Irish Standard
I.S. EN 50655-2:2017

Electric cables - Accessories - Material characterization - Part 2: Fingerprinting for heat shrinkable components for low and medium voltage applications up to 20,8/36 (42) kV

I.S. EN 50655-2:2017

Incorporating amendments/corrigenda/National Annexes issued since publication:

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National Foreword

I.S. EN 50655-2:2017 is the adopted Irish version of the European Document EN 50655-2:2017, Electric cables - Accessories - Material characterization - Part 2: Fingerprinting for heat shrinkable components for low and medium voltage applications up to 20,8/36 (42) kV

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 50655-2

November 2017

ICS 29.035.20

Supersedes HD 631.2 S1:2007, HD 631.3 S1:2008

English Version

Electric cables - Accessories - Material characterization - Part 2: Fingerprinting for heat shrinkable components for low and medium voltage applications up to 20,8/36 (42) kV

Câbles électriques - Accessoires - Caractérisation des matériaux - Partie 2: Essais d'identification des composants thermorétractables pour les applications basse tension et moyenne tension à 20,8/36 (42) kV

Kabel und isolierte Leitungen - Garnituren - Materialcharakterisierung - Teil 2: Fingerprintprüfungen für wärmeschrumpfende Komponenten für Niederspannungs- und Mittelspannungsanwendungen bis 20,8/36 (42) kV

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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.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

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

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Contents

Page

European foreword

This document (*EN 50655-2:2017*) 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)	2018-09-18
– latest date by which the national standards conflicting with this document have to be withdrawn	(dow)	2020-09-18

This document supersedes HD 631.2 S1:2007 and HD 631.3 S1:2008.

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

EN 50655 series will consist of the following:

– EN 50655-1, *Electric cables - Accessories - Material characterization - Part 1: Fingerprinting for resinous compounds*;

– EN 50655-2, *Electric cables - Accessories - Material characterization - Part 2: Fingerprinting for heat shrinkable components for low and medium voltage applications up to 20,8/36 (42) kV*;

– EN 50655-3, *Electric cables - Accessories - Material characterization - Part 3: Fingerprinting for cold shrinkable components for low and medium voltage applications up to 20,8/36 (42) kV*.

NOTE It has been assumed in the preparation of this document that the execution of its provisions will be entrusted to appropriately qualified and experienced people, for whose use it has been produced.

WARNING This European Standard calls for the use of substances and/or procedures that may be injurious to health if adequate precautions are not taken. It refers only to technical suitability and does not absolve the user from legal obligations relating to health and safety at any stage.

1 Scope

This European Standard specifies the methods and requirements for fingerprinting (as defined in 3.13) of heat shrinkable components intended to be used for electrical insulation and/or electrical insulation and mechanical protection in cable accessories for low and medium voltage, as defined in EN 50393, HD 629.1 and HD 629.2.

Fingerprinting of materials does not have a mandatory link to type testing of accessories. It is regarded as a stand-alone test, but it may be carried out in combination with accessory type tests.

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 50393, *Test methods and requirements for accessories for use on distribution cables of rated voltage 0,6/1,0 (1,2) kV*

EN 60684-2, *Flexible insulating sleeving - Part 2: Methods of test (IEC 60684-2)*

EN ISO 1183 (series), *Plastics - Methods for determining the density of non-cellular plastics (ISO 1183 series)*

EN ISO 11357-3, *Plastics - Differential scanning calorimetry (DSC) - Part 3: Determination of temperature and enthalpy of melting and crystallization (ISO 11357-3)*

EN ISO 11358-1, *Plastics - Thermogravimetry (TG) of polymers - Part 1: General principles (ISO 11358-1)*

HD 629.1, *Test requirements on accessories for use on power cables of rated voltage from 3,6/6(7,2) kV up to 20,8/36(42) kV - Part 1: Cables with extruded insulation*

HD 629.2, *Test requirements on accessories for use on power cables of rated voltage from 3,6/6(7,2) kV up to 20,8/36(42) kV - Part 2: Cables with impregnated paper insulation*

IEC 60050-461, *International Electrotechnical Vocabulary - 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
heat shrinkable
property of a polymeric component previously expanded to recover to its original shape when heated above an appropriate temperature

3.2
heat-shrinkable components
expanded polymeric extruded tubing or molded parts (single or multi-layer), which undergo thermally activated recovery when heated above an appropriate temperature

3.3
tubing
tube of heat shrink polymeric material cut to a predetermined length

3.4
wraparound sleeve
flat sheet of heat shrink polymeric material, which can be wrapped to form tubing