
Radio frequency cables - Part 3-3: Coaxial cables for digital communication in horizontal floor wiring - Detail specification for coaxial cables with foamed dielectric for local area networks of 185 m reach and up to 10 Mb/s (IEC 61196-3-3:1997)

Radio frequency cables -- Part 3-3: Coaxial cables for digital communication in horizontal floor wiring - Detail specification for coaxial cables with foamed dielectric for local area networks of 185 m reach and up to 10 Mb/s

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Hochfrequenzkabel -- Teil 3-3: Koaxialkabel für Etagenverkabelung in der digitalen Kommunikation - Bauartspezifikation für Koaxialkabel mit geschäumtem Dielektrikum für lokale Netze mit 185 m Reichweite und bis 10 Mb/s

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Câbles pour fréquences radioélectriques -- Partie 3-3: Câbles coaxiaux pour transmission numérique destinés au câblage horizontal des immeubles - Spécification particulière pour les câbles coaxiaux avec diélectrique expansé pour réseaux locaux jusqu'à 185 m, et de débit maximal 10 Mb/s

Ta slovenski standard je istoveten z: EN 61196-3-3:1997

ICS:

33.120.10 Koaksialni kabli. Valovodi Coaxial cables. Waveguides

SIST EN 61196-3-3:1998

en

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English version

Radio frequency cables
Part 3-3: Coaxial cables for digital communication in horizontal floor wiring
Detail specification for coaxial cables with foamed dielectric for local area
networks of 185 m reach and up to 10 Mb/s
(IEC 61196-3-3:1997)

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Hochfrequenzkabel
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Etagenverkabelung in der digitalen
Kommunikation - Bauartspezifikation für
Koaxialkabel mit geschäumtem
Dielektrikum für lokale Netze mit 185 m
Reichweite und bis 10 Mb/s
(IEC 61196-3-3:1997)

SIST EN 61196-3-3:1998

This European Standard was approved by CENELEC on 1997-10-01. 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.

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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 document 46A/290/FDIS, future edition 1 of IEC 61196-3-3, prepared by SC 46A, Coaxial cables, of IEC TC 46, Cables, wires, waveguides, R.F. connectors, and accessories for communication and signalling, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61196-3-3 on 1997-10-01.

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) 1998-07-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 1998-07-01

Endorsement notice

The text of the International Standard IEC 61196-3-3:1997 was approved by CENELEC as a European Standard without any modification.

SIST EN 61196-3-3:1998

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NORME
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STANDARD

61196-3-3

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1997-09

Câbles pour fréquences radioélectriques –

Partie 3-3:

Câbles coaxiaux pour transmission numérique destinés au câblage horizontal des immeubles –

Spécification particulière pour les câbles coaxiaux avec diélectrique expansé pour réseaux locaux jusqu'à 185 m, et de débit maximal de 10 Mb/s

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Radio frequency cables –

Part 3-3:

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Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

RADIO FREQUENCY CABLES –

**Part 3-3: Coaxial cables for digital communication
in horizontal floor wiring –
Detail specification for coaxial cables with foamed dielectric
for local area networks of 185 m reach and up to 10 Mb/s**

FOREWORD

- 1) The IEC (International Electrotechnical Commission) is a world-wide organisation for standardisation comprising all national electrotechnical committees (IEC National Committees). The object of the 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, the IEC publishes International Standards. 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. The IEC collaborates closely with the International Organisation for Standardisation (ISO) in accordance with conditions determined by agreement between the two organizations.
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International Standard IEC 61196-3-3 has been prepared by subcommittee 46A: Coaxial cables, of IEC technical committee 46: Cables, wires, waveguides, r.f. connectors and accessories for communication and signalling.

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

FDIS	Report on voting
46A/290/FDIS	46A/304/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.

