Annexe CC (normative)

Matériel électrique «n» ne produisant pas d'étincelles Protection des appareils par mode de protection "n"

Lorsqu'il est fait référence à l'IEC 60079-15, les articles suivants sont applicables avec les modifications indiquées.

Exigences supplémentaires pour luminaires ne produisant pas d'étincelles

Tous les paragraphes de l'Article 11 sont applicables, à l'exception de 11.2.4.1, 11.2.4.5, 11.2.5, 11.2.6, 11.2.7, 11.3.4, 11.3.5, 11.3.6 et 11.4.

16 Exigences supplémentaires générales relatives au matériel produisant des arcs, des étincelles ou des surfaces chaudes

L'Article 16 est applicable.

17 Exigences supplémentaires relatives aux dispositifs à coupure enfermée et composants non propagateurs de flamme produisant des arcs, des étincelles ou des surfaces chaudes

L'Article 17 est applicable.

18 Exigences supplémentaires relatives aux dispositifs hermétiquement scellés produisant des arcs, des étincelles ou des surfaces chaudes

L'Article 18 est applicable.

Exigences supplémentaires relatives aux dispositifs clos produisant des arcs, des 19 étincelles ou des surfaces chaudes

Tous les paragraphes de l'Article 19 sont applicables, à l'exception de 19.1 et 19.6, qui sont remplacés par ce qui suit.

19.1 Matériaux non métalliques

L'étanchéité est soumise à l'essai selon 22.5. Toutefois, si le dispositif est soumis à l'essai dans l'appareil, les Paragraphes 22.5.1 et 22.5.2 ne s'appliquent pas. Après les essais de l'Article 19 de l'IEC 60335-2-11, par examen, il ne doit pas y avoir de dommage évident qui pourrait compromettre le type de protection.

19.6 Essais de type

Les essais de type décrits en 22.5 doivent être effectués s'ils sont appropriés.

Exigences supplémentaires relatives aux matériels produisant des arcs, des 20 étincelles ou des surfaces chaudes et protégés par des enveloppes à respiration limitée

L'Article 20 est applicable.

This is a preview. Click here to purchase the full publication.

26 Exigences supplémentaires générales pour le matériel produisant des arcs, des étincelles ou des surfaces chaudes

Cet article est applicable.

27 Exigences supplémentaires pour dispositifs à coupure enfermée et composants non propagateurs de flamme produisant des arcs, des étincelles ou des surfaces chaudes

Cet article est applicable.

28 Exigences supplémentaires pour dispositifs hermétiquement scellés produisant des arcs, des étincelles ou des surfaces chaudes

Cet article est applicable.

29 Exigences supplémentaires pour dispositifs clos ou encapsulés produisant des arcs, des étincelles ou des surfaces chaudes

Cet article est applicable avec les exceptions suivantes.

29.1 Matériaux non métalliques

Remplacement:

Les dispositifs d'étanchéité sont soumis à l'essai selon 33.5. Toutefois, si les dispositifs sont soumis à l'essai dans l'appareil, les Paragraphes 33.5.1 et 33.5.2 ne sont pas applicables. Cependant, après les essais de l'Article 19 de l'IEC 60335-2-11, un examen doit montrer qu'il n'y a aucun dommage évident de l'encapsulage, du type fissures dans la résine ou exposition des parties encapsulées, susceptible de réduire le mode de protection.

29.8 Essais de type

Remplacement:

Les essais de type décrits en 33.5 doivent être effectués s'ils sont appropriés.

30 Exigences supplémentaires pour matériel et circuits à énergie limitée produisant des arcs, des étincelles ou des surfaces chaudes

Cet article est applicable avec les exceptions suivantes.

Les Paragraphes 30.5, 30.6 et 30.10 ne sont pas applicables.

31 Exigences supplémentaires pour les matériels produisant des arcs, des étincelles ou des surfaces chaudes et protégés par des enveloppes à respiration limitée

Cet article est applicable avec l'exception suivante.

31.6 Aspects de la maintenance

Remplacement:

Les enveloppes à respiration limitée doivent être soumises à des essais de type, y compris les dispositifs d'entrée de câble.

This is a preview. Click here to purchase the full publication.

Bibliographie

La bibliographie de la Partie 1 est applicable avec les exceptions suivantes.

