



BSI Standards Publication

Safety and control devices for gas burners and gas-burning appliances — Particular requirements

Part 8: Multifunctional controls

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National foreword

This British Standard is the UK implementation of ISO 23551-8:2016+A1:2019. It supersedes BS ISO 23551-8:2016, which is withdrawn.

The start and finish of text introduced or altered by amendment is indicated in the text by tags. Tags indicating changes to ISO text carry the number of the ISO amendment. For example, text altered by ISO amendment A1 is indicated by A1 A1.

The UK participation in its preparation was entrusted to Technical Committee GSE/22, Safety and control devices for gas and oil burners and gas burning appliances.

A list of organizations represented on this committee can be obtained on request to its secretary.

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© The British Standards Institution 2019
Published by BSI Standards Limited 2019

ISBN 978 0 580 95224 1

ICS 27.060.20

Compliance with a British Standard cannot confer immunity from legal obligations.

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 29 February 2016.

Amendments/corrigenda issued since publication

Date	Text affected
30 June 2019	Implementation of ISO amendment 1:2019

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First edition
2016-02-01

AMENDMENT 1
2019-06

Safety and control devices for gas burners and gas-burning appliances — Particular requirements —

Part 8: Multifunctional controls

*Dispositifs de commande et de sécurité pour les brûleurs et les
appareils à gaz — Exigences particulières —*

Partie 8: Equipements multifonctionnels



Reference number
ISO 23551-8:2016(E)

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ISO copyright office
Ch. de Blandonnet 8 • CP 401
CH-1214 Vernier, Geneva, Switzerland
Tel. +41 22 749 01 11
Fax +41 22 749 09 47
copyright@iso.org
www.iso.org

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [Foreword - Supplementary information](#)

The committee responsible for this document is ISO/TC 161, *Control and protective devices for gas and/or oil burners and appliances*.

ISO 23551 consists of the following parts, under the general title *Safety and control devices for gas burners and gas-burning appliances — Particular requirements*:

- *Part 1: Automatic and semi-automatic valves*
- *Part 2: Pressure regulators*
- *Part 3: Gas/air ratio controls, pneumatic type*
- *Part 4: Valve-proving systems for automatic shut-off valves*
- *Part 5: Manual gas valves*
- *Part 6: Thermoelectric flame supervision controls*
- *Part 8: Multifunctional controls*
- *Part 9: Mechanical gas thermostats*
- *Part 10: Vent valves*

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Introduction

This part of ISO 23551 is designed to be used in combination with ISO 23550. Together, they establish the full requirements as they apply to multifunctional controls. This part of ISO 23551 adapts ISO 23550, where needed, by stating “with the following modification”, “with the following addition”, “is replaced by the following” or “is not applicable” in the corresponding clauses. In order to identify specific requirements that are particular to this part of ISO 23551 that are not already covered by ISO 23550, this part of ISO 23551 may contain clauses or subclauses that are additional to the structure of ISO 23550. These clauses are numbered starting from 101 or, in the case of an Annex, are designated AA, BB, CC, etc.

It has been necessary to take into consideration the differing requirements resulting from practical experience and installation practices in various regions of the world and to recognize the variation in basic infrastructure associated with gas and/or oil controls and appliances. This part of ISO 23551 provides a basic framework of requirements that recognize these differences.

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Safety and control devices for gas burners and gas-burning appliances — Particular requirements —

Part 8: Multifunctional controls

1 Scope

This part of ISO 23551 specifies the safety, construction and performance requirements for multifunctional controls intended for use with gas burners, gas appliances and similar use, hereafter referred to as "MFC".

This part of ISO 23551 is applicable to MFC with declared maximum inlet pressures up to, and including, 50 kPa (500 mbar) of nominal connection sizes up to, and including, DN 150 for use with one or more fuel gases.

MFC consist of two or more functions, at least one of which is a mechanical control, as specified in the relevant control standards.

A1 This part of ISO 23551 is also applicable to:

- water operated gas valves (see [Annex AA](#)); and
- OSDs according to [Annex BB](#). **A1**

2 Normative references

The following referenced documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 23550:2011, *Safety and control devices for gas burners and gas-burning appliances — General requirements*

ISO 23551-1, *Safety and control devices for gas burners and gas-burning appliances — Particular requirements — Part 1: Automatic and semi-automatic valves*

ISO 23551-2, *Safety and control devices for gas burners and gas-burning appliances — Particular requirements — Part 2: Pressure regulators*

ISO 23551-3, *Safety and control devices for gas burners and gas-burning appliances — Particular requirements — Part 3: Gas/air ratio controls, pneumatic type*

ISO 23551-4, *Safety and control devices for gas burners and gas-burning appliances — Particular requirements — Part 4: Valve-proving systems for automatic shut-off valves*

ISO 23551-5, *Safety and control devices for gas burners and gas-burning appliances — Particular requirements — Part 5: Manual gas valves*

ISO 23551-6, *Safety and control devices for gas burners and gas-burning appliances — Particular requirements — Part 6: Thermoelectric flame supervision controls*

ISO 23551-9, *Safety and control devices for gas burners and gas-burning appliances — Particular requirements — Part 9: Mechanical gas thermostats*