

## SLOVENSKI STANDARD SIST EN 60335-2-39:2001

01-februar-2001

Nadomešča:

SIST EN 60335-2-39:1997

SIST EN 60335-2-39:1997/A1:1997 SIST EN 60335-2-39:1997/A2:1999

Varnost gospodinjskih in podobnih električnih aparatov - 2-39. del: Posebne zahteve za komercialne električne večnamenske kuhalne posode (IEC 60335-2-39:2000)

Safety of household and similar electrical appliances - Part 2-39: Particular requirements for commercial electric multi-purpose cooking pans (standards.iten.ar)

Sicherheit elektrischer Geräte für den Hausgebrauch und ähnliche Zwecke -- Teil 2-39: Besondere Anforderungen für elektrische Mehrzweck-Koch-Lund Bratpfannen für den gewerblichen Gebrauch 07f5c51faa73/sist-en-60335-2-39-2001

Sécurité des appareils électrodomestiques et analogues -- Partie 2-39: Règles particulières pour les sauteuses électriques à usage collectif

Ta slovenski standard je istoveten z: EN 60335-2-39:2000

ICS:

97.040.20 Štedilniki, delovni pulti, pečice in podobni aparati

Cooking ranges, working tables, ovens and similar

appliances

SIST EN 60335-2-39:2001

en

SIST EN 60335-2-39:2001

## iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST EN 60335-2-39:2001</u> https://standards.iteh.ai/catalog/standards/sist/0effcf00-0a42-46ea-8da6-07f5c51faa73/sist-en-60335-2-39-2001

### **EUROPEAN STANDARD**

### EN 60335-2-39

### NORME EUROPÉENNE

### **EUROPÄISCHE NORM**

May 2000

ICS 97.040.50

Supersedes EN 60335-2-39:1995 + A1:1996 + A2:1999

English version

## Safety of household and similar electrical appliances Part 2-39: Particular requirements for commercial electric multi-purpose cooking pans

(IEC 60335-2-39:2000)

Sécurité des appareils électrodomestiques et analogues Partie 2-39: Règles particulières pour les sauteuses électriques à usage collectif (CEI 60335-2-39:2000) Sicherheit elektrischer Geräte für den Hausgebrauch und ähnliche Zwecke Teil 2-39: Besondere Anforderungen für elektrische Mehrzweck-Koch- und Bratpfannen für den gewerblichen

iTeh STANDARD PRGebrauch (HEC 60335-2-39:2000) (standards.iteh.ai)

SIST EN 60335-2-39:2001 https://standards.iteh.ai/catalog/standards/sist/0effcf00-0a42-46ea-8da6-07f5c51faa73/sist-en-60335-2-39-2001

This European Standard was approved by CENELEC on 2000-04-01. 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, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, 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

Page 2 EN 60335-2-39:2000

#### Foreword

The text of document 61E/353/FDIS, future fourth edition of IEC 60335-2-39, prepared by SC 61E of the IEC Technical Committee 61, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60335-2-39 on 2000-04-01.

This European Standard replaces EN 60335-2-39:1995 and its amendments A1:1996 and A2:1999.

The following dates are applicable:

 latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement

(dop) 2001-01-01

 date on which national standards conflicting with the EN have to be withdrawn

(dow) 2003-04-01

This standard has to be used in conjunction with EN 60335-1, Safety of household and similar electrical appliances, Part 1: General requirements. It was established on the basis of the 1994 edition of that standard. Amendments and revisions of part 1 have also to be taken into account and the dates when such changes become applicable will be stated in the relevant amendment or revision of part 1.

This part 2 supplements or modifies the corresponding clauses of EN 60335-1, so as to convert it into the European Standard: Safety requirements for commercial electric mutli-purpose cooking pans.

When a particular subclause of part 1 is not mentioned in this part 2, that subclause applies as far as is reasonable. When this standard states "addition", "modification" or "replacement", the relevant text of part 1 is to be adapted accordingly 1 and 2 rds. Item. 21

Subclauses, figures and notes which are additional to those in part 1 are numbered starting with 101.

