



SLOVENSKI STANDARD
SIST EN 50706:2022

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Varnost gospodinjskih in podobnih električnih aparatov - Posebne zahteve za komercialne električne rotacijske likalnike

Household and similar electrical appliances - Particular requirements for electrical operated commercial rotary ironers

iTeh STANDARD PREVIEW
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Appareils électrodomestiques et analogues - Exigences particulières pour les repasseuses rotatives électriques à usage

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Household and similar electrical appliances - Particular requirements for electrically operated commercial rotary ironers

Appareils électrodomestiques et analogues - Exigences particulières pour les repasseuses rotatives électriques à usage collectif

Sicherheit elektrischer Geräte für den Hausgebrauch und ähnliche Zwecke - Besondere Anforderungen für elektrische Bügelmaschinen für den gewerblichen Gebrauch

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European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

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European foreword

This document (EN 50706:2022) has been prepared by CLC/TC 61, "Safety of household and similar electrical appliances".

The following dates are fixed:

- latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2023-02-19
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2025-08-19

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC shall not be held responsible for identifying any or all such patent rights.

This document has been prepared under a Standardization Request given to CENELEC by the European Commission and the European Free Trade Association.

Any feedback and questions on this document should be directed to the users' national committee. A complete listing of these bodies can be found on the CENELEC website.

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EN 50706:2022 (E)**Introduction***Addition:*

EN 50706:2022 is read in conjunction with EN 60335-1:2012+A11:2014 +A13:2017+A1:2019 +A14:2019 +A2:2019+A15:2021+A16:2022, which is referred to in this text as “Part 1”. This document supplements or modifies the corresponding clauses and subclauses of the standards of Part 1.

NOTE The following numbering system is used:

- subclauses, tables and figures that are numbered starting from 101 are additional to those in Part 1;
- unless notes are in a new subclause or involve notes in Part 1, they are numbered starting from 101, including those in a replaced clause or subclause;
- additional annexes are lettered AA, BB, etc.

This document is a product family standard dealing with the safety of commercial electric **rotary ironers** and takes precedence over horizontal and generic standards covering the same subject.

This document recognizes the level of protection against hazards such as electrical, mechanical, thermal, fire and radiation of commercial electric **rotary ironers** when operated as in normal use taking into account the manufacturer's instructions. It also covers any reasonably foreseeable misuse of the machinery and takes into account the way in which electromagnetic phenomena can affect the safe operation of commercial electric **rotary ironers**.

A commercial electric **rotary ironers** that complies with the text of this standard will not necessarily be considered to comply with the safety principles of the standard if, when examined and tested, it is found to have other features that impair the level of safety covered by these requirements.

This document takes into account the requirements of HD 60364 as far as possible so that there is compatibility with the wiring rules when the machinery is connected to the supply mains. However, national wiring rules may differ.

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This document applies in conjunction with the latest edition of EN 60335-1 and its amendments, which is referred to in this text as “Part 1”. This standard supplements or modifies the corresponding clauses of Part 1 as indicated in the text.

1 Scope

This clause of Part 1 is replaced by the following:

This document deals with the safety of electrically operated commercial **rotary ironers**, intended to be used by trained users in e.g. hotels hospitals, factories, in light industry and on farms. It also covers **rotary ironers** which are declared for commercial use in **areas open to the public** and operated by lay persons e.g. in laundrettes and communal laundry rooms. Their rated voltage being not more than 250 V for single phase and 480 V for others.

This document also covers electrically operated commercial **rotary ironers** making use of other energy sources. It does not cover requirements for these other energy sources for heating purposes. However, the influence of these other energy sources on the machine is covered.

As far as is practicable, this document deals with the common hazards presented by appliances that are encountered by all persons in household and similar environments.

However, in general, it does not take into account

- **children** playing with the appliance,
- **the use of the appliance by children**,

It is recognized that **very vulnerable people** may have needs beyond the level addressed in this document.

Products covered by this document do not create a noise hazard, therefore no specific provisions concerning noise are given.

NOTE 101 Attention is drawn to the fact that

- for electrically operated commercial **rotary ironers** intended to be used in vehicles or on board ships or aircraft, additional requirements can be necessary;
- in many countries additional requirements are specified by the national health authorities, the national authorities responsible for the protection of labour and similar authorities.

This document does not apply to

- industrial flatwork ironers having a surface contact area $\geq 1,20 \text{ m}^2$, feeders and folders (EN ISO 10472-5);
- 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);

For the purpose of this document, the term “appliance” as used in Part 1 is read as “electrically operated commercial **rotary ironers**”.

