

Connectors for frequencies below 3 MHz for use with printed boards —

Part 5: Edge-socket connectors and two-part connectors for double-sided printed boards with 2,54 mm (0,1 in) spacing

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British Standard

ICS 31.220.10

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National foreword

This British Standard is the English language version of EN 60603-5:1998. It is identical with IEC 60603-5:1987.

The UK participation in its preparation was entrusted by Technical Committee EPL/48, Electromechanical components for electronic equipment, to Subcommittee EPL/48/2, Connectors for electronic equipment, which has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible international/European committee any enquiries on the interpretation, or proposals for change, and keep the UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

A list of organizations represented on this subcommittee can be obtained on request to its secretary.

From 1 January 1997, all IEC publications have the number 60000 added to the old number. For instance, IEC 27-1 has been renumbered as IEC 60027-1. For a period of time during the change over from one numbering system to the other, publications may contain identifiers from both systems.

Cross-references

Attention is drawn to the fact that CEN and CENELEC standards normally include an annex which lists normative references to international publications with their corresponding European publications. The British Standards which implement international or European publications referred to in this document may be found in the BSI Standards Catalogue under the section entitled “International Standards Correspondence Index”, or by using the “Find” facility of the BSI Standards Electronic Catalogue.

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Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, the EN title page, pages 2 to 34 and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

Amendments issued since publication

Amd. No.	Date	Comments

This British Standard, having been prepared under the direction of the Electrotechnical Sector Board, was published under the authority of the Standards Board and comes into effect on 15 May 1998

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Descriptors: Electronic components, electric connectors, printed-circuit cards, connector plugs, bed plates, designation, dimensions, assembling, couplings, tests, standard gauges, characteristics

English version

**Connectors for frequencies below 3 MHz for use with
printed boards Part 5: Edge-socket connectors and two-part
connectors for double-sided printed boards
with 2,54 mm (0,1 in) spacing**

(IEC 60603-5:1987)

Connecteurs pour fréquences
inférieures à 3 MHz pour utilisation
avec cartes imprimées
Partie 5: Connecteurs encartables et
connecteurs enfichables pour cartes imprimées
double face au pas de 2,54 mm (0,1 in)
(CEI 60603-5:1987)

Steckverbinder für gedruckte Schaltungen für
Frequenzen unter 3 MHz
Teil 5: Steckverbinder für direktes Stecken und
indirekte Steckverbinder für
beidseitig-beschichtete leiterplatten
mit 2,54 mm (0,1 in) Kontaktabstand
(IEC 60603-5:1987)

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

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Foreword

The text of the International Standard IEC 60603-5:1987, 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 60603-5 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 60603-5:1987 was approved by CENELEC as a European Standard without any modification.

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This standard shall be used in conjunction with IEC Publication 512: Electromechanical Components for Electronic Equipment: Basic Testing procedures and Measuring Methods.

1 Scope

This standard covers a range of connectors with 2.54 mm (0.1 in) spacing intended to connect a double sided printed board to another printed board or wires.

Two kinds of connector are available:

- One-part edge-socket connector.

Fixed connector or (female) receptacle is intended to mate with edge board contacts.

- Two-part connector.

Fixed connector or (female) receptacle is intended to mate with free connector of board-mounted (male) connector.

For these two cases, fixed connectors or (female) receptacles are the same.

Fixed connectors are available with:

