

Svenska Elektriska Kommissionen, SEK

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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 60456:2005. Den svenska standarden innehåller den officiella engelska språkversionen av EN 60456:2005.

### Nationellt förord

Europastandarden EN 60456:2005

består av:

- europastandardens ikraftsättningsdokument, utarbetat inom CENELEC
- **IEC 60456, Fourth edition, 2003 - Clothes washing machines for household use - Methods for measuring the performance**

utarbetad inom International Electrotechnical Commission, IEC.

Tidigare fastställd svensk standard SS-EN 60456, utgåva 2, 1999, SS-EN 60456/A11, utgåva 1, 2001, SS-EN 60456/A12, utgåva 1, 2001 och SS-EN 60456/A13, utgåva 1, 2003, gäller ej fr o m 2007-10-01.

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ICS 97.060

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Denna standard är fastställd av Svenska Elektriska Kommissionen, SEK, som också kan lämna upplysningar om **sakinnehållet** i standarden.  
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Det finns många fördelar med att ha gemensamma tekniska regler för bl a säkerhet, prestanda, dokumentation, utförande och skötsel av elprodukter, elanläggningar och metoder. Genom att utforma sådana standarder blir säkerhetskraven tydliga och utvecklingskostnaderna rimliga samtidigt som marknadens acceptans för produkten eller tjänsten ökar.

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EUROPEAN STANDARD

**EN 60456**

NORME EUROPÉENNE

EUROPÄISCHE NORM

March 2005

ICS 97.060

Supersedes EN 60456:1999 + A11:2001 + A12:2001 + A13:2003

English version

**Clothes washing machines for household use -  
Methods for measuring the performance**  
(IEC 60456:2003, modified)

Machines à laver le linge  
pour usage domestique -  
Méthodes de mesure de l'aptitude  
à la fonction  
(CEI 60456:2003, modifiée)

Waschmaschinen für den Hausgebrauch -  
Verfahren zur Messung  
der Gebrauchseigenschaften  
(IEC 60456:2003, modifiziert)

This European Standard was approved by CENELEC on 2004-10-01. 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, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

**CENELEC**

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

**Central Secretariat: rue de Stassart 35, B - 1050 Brussels**

## Foreword

The text of the International Standard IEC 60456:2003, prepared by SC 59D, Home laundry appliances, of IEC TC 59, Performance of household electrical appliances, together with the common modifications prepared by the Technical Committee CENELEC TC 59X, Consumer information related to household electrical appliances, was submitted to the formal vote and was approved by CENELEC as EN 60456 on 2004-10-01.

This European Standard supersedes EN 60456:1999 + A11:2001 + A12:2001 + A13:2003.

Many of the changes in the new IEC 60456:2003 had already been included in EN 60456:1999/A12:2001 and A13:2003. Consequently, the only significant technical difference with the previous edition of the European Standard is the allowance of three alternative methods to condition the load.

It is not expected that this new version EN 60456 will influence energy label declaration in any way.

In this European Standard the common modifications to the International Standard are indicated by a vertical line in the left margin of the text.

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) 2005-10-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2007-10-01

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.

Clauses, subclauses and notes that are additional to those in IEC 60456 are prefixed with the letter Z.

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## 1 Scope

This International Standard deals with methods for measuring the performance of clothes **washing machines** for household use, with or without heating devices and for cold and/or hot water supply. It also deals with appliances for water extraction by centrifugal force and is applicable to appliances for both washing and drying textiles (called **washer-dryers**) with respect to their washing performance.

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

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

NOTE 1 This standard applies also to **washing machines** for communal use in blocks of flats or in launderettes, but **washing machines** for commercial laundries are not included.

NOTE 2 While this standard includes testing requirements for all types of **washing machines**, to date there has been only limited testing and evaluation of other than **horizontal drum washing machines** to this standard.

This European Standard also specifies, as far as necessary, the test methods which shall be applied in accordance with the Commission's Directive 95/12/EC of 23 May 1995 implementing Council Directive 92/75/EEC with regard to energy labelling of household washing machines.

## 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.

EN 12127, *Textiles – Fabrics – Determination of mass per unit area using small samples*

EN 60704-2-4, *Test code for the determination of airborne acoustical noise emitted by household and similar electrical appliances – Part 2: Particular requirements for washing machines and spin extractors* (IEC 60704-2-4)

EN 60704-3, *Test code for the determination of airborne acoustical noise emitted by household and similar electrical appliances – Part 3: Procedure for determining and verifying declared noise emission values* (IEC 60740-3)

EN 60734, *Household electrical appliances – Performance – Hard water for testing* (IEC 60734)

EN 62053-21, *Electricity metering equipment (a.c.) – Particular requirements – Part 21: Static meters for active energy (classes 1 and 2)* (IEC 62053-21)

ISO 2060, *Textiles – Yarn from packages – Determination of linear density (mass per unit length) by the skein method* (Endorsed as EN ISO 2060)

ISO 2061, *Textiles – Determination of twist in yarns – Direct counting method* (Endorsed as EN ISO 2061)

ISO 3801, *Textiles – Woven fabrics – Determination of mass per unit length*

ISO 7211-2, *Textiles – Woven fabrics – Construction – Methods of analysis – Part 2: Determination of number of threads per unit length*