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Irish Standard I.S. EN 50483-6:2009

# Test requirements for low voltage aerial bundled cable accessories -- Part 6: Environmental testing

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# EUROPEAN STANDARD

# EN 50483-6

# NORME EUROPÉENNE EUROPÄISCHE NORM

January 2009

ICS 29.240.20

English version

# Test requirements for low voltage aerial bundled cable accessories -Part 6: Environmental testing

Prescriptions relatives aux essais des accessoires pour réseaux aériens basse tension torsadés -Partie 6: Essais d'environnement Prüfanforderungen für Bauteile für isolierte Niederspannungsfreileitungen -Teil 6: Umweltprüfungen

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# CENELEC

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

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EN 50483-6:2009

– 2 –

### Foreword

This European Standard was prepared by a sub-group of WG 11 of the Technical Committee CENELEC TC 20, Electric cables.

The text of the draft was submitted to the formal vote and was approved by CENELEC as EN 50483-6 on 2008-12-01.

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)	2009-12-01
_	latest date by which the national standards conflicting with the EN have to be withdrawn	(dow)	2011-12-01

This is Part 6 of CENELEC standard EN 50483 "*Test requirements for low voltage aerial bundled cable accessories*", which has six parts:

- Part 1: Generalities;
- Part 2: Tension and suspension clamps for self supporting system;
- Part 3: Tension and suspension clamps for neutral messenger system;
- Part 4: Connectors;
- Part 5: Electrical ageing test;
- Part 6: Environmental testing.

- 3 -

## Contents

1	Scop	e	4
2	Norm	ative references	4
3	Term	s and definitions	4
4	Symb	ools	5
5	Mark	ing	5
6	(Spa	re)	5
7	(Spa	re)	5
8	Туре	tests	6
	8.1	Number of test samples and number of cycles	6
	8.2	Requirements	6
	8.3	Cleaning	6
	8.4	Corrosion ageing tests	6
	8.5	Climatic ageing test	10
Anr	nex A	(informative) Salt mist and gas atmosphere corrosion test justification	18
Anr	nex B	(informative) Example of specific reaction to obtain sulphur dioxide	19
Anr	nex C	(informative) Climatic areas	20
Anr	nex D	(informative) Test equipment	21
Bib	liogra	ohy	24

# Figures

Figure 1 – Suggested arrangement for connections – Optional immersion test Method 1	9
Figure 2 – Informative diagram of the conditioning cycle – Weekly cycle	15
Figure 3 – Temperature – Radiation – Time relationships	17
Figure D.1 – Typical test arrangement	21

### Tables

Table 1 – Quantities for acid solution components	10
Table 2 – Spectral energy distribution and permitted tolerances	17
Table C.1 – Climatic conditions – Appropriate tests	20

EN 50483-6:2009

- 4 -

### 1 Scope

EN 50483 series applies to overhead line fittings for tensioning, supporting and connecting aerial bundled cables (ABC) of rated voltage  $U_0/U$  ( $U_m$ ): 0,6/1 (1,2) kV.

The objective is to provide a method of testing the suitability of accessories when used under normal operating conditions with low voltage aerial bundled cables complying with HD 626.

This Part 6 defines the environmental tests in particular the climatic and corrosion ageing tests. The objective of these tests is to predict the behaviour of ABC accessories when subjected to sun radiation, to weather conditions (humidity, spraying water, heat, cold) and pollution. EN 50483-1, EN 50483-2, EN 50483-3 and EN 50483-4 specify which type tests included in this part of the standard are needed.

Climate differs across Europe and in order to meet the differing geographic climatic conditions it is necessary to provide a range of tests to meet these variations. A range of optional, additional tests is provided to meet the varying climatic needs and these should be agreed between the customer and the supplier (see Annex C).

NOTE This European Standard does not invalidate existing approvals of products achieved on the basis of national standards and specifications and/or the demonstration of satisfactory service performance. However, products approved according to such national standards or specifications cannot directly claim approval to this European Standard. It may be possible, subject to agreement between supplier and purchaser, and/or the relevant conformity assessment body, to demonstrate that conformity to the earlier standard can be used to claim conformity to this standard, provided an assessment is made of any additional type testing that may need to be carried out. Any such additional testing that is part of a sequence of testing cannot be done separately.

### 2 Normative references

The following referenced documents are indispensable for the application 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.

EN 50483 series, Test requirements for low voltage aerial bundled cable accessories

EN 60068-2-5, Environmental testing – Part 2: Tests – Test Sa: Simulated solar radiation at ground level (IEC 60068-2-5)

EN 60068-2-9:1999, Environmental testing – Part 2: Tests – Guidance for solar radiation testing (IEC 60068-2-9:1975 + A1:1984)

EN 60068-2-11:1999, *Environmental testing – Part 2: Tests – Test Ka: Salt mist* (IEC 60068-2-11:1981)

EN ISO 3231, Paints and varnishes – Determination of resistance to humid atmospheres containing sulfur dioxide (ISO 3231)

IEC 60050-461, International Electrotechnical Vocabulary (IEV) – Part 461: Electric cables

### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 60050-461 and the following apply.

#### 3.1

#### aerial bundled cable (ABC)

aerial cable consisting of a group of insulated conductors which are twisted together including, or not, a non insulated conductor [IEV 461-08-02, modified]

NOTE The terms bundled conductors, bundled cables, bundled cores, conductor bundles and bundle could be used as equivalent to the term aerial bundled cable (ABC).



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