

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE

AMENDMENT 2  
AMENDEMENT 2

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

IEC 60335-2-11:2008/AMD2:2015

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## FOREWORD

This amendment has been prepared by IEC technical committee 61: Safety of household and similar electrical appliances.

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

FDIS	Report on voting
61/5002/FDIS	61/5056/RVD

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

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

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- withdrawn,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

NOTE 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.

## 7 Marking and instructions

**7.6** Delete the entire existing subclause.

**7.12** Replace the second paragraph by the following:

If symbol ISO 7000-0790 (2004-01) is used, its meaning shall be explained.

Add, after the existing last paragraph, as a second warning, the following new paragraph:

WARNING: The appliance must not be supplied through an external switching device, such as a timer, or connected to a circuit that is regularly switched on and off by a utility.

**7.14** In the addition, replace the requirement by the following:

The height of symbol ISO 7000-0790 (2004-01) shall be at least 15 mm.

**7.101 Delete the entire existing subclause.**

## 11 Heating

**11.3 Replace the first sentence of the first paragraph of the addition by the following:**

*Where the accessible external surfaces are suitably flat and permit access for the test probe of Figure 101, then it may be used to measure the temperature rises of accessible external surfaces specified in Table 101.*

*Replace the existing note by the following:*

**NOTE 101** The probe can be held in place using a laboratory stand clamp or similar device.

**11.8 In the addition, replace the first paragraph by the following new text and new table:**

*During the test, the temperature rises are monitored continuously and shall not exceed the values shown in Table 3 and Table 101.*

**Table 101 – Maximum temperature rises for accessible external surfaces under normal operating conditions with the door closed**

Surface <sup>c</sup>	Temperature rise <sup>e</sup> K		
	Surfaces of appliances situated not more than 850 mm above the floor after installation		Surfaces situated more than 850 mm above the floor after installation <sup>d</sup>
	Front surfaces	Other surfaces <sup>d</sup>	
Bare metal	38	42	42
Coated metal <sup>a</sup>	42	49	49
Glass and ceramic	51	56	56
Plastic and plastic coating > 0,4 mm <sup>b</sup>	58	62	62

<sup>a</sup> Metal is considered coated when a coating having a minimum thickness of 90 µm made by enamel or non-substantially plastic coating is used.

<sup>b</sup> The temperature rise limit applies also for plastic material having a metal finish of thickness less than 0,1 mm.

<sup>c</sup> When the thickness of plastic coating does not exceed 0,4 mm, the temperature rise limits of coated metal or glass and ceramic apply.

<sup>d</sup> If these values are exceeded, the test is allowed to be repeated with the appliance moved away from the test corner side wall. The test is repeated for 1 cycle.

<sup>e</sup> Temperature rises are not measured on

- the underside of appliances intended to be used on a working surface or floor;
- the rear surface of appliances;
- surfaces that are inaccessible to a 75 mm diameter probe having a hemispherical end.

## 16 Leakage current and electric strength

**16.2 In the modification, add “combined” after “class I”.**

## 20 Stability and mechanical hazards

**20.102 Delete the second paragraph of the requirement.**

**20.103** To the end of the second sentence of the requirement, add “or fixed appliances”.

## 22 Construction

**22.103** Replace the existing text in italics by the following:

Compliance is checked by inspection and by the following tests.

The washing machine and **tumble dryer** are assembled together in accordance with the instructions.

*The combination is placed in the most unfavourable orientation on a surface that is inclined at 5° to the horizontal. Each appliance is supplied at **rated voltage** and operated under **normal operation** in turn and then together.*

*The empty combination is placed on a horizontal surface and a horizontal force of 150 N is applied to the upper edge of the combination with the doors closed.*

*The combination shall not tilt and the **tumble dryer** shall not fall off the washing machine.*

## Annexes

**Annex BB – Tumble dryers that use a refrigerating system incorporating sealed motor-compressors for carrying out the drying process**

## 2 Normative references

Delete references IEC 60079-4A and IEC 60079-20 from the existing list.

Add the following new reference:

IEC 60079-20-1, Explosive atmospheres – Part 20-1: Material characteristics for gas and vapour classification – Test methods and data

Replace the references to ISO 817 and ISO 5149 by the following new references:

ISO 817, Refrigerants – Designation and safety classification

ISO 5149-1, Refrigerating systems and heat pumps – Safety and environmental requirements – Part 1: Definitions, classification and selection criteria

## 3 Definitions

Replace the title of this clause by the following new title:

## 3 Terms and definitions

**3.201** Replace, in the existing definition “ISO 5149” by “ISO 5149-1”.

**7.1** Replace the last paragraph by the following:

Appliances that use **flammable refrigerants** shall be marked with symbol ISO 7010 W021.