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Standards

Irish Standard  
I.S. EN 50483-5:2009

# Test requirements for low voltage aerial bundled cable accessories -- Part 5: Electrical ageing test

## I.S. EN 50483-5:2009

*Incorporating amendments/corrigenda issued since publication:*

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**Test requirements for low voltage aerial bundled cable accessories -  
Part 5: Electrical ageing test**

Prescriptions relatives aux essais  
des accessoires pour réseaux aériens  
basse tension torsadés -  
Partie 5: Essai de vieillissement électrique

Prüfanforderungen für Bauteile für isolierte  
Niederspannungsfreileitungen -  
Teil 5: Elektrische Alterungsprüfungen

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**CENELEC**

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

**Central Secretariat: avenue Marnix 17, B - 1000 Brussels**

## 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 50483-5 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- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2011-12-01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 5 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.
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## 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.

This Part 5 applies to the connections described in EN 50483-4, including branch connectors, Insulation Piercing Connectors (IPC), pre-insulated lugs (terminals) and through pre-insulated connectors (sleeves).

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

Two classes of connectors are covered by this standard:

*Class A:* These are connectors intended for electricity distribution or industrial networks in which they can be subjected to short-circuits of relatively high intensity and duration. As a consequence, Class A connectors will be suitable for the majority of applications.

*Class B:* These are connectors for networks in which overloads or short-circuits are rapidly cleared by the operation of protection devices.

Depending on their application, the connectors are subjected to heat cycles and short-circuit current tests.

*Class A:* the connectors are subjected to heat cycles and short-circuit current tests.

*Class B:* the connectors are subjected to heat cycles only.

The object of this Part 5 is to define the heating cycles test methods and requirements which apply to compression through connectors, insulation piercing connectors and all other type of connections for low voltage aerial bundled cables.

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 61238-1:2003, *Compression and mechanical connectors for power cables for rated voltages up to 36 kV ( $U_m = 42$  kV) – Part 1: Test methods and requirements* (IEC 61238-1:2003, mod.)

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

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