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AMENDMENT 1
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Amendment 1

Safety of household and similar electrical appliances –

Part 2-64: Particular requirements for commercial electric kitchen machines

Amendement 1

Sécurité des appareils électrodomestiques et analogues –

Partie 2-64: Règles particulières pour les machines de cuisine électriques à usage collectif

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FOREWORD

This amendment has been prepared by subcommittee 61E: Safety of electrical commercial catering equipment, of IEC technical committee 61: Safety of household and similar electrical appliances.

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

FDIS	Report on voting
61E/333/FDIS	61E/359/RVD

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

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

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Replace the words "Figure 101 – Splash apparatus" with "Figures".

Page 9

1 Scope

Replace the 12th dashed item of Note 1 with the following:

- machines used for washing and/or drying food;

Add the following to the examples in Note 1:

- beam mixers;

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2 Definitions

2.2.9 *Replace the fifth dashed item of Note 2 with the following:*

- machines used for washing and/or drying food;

Add, on page 13, the following additional definitions relevant to slicers:

2.2.103

guard plate

plate similar to a slice thickness plate, fitted to machines with automatic product feeding

2.2.104**product holder**

support for the product to be sliced. The **product holder** can be equipped with a **pusher** or a **feed carriage** and/or a clamping device

2.2.105**sliding feed table**

device which supports the **product holder** and allows it to move forwards and backwards

2.2.106**feed carriage**

device on which the product is placed and which slides on top of the **product holder** in order to move the product towards the blade

2.2.107**pusher**

device used to move the product along the **product holder** against the thickness plate

2.2.108**last slice device**

plate with which the last portion of the product is fed to the cutting blade

NOTE The plate can be fitted on the **pusher**, clamping device or **feed carriage**.

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6 Classification

Delete, on page 15, subclause 6.101.

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7 Marking and instructions**7.12 Add the following to the addition:**

The instructions for use shall contain instructions for cleaning of all surfaces coming into contact with food during normal use.

Operating instructions included in the operating manual shall clearly indicate how to use particular or special safeguards provided with the appliance, and shall draw the attention of the user to any remaining hazards and give information about preventative measures to be taken by the user for the safe use of the appliance.

NOTE Examples of appliances with remaining hazards are those which are not subjected to the test with the test finger in 20.2.

Information shall also be given about the correct assembly and safe use of accessories provided with the appliance and, if relevant, about possible hazards which might arise when using accessories other than those provided with the appliance. The instructions for use shall warn the user to use a suitable bowl with attachable accessories, such as egg beaters and sieving machines, and shall indicate that the accessory must not project from the upper part of the bowl.

The instructions for use for hand-held blenders and whisks shall contain a warning against the use of these appliances when not in contact with the product.

The instructions for use for food processors shall state that care is needed when handling cutting blades, especially when removing the blades from the bowl, emptying the bowl and during cleaning.

The instructions for use for mincers, where the required safety at the discharge outlets depends entirely on perforated discs provided with the appliance, shall contain a warning against use of perforated discs with oval shaped holes or holes of a greater diameter.

The instructions for use for slicers shall give details for assembly and removal of blades and shall require that the slice thickness plate or **guard plate** shall be set to the zero position during the cleaning of the blade while still installed in the appliance.

The instructions for use shall identify separate sharpening devices suitable for use with the appliance and shall state that only those devices shall be used.

NOTE A code or similar means may be used for identification purposes.

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13 Leakage current and electric strength at operating temperature

13.2 *Delete, on page 21, the addition.*

Page 25

20 Stability and mechanical hazards

Delete, on pages 25 and 27, the text of 20.2 and replace it with the following:

20.2 *Add the following after the second requirement paragraph:*

Covers and the like, protecting danger zones within the operating range of the appliance shall be **detachable** only when the risk is excluded by other means.

NOTE 101 Parts which do not move more than 4 mm away from each other are not regarded as dangerous crushing (squashing) and shearing zones.

