

**Harmonized system of quality
assessment for electronic components**

Sectional specification: Rectangular connectors for frequencies below 3 MHz

The European Standard EN 175300:1996 has the status of a
British Standard

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Committees responsible for this British Standard

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- Association of Manufacturers Allied to the Electrical and Electronic Industry (BEAMA Ltd.)
- British Telecommunications plc
- BSI Quality Assurance
- Federation of the Electronics Industry
- Ministry of Defence
- Premises Cabling Association

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National foreword

This British Standard has been prepared by Subcommittee EPL/48/2, and is the English language version of EN 175300:1996 *Sectional Specification: Rectangular connectors for frequencies below 3 MHz*, published by the European Committee for Electrotechnical Standardization (CENELEC.) It supersedes BS EN 175300:1992, which will be withdrawn 1997-09-15.

Cross-references

Publication referred to	Corresponding British Standard
CECC 00007:1973	BS E9007:1975 <i>Specification for harmonized system of quality assessment for electronic components: Basic specification: Sampling plans and procedures for inspection by attributes</i>
CECC 00009:1980	BS CECC 00009:1982 <i>Specification for harmonized system of quality assessment for electronic components: Basic specification: Basic testing procedures and measuring methods for electromechanical components</i> BS CECC 00114 <i>Rule of procedure 14. Quality assessment procedures</i>
CECC 00114-II:1994	Part 2:1995 <i>Qualification approval of electronic components</i>
CECC 00114-III:1993	Part 3:1993 <i>Capability approval of an electronic component manufacturing activity</i>
IEC 50 (581):1978	BS 4727 <i>Glossary of electrotechnical, power, telecommunication, electronics, lighting and colour terms</i> Part 1 <i>Terms common to power, telecommunications and electronics</i> Group 13:1991 <i>Electromechanical components for electronic equipment</i> BS EN 60068 <i>Environmental testing</i>
IEC 68-1:1988	Part 1:1995 <i>General and guidance</i> BS 7822 <i>Insulation coordination for equipment within low-voltage systems</i>
IEC 664-1:1992	Part 1:1995 <i>Principles, requirements and tests</i>
IEC 807-1:1991	BS QC 030000:1993 <i>Harmonized system of quality assessment for electronic components. Rectangular connectors for frequencies below 3 MHz. Generic specification. General requirements and guide for the preparation of detail specifications for connectors with assessed quality</i>
ISO 286	BS EN 20286 <i>ISO system of limits and fits</i>
ISO 1000:1992	BS 5555:1993 <i>Specification for SI units and recommendations for the use of their multiples and of certain other units</i>

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Summary of pages

This document comprises a front cover, an inside front cover, pages i to iv, the EN title page, pages 2 to 32, an inside back cover 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.

Descriptors: Quality, electronic components, connectors

English version

Sectional Specification: Rectangular connectors for frequencies below 3 MHz

Spécification intermédiaire:
Connecteurs rectangulaires pour
fréquences inférieures à 3 MHz

Rahmenspezifikation:
Rechteckige Steckverbinder für
Frequenzen unter 3 MHz

This European Standard was approved by CENELEC on 1995-09-08. 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.

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CENELEC

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

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Foreword

This European Standard was prepared by Working Group CLC/TC CECC/SC 48B (former WG 25).

It is based, wherever possible, on the Publications of the International Electrotechnical Commission and in particular on IEC 807-1: Rectangular connectors for frequencies below 3 MHz, Part 1: General requirements and guide for the preparation of detail specifications.

The text of the draft based on document CECC(Secretariat)3556 was submitted to the formal vote; together with the voting report, circulated as document CECC(Secretariat)3666, it was approved as EN 175300 on 1995-09-08.

This European Standard replaces EN 175300:1992.

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) 1996-09-15
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 1997-09-15

NOTE This specification does not comply completely with the requirements of CECC 00400.

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CECC SPECIFICATION SYSTEM
for LF Connectors

EN 175200	EN 61076-4	EN 175300
SECTIONAL SPECIFICATION for Circular Connectors	SECTIONAL SPECIFICATION for Printed Board Connectors	SECTIONAL SPECIFICATION for Rectangular Connectors
	Scope General Tests & Test Schedules Quality Assessment Procedures Preparation of Detail Specifications	
EN 61076-2-001	EN 175101	EN 61076-3-001
EXAMPLE DETAIL SPECIFICATION/BLANK DETAIL SPECIFICATION	EXAMPLE DETAIL SPECIFICATION/BLANK DETAIL SPECIFICATION	EXAMPLE DETAIL SPECIFICATION/BLANK DETAIL SPECIFICATION
	Provides an example of layout and the basis of a proforma for preparation of Detail Specifications	
CECC 75201-8XX	CECC 75101-8XX	CECC 75301-8XX
DETAIL SPECIFICATION	DETAIL SPECIFICATION (Connector Type ...)	DETAIL SPECIFICATION
	Description Type Designation Outline Drawings Characteristics Assessment Levels Test Schedules	

NOTE Sectional specifications include generic data.

