



NSAI
Standards

Irish Standard
I.S. EN IEC 62677-2:2018

Heat shrinkable low and medium voltage moulded shapes - Part 2 Methods of test

I.S. EN IEC 62677-2:2018

Incorporating amendments/corrigenda/National Annexes issued since publication:

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National Foreword

I.S. EN IEC 62677-2:2018 is the adopted Irish version of the European Document EN IEC 62677-2:2018, Heat shrinkable low and medium voltage moulded shapes - Part 2 Methods of test

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EUROPEAN STANDARD

EN IEC 62677-2

NORME EUROPÉENNE

EUROPÄISCHE NORM

February 2018

ICS 29.035.01; 29.035.20

English Version

**Heat shrinkable low and medium voltage moulded shapes - Part
2 Methods of test
(IEC 62677-2:2017)**

Profilés thermorétractables basse et moyenne tensions -
Partie 2: Méthodes d'essai
(IEC 62677-2:2017)

Wärmeschrumpfende Nieder- und Mittelspannungsformteile
- Teil 2: Prüfverfahren
(IEC 62677-2:2017)

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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.

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Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

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

EN IEC 62677-2:2018 (E)

European foreword

The text of document 15/807/FDIS, future edition 1 of IEC 62677-2, prepared by IEC/TC 15 "Solid electrical insulating materials", was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 62677-2:2018.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2018-08-15
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2020-11-15

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In the official version, for Bibliography, the following note has to be added for the standard indicated :

IEC 62677-1 NOTE Harmonized as EN IEC 62677-1.

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

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.

NOTE 1 When an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60212	2010	Standard conditions for use prior to and during the testing of solid electrical insulating materials	EN 60212	2011
IEC 60216-4-1	2006	Electrical insulating materials - Thermal endurance properties -- Part 4-1: Ageing ovens - Single-chamber ovens	EN 60216-4-1	2006
IEC 60216-4-2	2000	Electrical insulating materials - Thermal endurance properties -- Part 4-2: Ageing ovens - Precision ovens for use up to 300 °C	EN 60216-4-2	2000
IEC 60243-1	2013	Electric strength of insulating materials - Test methods -- Part 1: Tests at power frequencies	EN 60243-1	2013
IEC 60250	1969	Recommended methods for the determination of the permittivity and dielectric dissipation factor of electrical insulating materials at power, audio and radio frequencies including metre wavelengths	-	-
IEC 60587	2007	Electrical insulating materials used under severe ambient conditions - Test methods for evaluating resistance to tracking and erosion	EN 60587	2007
IEC 60695-11-2	2013	Fire hazard testing -- Part 11-2: Test flames - 1 kW nominal premixed flame: Apparatus, confirmatory test arrangement and guidance	EN 60695-11-2	2014
IEC 60695-11-10	2013	Fire hazard testing -- Part 11-10: Test flames - 50 W horizontal and vertical flame test methods	EN 60695-11-10	2013
IEC 62631-3-1	2016	Dielectric and resistive properties of solid insulating materials - Part 3-1 Determination of resistive properties (DC methods) - Volume resistance and volume resistivity, general method	EN 62631-3-1	2016
IEC 62677-3	series	Heat-shrinkable low and medium voltage-moulded shapes - Part 3: Specification for individual materials	-	series
ISO 62	2008	Plastics - Determination of water absorption	EN ISO 62	2008

EN IEC 62677-2:2018 (E)

ISO 846	1997	Plastics - Evaluation of the action of microorganisms	of EN ISO 846	1997
ISO 4892-3	2016	Plastics - Methods of exposure to laboratory light sources - Part 3: Fluorescent UV lamps	to EN ISO 4892-3	2016
ISO 11357-3	2011	Plastics - Differential scanning calorimetry (DSC) - Part 3: Determination of temperature and enthalpy of melting and crystallization	EN ISO 11357-3	2013
ISO 11358-1	2014	Plastics - Thermogravimetry (TG) of polymers - Part 1: General principles	of EN ISO 11358-1	2014



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INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Heat shrinkable low and medium voltage moulded shapes –
Part 2: Methods of test**

