



NSAI
Standards

Irish Standard
I.S. EN 50655-3:2017

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

I.S. EN 50655-3:2017

Incorporating amendments/corrigenda/National Annexes issued since publication:

The National Standards Authority of Ireland (NSAI) produces the following categories of formal documents:

I.S. xxx: Irish Standard — national specification based on the consensus of an expert panel and subject to public consultation.

S.R. xxx: Standard Recommendation — recommendation based on the consensus of an expert panel and subject to public consultation.

SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

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):

NOTE: The date of any NSAI previous adoption may not match the date of its original CEN/CENELEC document.

This document is based on:

EN 50655-3:2017

Published:

2017-11-24

This document was published under the authority of the NSAI and comes into effect on:

2017-12-12

ICS number:

29.035.20

NOTE: If blank see CEN/CENELEC cover page

NSAI
1 Swift Square,
Northwood, Santry
Dublin 9

T +353 1 807 3800
F +353 1 807 3838
E standards@nsai.ie
W NSAI.ie

Sales:
T +353 1 857 6730
F +353 1 857 6729
W standards.ie

Údarás um Chaighdeáin Náisiúnta na hÉireann

National Foreword

I.S. EN 50655-3:2017 is the adopted Irish version of the European Document EN 50655-3:2017, 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

This document does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

For relationships with other publications refer to the NSAI web store.

Compliance with this document does not of itself confer immunity from legal obligations.

In line with international standards practice the decimal point is shown as a comma (,) throughout this document.

This page is intentionally left blank

EUROPEAN STANDARD

EN 50655-3

NORME EUROPÉENNE

EUROPÄISCHE NORM

November 2017

ICS 29.035.20

Supersedes HD 631.4 S1:2008

English Version

**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**

Câbles électriques - Accessoires - Caractérisation des matériaux - Partie 3: Essais d'identification des composants rétractables à froid pour les applications basse et moyenne tension jusqu'à 20,8/36 (42) kV

Kabel und isolierte Leitungen - Garnituren - Materialcharakterisierung - Teil 3: Fingerprint-Prüfungen für kaltschrumpfende Komponenten für Nieder- und Mittelspannungsanwendungen bis 20,8/36 (42) kV

This European Standard was approved by CENELEC on 2017-09-18. 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.

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Contents		Page
European foreword		3
1	Scope	4
2	Normative references	4
3	Terms and definitions.....	4
4	Fingerprinting.....	6
4.1	General	6
4.2	Sampling	6
4.3	Preparation and conditioning	6
4.4	Tests	6
4.5	Test report	6
Annex A (informative) Health and safety.....		8
Table		
Table 1 — Fingerprinting tests — Test methods and requirements.....		7

European foreword

This document (EN 50655-3:2017) 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

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.

This document supersedes HD 631.4 S1:2008.

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.

EN 50655-3:2017

1 Scope

This European Standard specifies the test methods and requirements for fingerprinting (as defined in 3.11) of cold shrinkable components intended to be used in cable accessories for low and medium voltage, as defined in EN 50393, HD 629.1 and HD 629.2.

Fingerprinting testing 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 the accessory type tests.

Component basic functions can be conductive, stress control or stress grading, insulating, oil barrier, anti-tracking, external protection and sealing. Components are supplied as single layer items or as multi-layer items.

Components are generally supplied pre-expanded or with a system allowing expansion prior to installation.

NOTE Information on health and safety is given in Annex A.

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 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*

ISO 2781, *Rubber, vulcanized or thermoplastic - Determination of density*

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

cold shrinkable

property of an elastomeric component previously expanded to recover to its original shape at ambient temperature after removal of the means of support

3.2

cold shrinkable component

elastomeric extruded tubing or moulded part (single- or multi-layer) pre-expanded on a support or expanded prior to installation, which tends to recover to its original dimensions when the support is removed

3.3

multi-layer component

component that consists of minimum two or more different materials bonded together

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

-
- [Looking for additional Standards? Visit Intertek Inform Infostore](#)
 - [Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation](#)
-