SLOVENSKI STANDARD
SIST EN 60619:1998

01-januar-1998

Electrically operated food preparation appliances - Methods for measuring performance (IEC 619:1993)

Electrically operated food preparation appliances - Methods for measuring performance (IEC 619:1993)

Elektrisch betriebene Küchenmaschinen - Prüfverfahren zur Bestimmung der Gebrauchseigenschaften

Appareils électriques pour la préparation de la nourriture - Méthodes de mesure de l'aptitude à la fonction

Ta slovenski standard je istoveten z: **EN 60619:1993**

ICS:

97.040.50	Majhni gospodinjski aparati	Small kitchen appliances

SIST EN 60619:1998 **en**

EUROPEAN STANDARD EN 60619

NORME EUROPEENNE

EUROPÄISCHE NORM April 1993

UDC 64.06-83:641.5

Descriptors: Household electrical appliances, food preparation, performance, measurements, comparative tests

ENGLISH VERSION

Electrically operated food preparation appliances Measuring methods (IEC 619:1993)

Appareils électriques pour la préparation de la nourriture Méthodes de mesure (CEI 619:1993)

Elektrische Küchenmaschinen Prüfverfahren (IEC 619:1993)

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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

Ref. No. EN 60619:1993 E

FOREWORD

The text of document 59G(CO)25, as prepared by sub-committee 59G: Small kitchen appliances, of IEC technical committee 59: Performance of household electrical appliances, was submitted to the IEC-CENELEC parallel vote in March 1992.

The reference document was approved by CENELEC as EN 60619 on 9 December 1992.

The following dates were fixed:

- latest date of publication of an identical national standard	(dop)	1994-02-01
- latest date of withdrawal of conflicting national standards	(dow)	1994-02-01

ENDORSEMENT NOTICE

The text of the International Standard IEC 619:1993 was approved by CENELEC as a European Standard without any modification.

NORME INTERNATIONALE
INTERNATIONAL STANDARD

CEI
IEC
619

Deuxième édition
Second edition
1993-02

Appareils électriques pour la préparation de la nourriture – Méthodes de mesure

Electrically operated food preparation appliances – Measuring methods

Bureau Central de la Commission Electrotechnique Internationale 3, rue de Varembé Genève, Suisse

Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

CODE PRIX
PRICE CODE U

Pour prix, voir catalogue en vigueur
For price, see current catalogue

Publication 619 de la CEI
(Deuxi me dition - 1993)

Appareils lectriques pour la pr paration et la nourriture – M thodes de mesure

IEC Publication 619
(Second edition - 1993)

Electrically operated food preparation appliances – Measuring methods

C O R R I G E N D U M 1

Page de couverture, page 6 et page 8

Remplacer le titre de cette publication par le titre suivant:

Appareils lectriques pour la pr paration de la nourriture – M thodes de mesure de l'aptitude la fonction

Cover page, page 7 and page 9

Replace the title of this publication by the following:

Electrically operated food preparation appliances – Methods for measuring the performance

Juillet 1993

July 1993

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Clause Page

INTERNATIONAL ELECTROTECHNICAL COMMISSION

ELECTRICALLY OPERATED FOOD PREPARATION APPLIANCES – MEASURING METHODS

FOREWORD

1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the IEC is to promote international cooperation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, the IEC publishes International Standards. Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. The IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.

2) 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.

3) They have the form of recommendations for international use published in the form of standards, technical reports or guides and they are accepted by the National Committees in that sense.

4) In order to promote international unification, IEC National Committees undertake to apply IEC International Standards transparently to the maximum extent possible in their national and regional standards. Any divergence between the IEC Standard and the corresponding national or regional standard shall be clearly indicated in the latter.

International Standard IEC 619 has been prepared by sub-committee 59G: Small kitchen appliances, of IEC technical committee 59: Performance of household electrical appliances.

This second edition cancels and replaces the first edition issued in 1978 and its amendment 1 (1992). It constitutes a technical revision.

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

DIS	Report on Voting
59G(CO)25	59G(CO)33

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

Annex A forms an integral part of this standard.

ELECTRICALLY OPERATED FOOD PREPARATION APPLIANCES – MEASURING METHODS

1 Scope and object

1.1 *Scope*

This International Standard applies to electrically operated food preparation appliances for household use.

The purpose of this standard is to state and define test methods of measuring the functions that can be carried out by means of household electrical food preparation appliances, which are of interest to the user and to give some guidelines for the evaluation of test results.