**Profils thermorétractables basse et moyenne tensions –
Partie 2: Méthodes d'essai**





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IEC 62677-2

Edition 1.0 2017-10

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Heat shrinkable low and medium voltage moulded shapes –
Part 2: Methods of test**

**Profilés thermorétractables basse et moyenne tensions –
Partie 2: Méthodes d'essai**

INTERNATIONAL
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CONTENTS

FOREWORD.....	5
INTRODUCTION.....	7
1 Scope.....	8
2 Normative references	8
3 Terms and definitions	9
4 Test conditions	9
5 Standard test specimens	9
6 Dimensions.....	9
6.1 Number of test specimens.....	9
6.2 Procedure	9
6.3 Result	10
7 Heat shock	10
7.1 Number of test specimens.....	10
7.2 Form of test specimens.....	10
7.3 Procedure	10
7.4 Report.....	10
7.5 Result	10
8 Bending at low temperature	10
8.1 Number and form of test specimens	10
8.2 Procedure	10
8.3 Result	10
9 Dimensional stability on storage	10
9.1 Number of test specimens.....	10
9.2 Procedure	11
9.3 Result	11
10 Tensile strength and elongation at break	11
10.1 Number and form of test specimens	11
10.2 Conditioning.....	12
10.3 Test temperature	12
10.4 Procedure	12
10.5 Calculations	12
10.6 Report.....	12
10.7 Result	12
11 Secant modulus at 2 % elongation.....	13
11.1 Number and form of test specimens	13
11.2 Procedure	13
11.3 Calculation.....	13
11.4 Report.....	13
11.5 Result	13
12 Electric strength	13
12.1 Number and form of test specimens	13
12.2 Conditioning.....	13
12.3 Electrodes	13
12.4 Procedure	14
12.5 Report.....	14

12.6	Result	14
13	Volume resistivity	14
13.1	Number and form of test specimens	14
13.2	Electrodes	14
13.3	Procedure	14
13.4	Report.....	14
13.5	Result	14
14	Permittivity and dissipation factor	14
14.1	Number and form of test specimens	14
14.2	Electrodes	14
14.3	Procedure	14
14.4	Calculation.....	14
14.5	Result	15
15	Resistance to tracking	15
15.1	Procedure	15
15.2	Report.....	15
15.3	Result	15
16	Flammability	15
16.1	Method A	15
16.1.1	Number and form of test specimens	15
16.1.2	Procedure.....	15
16.1.3	Result.....	15
16.2	Method B	15
16.2.1	Number and form of test specimens	15
16.2.2	Apparatus	15
16.2.3	Procedure.....	15
16.2.4	Result.....	16
17	Carbon black content.....	16
17.1	Number and form of test specimens	16
17.2	Procedure	16
17.3	Report.....	16
17.4	Result	17
18	Resistance to selected fluids	17
18.1	Principle	17
18.2	Choice of fluid.....	17
18.3	Methods of assessment	17
18.4	Number and form of test specimens	17
18.5	Procedure	17
18.6	Result	18
19	Long term heat ageing (3 000 h).....	18
19.1	Number and form of test specimens	18
19.2	Procedure	18
19.3	Report.....	18
19.4	Result	18
20	Heat ageing	18
20.1	Number and form of test specimens	18
20.2	Procedure	18
21	Water absorption	18

21.1	Procedure	18
21.2	Report.....	18
21.3	Result	18
22	Resistance to mould growth.....	19
22.1	Test in accordance with ISO 846.....	19
22.2	Report.....	19
22.3	Result	19
23	Peel adhesion.....	19
23.1	Principle	19
23.2	Apparatus	19
23.3	Form and number of test specimens	19
23.4	Procedure	19
23.5	Calculation.....	20
23.6	Report.....	20
23.7	Result	20
24	Copper corrosion (presence of corrosive volatiles)	20
24.1	Principle	20
24.2	Apparatus	20
24.3	Number and form of test specimens	21
24.4	Procedure	21
24.5	Report.....	21
24.6	Result	21
25	Halogen content	21
25.1	Method for the determination of low levels of chlorine and/or bromine and/or iodine.....	21
25.1.1	Principle	21
25.1.2	Apparatus	22
25.1.3	Procedure.....	22
25.2	Determination of low levels of fluorine	22
25.2.1	Principle	22
25.2.2	Apparatus	22
25.2.3	Reagents	23
25.2.4	Procedure.....	23
25.3	Result	23
26	Adhesive temperature resistance.....	23
26.1	Number and form of test specimens	23
26.2	Procedure	23
26.3	Report.....	23
26.4	Result	24
27	Resistance to weathering	24
27.1	Number and form of test specimens	24
27.2	Procedure	24
27.3	Report.....	24
	Bibliography.....	25
	Figure 1 – Dumb-bell specimen for tensile strength test.....	11
	Figure 2 – Test arrangement for flammability to Clause 16 method B.....	16
	Figure 3 – Test arrangement for heat shrink moulded shape on metal tube or cable	20

