

SLOVENSKI STANDARD
SIST EN 60704-2-3:1998**01-januar-1998**

Test code for the determination of airborne acoustical noise emitted by household and similar electrical appliances - Part 2: Particular requirements for dishwashers (IEC 704-2-3:1987 + Corrigendum 1989, modified)

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Prüfvorschrift für die Bestimmung der Luftschallemission von elektrischen Geräten für den Hausgebrauch und ähnliche Zwecke -- Teil 2: Besondere Anforderungen an Geschirrspülmaschinen

Code d'essai pour la détermination du bruit aérien émis par les appareils électrodomestiques et analogues -- Partie 2: Règles particulières pour les lave-vaisselle

Ta slovenski standard je istoveten z: EN 60704-2-3:1994

ICS:

| | | |
|-----------|--------------------------------|---|
| 17.140.20 | Emisija hrupa naprav in opreme | Noise emitted by machines and equipment |
| 97.040.40 | Pomivalni stroji | Dishwashers |

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ICS 17.140.20

Supersedes HD 423.2.3 S1:1989 + A1:1990

Descriptors: Household electrical appliance, dishwasher acoustic, test code, noise measurement, airborne noise, sound pressure

ENGLISH VERSION

Test code for the determination of airborne acoustical noise emitted by household and similar electrical appliances

Part 2: Particular requirements for dishwashers
(IEC 704-2-3:1987 + corrigendum 1989, modified)

Code d'essai pour la détermination du bruit aérien émis par les appareils électrodomestiques et analogues
Deuxième partie:
Règles particulières pour les lave-vaisselle
(CEI 704-2-3:1987 + corrigendum 1989, modifiée)

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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.

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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

At the request of CENELEC Technical Committee TC 59X, Consumer information related to household electrical appliances, HD 423.2.3 S1:1989 (IEC 704-2-3:1987 + corrigendum December 1989) and its amendment A1:1990 were submitted to the CENELEC voting procedure for conversion into a European Standard.

The text of the International Standard together with the common modifications accepted as A1:1990 to HD 423.2.3 S1:1989 was approved by CENELEC as EN 60704-2-3 on 5 July 1994.

The following dates were fixed:

- latest date of publication of an identical national standard (dop) 1995-07-15
- latest date of withdrawal of conflicting national standards (dow) -

Annexes designated "normative" are part of the body of the standard. Annexes designated "informative" are given only for information. In this standard, annex A is informative and annex ZA is normative.

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ENDORSEMENT NOTICE

The text of the International Standard IEC 704-2-2:1987 and its corrigendum December 1989 was approved by CENELEC as a European Standard with agreed common modifications as given below.

COMMON MODIFICATIONS

- i 6.4 Loading and operating of appliances
- 6.4.2 Replace the first and the second paragraphs of the replacement by:
- R The determination of noise emission of the dishwasher may be restricted to the periods of the main program parts wash and clean-rinse; functions separated from these main program parts as for example "water supply" or "pumping" have to be reported in addition if their noise emission exceeds the sound power level of the main program parts and if their noise can be considered as steady for a duration of more than 60 s.
- The measurements shall be carried out during that part of the functions main-wash or main-clean-rinse in which the highest A-weighted sound power level is to be expected according to the time history of the sound pressure level and in which the noise emission can be regarded as steady for at least 60 s.
- i Introduce the last paragraph of the replacement between the third and the fourth paragraphs.
- Add at the end of the subclause:
- r Note.- According to ISO Standard 1680/1:1986 a noise is considered to be steady when the fluctuations of the indicating pointer on the sound level meter are less than ± 30 dB using the "slow" meter characteristics.

ANNEX ZA (normative)

OTHER INTERNATIONAL PUBLICATIONS QUOTED IN THIS STANDARD
WITH THE REFERENCES OF THE RELEVANT EUROPEAN PUBLICATIONS

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

NOTE : When the international publication has been modified by CENELEC common modifications, indicated by (mod), the relevant EN/HD applies.

| IEC Publication | Date | Title | EN/HD | Date |
|---|-------|--|------------|------|
| 436 | 1981* | Methods for measuring the performance of electric dishwashers | - | - |
| 704-1 | 1982 | Test code for the determination of airborne acoustical noise emitted by household and similar electrical appliances - Part 1: General requirements | EN 60704-1 | 1994 |
| 804 | 1985 | Integrating-averaging sound level meters | EN 60804* | 1994 |
| SIST EN 60704-2-3:1998 https://standards.iteh.ai/catalog/standards/sist/9c66015e-7e4e-4f80-92e6-b77eb785bcb2/sist-en-60704-2-3-1998 | | | | |
| Other publications quoted: | | | | |
| ISO 3055 | 1985 | Kitchen equipment - Co-ordinating sizes | - | - |
| ISO 3743 | 1988 | Acoustics - Determination of sound power levels of noise sources - Engineering methods for special reverberation test rooms | - | - |
| ISO 3744 | 1981 | Acoustics - Determination of sound power levels of noise sources - Engineering methods for free-field conditions over a reflecting plane | - | - |