NOTE 102 Drawing-in zones can only occur during operations where uncovered movable parts move past stationary and/or moving parts.

Add the following after the first test specification paragraph:

However, for feed apertures and discharge apertures, unless otherwise specified, the test is carried out with a test finger similar to that shown in figure 1 but having a non-circular stop face with a diameter of 56 mm instead of 50 mm and with the distance between the tip of the test finger and the stop face being 120 mm. The 75 mm diameter guard is removed. The test finger is not inserted into the aperture for a linear distance of more than 850 mm, measured from the tip of the finger, if the aperture has a largest dimension of less than 150 mm.

NOTE 103 Moving parts which can be touched by the test finger through discharge apertures are not considered to be dangerous if they have a smooth surface or are constructed so that the risk of entrapment or injury is negligible.

For some appliances, complete protection is impracticable and the test with the test finger is therefore not carried out. Examples of such appliances are

- **hand-held appliances**
- slicers
- tin openers
- pastry rollers
- noodle strip cutters
- sieving machines
- peelers (discharge apertures only)
- bone saws (circular or band type)
- citrus juice squeezers
- egg beaters designated as attachable accessories
- knife sharpeners

Delete note 1 and renumber note 2 as note 1.

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20.103 *Replace this subclause with the following:*

20.103 Appliances, or parts of appliances, which are designed to tilt in normal use shall not give rise to any hazard. Accidental tilting from any position, even in the case of supply interruption, shall be prevented, and there shall be no crushing zone between the tilting part and the appliance except at the bumper point when the part is fully tilted.

Compliance is checked by inspection, by manual test and by switching off the supply to the appliance at any time during the tilting operation.

NOTE The requirement may be met by, for example, one of the following means:

- providing switches which have to be kept switched on by hand;
- limiting the rate of motion (peripheral speed) to 50 mm/s;
- protecting danger zones by means of appropriate guards;
- maintaining moving parts securely in position – even in the case of a fault.

If the appliance or part is tilted manually, it shall not be possible to adversely influence the tilting action other than by the intended means.

Compliance is checked by inspection and by applying a force of 340 N at any point on the tiltable part.

20.106 *In the requirement paragraph and in the first and second dash of the Note, replace the words "piece holder" with "**product holder**". In the third dash of the Note, replace the word "slicers" with "systems".*

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20.107 *Replace this subclause with the following new subclause:*

20.107 Accidental contact with devices of driven shafts which engage on attachable accessories shall be prevented, unless their movement is possible only after attachable accessories have been engaged.

Compliance is checked by inspection and by manual test.

NOTE The requirement is considered to be met, for example, if the devices are recessed in their housing or are constructed so that contact would not result in a hazard.

20.109 *Replace this subclause with the following new subclause:*

20.109 Blades of hand-held blenders shall be completely screened from above and shall not be able to touch a flat surface when rotating.

Compliance is checked by inspection and by applying a cylindrical rod from any position between the vertical and an angle of 45° to the upperside of the blending blade. The rod has a diameter of 8,0 mm ± 0,1 mm and unlimited length.

It shall not be possible to touch the blades with the end of the test rod.

20.110 *Replace this subclause with the following:*

20.110 Appliances for washing and drying foodstuffs, which have a rotating drum with a kinetic energy of more than 200 J, shall be provided with a cover interlocked so that the appliance will not start when the cover is open. If the cover is opened while the appliance is operating, the drum shall stop within 2 s.

*Compliance is checked by inspection, measurement and manual test. The appliance is supplied at **rated voltage** and without a load.*

20.111 *Replace this subclause with the following:*

20.111 Dangerous moving parts which are accessible after covers or lids are opened shall stop within 2 s after the cover or lid has been opened or removed. When closed again, the automatic restarting of the appliance shall be possible only if this does not result in a hazard.

Compliance is checked by operating the appliance without load and at the highest speed.