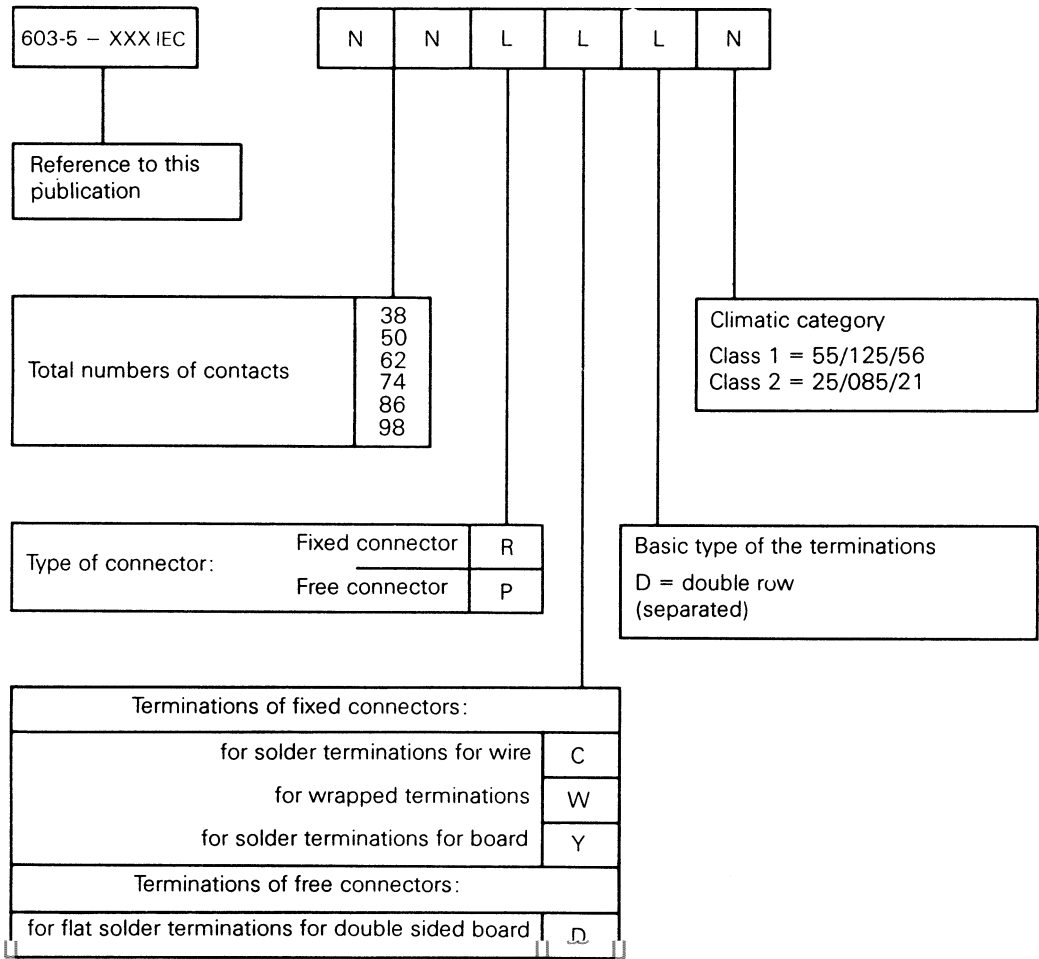
- solder terminations for wire,
- solder terminations for board up to 3.44 mm (0.135 in),
- wrapped terminations.

Free connectors are provided with flat solder terminations for double sided board of nominal thickness 1.6 mm (0.063 in).

For edge-socket connectors only, polarization and coding are available by means of a device mounted instead of two opposite contacts.

2 IEC type designation

Connectors according to this publication shall be designated by:

