BS EN 54-5:2017

BSI Standards Publication

Fire detection and fire alarm systems

Part 5: Heat detectors — Point heat detectors

bsi.

This British Standard is the UK implementation of EN 54-5:2017. It supersedes BS EN 54-5:2001 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee FSH/12/2, Fire detectors.

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

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Amendments/Corrigenda issued since publication

Date	Text affected

EUROPEAN STANDARD **EN 54-5**

NORME EUROPÉENNE

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Supersedes EN 54-5:2000

English Version

Fire detection and fire alarm systems - Part 5: Heat detectors - Point heat detectors

Systèmes de détection et d'alarme incendie - Partie 5 : Détecteurs de chaleur - Détecteurs ponctuels

Brandmeldeanlagen - Teil 5: Wärmemelder - Punktförmige Melder

This European Standard was approved by CEN on 23 October 2016.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.

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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

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European foreword

This document (EN 54-5:2017) has been prepared by Technical Committee CEN/TC 72 "Fire detection and fire alarm systems", the secretariat of which is held by BSI.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by August 2017, and conflicting national standards shall be withdrawn at the latest by February 2021.

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

This document supersedes EN 54-5:2000.

EN 54-5 has been revised as follows:

Inclusion of new clauses and annexes:

— Clause 6 Assessment and verification of constancy of performance (AVCP)

— Clause 7 Classification and designation

— Clause 8 Marking, labelling and packaging

— Annex E (informative) Data supplied with point heat detectors

The main technical changes are as follows:

— Applying the latest EN 50130-4:2011 EMC for immunity tests.

The editorial changes are as follows:

— Changes from classes to Categories

— Editorial changes in a number of clauses, such as software and General, in order to conform to the regulation.

This document has been prepared under a standardization request given to CEN/CENELEC by the European Commission and the European Free Trade Association, and supports the basic requirements of Regulation (EU) 305/2011.

For relationship with EU Regulation, see informative Annex ZA, which is an integral part of this document.

EN 54, *Fire detection and fire alarm systems*, consists of the following parts:

— Part 1: Introduction

— Part 2: Control and indicating equipment

— Part 3: Fire alarm devices – Sounders

— Part 4: Power supply equipment

— Part 5: Heat detectors – Point heat detectors

— Part 7: Smoke detectors – Point detectors using scattered light, transmitted light or ionization

— Part 10: Flame detector – Point detectors

— Part 11: Manual call points

— Part 12: Smoke detectors – Line detector using an optical light beam

— Part 13: Compatibility assessment of system components

— Part 14: Guidelines for planning, design, installation, commissioning, use and maintenance (CEN/TS)

— Part 16: Voice alarm control and indicating equipment

— Part 17: Short circuit isolators

— Part 18: Input/output devices

— Part 20: Aspirating smoke detectors

— Part 21: Alarm transmission and fault warning routine equipment

— Part 22: Line-type heat detectors

— Part 23: Fire alarm devices – Visual alarms

— Part 24: Components of voice alarm systems – Loudspeakers

— Part 25: Components using radio links and system requirements

— Part 26: Carbon monoxide detectors – Point detectors

— Part 27: Duct smoke detectors

— Part 28: Non-resettable (digital) line type heat detectors

— Part 29: Multi-sensor fire detectors - Point detectors using a combination of smoke and heat sensors

— Part 30: Multi-sensor fire detectors - Point detectors using a combination of carbon monoxide and heat sensors

— Part 31: Multi-sensor detector – Point detectors using a combination of smoke, carbon monoxide and optionally heat sensors

— Part 32: Guidelines for the planning, design, installation, commissioning, use and maintenance of voice alarm systems (CEN/TS)

NOTE This list includes standards that are in preparation and other standards may be added. For current status of published standards refer to www.cen.eu.

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

1 Scope

This European Standard specifies the requirements, test methods and performance criteria for point heat detectors intended for use in fire detection and fire alarm systems installed in and around buildings (see EN 54-1:2011).

This European Standard provides for the assessment of verification of consistency of performance (AVCP) of point heat detectors to this EN.

For other types of heat detector, or for detectors intended for use in other environments, this standard should only be used for guidance.

Heat detectors with special characteristics and developed for specific risks are not covered by this standard.

2 Normative references

The following 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.

EN 54-1:2011, *Fire detection and fire alarm systems - Part 1: Introduction*

EN 50130-4:2011, *Alarm systems - Part 4: Electromagnetic compatibility - Product family standard: Immunity requirements for components of fire, intruder, hold up, CCTV, access control and social alarm systems*

EN 60068-1:1994, *Environmental testing - Part 1: General and guidance (IEC 60068-1:1988)*

EN 60068-2-1:2007, *Environmental testing - Part 2-1: Tests - Test A: Cold (IEC 60068-2-1:2007)*

EN 60068-2-2:2007, *Environmental testing - Part 2-2: Tests - Test B: Dry heat (IEC 60068-2-2:2007)*

EN 60068-2-6:2008, *Environmental testing - Part 2-6: Tests - Test Fc: Vibration (sinusoidal) (IEC 60068-2-6:2008)*

EN 60068-2-27:2009, *Environmental testing - Part 2-27: Tests - Test Ea and guidance: Shock (IEC 60068-2-27:2009)*

EN 60068-2-30:2005, *Environmental testing - Part 2-30: Tests - Test Db: Damp heat, cyclic (12 h + 12 h cycle) (IEC 60068-2-30:2005)*

EN 60068-2-42:2003, *Environmental testing - Part 2-42: Tests - Test Kc: Sulphur dioxide test for contacts and connections (IEC 60068-2-42:2003)*

EN 60068-2-78:2013, *Environmental testing - Part 2-78: Tests - Test Cab: Damp heat, steady state (IEC 60068-2-78:2012)*

ISO 209:2007, *Aluminium and aluminium alloys — Chemical composition*