

BRITISH STANDARD

**BS 3456 :
Part 102 :
Section 102.13 :
1991**

Specification for

Safety of household and similar electrical appliances

Part 102. Particular requirements

Section 102.13 Frying pans, deep fat fryers and similar appliances

(Implementation of CENELEC HD 279 S1)

Sécurité des appareils électrodomestiques et
analogues
Partie 102. Règles particulières
Section 102.13 Poêles à frire, friteuses et
appareils analogues

Sicherheit von Elektrogeräten für den
Haushalt und ähnliche Zwecke
Teil 102. Besondere Anforderungen
Abschnitt 102.13 Bratpfannen, Fritiergeräte
und ähnliche Geräte

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Committees responsible for this British Standard

The preparation of this British Standard was entrusted by the Light Electrical Engineering Standards Policy Committee (LEL/-) to Technical Committee LEL/161, upon which the following bodies were represented:

Association for Consumer Research (ACRE)
 Association of Consulting Scientists
 Association of Control Manufacturers TACMA (BEAMA Ltd.)
 Association of Manufacturers of Domestic Electrical Appliances
 British Cable Makers' Confederation
 British Electrotechnical Approvals Board
 British Gas plc
 British Lawn Mower Manufacturers' Federation
 British Retailers' Association
 Catering Equipment Manufacturers' Association
 Consumer Policy Committee of BSI
 Department of Trade and Industry (Consumer Safety Unit, CA Division)
 ERA Technology Ltd.
 Electrical Installation Equipment Manufacturers' Association (BEAMA Ltd.)
 Electricity Supply Industry in United Kingdom
 Home Office
 Institute of Trading Standards Administration
 Institution of Electrical Engineers
 Lighting Industry Federation Ltd.
 Loss Prevention Council
 Portable Electric Tool Manufacturers' Association
 Rotating Electrical Machines Association (BEAMA Ltd.)
 Royal Society for the Prevention of Accidents
 Small Electrical Appliances Marketing Association

The following body was also represented in the drafting of the standard, through subcommittees and panels:

British Burns Association

This British Standard, having been prepared under the direction of the Light Electrical Engineering Standards Policy Committee, was published under the authority of the Standards Board and comes into effect on 30 April 1991

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Foreword

This Section of BS 3456 : Part 102 has been prepared under the direction of the Light Electrical Engineering Standards Policy Committee. It is aligned with the CENELEC¹⁾ Harmonization Document for frying pans, deep fat fryers and similar appliances, HD 279 S1, which in turn is based on IEC²⁾ Publication 335-2-13 (1982-Second edition). Its number is directly related to the number of the equivalent Section of the IEC Publication.

It is a revision of BS 3456 : Section 3.16 : 1980 which is withdrawn in accordance with the CENELEC Internal Regulations.

It gives the particular requirements for frying pans, deep fat fryers and similar appliances, and is to be read in conjunction with BS 3456 : Part 101 : 1987 'General requirements' which it supplements or modifies. The many references to Part 1 should be read as references to BS 3456 : Part 101 which is the implementation of the CENELEC Harmonization Document for the general requirements, HD 251 S3. In the original IEC text of the particular requirements the precise line numbers in the IEC Part 1 are given. The lines in Part 101 of BS 3456 are not numbered but sufficient information has been included in these particular requirements for the relevant matter in Part 101 to be identified. For ease of production the text of the IEC standard has been used, but it has been modified as described below.

The CENELEC modifications that appear in HD 279 S1 have been included in the text in the appropriate position and are indicated by a single side line in the margin of the page. References are included to items of the original IEC text which are given in appendix X together with the justifications in the CENELEC Harmonization Document for the modifications.

A complete list of all national deviations to the CENELEC Harmonization Document is given in appendix Y.

In this British Standard the following print types are used to differentiate between requirements, test specifications and explanatory matter.

Requirements: in roman type

Test specifications: in italic type

Explanatory matter: in small roman type

The CENELEC Harmonization Document was approved by the CENELEC Technical Board on 13 December 1984.

¹⁾ CENELEC = European Committee for Electrotechnical Standardization.

