
Konektorji za električno in elektronsko opremo - Zaslonjeni ali nezaslonjeni prosti in pritrjeni konektorji za podatkovne prenose po eni simetrični parici s tokovno zmogljivostjo - Splošne zahteve in preskusi (IEC 63171:2021)

Connectors for electrical and electronic equipment - Shielded or unshielded free and fixed connectors for balanced single-pair data transmission with current-carrying capacity - General requirements and tests (IEC 63171:2021)

Steckverbinder für elektrische und elektronische Geräte - Geschirmte oder ungeschirmte freie und feste Steckverbinder für symmetrische Ein-Paar-Datenübertragung mit Strombelastbarkeit; Allgemeine Anforderungen und Prüfungen (IEC 63171:2021)

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Connecteurs pour équipements électriques et électroniques - Fiches et embases écrantées ou non écrantées pour transmission de données sur une seule paire symétrique avec courant admissible - Exigences générales et essais (IEC 63171:2021)

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ICS:

31.220.10 Vtiči in vtičnice, konektorji Plug-and-socket devices.
Connectors

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EUROPEAN STANDARD

EN IEC 63171

NORME EUROPÉENNE

EUROPÄISCHE NORM

April 2021

ICS 31.220.10

English Version

Connectors for electrical and electronic equipment - Shielded or unshielded free and fixed connectors for balanced single-pair data transmission with current-carrying capacity - General requirements and tests
(IEC 63171:2021)

Connecteurs pour équipements électriques et électroniques
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(IEC 63171:2021)

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

EN IEC 63171:2021 (E)**European foreword**

The text of document 48B/2863/FDIS, future edition 1 of IEC 63171, prepared by SC 48B "Electrical connectors" of IEC/TC 48 "Electrical connectors and mechanical structures for electrical and electronic equipment" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 63171:2021.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2022-01-15
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2024-04-15

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In the official version, for Bibliography, the following notes have to be added for the standards indicated:

		SIST EN IEC 63171:2021
IEC 60603-7 (series)	NOTE	Harmonized as EN 60603-7 (series)
IEC 61076-2-101	NOTE	Harmonized as EN 61076-2-101
IEC 61076-2-104	NOTE	Harmonized as EN 61076-2-104

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

Publication	Year	Title	EN/HD	Year
IEC 60050-581	-	International Electrotechnical Vocabulary - Part 581: Electromechanical components for electronic equipment	-	-
IEC 60068-1	2013	Environmental testing - Part 1: General and guidance	EN 60068-1	2014
IEC 60512-1	-	Connectors for electrical and electronic equipment - Tests and measurements - Part 1: Generic specification	EN IEC 60512-1	-
IEC 60512-1-1	-	Connectors for electronic equipment - Tests and measurements - Part 1-1: General examination - Test 1a: Visual examination	EN 60512-1-1	-
IEC 60512-2-1	-	Connectors for electronic equipment - Tests and measurements - Part 2-1: Electrical continuity and contact resistance tests - Test 2a: Contact resistance - Millivolt level method	EN 60512-2-1	-
IEC 60512-2-5	-	Connectors for electronic equipment - Tests and measurements - Part 2-5: Electrical continuity and contact resistance tests - Test 2e: Contact disturbance	EN 60512-2-5	-
IEC 60512-3-1	-	Connectors for electronic equipment - Tests and measurements - Part 3-1: Insulation tests - Test 3a: Insulation resistance	EN 60512-3-1	-
IEC 60512-4-1	-	Connectors for electronic equipment - Tests and measurements - Part 4-1: Voltage stress tests - Test 4a: Voltage proof	EN 60512-4-1	-

EN IEC 63171:2021 (E)

