

SLOVENSKI STANDARD

SIST EN 50085-2-3:2010

01-maj-2010

Nadomešča:
SIST EN 50085-2-3:2000

**Sistemi kabelskih korit in sistemi kabelskih cevi za električne inštalacije - 2-3. del:
Posebne zahteve za utorske sisteme kabelskih korit za inštalacije v priključnih
omaricah**

Cable trunking systems and cable ducting systems for electrical installations - Part 2-3:
Particular requirements for slotted cable trunking systems intended for installation in
cabinets

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Elektroinstallationskanalsysteme für elektrische Installationen - Teil 2-3: Besondere
Anforderungen an Verdrahtungskanäle zum Einbau in Schaltschränke

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Systèmes de goulottes et systèmes de conduits-profils pour installations électriques -
Partie 2-3: Règles particulières pour les systèmes de goulottes de câblage pour
installation dans les armoires

Ta slovenski standard je istoveten z: EN 50085-2-3:2010

ICS:

29.120.10	Inštalacijske cevi za električne namene	Conduits for electrical purposes
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SIST EN 50085-2-3:2010 en,fr

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 50085-2-3

March 2010

ICS 29.120.10

Supersedes EN 50085-2-3:1999

English version

**Cable trunking systems and cable ducting systems
for electrical installations -
Part 2-3: Particular requirements for slotted cable trunking
systems intended for installation in cabinets**

Systèmes de goulottes et systèmes
de conduits-profilés pour installations
électriques -
Partie 2-3: Règles particulières
pour les systèmes de goulottes
de câblage pour installation
dans les armoires

Elektroinstallationskanalsysteme
für elektrische Installationen -
Teil 2-3: Besondere Anforderungen
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This European Standard was approved by CENELEC on 2010-03-01. 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, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

CENELEC

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

Central Secretariat: Avenue Marnix 17, B - 1000 Brussels

Foreword

This European Standard was prepared by the Technical Committee CENELEC TC 213, Cable management systems. It was submitted to the formal vote and was approved by CENELEC as EN 50085-2-3 on 2010-03-01.

This document supersedes EN 50085-2-3:1999 and is aligned on EN 50085-1:2005.

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

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) 2011-03-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2013-03-01

This European Standard is a system standard for cable management products used for electro-technical purposes. It relates to the Council Directive on the approximation of laws, regulations and administrative provisions of the Member States relating to Low Voltage (Directive 2006/95/EC) through consideration of the essential requirements of this directive.

This European Standard is supported by separate standards to which references are made.

This Part 2-3 is to be used in conjunction with EN 50085-1:2005, "*Cable trunking systems and cable ducting systems for electrical installations – Part 1: General requirements*".

This Part 2-3 supplements or modifies the corresponding clauses of EN 50085-1:2005. Where a particular clause or subclause of Part 1 is not mentioned in this Part 2, that clause or subclause applies as far as it is reasonable. Where this Part 2 states "addition", "modification" or "replacement" the relevant text of Part 1 is to be adapted accordingly.

NOTE The following numbering system is used:

- subclauses, tables and figures that are additional to those in Part 1 are numbered starting from 101;
- additional annexes are lettered AA, BB, etc.

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1 Scope

Replacement:

This European Standard specifies requirements and tests for cable trunking systems (CTS) and cable ducting systems (CDS) intended for the accommodation, and where necessary for the electrically protective separation, of insulated conductors, cables and possibly other electrical equipment in electrical and/or communication systems installations. The maximum voltage of these installations is 1 000 V a.c. and 1 500 V d.c.

Slotted cable trunking systems are intended for mounting inside cabinets in electrical and/or communication system installations.

This European Standard does not apply to conduit systems, cable tray systems, cable ladder systems, power track systems or equipment covered by other standards.

This European Standard shall be used in conjunction with EN 50085-1:2005 “*Cable trunking systems and cable ducting systems for electrical installations – Part 1: General requirements*” which is referred to in this document as Part 1. Wherever reference is made in this European Standard to EN 50085-1:2005 this does not apply to cable ducting systems.

2 Normative references

Replacement:

EN 50085-1	2005	Cable trunking systems and cable ducting systems for electrical installations – Part 1: General requirements
EN 50085-2-3	1999	Cable trunking systems and cable ducting systems for electrical installations – Part 2-3: Particular requirements for slotted cable trunking systems intended for installation in cabinets
EN 60695-11-5	2005	Fire hazard testing – Part 11-5: Test flames – Needle-flame test method – Apparatus, confirmatory test arrangement and guidance (IEC 60695-11-5:2004)
HD 383 S2	1986 ¹⁾	Conductors of insulated cables – First supplement: Guide to the dimensional limits of circular conductors (IEC 60228:1978, mod. + IEC 60228A:1982, mod.)