2 Normative references

This clause of Part 1 is applicable except as follows:

EN 62233:2008, *Measurement methods for electromagnetic fields of household appliances and similar apparatus with regard to human exposure*

EN ISO 13857:2019, *Safety of machinery – Safety distances to prevent hazard zones being reached by upper and lower limbs*

EN 60068-2-75, *Environmental testing - Part 2-75: Tests - Test Eh: Hammer tests*

ISO 1817, *Rubber, vulcanized or thermoplastic — Determination of the effect of liquids*

EN 50706:2022 (E)

EN 61010-1:2010,¹ *Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 1: General requirements*

3 Terms and definitions

This clause of Part 1 is applicable except as follows.

Replacement

3.1.9

normal operation

appliances are operated without laundry and with the pressing surfaces in contact with each other at maximum temperature and roller speed settings until steady state conditions are reached

Note 1 to entry: The roller cover is not removed.

3.1.101

rotary ironer

appliance in which the laundry is supported by one padded roller that is rotated by a motor and a heated surface that can be brought into contact with the laundry

3.1.102

guard

part of the appliance specifically designed to provide protection by means of a physical barrier

3.1.103

operator

person or persons installing, operating, adjusting, maintaining, cleaning, repairing or moving appliances

Note 1 to entry: Example is the location where the **operator** loads the appliance.

3.1.104

area open to the public

area in which the general public including children can enter

Note 1 to entry: Examples are laundrettes, communal laundry rooms.

3.Z.7

use of the appliance

Replace the “NOTE Z1” by “VOID”

4 General requirement

This clause of Part 1 is applicable except as follows:

Replace the first paragraph by the following:

Appliances shall be constructed so that they function safely so as to cause no danger to persons or surroundings during normal use, even in the event of carelessness, and during installation, adjusting, maintenance, cleaning, repairing or transportation.

5 General conditions for the tests

This clause of Part 1 is applicable.

¹ As impacted by EN 61010-1:2010/A1:2019.

6 Classification

6.1 Modification:

Appliances shall be of class I.

7 Marking and instructions

This clause of Part 1 is applicable except as follows.

7.1 Modification:

Replace the fourth and fifth dashed items by:

- business name, and full address of the manufacturer and, where applicable, his authorized representative,
- model or type reference, serial number if any and production year,

NOTE 1 Production year is the year when the production process is completed. The production year can be a part of the serial number.

Add the following new dashed items:

- designation of the appliance,

The designation may be a combination of letters and/or numbers and shall enable to identify the appliance as specified in the instructions.

- the maximum permissible steam supply pressure, in kilopascals (kPa), unless this is indicated in the instruction sheet,
- the maximum permissible steam supply temperature in degrees Celsius, unless this is indicated in the instruction sheet.

Addition:

Appliances shall be marked on or near lamp holders with the maximum power input of replaceable illumination lamps as follows:

lamp max. ... W

The word "lamp" may be replaced by symbol IEC 60417-5012 (2002-10).

Appliances intended to be supplied with compressed air shall be marked with the maximum air pressure in MPa.

7.10 Addition:

If the **off position** is only indicated by letters, the word "off" shall be used.

7.12 Replace the first sentence in the requirement with the following:

Instructions shall be provided with the appliance so that the appliance can be used safely.

Replace the 4th and 5th paragraph by the following:

The instructions for appliances that can be used in **areas open to the public** shall include the substance of the following:

This appliance may be used by persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Hazards which may occur arising from putting hands accidentally on hot surfaces, rotating parts, the application of unsuitable objects to be ironed and similar actions.

EN 50706:2022 (E)*Addition:*

The instructions for use shall contain at least the following information:

- the business name and full address of the manufacturer and, where applicable, his authorized representative;
- model or type reference of the appliance as marked on the appliance itself, except for the serial number;
- the designation of the appliance together with its explanation in case it is given by a combination of letters and/or numbers;

The designation shall enable the identification of the appliance as specified in the instructions.

- the general description of the appliances, when needed due to the complexity of the appliance;
- specific precautions if required during installation, operation, adjusting, user maintenance, cleaning, repairing or moving;
- when needed drawings, diagrams, descriptions and explanations necessary for the safe use, user maintenance and repair of the appliance and for checking its correct function;
- information regarding putting into service, safe operation, handling, transportation, storage of the appliance taking into account its weight and, if necessary, instructions for the training of operators;
- instructions to enable adjustment and maintenance to be carried out safely, including the protective measures that should be taken during these operations;
- the possible reasonably foreseeable misuse and, whenever relevant, a warning against the effects it may have on the safe use of the appliance.

The manufacturer shall declare if the appliance is also intended to be used in **areas open to the public**. If the appliance is not suitable for use in **areas open to the public** the instruction shall include the substance of the following warning:

CAUTION This appliance shall not be installed where the public has access.

