

**NORME
INTERNATIONALE
INTERNATIONAL
STANDARD**

**CEI
IEC**

61169-1

QC 220000

1992

AMENDEMENT 2
AMENDMENT 2

1997-04

Amendement 2

Connecteurs pour fréquences radioélectriques –

Partie 1:

Spécification générique –

Prescriptions générales et méthodes de mesure

Amendment 2

Radio-frequency connectors –

Part 1:

Generic specification –

General requirements and measuring methods

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International Electrotechnical Commission
Международная Электротехническая Комиссия

CODE PRIX
PRICE CODE

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This amendment has been prepared by the subcommittee 46D: RF connectors, of IEC technical committee 46: Cables, wires, waveguides, RF connectors, and accessories for communication and signalling.

FDIS	Report on voting
46D/279/FDIS	46D/296/RVD

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

Add, after subclause 10.3.2.3, the following new subclause

10.3.3 Test schedules and inspection requirements for alternative fixed-quantity sample procedures

Table 1 – Lot-by-lot procedure – Acceptance tests: groups A1 and B1

	Test method of IEC 61169-1 QC 220000 Subclause	Assessment level M (higher)				Assessment level H (lower)			
		Test required	IL	AQL %	Period	Test required	IL	AQL %	Period
<i>Group A1</i> Visual inspection	9.1.2	a	11	1,0		a	S3	1,5	
<i>Group B1</i> Outline dimensions	9.1.3.1	a	S4	0,40	Lot by lot	a	S3	0,40	Lot by lot
Mechanical compatibility	9.1.3.3	a	11	1,0		a	S3	1,5	
Engagement and separation	9.3.6	a	S4	0,40		a	S3	1,5	
Gauge retention force (resilient contacts)	9.3.4	ia	11	1,0		ia	S3	1,5	
Scaling, non-hermetic	9.4.5.1	ia	11	0,65		ia	S3	1,0	
Scaling, hermetic	9.4.5.2	ia	11	0,015		ia	S3	0,025	
Voltage proof	9.2.6	a	S4	0,40		a	11	4,0	
Solderability piece-parts ^{d)}	9.3.2.1.1	ia	S4	0,40		ia	S3	4,0	
Insulation resistance	9.2.5	a	S4	0,40		a	S3	4,0	
Effectiveness of safety wire locking holes; piece-parts ^{d)}	TBD	ia	S4	0,40		ia	S3	4,0	
a applicable ia test required (if technically applicable) IL inspection level AQL acceptable quality level d) destructive tests – specimens shall not be returned to stock.									

Tableau 2 – Procédure de prélèvement fixe – Séquence initiale d'essais groupe 0

Groupe 0

Examen visuel
Dimensions extérieures
Compatibilité mécanique
Accouplement et désaccouplement
Rétention du calibre
(contacts élastiques)
Étanchéité sans herméticité
Étanchéité avec herméticité
Tension de tenue
Soudabilité pièces détachées^{d)}
Résistance d'isolement

Méthode d'essai de la CEI 61169-1 QC 220000 Paragraphe	Niveau d'assurance M (haut)		Niveau d'assurance H (bas)	
	Test requis	Nombre d'échantillons	Test requis	Nombre d'échantillons
9.1.2	a	36 minimum	a	18 minimum
9.1.3.1	a		a	
9.1.3.3	a		a	
9.3.6	a		a	
9.3.4	ia		ia	
9.4.5.1	ia		ia	
9.4.5.2	ia		ia	
9.2.6	a		a	
9.3.2.1.1	ia		ia	
9.2.5	a		a	
a	applicable			
ia	test requis (si techniquement applicable)			
d)	essais destructifs. Les spécimens ne doivent pas être remis en stock			

Table 2 – Fixed quantity sample procedure – Initial QA test sequence: group 0*Group 0*

Visual inspection
Outline dimensions
Mechanical compatibility
Engagement and separation
Gauge retention force
(resilient contacts)
Scaling, non-hermetic
Scaling, hermetic
Voltage proof
Solderability piece-parts^{d)}
Insulation resistance

Test method of IEC 61169-1 QC 220000 Subclause	Assessment level M (higher)		Assessment level H (lower)	
	Test required	Number of specimens	Test required	Number of specimens
9.1.2	a	36 minimum	a	18 minimum
9.1.3.1	a		a	
9.1.3.3	a		a	
9.3.6	a		a	
9.3.4	ia		ia	
9.4.5.1	ia		ia	
9.4.5.2	ia		ia	
9.2.6	a		a	
9.3.2.1.1	ia		ia	
9.2.5	a		a	
a	applicable			
ia	test required (if technically applicable)			
d)	destructive tests – specimens shall not be returned to stock			

procedure – Periodic group D test

	Test method of IEC 61169-1 QC 220000 Sub-clause	Assessment level M (higher)				Assessment level H (lower)			
		Test required	Number of specimens	Permitted failures per group	Period	Test required	Number of specimens	Permitted failures per group	Period
Group D1 d) Solderability – connector assemblies Resistance to soldering heat Mechanical tests on cable fixing: i) cable rotation (nutation) ii) cable pulling iii) cable bending iv) cable torsion Bending moment Strength of coupling mechanism	9.3.2.1.1 9.3.2.1.2 9.3.7.2 9.3.8 9.3.9 9.3.10 9.3.12 9.3.11	ia ia ia ia ia ia a ia	6	0	3 years	ia ia ia a ia	3 3 0	0	3 years
Group D2 d) Contact resistance, outer conductor and screen continuity, centre conductor continuity Bump Vibration Shock Damp heat, steady state Salt mist	9.2.3 9.3.13 9.3.3 9.3.14 9.4.3 9.4.6	a a ³⁾ a a a a	6	0	3 years	a a	3	0	3 years
Group D3 Dimensions, piece-parts and materials	9.1.3.2	a	1)	0	3 years	a	1)	0	3 years
Group D4 d) Mechanical endurance High temperature endurance Sulphur dioxide	9.5 9.6 9.4.8	a a a ³⁾	6	0	3 years	a	3	0	3 years
Group D5 d) Reflection factor Screening effectiveness Water immersion	9.2.1 9.2.8 9.2.7	ia ia a ³⁾	6	0	3 years	ia	3	0	3 years
Group D6 d) Centre contact captivation Discharge test (corona) Rapid change of temperature Climatic sequence	9.3.5 9.2.9 9.4.4 9.4.2	ia a a a	6	0	3 years		3	0	3 years
Group D7 d) Resistance to solvent and contaminating fluids	9.7	a ³⁾	12)	0	3 years		12)	0	3 years
a applicable ia test required (if technically applicable) IL inspection level AQL acceptable quality level d) destructive tests – specimens shall not be returned to stock.									
NOTES 1) One set of piece-parts of each style and variant, unless using common piece-parts. 2) Group D7 – number of pairs for each solvent. 3) See detail specification.									

Procédures

Contrôle de conformité de la qualité

Il doit comprendre les essais des groupes A1 et B1 en contrôle lot par lot et les essais des groupes D1 à D7 en contrôle périodique.

Homologation et maintenance

Trois lots consécutifs doivent subir avec succès les essais des groupes A1 et B1. Les échantillons issus de ces lots doivent subir avec succès les essais périodiques spécifiés pour le groupe D.

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