* IEC 436:1973 is harmonized as HD 378 S1:1979
EN 60804 includes A1:1989 to IEC 804

NORME INTERNATIONALE INTERNATIONAL STANDARD

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First edition
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Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

Code d'essai pour la détermination du bruit aérien émis par les appareils électrodomestiques et analogues

Deuxième partie: Règles particulières pour les lave-vaisselle

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Test code for the determination of airborne acoustical noise emitted by household and similar electrical appliances

Part 2: Particular requirements for dishwashers

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**TEST CODE FOR THE DETERMINATION OF AIRBORNE
ACOUSTICAL NOISE EMITTED BY HOUSEHOLD
AND SIMILAR ELECTRICAL APPLIANCES**

Part 2: Particular requirements for dishwashers

FOREWORD

- 1) The formal decisions or agreements of the IEC on technical matters, prepared by Technical Committees on which all the National Committees having a special interest therein are represented, express, as nearly as possible, an international consensus of opinion on the subjects dealt with.
- 2) They have the form of recommendations for international use and they are accepted by the National Committees in that sense.
- 3) In order to promote international unification, the IEC expresses the wish that all National Committees should adopt the text of the IEC recommendation for their national rules in so far as national conditions will permit. Any divergence between the IEC recommendation and the corresponding national rules should, as far as possible, be clearly indicated in the latter.

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SIS PREFACE 2-3:1998

This standard has been prepared by Sub-Committee 59A: Electric Dishwashers, of IEC Technical Committee No. 59: Performance of Household Electrical Appliances.

The text of this publication is based on the following documents:

| Six Months' Rule | Report on Voting |
|------------------|------------------|
| 59A(CO)26 | 59A(CO)30 |

Further information can be found in the Report on Voting indicated in the table above.

This Part 2 is intended to be used in conjunction with IEC Publication 704-1, First edition, 1982: Test code for the determination of airborne acoustical noise emitted by household and similar electrical appliances, Part 1: General requirements.

The relevant text of Part 1 as amended by this publication establishes the test code for dishwashers.

This Part 2 supplements or modifies the corresponding clauses in IEC Publication 704-1. When a particular sub-clause is not mentioned in this Part 2, that sub-clause is applicable as far as is reasonable. Where this standard states "addition", "modification" or "replacement", the relevant requirement, test specification or explanatory matter in Part 1 should be adapted accordingly.

In this publication:

- 1) The following print types are used:
 - requirements proper: in roman type;
 - *test specifications: in italic type;*
 - explanatory matter: in smaller roman type;
- 2) Sub-clauses or figures which are additional to those in Part 1 are numbered starting from 101: additional appendices are lettered AA, BB, etc.

Other IEC publications quoted in this standard:

Publication N° 436 (1981): Methods for Measuring the Performance of Electric Dishwashers

704-1 (1982): Test Code for the Determination of Airborne Acoustical Noise Emitted by Household and Similar Electrical Appliances, Part 1: General Requirements.

804 (1985): Integrating-averaging Sound Level Meters.

Other publications quoted:

ISO standard 3055: Kitchen equipment – Co-ordinating sizes.

ISO standard 3743: Acoustics – Determination of sound power levels of noise sources – Engineering methods for special reverberation test rooms.

ISO standard 3744: Acoustics – Determination of sound power levels of noise sources – Engineering methods for free-field conditions over a reflecting plane.

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TEST CODE FOR THE DETERMINATION OF AIRBORNE ACOUSTICAL NOISE EMITTED BY HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES

Part 2: Particular requirements for dishwashers

INTRODUCTION

The measuring conditions specified in this Part 2 simulate the practical use of dishwashers as far as possible, taking into account steadiness of the noise emitted and reproducibility in different laboratories. To avoid unsteadiness caused by foaming, the test must be run with unsoiled load and without detergents or rinsing aids. Dishwashers intended to be built in or under a counter are built in an appropriate cabinet, and machines to be used on a counter are to be so tested on a counter.

It is recommended to consider noise data as part of performance tests.

1. Scope and object

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This clause of Part 1 applies except as follows:

1.1 Scope

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These particular requirements apply to single unit electric dishwashers for household and similar use, with and without automatic programme control, for cold and (or) hot water supply, for detachable or permanent connection to water supply or sewage systems, intended for placing on the floor against a wall, for building in or placing under a counter, a kitchen work-top or under a sink, for wall-mounting or on a counter.

Limitations for the use of this test code are given in the scope of IEC Publication 704-1.

1.2 Object

Addition:

Requirements for the declaration of noise emission values are not within the scope of this standard.

Note. — Procedure for verifying stated noise emission values are being developed by ISO.

2. References

This clause of Part 1 applies except as follows:

Addition:

— IEC Publication 436: Methods for Measuring the Performance of Electric Dishwashers.