

**Automaatne
tulekahjusignalisastioonisüsteem. Osa
3: Tuletõrjehäire seadmed. Helisignaali
andjad**

Fire detection and fire alarm systems - Part 3: Fire
alarm devices - Sounders

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 54-3:2001 sisaldab Euroopa standardi EN 54-3:2001 ingliskeelset teksti.	This Estonian standard EVS-EN 54-3:2001 consists of the English text of the European standard EN 54-3:2001.
Käesolev dokument on jõustatud 19.12.2001 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.	This document is endorsed on 19.12.2001 with the notification being published in the official publication of the Estonian national standardisation organisation.
Standard on kättesaadav Eesti standardiorganisatsioonist.	The standard is available from Estonian standardisation organisation.

Käsitlusala: This standard specifies the requirements, test methods and performance criteria for fire alarm sounders in a fixed installation intended to signal an audible warning of fire between a fire detection and fire alarm system and the occupants of a building. It is intended to cover only those devices which derive their operating power by means of a physical electrical connection to an external source such as a fire alarm system. This standard specifies audible fire alarm devices for two types of application environment, type A for indoor use and type B for outdoor use.	Scope: This standard specifies the requirements, test methods and performance criteria for fire alarm sounders in a fixed installation intended to signal an audible warning of fire between a fire detection and fire alarm system and the occupants of a building. It is intended to cover only those devices which derive their operating power by means of a physical electrical connection to an external source such as a fire alarm system. This standard specifies audible fire alarm devices for two types of application environment, type A for indoor use and type B for outdoor use.
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ICS 13.220.20

Võtmesõnad: definitions, design, detector, fire alarm system, fire alarms, fire brigade, fire detectors, fire equipment, fire safety, marking, measurement, ratings, sound intensity, specification (approval), specifications, testing, warning devices, warning systems

ICS 13.220.20

English version

**Fire detection and fire alarm systems - Part 3: Fire alarm
devices - Sounders**

Systèmes de détection et d'alarme incendie - Partie 3:
Dispositifs sonores d'alarme feu

Brandmeldeanlagen - Teil 3: Akustische
Alarmierungseinrichtungen

This European Standard was approved by CEN on 17 December 1999.

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 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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
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Foreword

This European Standard has been prepared by Technical Committee CEN/TC 72 "Fire detection and fire alarm systems", the secretariat of which is held by BSI.

EN 54 is published in a series of parts. Information on the relationship between this European Standards and other standards of the EN 54 series is given in Annex A of EN 54-1:1996.

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 October 2001, and conflicting national standards shall be withdrawn at the latest by October 2003. For products which have complied with the relevant national standard before the date of withdrawal (dow), as shown by the manufacturer or by a certification body, this previous standard may continue to apply for production until October 2006.

This standard has been prepared in co-operation with the CEA (Comité Européen des Assurances) and with EURALARM (Association of European Manufacturers of Fire and Intruder Alarm Systems).

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

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

Introduction

The purpose of a fire alarm sounder is to warn person(s) within, or in the vicinity of, a building of the occurrence of a fire emergency situation in order to enable such person(s) to take appropriate measures.

This standard recognizes that the exact nature of the sound requirement, i.e. its frequency range, temporal pattern and output level will vary according to the nature of the installation, the type of risk present and appropriate measures to be taken, the type of signals used for other non-fire emergency alarms (see, for example, EN 457) and national differences in custom and practice. The resulting standard specifies, therefore, a common method for the testing of the operational performance of sounders against the specification declared by the manufacturer rather than imposing common requirements.

Attention is drawn to ISO 8201 : 1987, Acoustics - Audible emergency evacuation signal, the international standard which specifies the temporal pattern and the required sound pressure level of an audible emergency evacuation signal.

This standard gives common requirements for the construction and robustness of sounders as well as for their performance under climatic, mechanical and electrical interference conditions which are likely to occur in the service environment. The sounders have been classified in either an indoor or an outdoor application environment category.

1 Scope

This European Standard specifies the requirements, test methods and performance criteria for fire alarm sounders in a fixed installation intended to signal an audible warning of fire between a fire detection and fire alarm system and the occupants of a building. It is intended to cover only those devices which derive their operating power by means of a physical electrical connection to an external source such as a fire alarm system.

This standard specifies fire alarm sounders for two types of application environment, type A for indoor use and type B for outdoor use.

This standard is not intended to cover:

- a) loudspeaker type devices primarily intended for emitting emergency voice messages;
- b) supervisory sounders, for example, within the control and indicating equipment.

2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

<u>Publication</u>	<u>Title</u>
EN 54-1:1996	Fire detection and fire alarm systems - Part 1: Introduction
EN 50130-4:1995	Alarm systems - Part 4: Electromagnetic compatibility - Product family standard : Immunity requirements for components of fire, intruder and social alarm systems
EN 60068-1:1994	Environmental testing – Part 1: General and guidance (IEC 60068-1:1988 + Corrigendum 1988 + A1:1992)
EN 60068-2-1:1993	Environmental testing – Part 2: Tests, tests A: cold (IEC 60068-2-1:1990)
EN 60068-2-2:1993	Basic environmental testing procedures – Part 2: Tests, tests B: dry heat (IEC 60068-2-2:1974 + IEC 68-2-2 A:1976)
HD 323.2.3 S2:1987	Basic environmental testing procedures – Part 2: Tests, tests Ca: damp heat, steady state
EN 60068-2-6:1995	Environmental testing – Part 2: Tests – Tests Fc : Vibration (sinusoidal) (IEC 60068-2-6:1995 + Corrigendum 1995)
EN 60068-2-27:1993	Basic environmental testing procedures – Part 2: Tests – Test Ea and guidance: Shock (IEC 60068-2-27:1987)
IEC 60068-2-30:1980	Basic environmental testing procedures – Part 2: Tests – Tests Db and guidance: Damp heat, cyclic (12 + 12 – hour cycle)
IEC 60068-2-42:1982	Basic environmental testing procedures – Part 2: Tests – Test Kc: Sulphur dioxide test for contacts and connections
HD 323.2.56 S1:1990	Basic environmental testing procedures – Part 2: Tests, test Cb: damp heat, steady state, primarily for equipment
IEC 68-2-63:1997	Environmental testing – Part 2: Test methods – Test Eg: Impact, spring hammer
EN 60529:1991	Degrees of protection provided by enclosures (IP code) (IEC 60529:1989)
IEC 60651:1979	Sound level meters
ISO 1210:1992	Plastics – Determination of the burning behaviour of horizontal and vertical specimens in contact with a small-flame ignition source
ISO 10351:1992	Plastics – Determination of the combustibility of specimens using a 125 mm flame source