The front cover of the instructions shall include the substance of the following warning:

CAUTION Read the instructions before using the appliance.

This wording may be replaced by symbols 0434 and 0790 of ISO 7000.

If symbols ISO 7000-0434 and ISO 7000-0790 are used, their meaning shall be explained.

The words 'Original instructions' shall appear on the language version(s) verified by the manufacturer or by the authorized representative.

When a translation of the original instructions has been provided by a person introducing the appliance on the market; the meaning of the sentence 'Translation of the original instructions' has to appear in the relevant instructions delivered with the appliance.

The instructions needed for maintenance/service to be done by specialized personnel, mandated by the manufacturer or the authorized representative, and may be supplied in only one Community language which the specialized personnel understand.

The instructions shall indicate the type and frequency of inspections and maintenance required for safe operation including the preventive maintenance measures.

Addition:

The instructions shall include the substance of the following:

- the appliance shall be switched off when not in use.
- how the roller cover is to be replaced

- the ironed laundry shall cool down before packing or stacking it.
- that hot laundry could self-ignite and cause a fire.
- that only materials declared as suitable for ironing shall be ironed.

The instructions for appliances in which steam is generated under pressure shall state that the filling cap shall not be removed during use. Instructions for the safe refilling of the water reservoir shall be given.

Add the following new subclauses:

7.12.101

Specific instructions shall be given, when necessary as follows:

- on use, transportation, assembly, dismantling when out of service, testing or foreseeable breakdowns, if these operations have consequences on stability of the appliance in order to avoid overturning, falling or uncontrolled movements of the appliance or of its component parts. The instructions needed for the safe transportation of the packed appliance, should be stated on the package or should be delivered together with the package.

NOTE General rules on schedules concerning transportation requirements and tests can be found in EN ISO 4180.

- on how to maintain adequate mechanical stability when in use, during transportation, assembly, dismantling, scrapping and any other action involving the appliance;
- on the operating method to be followed in the event of accident or breakdown; if a blockage is likely to occur the operating method to safely unblock the appliance;

Compliance is checked by inspection.

7.12.102

The instructions shall include information that the A-weighted sound pressure level is below 70 dB (A).

7.12.103

The instructions shall include a warning that the appliance shall be disconnected from its power source during service and when replacing parts and, if that the removal of the plug is foreseen, it shall be clearly indicated that the removal of the plug has to be such that an **operator** can check from any of the points to which he has access that the plug remains removed.

If this is not possible, due to the construction of the appliance or its installation, a disconnection with a locking system in the isolated position shall be provided.

Compliance is checked by inspection.

8 Protection against access to live parts

This clause of Part 1 is applicable except as follows:

8.1.1 Addition:

For appliances not intended to be installed in **areas open to the public** replace the third paragraph by the following:

Test probe B of IEC 61032 is applied without appreciable force, the appliance being in every possible position, except that appliances normally used on the floor and having a mass exceeding 40 kg are not tilted. Through openings, the test probe is applied to any depth that the probe will permit and is rotated or angled before, during and after insertion to any position. If the opening does not allow the entry of the probe, the force on the probe in the straight position is increased to 20 N when probe B is used. If the probe then enters the opening, the test is repeated with the probe in the angled position.

EN 50706:2022 (E)**9 Starting of motor-operated appliances**

This clause of Part 1 is not applicable.

10 Power input and current

This clause of Part 1 is applicable.

11 Heating

This clause of Part 1 is applicable except as follows.

11.3 Addition:

Temperature rises of the flat accessible surfaces are measured using the probe of Figure 101. The probe is applied with a force of $4\text{ N} \pm 1\text{ N}$ to the surface in such a way that the best possible contact between the probe and the surface is ensured.

Any measuring instrument giving the same results as the probe may be used.

11.4 Addition:

If the temperature rise limits are exceeded in appliances incorporating motors, transformers or **electronic circuits**, and the power input is lower than the **rated power input**, the test is repeated with the appliance supplied at 1,06 times **rated voltage**.

11.6 Replacement:

Combined appliances are operated as **heating appliances**.

11.7 Addition:

Appliances are operated until steady conditions are established.²²

11.8 Addition:

The temperature rise limits of motors, transformers and components of **electronic circuits**, including parts directly influenced by them, may be exceeded when the appliance is operated at 1,15 times **rated power input**.

Modification:

Replace the first paragraph of Part 1 by the following:

“During the test, the temperature rises are monitored continuously and shall not exceed the values shown in Table 3 and Table 101 in accordance with 11.101.”

In Table 3 the row “external enclosure of **motor-operated appliances**, except handles held in normal use” is not applicable.