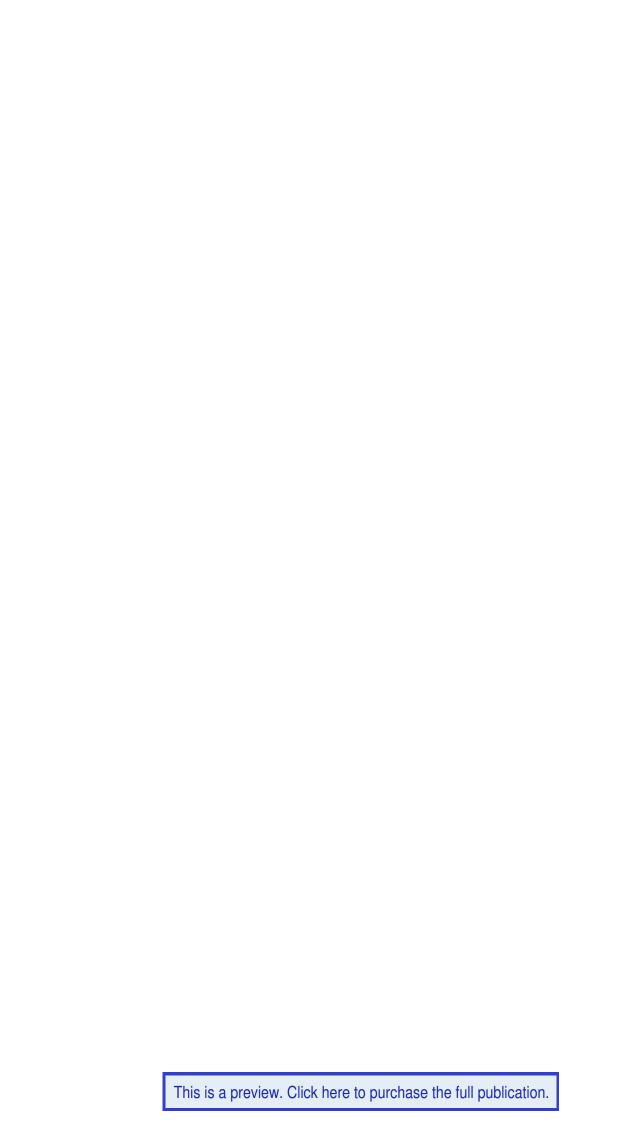
Addition:

IEC 60079 (toutes les parties), Atmosphères explosives

IEC 60436, *Electric dishwashers for household use – Methods for measuring the performance* (disponible en anglais uniquement)

IEC 60584-1, Couples thermoélectriques – Partie 1: Tables de référence

ISO 13732-1, Ergonomie des ambiances thermiques – Méthodes d'évaluation de la réponse humaine au contact avec des surfaces – Partie 1: Surfaces chaudes





Edition 7.2 2015-11

FINAL VERSION

VERSION FINALE

Household and similar electrical appliances – Safety – Part 2-11: Particular requirements for tumble dryers

Appareils électrodomestiques et analogues – Sécurité – Partie 2-11: Règles particulières pour les sèche-linge à tambour



CONTENTS

FΟ	REWORD	4
INT	RODUCTION	7
1	Scope	8
2	Normative references	9
3	Terms and definitions	9
4	General requirement	10
5	General conditions for the tests	10
6	Classification	10
7	Marking and instructions	10
8	Protection against access to live parts	11
9	Starting of motor-operated appliances	11
10	Power input and current	12
11	Heating	12
12	Void	13
13	Leakage current and electric strength at operating temperature	13
14	Transient overvoltages	13
15	Moisture resistance	14
16	Leakage current and electric strength	14
17	Overload protection of transformers and associated circuits	14
18	Endurance	14
19	Abnormal operation	14
20	Stability and mechanical hazards	16
21	Mechanical strength	17
22	Construction	17
23	Internal wiring	18
24	Components	18
25	Supply connection and external flexible cords	18
26	Terminals for external conductors	18
27	Provision for earthing	18
28	Screws and connections	19
29	Clearances, creepage distances and solid insulation	19
30	Resistance to heat and fire	19
	Resistance to rusting	
32	Radiation, toxicity and similar hazards	19
Anı	nexes	21
	nex R (normative) Software evaluation	
Anı	nex AA (normative) Rinsing agent	21
	nex BB (normative) Tumble dryers that use a refrigerating system incorporating aled motor-compressors for carrying out the drying process	22
Anı	nex CC (normative) Equipment protection by type of protection "n"	30

