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Tumble dryers for household use – Methods for measuring the performance

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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FOREWORD

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International Standard IEC 61121 has been prepared by subcommittee 59D: Home laundry appliances, of IEC technical committee 59: Performance of household electrical appliances.

This consolidated version of IEC 61121 consists of the third edition (2002) [documents 59D/219/FDIS and 59D/222/RVD], its amendment 1 (2005) [documents 59D/286/FDIS and 59D/296/RVD] and its corrigenda of April 2003 and September 2003.

The technical content is therefore identical to the base edition and its amendment and has been prepared for user convenience.

It bears the edition number 3.1.

A vertical line in the margin shows where the base publication has been modified by amendment 1.

The French version of this standard has not been voted upon.

Annexes A, B, C and D form an integral part of this standard.

In this standard, the following print types are used:

– *test specifications: in italic type;*
– notes: in small roman type;
– other text: in roman type.

Words in **bold** in the text are defined in clause 3.

The committee has decided that the contents of the base publication and its amendments will remain unchanged until the maintenance result date indicated on the IEC web site 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- withdrawn,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.

INTRODUCTION

This third edition has been developed in light of experience with use of the second edition of IEC 61121. Other changes include some minor revisions to the test conditions and alterations to the test load to ensure that this remains harmonised with the IEC 60456 load for clothes washers.

In summary, the main changes are as follows.

1) General:
   - more terms have been defined and some previous definitions have been streamlined, in addition to the correction of some symbols and equations;
   - where possible, definitions and terms have been used in common with IEC 60456;
   - the content has been organised into a more logical and simple structure, and repetitive sections have been removed.
2) The conditions of measurement:
   - the wording of various sections has been revised to reduce ambiguity;
   - limits have been defined for water conductivity for auto-sensing dryers that are sensitive to conductivity, as well as methods to adjust conductivity where necessary;
   - specifications of a nominal exhaust duct were included.
3) Reproducibility and repeatability of test results:
   - revision of the specification for the cotton test load to include suitable test materials which are currently available on the market;
   - more careful definition of the process and conditions for **pre-treatment, conditioning** and **normalisation.**
4) Test methods:
   - accuracy of measurement has been defined for all instruments;
   - limits and interpretations of the allowable final moisture content for each type of dryer are now defined;
   - practical advice regarding the test procedure has been given with the aim of reducing ambiguity.

TUMBLE DRYERS FOR HOUSEHOLD USE – METHODS FOR MEASURING THE PERFORMANCE

1 Scope

This International Standard is applicable to household electric **tumble dryers** of the **automatic** and **non-automatic** type, with or without a cold water supply and incorporating a heating device.

The object is to state and define the principal performance characteristics of household electric **tumble dryer**s of interest to users and to describe standard methods for measuring these characteristics.

This standard is concerned neither with safety nor with performance requirements.

2 Normative references

The following referenced documents are indispensable for the application 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 60456, *Clothes washing machines for household use – Methods for measuring the performance*

IEC 60734, *Hard water to be used for testing the performance of some household electrical appliance*

IEC 61036, *Alternating current static watt-hour meters for active energy (Classes 1 and 2)*

IEC 61591:1997, *Household range hoods – Methods for measuring performance*

ISO 5167-1, *Measurement of fluid flow by means of pressure differential devices – Part 1: Orifice plates, nozzles and Venturi tubes inserted in circular cross-section conduits running full*