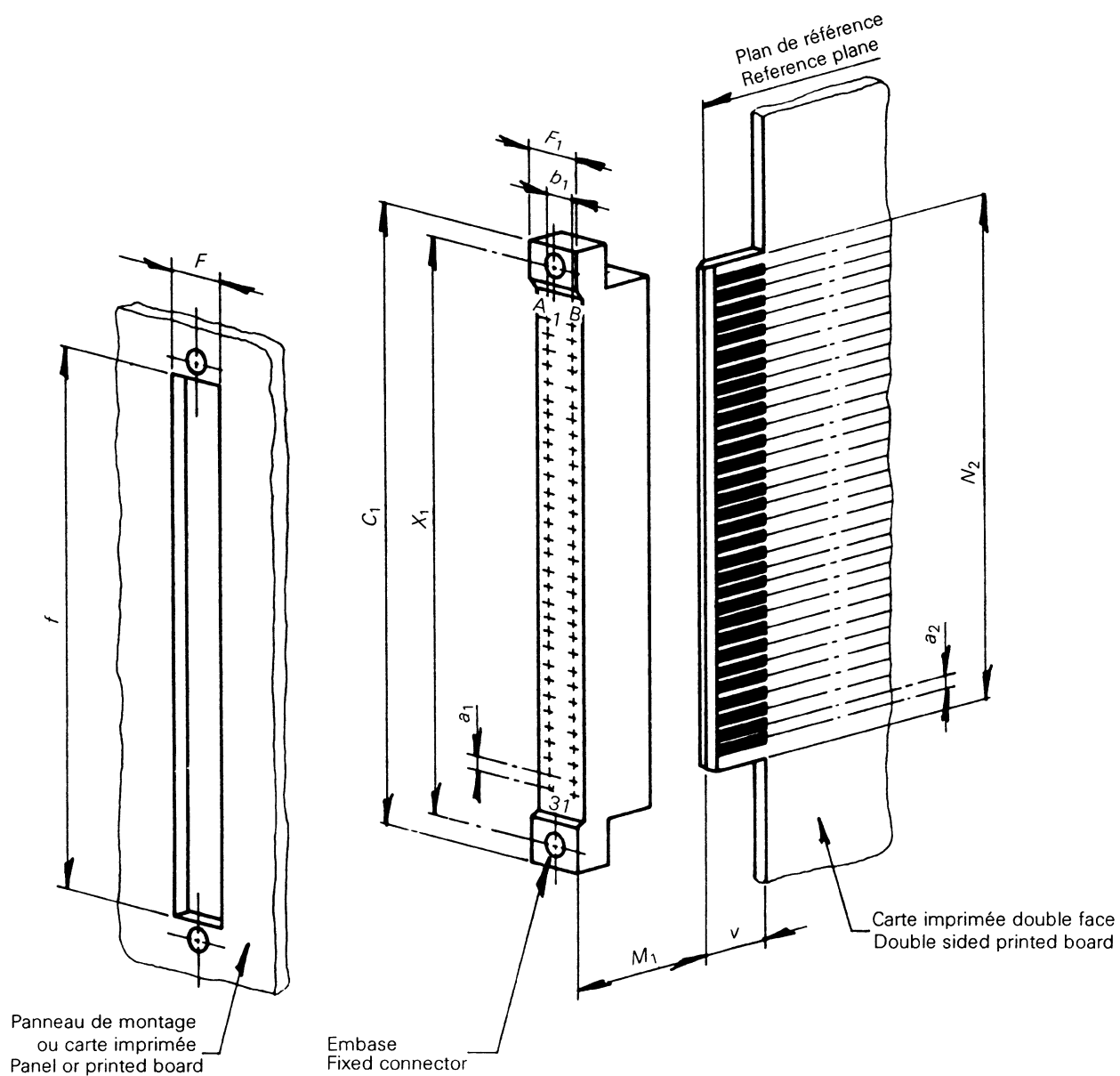


NOTE "L" for letter.
"N" for number.

