

Household and similar electric appliances - Methods for measuring the performance of clothes washing machines intended for commercial use

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

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English Version

Household and similar electric appliances - Methods for measuring the performance of clothes washing machines intended for commercial use

Appareils électrodomestiques et analogues - Méthodes de mesure de l'aptitude à la fonction pour les machines à laver le linge à usage commercial

Waschmaschinen für den gewerblichen Gebrauch - Verfahren zur Messung der Gebrauchseigenschaften

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European foreword

This document (EN 50640:2018) has been prepared by CLC/TC 59X "Performance of household and similar electrical appliances".

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) 2019-04-23
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2021-04-23

This document supersedes CLC/TS 50640:2015.

This European Standard is a new standard, but it is based on portions from EN 60456:2011.

The procedures described in this European Standard are modified substantially compared to the procedures described in EN 60456. Therefore results of tests according to this European Standard cannot and are bound not to be compared to results of similar procedures of EN 60456.

Significant technical differences from EN 60456 are:

- a) the method includes procedures for measuring steam heated and gas heated **washing machines**;
- b) the introduction of a new type of **base load**;
- c) a new reference **programme**;
- d) a new formulation of the standard detergent.

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 has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association.

1 Scope

This European Standard deals with the performance of clothes **washing machines** intended to be used by trained users e.g. in hotels, hospitals, factories, in light industry and on farms. It also covers **washing machines** declared for commercial use in public areas and operated by lay persons e.g. in launderettes, apartment houses and communal laundry rooms. The clothes **washing machines** can be utilizing cold and/or hot water supply and without heating or with heating devices for electricity, steam or gas. This European Standard covers top, front and side loaded clothes **washing machines** with horizontal or vertical axis and with one or more wash compartments. It also deals with appliances for both washing and drying textiles (**washer-dryers**) with respect to their washing related functions and to separate **spin extractors** related to their dewatering capabilities.

NOTE 1 Performance of tumble dryers declared for commercial use is assessed in EN 50594.

NOTE 2 The object is to state and define the principal performance characteristics of clothes **washing machines** declared for commercial use and to describe the test methods for measuring these characteristics.

NOTE 3 This European Standard does not apply to continuous batch **washing machines** (e.g. tunnel washers) or **washing machines** only possible to operate with automatic loading and unloading.

NOTE 4 This European Standard does not specify safety requirements for **clothes washing machines declared for commercial use**. Safety requirements are specified in EN 50571 and the EN ISO 10472- series.

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.

EN 437:2003+A1:2009, *Test gases — Test pressures — Appliance categories*

CEN/TR 1749:2014, *European scheme for the classification of gas appliances according to the method of evacuation of the combustion products (types)*

EN 12953-10, *Shell boilers — Part 10: Requirements for feedwater and boiler water quality*

EN 50571, *Household and similar electrical appliances — Safety — Particular requirements for commercial electric washing machines*

EN 60456, *Clothes washing machines for household use — Methods for measuring the performance (IEC 60456)*

EN 60734, *Household electrical appliances — Performance — Water for testing (IEC 60734)*

EN ISO 80000-1:2013, *Quantities and units — Part 1: General (ISO 80000-1:2009 + Cor 1:2011)*

IAPWS-IF97, *IAPWS Industrial Formulation 1997 for the Thermodynamic Properties of Water and Steam* [International Association for the Properties of Water and Steam]

3 Terms, definitions and symbols

3.1 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

• IEC Electropedia: available at <http://www.electropedia.org/>