INTERNATIONAL ELECTROTECHNICAL COMMISSION

**HEAT SHRINKABLE LOW AND MEDIUM
VOLTAGE MOULDED SHAPES –**
Part 2: Methods of test**FOREWORD**

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International Standard IEC 62677-2 has been prepared by committee TC15: Solid electrical insulating materials.

The text of this standard is based on the following documents:

FDIS	Report on voting
15/807/FDIS	15/811/RVD

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts in the IEC 62677 series, published under the general title *Heat shrinkable low and medium voltage moulded shapes*, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "<http://webstore.iec.ch>" in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

INTRODUCTION

This part of IEC 62677 is one of a series which deals with heat shrinkable low and medium voltage moulded shapes. The series consists of three parts:

Part 1: General requirements (IEC 62677-1¹)

Part 2: Methods of test (IEC 62677-2)

Part 3: Material requirements (IEC 62677-3-101², IEC 62677-3-102³ and IEC 62677-3-103⁴)

¹ Under preparation. Stage at the time of publication: IEC RFDIS IEC 62677-1:2017.

² Under preparation. Stage at the time of publication: IEC AFDIS IEC 62677-3-101:2017.

³ Under preparation. Stage at the time of publication: IEC AFDIS IEC 62677-3-102:2017.

⁴ Under preparation. Stage at the time of publication: IEC ACDV IEC 62677-3-103:2017.

HEAT SHRINKABLE LOW AND MEDIUM VOLTAGE MOULDED SHAPES –

Part 2: Methods of test

1 Scope

This part of IEC 62677 gives methods of test for heat shrinkable low and medium voltage moulded shapes in a range of configurations and materials suitable for insulation, environmental sealing, mechanical protection and strain relief for connector/cable terminations and multi-way transitions.

The tests specified are designed to control the quality of the moulded shapes but it is recognized that they are designed to be used in low and medium voltage cable accessories and as such electrical performance will be proven as part of the assembly. Examples of this are described in EN 50393, HD 629.1 and IEC 60502-4.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

IEC 60212:2010, *Standard conditions for use prior to and during the testing of solid electrical insulating materials*

IEC 60216-4-1:2006, *Electrical insulating materials – Thermal endurance properties – Part 4-1: Ageing ovens – Single-chamber ovens*

IEC 60216-4-2:2000, *Electrical insulating materials – Thermal endurance properties – Part 4-2: Ageing ovens – Precision ovens for use up to 300 °C*

IEC 60243-1:2013, *Electric strength of insulating materials – Test methods – Part 1: Tests at power frequencies*

IEC 60250:1969, *Recommended methods for the determination of the permittivity and dielectric dissipation factor of electrical insulating materials at power, audio and radio frequencies including metre wavelengths*

IEC 60587:2007, *Electrical insulating materials used under severe ambient conditions – Test methods for evaluating resistance to tracking and erosion*

IEC 62631-3-1:2016, *Dielectric and resistive properties of solid insulating materials – Part 3-1: Determination of resistive properties (DC methods) – Volume resistance and volume resistivity General method*

IEC 60695-11-2:2013, *Fire hazard testing – Part 11-2: Test flames – 1 kW pre-mixed flame – Apparatus, confirmatory test arrangement and guidance*

IEC 60695-11-10:2013, *Fire hazard testing – Part 11-10: Test flames – 50 W horizontal and vertical flame test methods*

IEC 62677-3 (all parts), *Heat shrinkable low and medium voltage moulded shapes*

ISO 62:2008, *Plastics – Determination of water absorption*

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