There are no special national conditions causing a deviation from this European Standard, other than those listed in annex ZA to EN 60335-1. [4073/sist-en-60335-2-39-200]

National deviations from this European Standard are listed in annex ZB and are in addition to those in EN 60335-1.

NOTE The following print types are used:

- requirements: in roman type;
- test specifications: in italic type;
- notes: in small roman type.

Words in **bold** in the text are defined in clause 2. When a definition of part 1 concerns an adjective, the adjective and the associated noun are also in bold.

p NOTE In this document, p is used in the margin to indicate instructions for preparing the printed version.

p Add:

#### Introduction

An investigation by CENELEC TC 61 has shown that all risks from products within the scope of this standard are fully covered by the Low Voltage Directive, 73/23/EEC. If the product has mechanical moving parts, a risk assessment in accordance with the Machinery Directive, 89/392/EEC, has shown that the risks are mainly of electrical origin and consequently this directive is not applicable. However, the relevant essential safety requirements of the Machinery Directive are covered by this standard together with the principal objectives of the Low Voltage Directive.

#### **Endorsement notice**

The text of the International Standard IEC 60335-2-39:2000 was approved by CENELEC as a European Standard without any modification.

p Add:

Annex ZB (informative)

#### **A-deviations**

Addition: iTeh STANDARD PREVIEW

Clause Deviation (standards.iteh.ai)

7.15 **Austria** (Elektroschutzverordnung 1995) - BGBL Nr. 706/1995, § 7.15)

If the marking of fixed appliances is not visible after the appliance has been installed, the relevant information shall also be included in the instructions for use and on an additional label which can be fixed near the appliance after installation.

SIST EN 60335-2-39:2001

## iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST EN 60335-2-39:2001</u> https://standards.iteh.ai/catalog/standards/sist/0effcf00-0a42-46ea-8da6-07f5c51faa73/sist-en-60335-2-39-2001 SIST EN 60335-2-39:2001

# INTERNATIONAL STANDARD

IEC 60335-2-39

Fourth edition 2000-02

Safety of household and similar electrical appliances –

Part 2-39:

Particular requirements for commercial electric multi-purpose cooking pans

(standards.iteh.ai)

https://Sécurité\_dest.appareils\_électrodomestiques et analogues – 07f5c51faa73/sist-en-60335-2-39-2001

Partie 2-39

Règles particulières pour les sauteuses électriques à usage collectif

© IEC 2000 — Copyright - all rights reserved

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

International Electrotechnical Commission 3, rue de Varembé Geneva, Switzerland Telefax: +41 22 919 0300 e-mail: inmail@iec.ch IEC web site http://www.iec.ch



Commission Electrotechnique Internationale International Electrotechnical Commission Международная Электротехническая Комиссия

PRICE CODE



## CONTENTS

	, , , , , , , , , , , , , , , , , , ,	⊃age	
FO	REWORD	3	
Cla	use		
1	Scope	5	
2	Definitions	5	
3	General requirement	6	
4	General conditions for the tests	6	
5	Void	7	
6	Classification	7	
7	Marking and instructions	7	
8	Protection against access to live parts	9	
9	Starting of motor-operated appliances	9	
10	Power input and current	9	
11	Heating	. 10	
12	Void	. 10	
13	Leakage current and electric strength at operating temperature	. 10	
14	Void (standards.iteh.ai)	. 11	
15	Moisture resistanceSIST EN 60335-2-39:2001	. 11	
16	Leakage current and electric strength g standards/sist/0effc00-0a42-46ca-8da6	. 13	
17	Overload protection of transformers and associated circuits	. 13	
18	Endurance	. 13	
19	Abnormal operation		
20	Stability and mechanical hazards	. 14	
21	Mechanical strength	. 14	
22	Construction	. 14	
23	Internal wiring	. 16	
24	Components	. 16	
25	Supply connection and external flexible cords	. 16	
26	Terminals for external conductors	. 17	
27	Provision for earthing	. 17	
28	Screws and connections	. 17	
29	Creepage distances, clearances and distances through insulation	. 17	
30	Resistance to heat, fire and tracking	. 18	
31	Resistance to rusting	. 18	
32	Radiation, toxicity and similar hazards	. 18	
Anr	nexes	. 20	
Figure 101 – Splash apparatus			