3 Definitions

For the purposes of this document, the terms and definitions of Part 1 apply except as follows.

Addition:

3.101

slotted cable trunking system

system comprising a slotted trunking length and possibly other slotted cable trunking system components for the accommodation and laying in of insulated conductors or cables intended for use in a cabinet or similar

¹⁾ Superseded by EN 60228:2005, *Conductors of insulated cables* (IEC 60228:2004).

3.102**slotted cable trunking system component**

part of the system which includes

- a) slotted trunking length,
- b) trunking fitting,
- c) fixing device,
- d) system accessory

NOTE The above mentioned system components may not necessarily be included all together in a system. Different combinations of system components may be used.

3.103**slotted trunking length**

trunking length with slotted walls and with cover(s) which may be integral part of the base and/or may be slotted

3.104**slotted wall**

wall with openings allowing cables to pass through

NOTE The openings can be with open or closed boundary and may have different shapes, normally designed to maintain wiring in position.

3.105**wall finger**

part of a slotted wall between two consecutive slots with open boundary

3.106**break-out line**

line which may be available on the walls of a trunking length to facilitate the breaking of walls or parts thereof, such as a wall finger

4 General requirements

Replacement:

Slotted cable trunking systems shall be so designed and constructed that where required they ensure reliable support, accommodation and segregation of the insulated conductors and/or cables contained therein.

Equipment associated with or incorporated in a system component but which is not a system component, shall and need only comply with the relevant standard of this equipment, if any. However it may be necessary to include such equipment in a test arrangement for the purpose of testing its interface with the slotted cable trunking system.

Compliance is checked by carrying out all the tests specified.

5 General conditions for tests

This clause of Part 1 is applicable.

6 Classification

This clause of Part 1 is applicable except as follows.

6.2 Not applicable

6.3 Table 2 is not applicable.

6.5 Not applicable

6.6 Not applicable

6.7 Not applicable

6.9 Not applicable

6.10 Not applicable

Addition:

6.101 According to the intended installation positions

6.101.1 Mounted on vertical or horizontal surface

6.101.2 Mounted on vertical or horizontal surface except in a cover down position

7 Marking and documentation

This clause of Part 1 is applicable.

8 Dimensions

This clause of Part 1 is applicable except as follows.

Addition:

8.101 Preferred solution for fixing holes, if any, in the base of the slotted trunking lengths according to the different trunking widths as shown in Figure 101 is as follows:

- trunking lengths with a nominal width less or equal to 12,5 mm should preferably have one row of small holes only, as shown in Figure 102 b);
- trunking lengths with a nominal width greater than 12,5 mm and less or equal to 62,5 mm, should preferably have one row of holes only, alternately as shown in Figure 102 a) and in Figure 102 b);
- trunking lengths with a nominal width greater than 62,5 mm should preferably have two or more rows of holes alternately as shown in Figure 102 a) and in Figure 102 b), positioned at a distance of 25 mm or 50 mm apart, symmetrically located from the trunking centre line.

9 Construction

This clause of Part 1 is applicable except as follows.

- 9.2 Not applicable
- 9.5 Not applicable
- 9.6 Not applicable
- 9.7 Not applicable
- 9.8 Not applicable
- 9.9 Not applicable
- 9.10 Not applicable
- 9.11 Not applicable
- 9.12 Not applicable

10 Mechanical properties

This clause of Part 1 is applicable except as follows.

10.2 Cable support test

Replacement:

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10.2.1 General test conditions

Each test is made on one new sample of slotted trunking length having a length of (250 ± 5) mm.

Before the test non metallic and composite slotted trunking lengths are aged at a temperature declared according to Table 3 for (168 ± 4) h continuously.

The sample is securely fixed, using 10 mm external diameter flat metallic washers and appropriate metallic screws to a rigid smooth support such as a plywood board 16 mm thick. When 10 mm external diameter is too large, suitable smaller washer and appropriate screw are used. Fixing(s) are positioned as shown in Figure 103 at (200 ± 5) mm centres along the length of the sample.

Within the width of the sample:

- *for trunking with a width less than 50 mm, one fixing is used as shown in Figure 103 a);*
- *for trunking with a width equal or greater than 50 mm, two fixings are used as shown in Figure 103 b).*

If the manufacturer's instructions require the use of cable retainers or dividers, these are fitted according to the manufacturer's instructions. Cable retainers, if any, are symmetrically fixed along the length.

The sample is subjected to an evenly distributed load of 0,8 g per mm² of the declared usable area for cables, per metre length. The load is distributed between the compartments proportionally to the declared usable area. The load consists of copper insulated conductors or cables complying with class 5, Table 3 of HD 383 S2:1986, or flexible insulated conductors or cables of similar mass per meter.