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Gas heated catering equipment - Part 2-1: Specific requirements - Open burners and wok burners

Großküchengeräte für gasförmige Brennstoffe - Teil 2-1: Spezifische Anforderungen - Offene Brenner und Wok-Brenner ANDARD PREVIEW

Appareils de cuisson professionnels utilisant les combustibles gazeux - Partie 2-1 : Exigences particulières - Brûleurs découverts et woks

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appliances

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<u>kSIST FprEN 203-2-1:2020</u> https://standards.iteh.ai/catalog/standards/sist/2d323beb-8903-41f8-bc32-cebd5e535993/ksist-fpren-203-2-1-2020

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This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 106.

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EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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European Foreword

This document (prEN 203-2-1:2019) has been prepared by Technical Committee CEN/TC 106 "Large kitchen appliances using gaseous fuels", the secretariat of which is held by AFNOR.

This document is currently submitted to the CEN Enquiry.

This document will supersede EN 203-2-1:2005.

This document has been prepared under a standardization request (under drafting) given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document.

The technical changes in comparison to the previous edition are:

- clarification of the scope according to EN 203-1,
- modification of the definition of wok burner in 3. 2.10
- clarification of supply of combustion air and evacuation of combustion products in 5.1.6;
- update of rational use of energy in 69 and ards.iteh.ai)
- modification of the text in 7.1.5.3 Conditions of supply and adjustment of the appliances;
- addition of a general subclause on 7.4.2 Limit temperatures; beb-8903-41f8-bc32-cebd5e535993/ksist-ipren-203-2-1-2020
- clarification of influence of wind and draughts in 7.4.3.3;
- clarification on the pan to be used for open burners in 7.6.2.3;
- modification of the test 7.6.2.5 for abnormal use(nominal heat output replaced by minimum heat input).
- addition of a pan of 60 cm internal diameter in tables 3, 4 and 5;
- deletion of the adjustment of the sequential function control (moved to EN 203-1);
- clarification of the rational use of energy (7.10) and consistency with EN 203-1 for ambient temperature during testing;
- updating of clause 8 on marking and instructions;

This document is used in conjunction with EN 203-1 "Gas Heated Catering Equipment – Part 1: General safety rules". This document specifies particular requirements for open and wok burners.

Enclosed and solid tops are covered by EN 203-2-9.

Subclauses and Figures which are additional to those in EN 203-1 are numbered continuously to part 1 (RI).

1 Scope

According to prEN 203-1:2019, 4 with the following addition:

This document applies to open burners, non-enclosed covered burners and wok burners.

2 Normative references

According to prEN 203-1:2019, 4 with the following additions:

prEN 203-1:2019, Gas heated catering equipment - Part 1: General safety rules

EN 631-1:1993, Materials and articles in contact with foodstuffs - Catering containers - Part 1: Dimensions of containers

3 Terms and definitions

According to prEN 203-1:2019, with the following addition:

3.2.2.8

open burner

hot plate burner for which the pan is heated directly by the flame and the products of combustion are evacuated directly to atmosphere without following a specific way

3.2.2.9

non enclosed covered burner Teh STANDARD PREVIEW

burner for which the pan or the foodstuffs being heated is screened from direct flame contact by the interposition of a surface on which they rest and where all products of combustion are evacuated directly to the atmosphere (e.g. around the periphery of the plate) and the burner is designed so that partial visibility of the flame is possible in normal operation

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EXAMPLE A non-enclosed burner may be: cebd5e535993/ksist-fpren-203-2-1-2020

- permanent, i.e. designed to be used only with the plate in position;
- dual purpose, i.e. designed so that it may also be used as an open burner after removal of the removable plate.

3.2.2.10

wok burner

open burner designed to be used with round-bottomed cooking vessels (wok)

4 Classification

Shall be according to prEN 203-1:2019, 4.

5 Constructional requirements

5.1 General

5.1.1 Conversion to different gases

Shall be according to prEN 203-1:2019, 5.1.1.

5.1.2 Materials and methods of construction

Shall be according to prEN 203-1:2019, 5.1.2.

5.1.3 Use, cleaning and maintenance

Shall be according to prEN 203-1:2019, 5.1.3.

5.1.4 Gas connections

Shall be according to prEN 203-1:2019, 5.1.4.

5.1.5 Soundness

Shall be according to prEN 203-1:2019, 5.1.5.

5.1.6 Supply of combustion air and evacuation of combustion products

5.1.6.1 General

Shall be according to prEN 203-1:2019, 5.1.6.1 with the following addition

Obstruction by means of the pan used of the combustion air inlets and of the evacuation of the products of combustion shall be made impossible.

5.1.6.2 Appliances equipped with a fan

Shall be according to prEN 203-1:2019, 5.1.6.2.

5.1.6.3 Appliances fitted with an air/gas ratio control device

Shall be according to prEN 203-1:2019, 5.1.6.3.

5.1.6.4 Appliances not intended to be connected to an evacuation duct of the combustion products (Type A)

Shall be according to prEN 203-1:2019, 5.1.6.4.

5.1.6.5 Appliances intended to be connected to a an evacuation duct of the combustion products (Type B)

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Shall be according to ENI203/41:2019, 5:11:6c5talog/standards/sist/2d323beb-8903-41f8-bc32-

5.1.7 Flame visibility

5.1.7.1 Verification by the installer

Shall be according to prEN 203-1:2019, 5.1.7.1.

5.1.7.2 Confirmation by the user

Shall be according to prEN 203-1:2019, 5.1.7.2.

5.1.8 Electrical safety

Shall be according to prEN 203-1:2019, 5.1.8.

5.1.9 Construction requirements for gas cylinder compartment

Shall be according to prEN 203-1:2019, 5.1.9.

5.2 Particular requirements for components in the gas circuit

5.2.1 General

Shall be according to prEN 203-1:2019, 5.2.1.

5.2.2 Gas rate control and shut-off device

5.2.2.1 General

Shall be according to prEN 203-1:2019, 5.2.2.1.

5.2.2.2 Shut-off device

Shall be according to prEN 203-1:2019, 5.2.2.2.

5.2.2.3 Control knob

Shall be according to prEN 203-1:2019, 5.2.2.3.

5.2.2.4 Marking and indicators

Shall be according to prEN 203-1:2019, 5.2.2.4.

5.2.3 Auxiliary equipment

Shall be according to prEN 203-1:2019, 5.2.3.

5.2.3.1 General

Shall be according to prEN 203-1:2019, 5.2.3.1.

5.2.3.2 Ignition device

Shall be according to prEN 203-1:2019, 5.2.3.2.

5.2.3.3 Flame supervision device

Shall be according to prEN 203-1:2019, 5.2.3.3.

5.2.3.4 Gas pressure regulator eh STANDARD PREVIEW

Shall be according to prEN 203-1:2019, 5.21.3.4.ndards.iteh.ai)

5.2.3.5 Regulating and overheat limit devices

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Shall be according to prEN 203-1:2019, 523-535993/ksist-fpren-203-2-1-2020

5.2.3.6 Pressure test points

Shall be according to prEN 203-1:2019, 5.2.3.6.

5.2.4 Burners

Shall be according to prEN 203-1:2019, 5.2.4.

5.2.5 Gas rate adjusters

Shall be according to prEN 203-1:2019, 5.2.5

5.3 Particular requirements

5.3.1 Food spillage

Shall be according to prEN 203-1:2019, 5.3.1 with the following addition:

After the test described in 7.8.4, the burner shall be able to be re-ignited easily.

Possible food spillage shall not be able to cause modification to the air/gas mixture of the burner.

5.3.2 Stability and mechanical safety

Shall be according to prEN 203-1:2019, 5.3.2 with the following addition:

The griddles and supports shall ensure the stability of pans which are intended to be used as stated in the user instructions.

5.3.3 Safety from fire risk

Shall be according to prEN 203-1:2019, 5.3.3

5.3.4 Appliances connected to water mains

Shall be according to prEN 203-1:2019, 5.3.4

5.3.5 Pressurized parts

Shall be according to prEN 203-1:2019, 5.3.5

5.3.6 Lack of heat-bearing fluid

Shall be according to prEN 203-1:2019, 5.3.6

6 Performance requirements

6.1 Soundness

6.1.1 Soundness of the gas circuit

Shall be according to prEN 203-1:2019, 6.1.1.

6.1.2 Soundness of combustion product circuit of type B appliances

6.1.2.1 General

Shall be according to prEN 203-1-2019, 6.1.21 DARD PREVIEW

6.1.2.2 Type B₁ appliances (with the exception of type B₁₄ appliances) (standards.iteh.ai)

Shall be according to prEN 203-1:2019, 6.1.2.2.

6.1.2.3 Type B_{14} and B_2 appliances <u>kSIST FprEN 203-2-1:2020</u>

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Shall be according to prEN 203-1:2019, 6.4.253.93/ksist-fpren-203-2-1-2020

6.2 Obtaining the gas rate

6.2.1 Nominal heat input (Q_n)

Shall be according to prEN 203-1:2019, 6.2.1.

6.2.2 Full calorific rate

Shall be according to prEN 203-1:2019, 6.2.2.

6.2.3 Reduced heat input

Shall be according to prEN 203-1:2019, 6.2.3.

6.2.4 Ignition burner heat input

Shall be according to prEN 203-1:2019, 6.2.4.

6.3 Safety of operation

6.3.1 Burners

6.3.1.1 Resistance to overheating

Shall be according to prEN 203-1:2019, 6.3.1.1.

6.3.1.2 Escape of unburned gas

Shall be according to prEN 203-1:2019, 6.3.1.2.

6.3.2 Temperature limits

6.3.2.1 Protection against risk of fire

6.3.2.1.1 Normal operation

Shall be according to prEN 203-1:2019, 6.3.2.1.1.

6.3.2.1.2 Abnormal operation

Shall be according to prEN 203-1:2019, 6.3.2.1.2.

6.3.2.2 Protection against risk of burns

6.3.2.2.1 Control knobs and other handles

Shall be according to prEN 203-1:2019, 6.3.2.2.1.

6.3.2.2.2 Vertical panels of the appliance case

Shall be according to prEN 203-1:2019, 6.3.2.2.2.

6.3.2.3 Regulating, control and safety devices

Shall be according to prEN 203-1:2019, 6.3.2.3.

6.3.3 Ignition - cross-lighting - flame stability

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6.3.3.1 Influence of supply conditions

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Shall be according to prEN 203-1:2019, 6.3.3.1.

6.3.3.2 Influence of winds and room draughts FprEN 203-2-12020

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6.3.3.2.1 Influence of winds and room draughts on type A and B appliances

Shall be according to prEN 203-1:2019, 6.3.3.2.1.

6.3.3.2.2 Influence of down draught for type B appliances

Shall be according to prEN 203-1:2019, 6.3.3.2.2.

6.3.4 Combustion products discharge safety devices for type B_{11BS} appliances

Shall be according to prEN 203-1:2019, 6.3.4.

6.3.5 Pre-purge

6.3.5.1 General

Shall be according to prEN 203-1:2019, 6.3.5.1.

6.3.5.2 Functioning of the permanent ignition burner when the fan stops during standby time

Shall be according to prEN 203-1:2019, 6.3.5.2.

6.4 Influence of burners on each other

Shall be according to prEN 203-1:2019, 6.4.