NSAI
Standards

Irish Standard
I.S. EN 50393:2015

Test methods and requirements for accessories for use on distribution cables of rated voltage 0,6/1,0 (1,2) kV

I.S. EN 50393:2015

Incorporating amendments/corrigenda/National Annexes issued since publication:

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This document replaces/revises/consolidates the NSAI adoption of the document(s) indicated on the CEN/CENELEC cover/Foreword and the following National document(s):

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Údarás um Chaighdeáin Náisiúnta na hÉireann

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 50393

February 2015

ICS 29.120.20

Supersedes EN 50393:2006

English Version

Test methods and requirements for accessories for use on distribution cables of rated voltage 0,6/1,0 (1,2) kV

Méthodes et prescriptions d'essai pour les accessoires de câbles de distribution de tension assignée 0,6/1,0 (1,2) kV

Prüfverfahren und Prüfanforderungen für die Garnituren von Verteilerkabeln mit einer Nennspannung von 0,6/1,0 (1,2) kV

This European Standard was approved by CENELEC on 2014-12-08. 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 CEN-CENELEC Management Centre 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 CEN-CENELEC Management Centre has the same status as the official versions.

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

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Foreword

This document (EN 50393:2015) has been prepared by CLC/TC 20 “Electric cables”.

The following dates are fixed:

• latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2015-12-08
• latest date by which the national standards conflicting with this document have to be withdrawn	(dow)	2017-12-08

This document supersedes EN 50393:2006.

EN 50393:2015 includes the following significant technical changes with respect to EN 50393:2006:

– in Clause 1 'Scope', the revised statement referring to 'existing approvals' has been inserted;

– in Clause 3 'Definitions', definitions of stop end types have been revised to align with those of joints, and definitions of 'rigid' and 'non-rigid' joints have been removed;

– in Clause 6 'Range of compliance', the numbers of joint and termination test samples have been increased (see also Table 6), compliance restriction and extension with regard to different cable designs have been clarified, and compliance restrictions and extensions relating to conductor connectors have been inserted and shown in a new Table 2;

– in 7.3, Table 3, joints of Type II are subject to a new test involving 9 heating cycles in water without oversheath damage (see also 8.6.2);

– in 7.3, Tables 3, 4 and 5, the footnotes referring to examination of tested accessories have been removed;

– in Clause 8 'Test methods', the AC voltage withstand test procedure has been simplified and clarified, references to 'rigid' and 'non-rigid' joints have been removed, reference to the 9 cycle test for Type II joints (Table 3) has been inserted, and requirements relating to examination of tested joints have been simplified and references to specific technologies or materials have been removed;

– Annexes B, C and D have been added to assist in full and accurate identification of test cable, accessories and connectors for inclusion in test reports.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC [and/or CEN] shall not be held responsible for identifying any or all such patent rights.

1 Scope

This European Standard details the performance requirements and the test methods for type testing of cable accessories for use with power distribution cables of rated voltage 0,6/1,0 (1,2) kV as defined in HD 603 or other relevant cable standards.

Cable accessories covered by this European Standard include joints, stop ends and outdoor terminations for extruded solid dielectric insulated cables and transition joints between extruded solid dielectric insulated and impregnated paper insulated cables. Joints, stop ends and outdoor terminations for impregnated paper insulated cables are not included.

The service operating conditions of accessories should be compatible with the service operating conditions of cables on which they are to be installed.

Accessories for special applications such as submarine, shipboard, explosive or seismic environments, or where specified fire performance characteristics are required, are not included.

NOTE 1 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.

NOTE 2 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 European 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 documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 61180-1:1994, *High-voltage test techniques for low-voltage equipment – Part 1: Definitions, test and procedure requirements (IEC 61180-1:1992)*

EN 61238-1, *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)*

HD 603, *Distribution cables of rated voltage 0,6/1 kV*

IEC 60050-461, *International Electrotechnical Vocabulary – Chapter 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
joint
accessory suitable for use in air or underground which makes a connection between two or more insulated power cables to form a continuous circuit