SLOVENSKI STANDARD
SIST EN 61210:2011

01-januar-2011

Nadomešča:
SIST EN 61210:1999

Povezovalne naprave - Ploščati končniki za hitro spajanje električnih bakrenih vodnikov - Varnostne zahteve (IEC 61210:2010, spremenjen)

Connecting devices - Flat quick-connect terminations for electrical copper conductors - Safety requirements (IEC 61210:2010, modified)

Dispositifs de connexion - Bornes plates à connexion rapide pour conducteurs électriques en cuivre - Exigences de sécurité (IEC 61210:2010, modifiziert)

Dispositifs de connexion - Bornes plates à connexion rapide pour conducteurs électriques en cuivre - Exigences de sécurité (IEC 61210:2010, modifiée)

Ta slovenski standard je istoveten z: **EN 61210:2010**

ICS:

29.120.20	Spojni elementi	Connecting devices

SIST EN 61210:2011 **en,fr**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 61210

November 2010

ICS 29.120.20

Supersedes EN 61210:1995

English version

Connecting devices - Flat quick-connect terminations for electrical copper conductors - Safety requirements

(IEC 61210:2010, modified)

Dispositifs de connexion - Bornes plates à connexion rapide pour conducteurs électriques en cuivre - Exigences de sécurité (CEI 61210:2010, modifiée)

Verbindungsmaterial - Flachsteckverbindungen für elektrische Kupferleiter - Sicherheitsanforderungen (IEC 61210:2010, modifiziert)

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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

Management Centre: Avenue Marnix 17, B - 1000 Brussels

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Foreword

The text of document 23F/200/FDIS, future edition 2 of IEC 61210, prepared by SC 23F, Connecting devices, of IEC TC 23, Electrical accessories, was submitted to the IEC-CENELEC parallel vote.

A draft amendment was prepared by the Technical Committee CENELEC SR 23F, Connecting devices and was submitted to formal vote.

The combined texts were approved by CENELEC as EN 61210 on 2010-11-01.

This European Standard supersedes EN 61210:1995.

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)	2011-11-01
– latest date by which the national standards conflicting with the EN have to be withdrawn	(dow)	2013-11-01

This European Standard has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association.

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61210:2010 was approved by CENELEC as a European Standard with agreed common modifications as given below.

COMMON MODIFICATIONS

Delete Annex D.

Modify Annex E as follows:

Table E1: delete the last column containing the dimensions in "inches".

Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

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.

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

Publication	Year	Title	EN/HD	Year
IEC 60068-1	1988	Environmental testing - Part 1: General and guidance	EN 60068-1[1)]	1994
IEC 60352-2	2006	Solderless connections - Part 2: Crimped connections - General requirements, test methods and practical guidance	EN 60352-2	2006
ISO 1456	2009	Metallic and other inorganic coatings - Electrodeposited coatings of nickel, nickel plus chromium, copper plus nickel and of copper plus nickel plus chromium	EN ISO 1456	2009
ISO 2081	2008	Metallic and other inorganic coatings - Electroplated coatings of zinc with supplementary treatments on iron or steel	EN ISO 2081	2008
ISO 2093	1986	Electroplated coatings of tin - Specification and test methods	-	-

[1)] EN 60068-1 includes A1 to IEC 60068-1 + corr. October 1988.

IEC 61210

Edition 2.0 2010-08

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Connecting devices – Flat quick-connect terminations for electrical copper conductors – Safety requirements

Dispositifs de connexion – Bornes plates à connexion rapide pour conducteurs électriques en cuivre – Exigences de sécurité

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

CONNECTING DEVICES – FLAT QUICK-CONNECT TERMINATIONS FOR ELECTRICAL COPPER CONDUCTORS – SAFETY REQUIREMENTS

FOREWORD

1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). 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. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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International Standard IEC 61210 has been prepared by subcommittee 23F: Connecting devices, of IEC technical committee 23: Electrical accessories.

