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Tvättmaskiner för hushållsbruk – Funktionsprovning

*Clothes washing machines for household use –
Methods for measuring the performance*

Som svensk standard gäller europastandarden EN 60456:2011. Den svenska standarden innehåller den officiella engelska språkversionen av EN 60456:2011.

Nationellt förord

Europastandarden EN 60456:2011^{*)}

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **IEC 60456, Fifth edition, 2010 - Clothes washing machines for household use - Methods for measuring the performance**

utarbetad inom International Electrotechnical Commission, IEC.

Där texten i europastandarden avviker från texten i motsvarande avsnitt i IEC 60456:2010 är detta markerat med rött.

Tidigare fastställd svensk standard SS-EN 60456, utgåva 3, 2005, SS-EN 60456 C1, utgåva 1, 2008 och SS-EN 60456/A12, utgåva 1, 2011, gäller ej fr o m 2014-03-21.

^{*)} Corrigendum, July 2011, till EN 60456:2011 ingår i standarden.

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SEK Svensk Elstandard

Box 1284
164 29 Kista
Tel 08-444 14 00
www.elstandard.se

English version

**Clothes washing machines for household use -
Methods for measuring the performance**
(IEC 60456:2010, modified)

Machines à laver le linge pour usage domestique -
Méthodes de mesure de l'aptitude à la fonction
(CEI 60456:2010, modifiée)

Waschmaschinen für den Hausgebrauch -
Verfahren zur Messung der Gebrauchseigenschaften
(IEC 60456:2010, modifiziert)

This European Standard was approved by CENELEC on 2011-03-21. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

Management Centre: Avenue Marnix 17, B - 1000 Brussels



Corrigendum to EN 60456:2011

English version

Add the following text to the Foreword:

The following dates were fixed:

- latest date by which the EN has to be implemented
at national level by publication of an identical
national standard or by endorsement (dop) 2012-03-21
 - latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2014-03-21
-

July 2011

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Foreword

The text of the International Standard IEC 60456:2010, prepared by SC 59D, Home laundry appliances, of IEC TC 59, Performance of household and similar electrical appliances, together with common modifications prepared by the Technical Committee CENELEC TC 59X, Performance of household and similar electrical appliances, was submitted to the formal vote and was approved by CENELEC as EN 60456 on 2011-03-21.

This document supersedes EN 60456:2005 + A11:2006 + A12:2011

Significant technical differences are

- a) a test procedure for a combined test sequence of cotton 40 °C and cotton 60 °C with full load and partial load is introduced,
- b) a test procedure for measuring power consumption in low power modes is introduced,
- c) a formula to calculate the energy consumption of washing machines including low power modes is added,
- d) the detergent dosage is reduced to 75 % for cotton and synthetic/blends,
- e) the detergent dosage of the reference machine type 1 is adjusted to maintain the washing performance level of the reference machine type 2,
- f) the reference machine type 1 is to be used for testing according to Commission Regulations with regard to energy labelling and ecodesign,
- g) control procedures for checking measured values in comparison to values declared by the manufacturer under consideration of permitted tolerances are updated.

The procedures described in this European Standard were modified substantially compared to EN 60456:2005, e.g. with regard to detergent dosage. Therefore results of tests according to this standard cannot and shall not be directly compared to results of similar procedures of previous versions. Also results based on a specific reference programme shall not be compared to results based on other reference programmes.

This European Standard also specifies, as far as necessary, the test methods which shall be applied in accordance with the COMMISSION DELEGATED REGULATION (EU) No 1061/2010 implementing Directive 2010/30/EU of the European Parliament and of the Council with regard to energy labelling of household washing machines and in accordance with the COMMISSION REGULATION (EU) No 1015/2010 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for household washing machines.

Clauses, subclauses, notes, tables and figures which are additional to those in IEC 60456:2010 are prefixed "Z".

Annexes ZA, ZB and ZC have been added by CENELEC.

Annex ZA sets out the procedure to be applied for testing according to Commission Regulations with regard to energy labelling and ecodesign and provides all necessary links to all relevant clauses of this European Standard.

Annex ZB provides control procedures for checking measured values in comparison to values declared by the manufacturer and taking into account any permitted tolerances.

Annex ZC lists normative references.

Endorsement notice

The text of the International Standard IEC 60456:2010 was approved by CENELEC as a European Standard with **common modifications printed in red letters**.

1 Scope

This European Standard specifies methods for measuring the performance of clothes **washing machines** for household use, with or without heating devices utilising cold and/or hot water supply. It also deals with appliances for water extraction by centrifugal force (**spin extractors**) and is applicable to appliances for both washing and drying textiles (**washer-dryers**) with respect to their washing related functions. This European Standard also covers **washing machines** which specify the use of no detergent for normal use.

NOTE 1 Tumble dryer performance is assessed to IEC 61121.

The object is to state and define the principal performance characteristics of electric household **washing machines** and **spin extractors** and to describe the test methods for measuring these characteristics.

NOTE 2 This European standard applies also to **washing machines** for communal use in blocks of flats or in laundrettes. It does not apply to **washing machines** for commercial laundries. This European Standard is not intended to be used for the comparative evaluation of detergents.

NOTE 3 This European Standard does not specify acoustical noise requirements for **washing machines**. Acoustical noise measurements are specified in IEC 60704-1 and IEC 60704-2-4.

NOTE 4 This European Standard does not specify safety requirements for **washing machines**. Safety requirements are specified in IEC 60335-2-7.

2 Normative references

Void.

NOTE Z1: Normative references to the relevant European Standards are listed in Annex ZC (normative).