²⁾ IEC = International Electrotechnical Commission.

Cross-references

International standard	Corresponding British Standard
IEC 335-1 : 1976 HD 251 S3 : 1982	BS 3456 Specification for safety of household and similar electrical appliances Part 101 : 1987 General requirements (Technically equivalent)
CEE Publication 15 : 1964	
	BS 3535 : 1962 Specification for safety isolating transformers for industrial and domestic purposes (Technically equivalent)

The Technical Committee has reviewed the provisions of IEC 320, to which reference is made in clauses 11.8 and 24.1, and has decided that they are acceptable for use in conjunction with this standard.

Product approval. Attention is drawn to the fact that products conforming to this British Standard may be approved by the British Electrotechnical Approvals Board for the purposes of participation in the CENELEC Certification Agreement and in the CB Scheme of the IECEE. (Details of the BEAB approval mark scheme are given on the inside back cover.)

Compliance with a British Standard does not of itself confer immunity from legal obligations.

British Standard Specification for

Safety of household and similar electrical appliances

Part 102. Particular requirements

Section 102.13 Frying pans, deep fat fryers and similar appliances

1. Scope

This clause of Part 1 is applicable except as follows:

1.1 *Replacement:*

This standard applies to frying pans, deep fat fryers and similar appliances.

This standard does not take into account the special hazards which exist in nurseries and other places where there are young children or aged or infirm persons without supervision; in such cases, additional requirements may be necessary.

This standard does not apply to:

- deep fat fryers having a recommended maximum quantity of oil or fat exceeding 4 l, which are covered by a separate Part 2;

NOTE. For information see X.2.

- 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);
- appliances designed exclusively for commercial catering or industrial purposes.

Until an IEC standard for appliances for commercial catering purposes is issued, this standard may form a guide to suitable requirements and tests for such appliances.

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.

Attention is drawn to the fact that in many countries additional requirements are specified by the national health authorities and the national authorities responsible for the protection of labour.

2. Definitions

This clause of Part 1 is applicable except as follows:

2.2.29 *Replacement:*

Conditions of adequate heat discharge denote that the appliance is operated under the following conditions.

Frying pans are filled with initially cold frying oil to a height of 1 cm above the highest point of the heated surface and are operated with the lid open or closed, whichever imposes the more severe condition, until the temperature of the oil, measured at the centre of the heated surface, attains a value of 250 °C. The temperature of the oil is then maintained at 250±15 °C, either by means of the thermostat or, if no thermostat is provided, by switching the supply on and off. If the temperature specified cannot be attained with the thermostat at the highest setting, the frying pan is operated with the thermostat at the highest setting.

NOTE. For information see X.3.

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Deep fat fryers are filled with initially cold frying oil to the minimum oil level marked on the appliance or recommended by the manufacturer and are operated with the thermostat, if any, at the highest setting and with the lid open or closed, whichever imposes the more severe condition, unless the deep fat fryer is so designed that it can only be operated with the lid in the closed position.

NOTE. For information see X.4.

3. General requirement

This clause of Part 1 is applicable.

4. General notes on tests

This clause of Part 1 is applicable except as follows:

4.2 Addition:

For appliances intended to be partially or completely immersed in water for cleaning, three additional samples are required for the tests of Sub-clause 15.101.

4.6 Page 19, lines 10 to 13 inclusive. Not applicable.

4.8 and 4.13 Not applicable.

Additional sub-clause:

4.101 *Deep fat fryers which can also be used as frying pans are tested as deep fat fryers or as frying pans, whichever gives the more unfavourable result.*

Deep fat fryers provided with heating elements not projecting into the oil container, and which are not marked with the minimum oil level, are considered as deep fat fryers which can also be used as frying pans.

5. Rating

This clause of Part 1 is applicable.

6. Classification

This clause of Part 1 is applicable except as follows:

See Sub-clause 22.1.

Addition:

This standard recognizes appliances which are intended to be partially or completely immersed in water for cleaning; it does not recognize watertight appliances.

7. Marking

This clause of Part 1 is applicable except as follows: