ICS 91.140
CCS P 45

NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 38693-2020

Safety and control devices for gas burners and gas-burning appliances - Particular requirements - Thermoelectric flame supervision controls

Issued on: March 31, 2020 **Implemented on: February 1, 2021**

Issued by: State Administration for Market Regulation, China National Standardization Administration

Table of Contents

Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009.

This standard uses the redrafting method to amend and adopt ISO 23551-6.2014 "Safety and Control Devices for Gas Burners and Burning Appliances"

Special requirements Part 6.Thermoelectric flameout protection device".

Compared with ISO 23551-6.2014, this standard has many structural adjustments. Appendix A lists this standard and ISO 23551-6.

The.2014 chapter number comparison list.

Compared with ISO 23551-6.2014, this standard has technical differences, and the clauses related to these differences have been passed on the outer side of the page.

The vertical single line (|) of the position is marked, and a list of the corresponding technical differences and their reasons is given in Appendix B.

This standard is consistent with GB 16914-2012 "Safety Technical Conditions for Gas Burning Appliances". The support of this standard is given in Appendix C.

Support the clause correspondence table of GB 16914-2012 basic requirements.

This standard also made the following editorial changes.

---Modified the standard name;

---Deleted the informative Annex A and Annex B of ISO 23551-6.2014;

---Added informative Appendix C, Appendix E and Appendix F, emphasizing the correspondence with my country's mandatory technical regulations and standards;

---The informative appendix H of ISO 23551-6.2014 was revised as appendix D.

This standard was proposed and managed by the Ministry of Housing and Urban-Rural Development of the People's Republic of China.

Drafting organizations of this standard. Okeli Electronics (Kunshan) Co., Ltd., North China Municipal Engineering Design and Research Institute Co., Ltd., Ningbo City

Wanbao Electric Co., Ltd., Ningbo Aokai Safety Technology Co., Ltd., Zhejiang Sanguo

Precision Electromechanical Co., Ltd., Zhongshan Junye Jiaant Electric

Co., Ltd., Shenzhen Beilaijiaer Technology Co., Ltd., Iosmith (China) Water Heater Co., Ltd., Guangdong Wanhe Electric Co., Ltd., Qing

Island Economic and Technological Development Zone Haier Water Heater Co., Ltd., Ningbo Fangtai Kitchenware Co., Ltd., Vantage Co., Ltd., Zhejiang Shuaifeng Electric Co., Ltd.

Co., Ltd., Zhejiang Boli Cooker Technology Co., Ltd., Shengzhou Jindi Intelligent Kitchen Appliance Co., Ltd., Zhongshan Huaxi Electronic Technology Co., Ltd.

Division, National Gas Appliance Quality Supervision and Inspection Center.

1 Scope

This standard specifies thermoelectric flameout protection devices for burners and burning appliances that use urban gas specified in GB/T 13611 (to

(Hereinafter referred to as "flame protection device") classification and grouping, structure and materials, requirements, test methods, inspection rules, marking, installation and operating instructions

Books, packaging, transportation and storage.

This standard applies to gas burners and heating appliances with a maximum working pressure not greater than 500kPa and a nominal size not greater than DN50.

Electric flameout protection device.

2 Normative references

The following documents are indispensable for the application of this document. For dated reference documents, only the dated version applies to this article

Pieces. For undated references, the latest version (including all amendments) applies to this document.

GB/T 2828.1 Sampling inspection procedure by attributes Part 1.Batch inspection sampling plan retrieved by acceptance quality limit (AQL)

(GB/T 2828.1-2012, ISO 2859-1.1999, IDT)

GB/T 13611 Classification and basic characteristics of urban gas

GB/T 30597-2014 General requirements for safety and control devices for gas burners and burning appliances (ISO 23550.2011,

MOD)

3 Terms and definitions

The following terms and definitions defined in GB/T 30597 apply to this document. For ease of use, the following is repeated

Certain terms and definitions in GB/T 30597.

3.1

Thermoelectric flameout protection device thermoelectricflamesupervisioncontrols

The valve body, solenoid valve, and thermocouple can respond to the thermoelectric potential generated by the thermocouple, and make it lead to the main burner or the main burner and ignition

The gas passage of the burner is opened, and after the monitored flame is extinguished, the device can automatically cut off the gas passage.

Note. See Appendix D for the form and composition diagram of the flameout protection device.

3.2

Solenoid valve solenoidvalve

A type of thermoelectric potential generated by a thermocouple installed in the valve body to maintain the open state of the gas path, and can be used after the monitored flame is extinguished

The part that closes the gas passage.

3.3

Thermocouple

The flame sensing element responds to the temperature of the monitored flame to generate thermoelectric potential.

3.4

Ignition interlock

As long as the passage to the main burner is opened, the component that can prevent the igniter from operating.