Add the following additional subclauses:

20.113 Hand-held whisks shall be provided with a guard to avoid accidental slipping of the hand into the tool. Its dimensions shall be at least 30 mm greater than the dimensions of the handgrip zone, and it shall be located between the handgrip zone and the tool.

Compliance is checked by inspection, measurement and manual test.

20.114 Beam mixers shall automatically switch off when the head is raised to a height of 300 mm above the supporting surface, unless the appliance incorporates a switch which has to be kept switched on by hand.

Compliance is checked by inspection and by measurement.

20.115 Unloading of the product from peelers shall not cause a hazard.

Compliance is checked by inspection and manual test.

NOTE The requirement may be met by, for example

- suitable guards preventing contact, except by a deliberate action, with rotating plates involving hazards of trap or injury;
- for rotating plates provided with cutting blades, the need to use one hand to keep the discharge door or lid open and the provision of a switch which has to be kept switched on by hand to allow for unloading of the product.

20.116 Slicing machines shall be stable when in use.

NOTE 1 This requirement does not apply to **fixed appliances**.

Compliance is checked by the following test:

The slicing machine is placed in accordance with the instructions for use on a plain glass plate which is placed on a horizontal surface.

NOTE 2 The glass surface is prevented from sliding by a stop.

A force of 50 N is applied horizontally to the appliance in the most unfavourable direction at a point 10 mm below the upper surface of the base carrying the sliding feed table.

The appliance shall not move on the glass plate.

NOTE 3 Suction cups are a suitable means, if any, to hold the appliance in place and allow it to be released after use.

20.117 Blades of slicing machines shall be adequately protected.

Compliance is checked by inspection, measurement and manual test.

The requirements may be met by the following provisions.

NOTE Alternative provisions giving an equivalent or greater degree of protection may also meet the requirements.

20.117.1 A guard surrounding the circular blade shall be provided, its open sector being no larger than required for using the appliance. The angle θ of the upper part of the open sector shown in figure 102 shall not exceed 60°.

The radial distance a between the outer circumference of the blade and the blade guard shall not exceed 6 mm, and the guard shall project at least 1 mm beyond the plane of the blade (distance b).

20.117.2 When the slice thickness plate is set to the zero position, the distance c between the outer circumference of the blade and the slice thickness plate shall not exceed 6 mm and the thickness plate shall project at least 1 mm beyond the plane of the blade. At the upper and lower points of the open sector, the distance e between the slice thickness plate and any other protecting part shall not exceed 5 mm.

NOTE 1 If the distance e is shielded, the limit does not apply.

Additional guarding shall be provided if slices thicker than 15 mm can be cut.

NOTE 2 An extension of the upper end of the slice thickness plate or an extension of the blade guard are examples of additional guarding.

Appliances shall not be capable of cutting slices thicker than 40 mm.

If the appliance is equipped with a slice support, this shall project at least 1 mm beyond the plane of the blade.

20.117.3 Slicing machines shall incorporate a **sliding feed table**, a thumb guard and a **product holder**. The thumb guard shall screen the full height of the open sector and shall be constructed so that the other fingers remain at least 30 mm away from the blade (distance f). The distance d between the plane of the thumb guard and the blade shall not exceed 6 mm. At the end of the forward movement of the **sliding feed table**, the thumb guard shall project at least 10 mm beyond the outer circumference of the blade.

NOTE For slicing machines with automatic feeding, the requirement applies to the guard plate.

It is not required to provide a thumb guard if the **product holder** incorporates means for clamping the food. In this case

- the handle of the **sliding feed table** shall be protected by a plate having dimensions at least 30 mm in excess of those of the handle. The handle shall be at least 80 mm from the blade;
- the handle of the clamping device shall be protected either by a guard or a **last slice device**, having dimensions of at least 50 mm in excess of those of the handle;
- it shall not be possible to remove the **feed carriage** from the **product holder**.