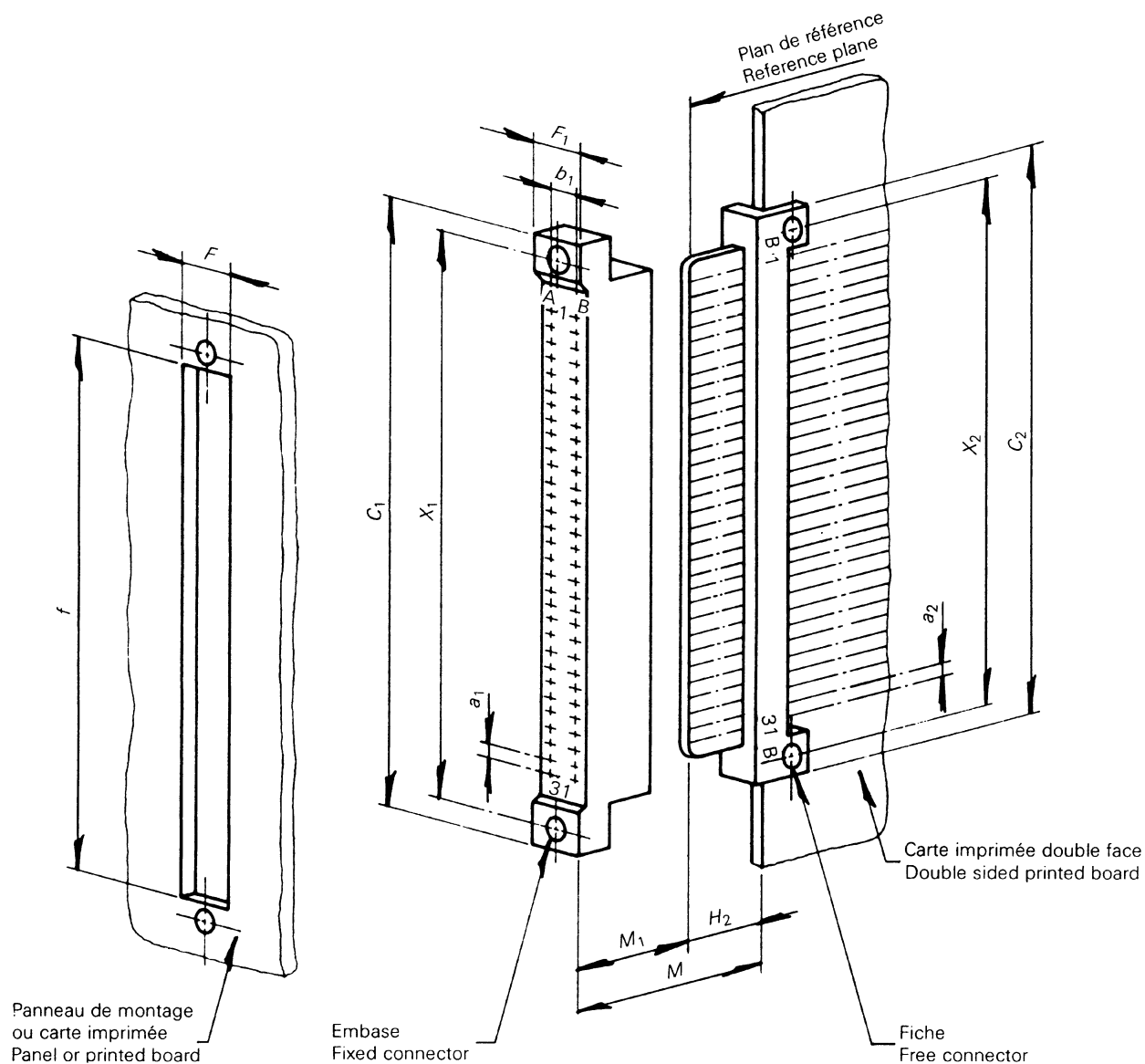
3 Common features

3.1 Isometric view

3.1.1 Edge-socket connector



3.1.2 Two-part connector



3.1.3 Common values

Reference letter	Dimensions		Legend
	mm	in	
a_1	2.54	0.1	Pitch of the terminations of the fixed connector
a_2	2.54	0.1	Pitch of the terminations of the free connector or of the contact pads of the double sided board
b_1	5.08	0.2	Distance between two rows
F	10.2 min.	0.402 min.	Minimum width of mounting cut-out
F_1	10 max.	0.394 max.	Maximum overall width of the fixed connector
H_2	14.8	0.583	Distance between the reference plane of the free connector and the touching face of board with free connector
M	19.3	0.760	Distance between the mounting plane of the fixed connector and the touching face of board with free connector
M_1	4.5	0.177	Distance between the mounting plane of the fixed connector and the bottom of the board slot
v	12.2	0.480	Minimum cut-out of the printed board

3.1.4 Values depending on the number of contacts

Reference letter	Legend
C_1	Maximum overall length of the fixed connector
C_2	Maximum overall length of the free connector
f	Minimum length of mounting cut-out
N_2	Maximum length of the printed board in the area of the edge-board contacts
X_1	Distance between the two mounting holes of the fixed connector
X_2	Distance between the two mounting holes of the free connector

3.2 Contact location

The contact identification may be partial. It must be made on the front and rear faces for the fixed connectors and on the lateral face for the free connector.

The fixed connector contacts may be replaced on the front face of the insulating housing.

4 Dimensions

4.1 General

Dimensions in millimetres are original. Drawings are shown in first angle projection. The shape of the connectors may deviate from those given in the following drawings as long as the specified dimensions are not influenced.

4.2 Fixed connector

4.2.1 Insulating housing