<p>[1] Elaboré par/ <i>Prepared by:</i> SC46A/WG3</p>	<p>[2] Document No : Indice/<i>Issue</i> Date :</p>	<p>CEI/IEC 61196-3-3 Mars / <i>March</i> 1997</p>
<p>[3] Disponible à/ <i>Available from:</i> :</p>	<p>[4] Spécification générique/ <i>Generic specification</i> Spécification intermédiaire/ <i>Sectional specification</i> Spécification particulière/ <i>Detail specification</i></p>	<p>CEI/IEC 61196-1 CEI/IEC 61196-3 CEI/IEC 61196-3-3</p>
<p>[5] Références complémentaires/<i>Additional references:</i></p> <p>Les câbles satisfaisant à cette spécification sont compatibles avec la connectique et les performances exigées par le système dans les applications 10 BASE 2 décrites dans l'ISO/CEI 8802-3 (1996).</p> <p><i>Cables meeting this specification are compatible with the connectorization and system performance requirements of 10 BASE 2 applications described in ISO/IEC 8802-3 (1996).</i></p>		
<p>[6] Titre/<i>Title:</i></p> <p>Câbles pour fréquences radioélectriques – Partie 3-3: Câbles coaxiaux pour transmission numérique destinés au câblage horizontal des immeubles – Spécification particulière pour les câbles coaxiaux avec diélectrique expansé pour réseaux locaux jusqu'à 185 m et de débit maximal de 10 Mb/s.</p> <p><i>Radio frequency cables – Part 3-3: Coaxial cables for digital communication in horizontal floor wiring – Detail specification for coaxial cables with foamed dielectric for local area networks of 185 m reach and up to 10 Mb/s.</i></p> <p>https://standards.iteh.ai/catalog/standards/sist/b99dc379-2f55-4e98-9b24-69170ea45673/sist-en-61196-3-3-1998</p>		
<p>[7] Construction du câble/<i>Cable construction :</i></p> <p>Conducteur/<i>Conductor</i></p> <p>Matériau /<i>Material :</i> cuivre étamé / <i>tinned copper</i> Nombre de brins /<i>Number of strands :</i> 19 Diamètre /<i>Diameter :</i> 1,00 mm ± 0,07 mm</p> <p>Matériau diélectrique/<i>Dielectric material</i></p> <p>Matériau /<i>Material :</i> polyéthylène expansé / <i>foamed polyethylene</i> Excentricité /<i>Eccentricity :</i> 8 % max. Ovalisation / <i>Ovality :</i> 5 % max Diamètre / <i>Diameter :</i> 2,65 mm ± 0,15 mm</p>		

[7] Construction du câble/Cable construction (suite/continued) :**Conducteur extérieur/outer conductor**

Couche /Layer :	1
Type /Type :	ruban /tape
Matériau /Material :	Al-polymère, face aluminium vers la couche 2, ou Al-polymère-Al; avec ou sans adhésif/ Al-polymer with aluminium surface faced to layer 2, or Al-polymer-Al; with or without adhesive.

Recouvrement minimal /Minimum overlap :	20 %
Couche /Layer :	2
Type /Type :	tresse /braid
Matériau /Material :	cuivre étamé /tinned copper
Diamètre du fil /Strand diameter :	0,13 mm ± 0,02 mm
Facteur de remplissage /Filling factor :	non spécifié / not specified

Gaine /Sheath

Matériau /Material :	PCV/PVC
Excentricité /Eccentricity :	5 % max.
Ovalisation /Ovality :	5 % max.
Épaisseur minimale /Minimum thickness :	0,5 mm
Couleur /Colour :	non spécifié /not specified
Diamètre sur gaine /Overall diameter :	4,7 mm ± 0,3 mm
Marquage /Marking :	"Fabrication de câble / cable manufacturing CEI/IEC 61196-3-3"

[8] Renseignements techniques/Engineering information:

Connecteur / Connector type :	CEI / IEC 60169-8 (BNC)
Masse / Mass :	3,9 kg / 100 m (nominal)
Rayon de courbure /Bending radius :	50 mm (min.)
Capacité linéique /Capacitance :	82 pF / m (nominal)
Tension de service /Voltage rating :	30 V (max.)

[9] Valeurs et caractéristiques à respecter / <i>Inspection values, ratings or characteristics</i>	[10] Paragraphe / <i>Subclause</i> *	[11] Valeur / <i>Value</i>	[12] Remarques / <i>Remarks</i>
Intégrité électrique / <i>Electrical integrity</i>			
Tension de tenue de la gaine (essai à sec) / <i>Sheath spark test</i>	11.6	3,0 kV (Valeur efficace / <i>r.m.s.</i>)	
Tension de tenue du diélectrique / <i>Dielectric withstand voltage</i>	11.5	1,0 kV (Valeur efficace / <i>r.m.s.</i>)	
Résistance d'isolement / <i>Insulation resistance</i>	11.2	5 000 M Ω -km	Tension/Voltage 100 à/to 500 V durée/duration 1 min.
Transmission / <i>Transmission</i>			
Impédance caractéristique / <i>Characteristic impedance</i>	11.8	50 Ω \pm 2 Ω	10 MHz
Résistance du conducteur extérieur / <i>Outer conductor resistance</i>	11.1	15 Ω /km (max.)	Temperature: 20 °C
Résistance en boucle / <i>Loop DCR</i>	11.1	50 Ω /km (max.)	Temperature: 20 °C
Affaiblissement / <i>Attenuation</i>	11.13	3,24 dB/100 m (max.) 4,59 dB/100 m (max.)	5 MHz 10 MHz
Affaiblissement après vieillissement / <i>Attenuation after ageing</i>		A l'étude / <i>under study</i>	
Vitesse relative de propagation / <i>Velocity ratio</i>	11.9	0,80 (min.)	
Impédance de transfert de surface / <i>Surface transfer impedance</i>	12.1	Voir figure 1 / <i>See figure 1</i>	Maximum fig. 1
Atténuation du blindage / <i>Screening attenuation</i>	12.4	Non spécifié / <i>Not specified</i>	
Affaiblissement de réflexion / <i>Return loss</i>	11.12	Non spécifié / <i>Not specified</i>	
* CEI/IEC 61196-1			