1 Scope

This Sectional Specification is applicable to rectangular connectors particularly designed for use in equipment for telecommunication, electronic data processing and in electronic devices employing similar techniques.

Connectors essentially designed for use at frequencies exceeding 3 MHz are not covered.

The object of this Sectional Specification is to establish uniform specifications and type test requirements for rectangular connectors and to establish rules for the preparation of Detail Specifications.

In the event of conflict between this Sectional Specification and a Detail Specification, the requirements of the Detail Specification shall prevail.

2 General

2.1 Related documents

EN 61076-3-001, *EDS/BDS Rectangular Connectors*¹⁾.

CECC 00007, *Harmonization document for IEC 410: Sampling procedures and tables for inspection by attributes for electronic components of assessed quality*.

CECC 00009, *Harmonization document for IEC 512: Basic testing procedure and measuring methods for Electromechanical Components*.

CECC 00100, *Basic Rules*.

CECC 00114-II, *Rules of Procedure 14 — Part II: Qualifications Approval of Electronic Components*.

CECC 00114-III, *Rule of Procedure 14 — Part III: Capability Approval of an Electronic Component Manufacturing Activity*.

IEC 27, *Letter symbols to be used in electrotechnology*.

IEC 50 (581), *International Electrotechnical Vocabulary (IEV) — Chapter 581: Electromechanical components for electronic equipment*.

IEC 68-1, *Basic environmental testing procedures — Part 1: General and Guidance*.

IEC 410, *Sampling procedures and tables for inspection by attributes for electronic components of assessed quality* (see CECC 00007).

IEC 512, *Electromechanical components for electronic equipment; basic testing procedures and measuring methods* (see CECC 00009).

IEC 664-1, *Insulation Coordination for Equipment within low voltage systems Principles, requirements and tests*.

IEC 807-1, *Rectangular Connectors for frequencies below 3 MHz — Part 1: General requirements and guide for the preparation of detail specifications*.

ISO R 286, *ISO systems of limits and fits — General tolerances and deviations*.

ISO R 1000, *Rules for the use of units of the International system of units and selection of the decimal multiples and sub-multiples of the SI units*.

ISO 1101, *Technical drawings geometrical tolerancing of form, orientation, location and run out-generalities, definitions symbols, indications on drawings*.

2.2 Terminology

The terminology used in and applicable to this specification is included in IEC 50(581). IEC 512 also contains applicable terms.

For the purpose of this specification the following additional terms and definitions shall apply:

2.2.1

hybrid connectors

detailed specifications in accordance with this Sectional Specification which contain integrated hybrid elements from other Sectional Specifications in the CECC system shall be permitted providing that:

- a) The hybridising elements are assessed using the appropriate test method from its sectional specification e.g. CECC 22000 for RF contacts, CECC 86000 for optical contacts, or Genetic Specification, CECC 33000 for integrated filter contacts.

¹⁾ In preparation

b) Where such test methods are not published in existing specifications they shall be included as Annex to the Detail Specification.

2.2.2

group of related connectors

a group of connectors within a sub-family having common features. Typical examples are:

- same mounting features but different kinds and number of contacts, or;
- same coupling features but different inserts and types of contacts.

a group of related connectors is covered by a single Detail Specification

2.2.3

type

connectors within a particular sub-family, such as rectangular connectors with blade contacts

2.2.4

style

a particular connector within a type

2.2.5

variant

variations within a type and style, or within a group of related connectors

2.2.6

Examples

Family : Connectors
 Sub-Family : Rack and Panel connectors
 Type : Rectangular, multipole connector with 2,5 mm wide blade contacts
 Style : Rectangular, fixed, free, adaptor etc.
 Variant : Rectangular, number of contacts, terminations etc.

2.3 Classification into climatic categories

The connectors are classified into climatic categories in accordance with the general rules given in IEC 68-1.

The following preferred temperature ranges and severities of the damp heat steady state tests have been selected:

Category	Temperature Range	Damp heat steady state	Identification code ^a
10/070/04	– 10 °C to + 70 °C	4 days	Under consideration
25/070/10	– 25 °C to + 70 °C	10 days	
25/085/10	– 25 °C to + 85 °C	10 days	
25/085/21	– 25 °C to + 85 °C	21 days	
40/085/21	– 40 °C to + 85 °C	21 days	
40/085/56	– 40 °C to + 85 °C	56 days	
40/100/10	– 40 °C to + 100 °C	10 days	
55/100/21	– 55 °C to + 100 °C	21 days	
55/125/21	– 55 °C to + 125 °C	21 days	
55/125/56	– 55 °C to + 125 °C	56 days	
65/155/56	– 65 °C to + 155 °C	56 days	
65/175/56	– 65 °C to + 175 °C	56 days	
65/200/56	– 65 °C to + 200 °C	56 days	

^a Identification code to be used for EN type designation