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60512-5-2	-	Connectors for electronic equipment - Tests and measurements - Part 5-2: Current-carrying capacity tests - Test 5b: Current-temperature derating	EN 60512-5-2	-
IEC 60512-6-4	-	Connectors for electronic equipment - Tests and measurements - Part 6-4: Dynamic stress tests - Test 6d: Vibration (sinusoidal)	EN 60512-6-4	-
IEC 60512-9-1	-	Connectors for electronic equipment - Tests and measurements - Part 9-1: Endurance tests - Test 9a: Mechanical operation	EN 60512-9-1	-
IEC 60512-9-2	-	Connectors for electronic equipment - Tests and measurements - Part 9-2: Endurance tests - Test 9b: Electrical load and temperature	EN 60512-9-2	-
IEC 60512-11-4	-	Connectors for electronic equipment - Tests and measurements - Part 11-4: Climatic tests - Test 11d: Rapid change of temperature	EN 60512-11-4	-
IEC 60512-11-7	-	Connectors for electronic equipment - Tests and measurements - Part 11-7: Climatic tests - Test 11g: Flowing mixed gas corrosion test	EN 60512-11-7	-
IEC 60512-11-12	-	Connectors for electronic equipment - Tests and measurements - Part 11-12: Climatic tests - Test 11m: Damp heat, cyclic	EN 60512-11-12	-
IEC 60512-13-2	-	Connectors for electronic equipment - Tests and measurements - Part 13-2: Mechanical operation tests - Test 13b: Insertion and withdrawal forces	EN 60512-13-2	-
IEC 60512-15-6	-	Connectors for electronic equipment - Tests and measurements - Part 15-6: Connector tests (mechanical) - Test 15f: Effectiveness of connector coupling devices	EN 60512-15-6	-
IEC 60512-25-9	-	Connectors for electronic equipment - Tests and measurements - Part 25-9: Signal integrity tests - Test 25i: Alien crosstalk	EN 60512-25-9	-
IEC 60512-26-100	-	Connectors for electronic equipment - Tests and measurements - Part 26-100: Measurement setup, test and reference arrangements and measurements for connectors according to IEC 60603-7 - Tests 26a to 26g	EN 60512-26-100	-
IEC 60512-28-100	-	Connectors for electrical and electronic equipment - Tests and measurements - Part 28-100: Signal integrity tests up to 2 000 MHz - Tests 28a to 28g	EN IEC 60512-28-100	-

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60664-1	-	Insulation coordination for equipment within low-voltage supply systems - Part 1: Principles, requirements and tests	EN IEC 60664-1	-
IEC 62153-4-9:2018/ A1	2020	Metallic communication cable test methods - Part 4-9: Electromagnetic compatibility (EMC) - Coupling attenuation of screened balanced cables, triaxial method	-	-
IEC 62153-4-15	-	Metallic communication cable test methods - Part 4-15: Electromagnetic compatibility (EMC) - Test method for measuring transfer impedance and screening attenuation - or coupling attenuation with triaxial cell	-	-
IEC/TR 63040	2016	Guidance on clearances and creepage distances in particular for distances equal to or less than 2 mm - Test results of research on influencing parameters	-	-
ISO/IEC 11801-1	-	Information technology - Generic cabling for customer premises - Part 1: General requirements	-	-

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IEC 63171

Edition 1.0 2021-03

INTERNATIONAL STANDARD

NORME INTERNATIONALE



Connectors for electrical and electronic equipment – Shielded or unshielded free and fixed connectors for balanced single-pair data transmission with current-carrying capacity – General requirements and tests

Connecteurs pour équipements électriques et électroniques – Fiches et embases écrantées ou non écrantées pour transmission de données sur une seule paire symétrique avec courant admissible – Exigences générales et essais

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**CONNECTORS FOR ELECTRICAL AND ELECTRONIC EQUIPMENT –
SHIELDED OR UNSHIELDED FREE AND FIXED CONNECTORS
FOR BALANCED SINGLE-PAIR DATA TRANSMISSION
WITH CURRENT-CARRYING CAPACITY –
GENERAL REQUIREMENTS AND TESTS**

FOREWORD

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The text of this International Standard is based on the following documents:

FDIS	Report on voting
48B/2863/FDIS	48B/2866/RVD

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

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

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