This second edition cancels and replaces the first edition published in 1993 and constitutes a merge between the first edition of IEC 61210 published by SC23F and IEC 60760 published in 1989 by SC48B. This second edition does not introduce major technical modifications.

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

FDIS	Report on voting
23F/200/FDIS	23F/202/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 publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

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

CONNECTING DEVICES – FLAT QUICK-CONNECT TERMINATIONS FOR ELECTRICAL COPPER CONDUCTORS – SAFETY REQUIREMENTS

1 Scope

This International Standard applies to non-insulated flat quick-connect terminations consisting of a male tab of size 2,8 mm, 4,8 mm, 6,3 mm or 9,5 mm with hole or dimple detents and a mating female connector for use as either an incorporated or an integrated part of an equipment or of a component, or as a separate entity. This standard establishes uniform requirements for the dimensions, performance characteristics and test program.

The connected electrical copper conductors shall be flexible or rigid stranded, having a cross-sectional area up to and including 6 mm^2 or rigid solid having a cross-sectional area up to and including 2,5 mm^2. This standard shall not be used for connecting aluminum conductors.

The rated voltage shall not exceed 1 000 V a.c. with a frequency up to and including 1 000 Hz, and 1 500 V d.c., and having the temperature limits applicable to materials used within this standard.

NOTE 1 This standard, where applicable, may be used for conductors made of material other than copper.

NOTE 2 For reasons of safety, it is recommended that flat quick-connect terminations beyond the scope of this standard should not be interchangeable with those of this standard.

NOTE 3 This standard does not apply to female connectors with positive locking means.

NOTE 4 The flat quick-connect terminations covered by this standard are not intended to be disconnected by pulling on the cable.

NOTE 5 Annex D provides additional information on non international units.

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 60068-1:1988, *Environmental testing – Part 1: General and guidance*

IEC 60352-2:2006, *Solderless connections – Part 2: Crimped connections – General requirements, test methods and practical guidance*

ISO 1456:2009, *Metallic and other inorganic coatings – Electrodeposited coatings of nickel, nickel plus chromium, copper plus nickel and of copper plus nickel plus chromium*

ISO 2081:2008, *Metallic and other inorganic coatings – Electroplated coatings of zinc with supplementary treatments on iron or steel*

ISO 2093:1986, *Electroplated coatings of tin – Specification and test methods*

3 Terms and definitions

For the purpose of this document the following terms and definitions apply:

3.1
flat quick-connect termination
electrical connection consisting of a male tab and a female connector which can be inserted and withdrawn with or without the use of a tool

3.2
male tab
that portion of a flat quick-connect termination which receives the female connector

3.3
male test tab
male tab manufactured with tighter tolerances for the specific purpose of conducting mechanical tests with production female connectors

3.4
female connector
that portion of a flat quick-connect termination which is pushed onto the male tab

3.5
detent
dimple (depression) or hole in the male tab which engages a raised portion on the female connector to provide a latch for the mating parts

3.6
maximum permissible temperature
maximum service temperature
highest temperature which the flat quick-connect termination is allowed to attain in normal use

4 Main characteristics

4.1 Flat quick-connect terminations are classified into sizes according to the nominal width and thickness of the male tabs. This standard covers the following nominal sizes:

– 2,8 mm × 0,5 mm
– 2,8 mm × 0,8 mm
– 4,8 mm × 0,5 mm
– 4,8 mm × 0,8 mm
– 6,3 mm × 0,8 mm
– 9,5 mm × 1,2 mm

NOTE Relationship between millimetres and inches is shown in Table D.2.

4.2 The preferred conductor cross-sectional areas shall be 0,2 mm^2, 0,34 mm^2, 0,5 mm^2, 0,75 mm^2, 1,0 mm^2, 1,5 mm^2, 2,5 mm^2, 4,0 mm^2 and 6,0 mm^2.

NOTE The approximate equivalent relationship between cross-sectional area in mm^2 and AWG sizes is shown in Table D.3.