Taking into account the lower grade of accuracy and repeatability, due to variations in time and origin of test materials and ingredients and to the influence of the subjective judgement of test operators, the described test methods may be applied more reliably for comparative testing of a number of appliances at approximately the same time, in the same laboratory, by the same operator and with the same utensils, rather than for testing of single appliances in different laboratories.

As there is no definition of a given type or size of oven, and as a number of the tests involve baking of the final product in order to make a determination of volume, a variation in results can be expected between ovens used. All comparative tests should be undertaken in the same oven.

1.2 *Aspects excluded from the scope*

This standard is not concerned with safety.

It does not apply to appliances designed exclusively for commercial or industrial use.

Attention is drawn to the fact that sometimes the same result may be obtained using different functions.

2 Normative references

Void.

NOTE - Other clauses which include normative references will be developed later.

3 Definitions

For the purpose of this International Standard the following definitions apply:

3.1 **Terms used to define the functions**

3.1.1 **whisking**: To incorporate air and increase the volume of egg-whites.

3.1.2 **whipping cream**: To incorporate air and increase the volume of cream.

3.1.3 **beating**: To mix and incorporate air (e.g.: cake batter).

3.1.4 **heavy mixing**: To incorporate ingredients evenly into a heavy mixture without chopping (e.g.: fruit cake containing glacé cherries).

3.1.5 **mixing**: To combine ingredients evenly (e.g.: pastry, pie).

3.1.6 **kneading**: To work a heavy mixture to form a smooth, pliable mass.

3.1.7 **blending/pureeing**: To make semi-solid ingredients liquid or to chop with liquid (e.g.: babyfood, fruit, soup).

3.1.8 **emulsifying**: To combine together insoluble liquids so that one or more is suspended in droplets throughout the other (e.g.: mayonnaise).

3.1.9 **chopping**: To reduce solid ingredients to small particles (e.g.: meat, onions, almonds).

3.1.10 **slicing**: To cut into slices (e.g.: carrots. cucumber, leeks).

3.1.11 **shredding**: To reduce to small strips (e.g.: carrots, cheese).

3.1.12 **french fry**: To cut potatoes into the shape of French fries.

NOTE - The definition of other functions is under consideration.

3.2 Terms used to define the major families of appliances

3.2.1 **mono-function appliance**: Appliance designed to perform only one function.

3.2.2 **multi-function appliance**: Appliance designed to perform more than one function.

Appliances can be either hand-held type or table type.

NOTE - Sometimes, for some appliances, it may be necessary to change the attachments or tools in order to perform the different functions.

4 List of measurements

This standard covers the following functions:

- whisking (clause 6);
- whipping cream (clause 7);
- beating (clause 8);
- heavy mixing (clause 9);
- mixing (clause 10);
- kneading (clause 11);
- blending/pureeing (clause 12);
- emusifying (clause 13);
- chopping of meat (subclause 14.1);

- chopping of onions (subclause 14.2);
- chopping of almonds (subclause 14.3);
- slicing of carrots (subclause 15.1);
- slicing of cucumbers (subclause 15.2);
- slicing of leeks (subclause 15.3);
- shredding of carrots (subclause 16.1);
- shredding of cheese (subclause 16.2);
- french fries chipping (clause 17);
- juice separation (clause 18);
- citrus juice extraction (clause 19);
- coffee milling and grinding (clause 20).

This standard also covers:

- splashing (clause 21);
- spillage (clause 22);
- cleaning (clause 23).

5 General conditions for measurements

Unless otherwise specified, the measurements are conducted under the following conditions.

5.1 *General*

The attachments, speed, tools and quantities of ingredients used shall be those recommended by the manufacturer. In the absence of manufacturer's recommendations, the quantities quoted shall be used. The ingredients specified have been selected primarily to ensure uniform and reproducible results. A list of ingredients known to be suitable is given in annex A. Unless otherwise stated, the appliance shall be operated in accordance with the manufacturer's instructions.

5.2 *Electrical supply*

The measurements shall be made at rated frequency and at a voltage which is within ±0,5 % of the rated voltage or the mean of the rated voltage range.

NOTE - If the rated voltage differs from the nominal supply voltage of the country concerned, measurements carried out at rated voltage may be misleading. Therefore, for comparative testing the voltage used for the tests is to conform to the nominal supply voltage and this shall be reported.

5.3 *Ambient temperature*

The ambient temperature and the temperature of all utensils and ingredients shall be maintained at (20 ± 5) °C, unless otherwise specified.

NOTE - In tropical climates, the ambient temperature may be (27 ± 5) °C but the temperature should be recorded.