### INTERNATIONAL ELECTROTECHNICAL COMMISSION

### SAFETY OF HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES -

## Part 2-39: Particular requirements for commercial electric multi-purpose cooking pans

### **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 co-operation 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 express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested National Committees.
- 3) The documents produced have the form of recommendations for international use and are published in the form of standards, technical specifications, 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 on attornal or regional standard shall be clearly indicated in the latter https://standards.iteh.ai/catalog/standards/sist/0effcf00-0a42-46ea-8da6-
- 5) The IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with one of its standards.
- 6) Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. The IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 60335-2-39 has been prepared by subcommittee 61E: Safety of electrical commercial catering equipment, of IEC technical committee 61: Safety of household and similar electrical appliances.

It forms the fourth edition of IEC 60335-2-39 and replaces the third edition, published in 1994, its amendment 1 (1996) and amendment 2 (1998).

The text of this standard is based on the third edition, amendments 1 and 2, and the following documents:

FDIS	Report on voting
61E/353/FDIS	61E/366/RVD

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

**-4-**

This part 2 is to be used in conjunction with the latest edition of IEC 60335-1 and its amendments. It was established on the basis of the third edition (1991) of that standard.

This part 2 supplements or modifies the corresponding clauses in IEC 60335-1, so as to convert it into the IEC standard: Safety requirements for commercial electric multi-purpose cooking pans.

Where a particular subclause of part 1 is not mentioned in this part 2, that subclause applies as far as is reasonable. Where this standard states "addition", "modification" or "replacement", the relevant text in part 1 is to be adapted accordingly.

NOTE 1 The following print types are used:

- requirements: in roman type;
- test specifications: in italic type;
- notes: in small roman type;

Words in **bold** in the text are defined in clause 2.

NOTE 2 Subclauses, figures and notes which are additional to those in part 1 are numbered starting from 101.

A bilingual version of this standard may be issued at a later date.

## iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST EN 60335-2-39:2001</u> https://standards.iteh.ai/catalog/standards/sist/0effcf00-0a42-46ea-8da6-07f5c51faa73/sist-en-60335-2-39-2001 60335-2-39 © IEC:2000(E)

- 5 -

### SAFETY OF HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES -

### Part 2-39: Particular requirements for commercial electric multi-purpose cooking pans

### Scope

This clause of part 1 is replaced by:

This standard deals with the safety of electrically operated commercial multi-purpose cooking pans not intended for household use, their rated voltage being not more than 250 V for single-phase appliances connected between one phase and neutral and 480 V for other appliances.

NOTE 1 These appliances are used for example in kitchens such as in restaurants, canteens, hospitals and commercial enterprises such as bakeries, butcheries, etc.

The electrical part of appliances making use of other forms of energy is also within the scope of this standard.

So far as is practicable, this standard deals with the common hazards presented by these types of appliances. NOTE 2 Attention is drawn to the fact that

- for appliances intended to be used in vehicles or on board ships or aircraft, additional requirements may be necessary;
- for appliances intended to be used in tropical countries, special requirements may be necessary;
- in many countries additional requirements are specified by the national health authorities, the national authorities responsible for the protection of labour, the national water supply authorities and similar authorities.

This standard does not apply to

- appliances designed exclusively for industrial purposes;
- appliances intended to be used in locations where special conditions prevail, such as the presence of a corrosive or explosive atmosphere (dust, vapour or gas);
- continuous process appliances for the mass production of food;
- deep fat fryers (IEC 60335-2-37).

#### **Definitions** 2

This clause of part 1 is applicable except as follows.

### 2.2.4 Addition:

NOTE The rated power input is the sum of the power inputs of all the individual elements in the appliance which can be on at one time; where there are several such combinations possible, that giving the highest power input is used in determining the rated power input.