Normung

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

Foreword

This amendment was prepared by the Technical Committee CENELEC TC 34Z, Luminaires and associated equipment.

The text of the draft was submitted to the Unique Acceptance Procedure and was approved by CENELEC as amendment A11 to EN 60570:1996 on 1998-10-01.

The following dates were fixed:

- latest date by which the amendment has to be implemented
at national level by publication of an identical
national standard or by endorsement (dop) 1999-10-01
 - latest date by which the national standards conflicting
with the amendment have to be withdrawn (dow) 1999-10-01
-

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5 Marking

5.6 Add the following items:

- d) Instructions concerning suitable means for overload and short circuit protection of the SELV circuit.

NOTE: The means of protection shall meet the requirements of IEC 60364, Electrical installation of buildings - Section 715: Extra-low voltage lighting installations.

- e) The minimum cross sectional area and maximum length of the supply cable between transformer and track supply connector.

11 Thermal endurance and operating temperatures

11.3 Replace the existing text by the following:

11.3 Thermal endurance of track shall be checked by the following tests:

11.3.1 A 1,2 m length of track is mounted as in normal use, according to the manufacturer's installation instructions, in a heating cabinet which is maintained for 168 h at a temperature which is 10°C in excess of the manufacturer's stated maximum track temperature under normal operating condition, with a minimum of 80°C or the t_a of the track $+55^{\circ}\text{C}$, whichever is the greater.

After the test, the track shall show no visible signs of deterioration and any shrinkage of the insulating liner shall be such that the track still complies with the requirements of clause 12 (steel probe, test finger, etc.) and the track shall comply with the requirements of 14.1 (insulation resistance test).

11.3.2 For Class III track a typical luminaire in accordance with 0.4.2 of EN 60598-1 and chosen to represent the most onerous situation designed to be used with the track shall be mounted on it in the most unfavourable position of normal use and electrically connected to it. For the supply cable the most unfavourable position shall be taken with the cable bent sharply at the inlet opening as far as possible as the design permits. The track shall be further electrically loaded so as to pass a total current, including the current to the luminaire, equal to its rated current.

The track system is operated at its rated voltage and the t_a of the track plus 20°C and the test is made in accordance with 12.3 of EN 60598-1.

Following the test in addition to complying with 12.3 of EN 60598-1 the track supply connector and couplers (if any) shall be loaded with 1.5 times the rated current of the track system. The voltage drop across each terminal or contact shall not exceed 22,5 mV.

16 Resistance to heat, fire and tracking

16.2 Replace the existing item a) by the following:

a) parts of insulating material retaining current carrying parts in position shall be tested at a temperature equal to that of the track plus 25 °C with a minimum temperature of 125 °C.

Add a new clause 17

17 Terminals and connections for external wiring

For Class III track the provisions of subclauses 15.9.1 and 15.9.2 of EN 60598-1:1997 shall apply with the following modifications:

15.9.1.1 Replace the 1st paragraph by the following:

For all types of terminals (or connections), the test according to 15.9.1.3 is made with ten solid copper non-insulated conductors or with conductors which are delivered by the manufacturer with the track system.

15.9.1.3 Add at the end of the 1st paragraph:

The voltage drop is measured across each terminal and across each connection to the track conductor.

15.9.2.3 Replace the existing text by the following:

Terminals (or connections) with rated current up to and including 6 A are then subjected to an ageing test, without current of 25 cycles duration, each cycle comprising 30 min at the upper cycle temperature of $T \pm 5$ °C or 80 °C ± 5 °C, whichever is the higher, followed by a cooling down period to a temperature between 15 °C and 30 °C. Terminals (or connections) with rated current exceeding 6 A are subjected to an ageing test of 100 such cycles. For the supply cable the most unfavourable position shall be taken with the cable bent sharply at the inlet opening as far as possible as the design permits.

NOTE: The temperature T is the marked maximum rated temperature for T -marked components, such as lampholders.

15.9.2.4 Replace the 1st line by the following:

The voltage drop is measured across each terminal and across each connection to the track conductor.

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 60570/A12

February 2000

ICS 29.060.10; 29.140.40

UDC 621.316.35::628.94-777.001.11.001.2.001.4.002.2 614.825

English version

Electrical supply track systems for luminaires

Systèmes d'alimentation électrique
par rail pour luminaires

Elektrische Stromschienensysteme
für Leuchten

This amendment A12 modifies the European Standard EN 60570:1996; it was approved by CENELEC on 2000-02-03. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this amendment the status of a national standard without any alteration.

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

Foreword

At the request of the Swedish electrotechnical committee, a draft for an amendment to EN 60570:1996 was submitted to the CENELEC members for acceptance in December 1999.

The text of the draft was accepted by CENELEC as amendment A12 to EN 60570:1996 on 2000-02-03.

The following dates were fixed:

- latest date by which the existence of the amendment
has to be announced at national level (doa) 2000-05-03
- latest date by which the amendment has to be implemented
at national level by publication of an identical
national standard or by endorsement (dop) 2000-08-03

Text of amendment A12

In annex ZB, **replace** the reference of the A-deviation for Sweden regarding clause 10 by "(Wiring regulations ELSÄK-FS 1999:5, 521.4.6.1)". The text of the A-deviation remains unchanged.