

STN	Elektrické umývačky riadu pre domácnosť Metódy merania funkčných vlastností Zmena A12	STN EN 60436/A12 36 1060
------------	--	--

Electric dishwashers for household use - Methods for measuring the performance

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 12/22

STN EN 60436 z augusta 2020 sa bez tejto zmeny A12 môže používať do 14. 10. 2025.

Obsahuje: EN 60436:2020/A12:2022

EUROPEAN STANDARD

EN 60436:2020/A12

NORME EUROPÉENNE

EUROPÄISCHE NORM

October 2022

ICS 97.040.40

English Version

Electric dishwashers for household use - Methods for measuring the performance

Lave-vaisselle électriques à usage domestique - Méthodes de mesure de l'aptitude à la fonction

Elektrische Geschirrspüler für den Hausgebrauch - Messverfahren für Gebrauchseigenschaften

This amendment A12 modifies the European Standard EN 60436:2020; it was approved by CENELEC on 2022-06-06. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this amendment 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 CEN-CENELEC Management Centre or to any CENELEC member.

This amendment 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 CEN-CENELEC Management Centre 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, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.



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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

EN 60436:2020/A12:2022 (E)

Contents	Page
European foreword	3
1 Replacement of "Introduction"	5
2 Modification of Clause 2 "Normative references"	5
3 Modifications to Clause 5 "General conditions for measurements"	5
4 Modifications to Clause 6, "Combined cleaning and drying performance test"	5
5 Modifications to Clause 7, "Combined cleaning and drying performance assessment"	6
6 Modifications to Clause 9 "Airborne acoustical noise"	7
7 Modification to Annex A, "Place settings and serving pieces"	7
8 Modification to Annex B, "Tableware specifications"	10
9 Modifications to Annex C, "Illustration of soil application quantities"	18
10 Modification to Annex D, "Pictures of the soiled items"	19
11 Modification to Annex E, "Test additives"	20
12 Modification to Annex F, "Microwave oven"	20
13 Modification to Annex G, "Through-circulation thermal cabinet"	20
14 Modification to Annex J, "Shade chart"	20
15 Modification to Annex K, "Additional aspects of energy consumption of dishwasher"	20
16 Modification of Annex L, "Suppliers of test materials ⁴ "	21
17 Modification of Annex T, "Instrumentation and accuracy"	24
18 Modification to Annex ZA, "Measurement procedure for low power modes"	25
Annex ZA (normative) Measurement procedure for low power modes	26
19 Modification to Annex ZB, "Normative references to international publications with their corresponding European publications"	32
20 Addition of Annex ZC, "Template for test report" and Annex ZD, "Uncertainty of Measurement"	32
Annex ZC (informative) Template for test report	33
Annex ZD (informative) Uncertainty of Measurement	34
21 Replacement of Annex ZZA, "Relationship between this European Standard and the energy labelling requirements of Commission Delegated Regulation (EU) No 2019/2017 aimed to be covered", and Annex ZZB, "Relationship between this European Standard and the ecodesign requirements of Commission Regulation (EU) No 2019/2022 aimed to be covered"	35
Annex ZZA (informative) Relationship between this European Standard and the energy labelling requirements of Commission Delegated Regulation (EU) No 2019/2017 aimed to be covered	36
Annex ZZB (informative) Relationship between this European Standard and the ecodesign requirements of Commission Regulation (EU) No 2019/2022 aimed to be covered	38

European foreword

This document (EN 60436:2020/A12:2022) 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) 2023-04-14
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2025-10-14

This document amends EN 60436:2020.

It includes the following significant changes:

- editorial improvement regarding consistent use of terms;
- realignment of headings (IEC vs EN);
- more precise description of applicable ambient conditions;
- update of milk preparation procedure;
- guidance on use of plastic fork as soiling tool;
- rounding of reported numbers in alignment with amendment of EU energy labelling and ecodesign regulation;
- necessary change of specified ranges for test load weight;
- update of supplier information annex;
- addition of Annex ZC Test report template;
- withdrawal of corrigendum (change of detergent annex);
- amendment of Annex ZA Measurement procedure for low power modes reflecting learnings of round robin test;
- introduction of dated normative references;
- updated Annexes ZZA and ZZB.

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 is read in conjunction with EN 60436:2020/A11:2020 and EN 60436:2020/AC:2020-06.

This document has been prepared under a Standardization Request given to CENELEC by the European Commission and the European Free Trade Association, and supports essential requirements of Directive(s) / Regulation(s).

EN 60436:2020/A12:2022 (E)

For the relationship with Directive(s) / Regulation(s), see informative Annexes ZZA and ZZB, which are an integral part of this document.

Any feedback and questions on this document should be directed to the users' national committee. A complete listing of these bodies can be found on the CENELEC website.

1 Replacement of “Introduction”

Replace the Introduction by the following:

“This edition of the standard EN 60436, Electric dishwashers for household use - Methods for measuring the performance, was developed for the EU energy labelling and ecodesign scheme and therefore based on the principle described in the standardization request M/566 to the European Committee for Standardisation, the European Committee for Electrotechnical Standardisation and the European Telecommunications Standards Institute as regards ecodesign and energy labelling requirements for household dishwashers, household washing machines and household washer-dryers in support of Commission Regulations (EU) 2019/2022 and (EU) 2019/2023 and Commission Delegated Regulations (EU) 2019/2017 and (EU) 2019/2014.

Standardization request M/566, issued by the European Commission, includes the standardization task to develop measures in testing household dishwashers, which ensure that the prospective harmonized standard takes into account improved test conditions and test materials to better reflect the user behaviour and the state of the art at European and international level.”

2 Modification of Clause 2 “Normative references”

Replace undated references by dated references:

EN 60704-2-3:2019, *Household and similar electrical appliances - Test code for the determination of airborne acoustical noise - Part 2-3: Particular requirements for dishwashers*

EN 60705:2015¹, *Household microwave ovens – Methods for measuring performance*

EN 60734:2012, *Household electrical appliances - Performance - Water for testing*

EN 50564:2011, *Electrical and electronic household and office equipment - Measurement of low power consumption*

EN 50643:2018, *Electrical and electronic household and office equipment - Measurement of networked standby power consumption of edge equipment*

ISO 607:1980, *Surface active agents and detergents — Methods of sample division*

koniec náhľadu – text ďalej pokračuje v platenej verzii STN

¹ As amended by EN 60705:2015/A2:2018.