Figure 101 – Probe for measuring surface temperatures	IEC 60335-2-11:2008+AMD1:2012 +AMD2:2015 CSV © IEC 2015 Bibliography	- 3 - 	31
normal operating conditions with the door closed1			
Table 201 – Maximum temperatures for motor-compressors2			13
	Table 201 – Maximum temperatures for moto	or-compressors	24

INTERNATIONAL ELECTROTECHNICAL COMMISSION

HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES – SAFETY –

Part 2-11: Particular requirements for tumble dryers

FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
- 3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
- 4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter
- 5) IEC itself does not provide any attestation of conformity. Independent certification bodies provide conformity assessment services and, in some areas, access to IEC marks of conformity. IEC is not responsible for any services carried out by independent certification bodies.
- 6) All users should ensure that they have the latest edition of this publication.
- 7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
- 8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
- 9) Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

DISCLAIMER

This Consolidated version is not an official IEC Standard and has been prepared for user convenience. Only the current versions of the standard and its amendment(s) are to be considered the official documents.

This Consolidated version of IEC 60335-2-11 bears the edition number 7.2. It consists of the seventh edition (2008-07) [documents 61/3646/FDIS and 61/3686/RVD], its amendment 1 (2012-10) [documents 61/4434/FDIS and 61/4493/RVD] and its amendment 2 (2015-11) [documents 61/5002/FDIS and 61/5056/RVD]. The technical content is identical to the base edition and its amendments.

This Final version does not show where the technical content is modified by amendments 1 and 2. A separate Redline version with all changes highlighted is available in this publication.

International Standard IEC 60335-2-11 has been prepared by IEC technical committee 61: Safety of household and similar electrical appliances.

The principal changes in this edition as compared with the sixth edition of IEC 60335-2-11 are as follows (minor changes are not listed):

- aligns the text with IEC 60335-1, Ed 4, and its Amendments 1 and 2;
- some notes have been converted to normative text (7.101, 11.8, 20.102, 20.103 and Annex AA).

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

This part 2 is to be used in conjunction with the latest edition of IEC 60335-1 and its amendments. It was established on the basis of the fourth edition (2001) of that standard.

NOTE 1 When "Part 1" is mentioned in this standard, it refers to IEC 60335-1.

This part 2 supplements or modifies the corresponding clauses in IEC 60335-1, so as to convert that publication into the IEC standard: Safety requirements for electric tumble dryers.

NOTE 2 The following annexes contain provisions suitably modified from other IEC standards:

Annex AA	Rinsing agent	IEC 60436
Annex BB	Tumble dryers that use a refrigerating system incorporating sealed motor-compressors for carrying out the drying process	IEC 60068-2-6 and IEC 60079-15
Annex CC	Equipment protection by type of protection "n"	IEC 60079-15

When a particular subclause of Part 1 is not mentioned in this part 2, that subclause applies as far as is reasonable. When this standard states "addition", "modification" or "replacement", the relevant text in Part 1 is to be adapted accordingly.

NOTE 3 The following numbering system is used:

- subclauses, tables and figures that are numbered starting from 101 are additional to those in Part 1;
- unless notes are in a new subclause or involve notes in Part 1, they are numbered starting from 101, including those in a replaced clause or subclause;
- additional annexes are lettered AA, BB, etc.

NOTE 4 The following print types are used:

- requirements: in roman type;
- test specifications: in italic type;
- notes: in small roman type.

Words in **bold** in the text are defined in Clause 3. When a definition concerns an adjective, the adjective and the associated noun are also in bold.

NOTE 5 The attention of National Committees is drawn to the fact that equipment manufacturers and testing organizations may need a transitional period following publication of a new, amended or revised IEC publication in which to make products in accordance with the new requirements and to equip themselves for conducting new or revised tests.

It is the recommendation of the committee that the content of this publication be adopted for implementation nationally not earlier than 12 months or later than 36 months from the date of publication.

The following differences exist in the countries indicated below.

- 3.1.9: The textile material has different dimensions (USA).
- 6.2: Tumble dryers are not required to be IPX4 (USA).
- 7.1: An instruction concerning cleaning the lint trap is to be marked on the dryer in letters not less than 8 mm high and is to be conspicuous when the dryer door is open (Australia, New Zealand).