It shall only be possible to lift or remove the **product holder** when the plate which sets the thickness of the slices is in the zero position. It shall not be possible to change this setting when the **product holder** has been lifted or removed.

20.117.4 Sharpening devices integral with the appliance shall be constructed so that during normal use of the appliance, a continuous cover over the blade is ensured in the same manner as the blade guard.

In the sharpening position, that part of the blade which is exposed shall not project more than 6 mm from each side of the abrasive wheels used for grinding.

Separate sharpening devices shall, when fixed to the appliance, have a suitable guard to cover the exposed parts of the blade. Any gap between the abrasive wheels used for grinding and the guard shall not exceed 6 mm.

The construction of both integral and separate sharpening devices shall not allow the blade to be sharpened when the gap between the blade and the blade guard exceeds 6 mm.

20.117.5 **Pushers** of slicing machines shall cover the exposed cutting sector of the blade or have a handle provided with a protective plate which is always at least 150 mm from the blade.

It shall only be possible for the **pusher** to remain in the raised position when the distance between the **pusher** and the blade is at least 60 mm. It shall not be possible to remove the arm of the **pusher** or to swing it outside of the **sliding feed table**.

20.117.6 Manual **feed carriages** shall be provided with a handle meeting the same dimensional requirements of 20.117.3 or 20.117.5 as appropriate. If they can be raised for cleaning, they shall fall back to the normal working position when released.

20.117.7 Slicing machines with automatic product feeding, and not provided with a plate which sets the thickness of the slices, shall incorporate a **guard plate** which covers the exposed cutting sector of the blade and extends beyond the front of the stroke of the **product holder** by at least 10 mm. It shall not be possible to move the **guard plate** away from the blade by more than the maximum slice thickness plus 3 mm. The provisions applicable to slice thickness plates apply to **guard plates**.

20.117.8 Slicing machines with a power-driven **sliding feed table** shall be constructed so that gaps between moving parts and other parts do not give rise to trapping or crushing hazards.

NOTE This requirement is considered to be met if, for example, the gap is less than 6 mm or more than 25 mm.

20.118 The discharge apertures of mincers shall be adequately protected.

*Compliance is checked by inspection and by a test with the test finger for feed and discharge apertures described in 20.2. The appliance is tested with the protective perforated disc in place as in normal use, even if the disc is **detachable**. The test finger shall not touch dangerous parts.*

20.119 Knife sharpeners shall not rotate at a speed exceeding 200 rev/min.

Compliance is checked by measurement.

20.120 Hazardous moving parts of bone saws of the band type shall be adequately protected. When these parts are accessible after lids, doors or guards are opened, the requirements of 20.111 apply.

Appliances with a cutting height not exceeding 250 mm shall be provided with a fixed table, a slice thickness plate of a height of at least 100 mm and a hinged **pusher** which protects the whole of the operating range and which automatically drops to its protective position when released. It shall be possible to change the blade without removing the **pusher**.

Appliances with a cutting height exceeding 250 mm with a fixed table shall be provided with a slice thickness plate of a height of at least 100 mm and a **last slice device** with a minimum height of 150 mm. The appliance shall incorporate an adjustable blade guard protecting the part of the blade not used for cutting. It shall be possible to lower the blade guard to at least 105 mm from the table. It shall also be possible to change the blade without removing the blade guard.

If the appliance is provided with a sliding table, its rear edge shall have a height of at least 60 mm and shall incorporate a finger guard at least 100 mm high and 50 mm wide. At the end of the forward movement of the sliding table, the finger guard shall project at least 10 mm beyond the blade. The other requirements for appliances with a cutting height not exceeding 250 mm are also applicable.

Compliance is checked by inspection, measurement and manual test.

NOTE The requirements may be met by alternative means which provide at least the same degree of protection.

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21 Mechanical strength

Replace the text of this clause with the following:

This clause of part 1 is applicable except as follows:

Add the following:

The test is also made on detachable parts which are necessary for protection against mechanical hazards.