SLOVENSKI STANDARD
SIST EN 60603-8:2002

01-september-2002

Connectors for frequencies below 3 MHz for use with printed boards - Part 8: Two-part connectors for printed boards, for basic grid of 2,54 mm (0,1 in), with square male contacts of 0,63 mm x 0,63 mm (IEC 60603-8:1990)

Connectors for frequencies below 3 MHz for use with printed boards -- Part 8: Two-part connectors for printed boards, for basic grid of 2,54 mm (0,1 in), with square male contacts of 0,63 mm x 0,63 mm

Steckverbinder für gedruckte Schaltungen für Frequenzen unter 3 MHz -- Teil 8: Indirekte Steckverbinder für gedruckte Schaltungen Rastermaß 2,54 mm (0,1 in) - Querschnitt der männlichen Kontakte 0,63 mm x 0,63 mm

Connecteurs pour fréquences inférieures à 3 MHz pour utilisation avec cartes imprimées -- Partie 8: Connecteurs pour cartes imprimées en deux parties, pour grille de base de 2,54 mm (0,1 in) à contacts mâles de section 0,63 mm x 0,63 mm

Ta slovenski standard je istoveten z: **EN 60603-8:1998**

ICS:

31.220.10	Vtiļ i in vtiļ nice, konektorji	Plug-and-socket devices. Connectors

SIST EN 60603-8:2002 **en**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 60603-8

February 1998

ICS 31.220.10

Descriptors: Electronic components, electric connectors, printed-circuit cards, plug connectors, designation, dimensions, assembling, couplings, tests, standard gauges, characteristics

English version

Connectors for frequencies below 3 MHz for use with printed boards Part 8: Two-part connectors for printed boards, for basic grid of 2,54 mm (0,1 in), with square male contacts of 0,63 mm x 0,63 mm (IEC 60603-8:1990)

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Querschnitt der männlichen Kontakte 0,63 mm x 0,63 mm
(IEC 60603-8:1990)

This European Standard was approved by CENELEC on 1998-01-01. 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, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

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 the International Standard IEC 60603-8:1990, prepared by SC 48B, Connectors, of IEC TC 48, Electromechanical components and mechanical structures for electronic equipment, was submitted to the formal vote and was approved by CENELEC as EN 60603-8 on 1998-01-01 without any modification.

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) 1998-12-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 1998-12-01

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.

Endorsement notice

The text of the International Standard IEC 60603-8:1990 was approved by CENELEC as a European Standard without any modification.

Annex ZA (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.

Publication	Year	Title	EN/HD	Year
IEC 60050(581)	1978	International Electrotechnical Vocabulary (IEV) Chapter 581: Electromechanical components for electronic equipment	-	-
IEC 60097	1970[1]	Grid system for printed circuits	-	-
IEC 60194	1988	Terms and definitions for printed circuits	HD 142 S3	1991
IEC 60326	series	Printed boards	-	-
IEC 60512	series	Electromechanical components for electronic equipment Basic testing procedures and measuring methods	EN 60512	series
IEC 60603-1	1981[2]	Connectors for frequencies below 3 MHz for use with printed boards Part 1: General rules and guide for the preparation of detail specifications	-	-
ISO 468	1982	Surface roughness Parameters, their values and general rules for specifying requirements	-	-

1) IEC 60097:1991 is harmonized as EN 60097:1993.

2) IEC 60603-1:1991 + A1:1992 are harmonized as EN 60603-1:1998.

NORME INTERNATIONALE

INTERNATIONAL STANDARD

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Première édition
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1990-12

Connecteurs pour fréquences inférieures à 3 MHz pour utilisation avec cartes imprimées

Huitième partie:

Connecteurs pour cartes imprimées en deux parties, pour grille de base de 2,54 mm (0,1 in) à contacts mâles de section 0,63 mm×0,63 mm

Connectors for frequencies below 3 MHz for use with printed boards

Part 8:

Two-part connectors for printed boards for basic grid of 2,54 mm (0,1 in), with square male contacts of 0,63 mm×0,63 mm

Bureau central de la Commission Electrotechnique Internationale 3, rue de Varembé Genève Suisse

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Международная Электротехническая Комиссия

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

CONNECTORS FOR FREQUENCIES BELOW 3 MHz FOR USE WITH PRINTED BOARDS

Part 8: Two-part connectors for printed boards for basic grid of 2,54 mm (0,1 in), with square male contacts of 0,63 mm × 0,63 mm

FOREWORD

1) The formal decisions or agreements of the IEC on technical matters, prepared by Technical Committees on which all the National Committees having a special interest therein are represented, express, as nearly as possible, an international consensus of opinion on the subjects dealt with.

2) They have the form of recommendations for international use and they are accepted by the National Committees in that sense.

3) In order to promote international unification, the IEC expresses the wish that all National Committees should adopt the text of the IEC recommendation for their national rules in so far as national conditions will permit. Any divergence between the IEC recommendation and the corresponding national rules should, as far as possible, be clearly indicated in the latter.

4) The IEC has not laid down any procedure concerning marking as an indication of approval and has no responsibility when an item of equipment is declared to comply with one of its recommendations.

PREFACE

This standard has been prepared by Sub-Committee 48B: Connectors, of IEC Technical Committee No. 48: Electromechanical components for electronic equipment.

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

Six Months' Rule	Report on Voting
48B(CO) 164	48B(CO) 179

Full information on the voting for the approval of this standard can be found in the Voting Report indicated in the table above.

The following IEC publications are quoted in this standard:

Publications Nos. 50 (581) (1978): International Electrotechnical Vocabulary (IEV), Chapter 581: Electromechanical components for electronic equipment.
97 (1970): Grid system for printed circuits.
194 (1988): Terms and definitions for printed circuits.
326: Printed boards.
512: Electromechanical components for electronic equipment; basic testing procedures and measuring methods.
603-1 (1981): Connectors for frequencies below 3 MHz for use with printed boards, Part 1: General rules and guide for the preparation of detail specifications.

Other publication quoted:

ISO Standard 468 (1982): Surface roughness – Parameters, their values and general rules for specifying requirements.

CONNECTORS FOR FREQUENCIES BELOW 3 MHz FOR USE WITH PRINTED BOARDS

Part 8: Two-part, connector for printed boards for basic grid of 2,54 mm (0,1 in), with square male contacts of 0,63 mm × 0,63 mm

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1. Scope

This standard is applicable to a group of related two-part connectors for printed boards for board-to-board and board-to-wire connection, with tin or gold plated contact area according to the style.

The free or fixed board-mounted connectors are provided with terminations suitable for printed boards in accordance with IEC 326 and using a grid of 2,54 mm (0,1 in) as laid down in IEC Publication 97.

The fixed connectors are provided with solder terminations.

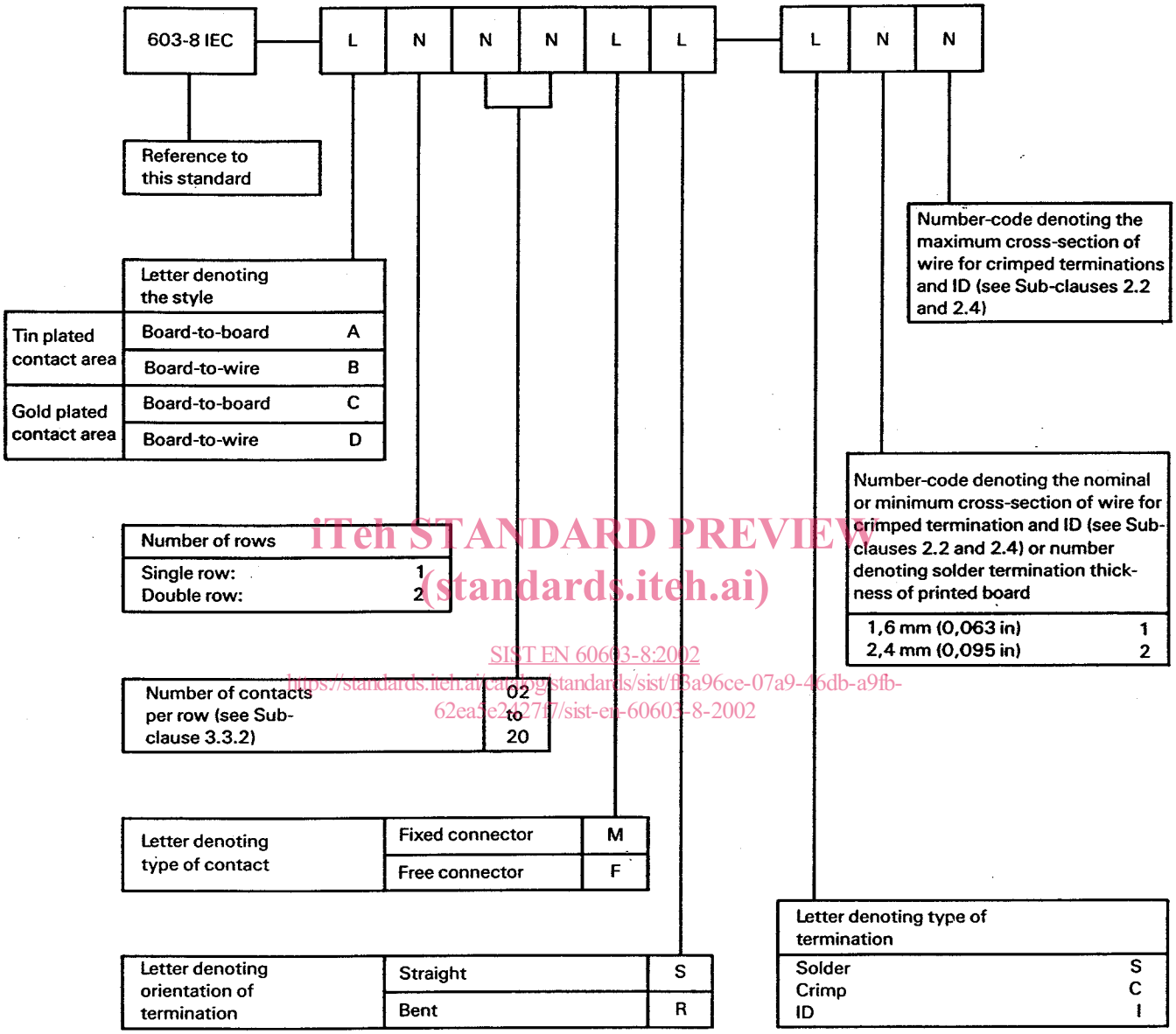
The free connectors are provided with solder terminations, crimp terminations or insulation displacement (ID) connections.

This standard shall be used in conjunction with IEC 50(581), 97, 194, 326, 512 and 603-1.

2. IEC type designation

2.1 *General codification*

Connectors according to this standard shall be designated by the following system:



Example. – Free connector board-to-wire style ID, tin-plated contact area, orientation of termination straight (parallel to the plug-in axis) for wire of minimum section 0,12 mm² (AWG 26) and maximum 0,22 mm² (AWG 24) of 28 contacts on double row: 603-8 IEC-B214FS-I64.

2.2 *Specific designation of the ID free connectors*

Table 1

ID for	1st number*	2nd number*
One wire	Nominal value	-
Range of nominal cross-sections	Minimum value	Maximum value

*See code, Sub-clause 2.4.

2.3 *Marking of cross-sections of usable wires*

The cross-sections of usable wires are referenced according to Table 2.

The marking shall be indicated on the ID free connector i.e.:
- by the gauge;
- by one or two figures;
- by one or two colours.

In the event of colour similarity between the insulator and the marking, different shades of colour shall be used.

2.4 *Designation and marking table*

Table 2

Nominal cross-section 7 strands mm²	Gauge	Code designation	Colour on housing
0,079	28	8	Grey
0,12	26	6	Blue
0,22	24	4	Yellow

3. Common features

3.1 *Dimensions*

3.1.1 *Reference system*

The basic grid of 2,54 mm (0,1 in) is used as datum system.

The dimensions are defined in Sub-clauses 3.1.2 and 3.1.3.

3.1.2 *Fixed connector*

Position of terminations.

The distances between the centres of the terminations shall be multiples of 2,54 mm (0,1 in).

3.1.3 *Printed board assembly*

3.1.3.1 Position of the board-mounted connector

3.1.3.2 Position of the printed board

3.1.3.3 Position of the grid of the printed board

The solder terminations of the board-mounted connectors shall fit into holes in the printed board according to IEC 326, located on a grid of 2,54 mm (0,1 in) according to IEC 97.

3.1.4 *Isometric views and values*

Table 3

Reference	Dimensions mm	Dimensions in	Legend
M_1	11,1	0,437	Required space for the mated connector
M_3	17,6	0,693	
M_4	20,6	0,811	
M_5	17,1	0,673	
C_1, C_2, C_3, C_4, C_6	$n \times 2,54$	$n \times 0,1$	Maximum overall length
C_8	$(n \times 2,54) + 0,35$	$(n \times 0,1) + 0,014$	
F_1	2,54	0,1	Maximum overall width
F_2	2,54	0,1	
F_3	5,08	0,2	
F_4	5,08	0,2	
F_5	7,62	0,3	
F_6	3,30	0,130	
F_8	5,84	0,230	
F_{10}	5,08	0,2	
F_{12}	5,10	0,201	
F_{14}	8,00	0,315	
F_{16}	7,62	0,3	
F_{18}	9,34	0,368	
e_1	12,00	0,472	Distance from the edge of the board to the first row of contacts
e_2	2,50	0,098	
e_3	12,00	0,472	
e_4	1,30	0,051	Distance between the base of the connector housing and the first row of contacts
h	7,62	0,3	Distance between two rows of right angle terminations of board-to-board free connectors
c	2,54	0,1	Pitch of the terminations

n = number of contacts per row.