



Fire Detection and Alarm Systems

Part 5: Point-type heat detectors

STANDARDS
Australia



AS ISO 7240.5:2018

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Part 5: Point-type heat detectors

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Preface

This Standard was prepared by the Standards Australia Committee FP-002, Fire Detection, Warning, Control and Intercom Systems, to supersede AS 7240.5—2004, *Fire detection and alarm systems, Part 5: Point type heat detectors (ISO 7240-5:2003, MOD)*.

The objective of this Standard is to specify the requirements, test methods and performance criteria for point type heat detectors for use in fire detection and fire alarm systems for buildings (refer to AS ISO 7240.1). For other types of heat detector, or for detectors intended for use in other environments, this Standard can be used for guidance only. Heat detectors with special characteristics and developed for specific risks are not covered by this Standard.

This Standard is identical with, and has been reproduced from, ISO 7240-5:2018, *Fire detection and alarm systems — Part 5: Point type heat detectors*.

As this document has been reproduced from an International Standard, a full point substitutes for a comma when referring to a decimal marker.

Australian Standards that are identical adoptions of international normative references may be used interchangeably. Refer to the online catalogue for information on specific Standards.

The terms “normative” and “informative” are used in Standards to define the application of the appendices or annexes to which they apply. A “normative” appendix or annex is an integral part of a Standard, whereas an “informative” appendix or annex is only for information and guidance.

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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 voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 22, *Equipment for fire protection and fire fighting*, Subcommittee SC 3, *Fire detection and alarm systems*.

This third edition cancels and replaces the second edition (ISO 7240-5:2012), which has been technically revised.

A list of all parts in the ISO 7240 series, published under the general title *Fire detection and fire alarm systems*, can be found on the ISO website.

This edition includes the following significant changes with respect to the previous edition:

- in [5.18](#) (electromagnetic compatibility immunity tests), EN 50130-4 has been replaced by IEC 62599-2;
- marking has been moved to a new [Clause 7](#);
- data and software requirements have been moved to a new [Clause 8](#).

Introduction

A fire detection and alarm system is required to function satisfactorily not only in the event of a fire, but also during and after exposure to conditions likely to be met in practice such as corrosion, vibration, direct impact, indirect shock and electromagnetic interference. Some tests specified are intended to assess the performance of the heat detectors under such conditions.

The performance of heat detectors is assessed from the results obtained in specific tests. This document is not intended to place any other restrictions on the design and construction of such detectors.

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Australian Standard®

Fire Detection and Alarm Systems

Part 5: Point-type heat detectors

1 Scope

This document specifies the requirements, test methods and performance criteria for point type heat detectors for use in fire detection and fire alarm systems for buildings (see ISO 7240-1).

For other types of heat detector, or for detectors intended for use in other environments, this document can be used for guidance only. Heat detectors with special characteristics and developed for specific risks are not covered by this document.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 209, *Aluminium and aluminium alloys — Chemical composition*

ISO 7240-1, *Fire detection and alarm systems — Part 1: General and definitions*

IEC 60068-1, *Environmental testing — Part 1: General and guidance*

IEC 60068-2-1, *Environmental testing — Part 2-1: Tests. Test A: Cold*

IEC 60068-2-2, *Environmental testing — Part 2-2: Tests. Tests B: Dry heat*

IEC 60068-2-6, *Environmental testing — Part 2-6: Tests — Test Fc: Vibration (sinusoidal)*

IEC 60068-2-27, *Environmental testing — Part 2-27: Tests. Test Ea and guidance: Shock*

IEC 60068-2-30, *Environmental testing — Part 2-30: Tests. Test Db and guidance: Damp heat, cyclic (12 + 12-hour cycle)*

IEC 60068-2-42, *Environmental testing — Part 2-42: Tests — Test Kc: Sulphur dioxide test for contacts and connections*

IEC 60068-2-78, *Environmental testing — Part 2-78: Tests — Test Cab: Damp heat, steady state*

IEC 62599-2, *Alarm systems — Part 2: Electromagnetic compatibility — Immunity requirements for components of fire and security alarm systems*

3 Terms and definitions

For the purposes of this document, the terms, definitions and abbreviated terms in ISO 7240-1 and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <https://www.electropedia.org/>
- ISO Online browsing platform: available at <https://www.iso.org/obp>