

Automaatne tulekahjusignalisatsioonisüsteem. Osa 11: Käsiteadustid

Fire detection and fire alarm systems - Part 11:
Manual call points

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 54-11:2002 sisaldab Euroopa standardi EN 54-11:2001 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 14.03.2002 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 54-11:2002 consists of the English text of the European standard EN 54-11:2001.</p> <p>This document is endorsed on 14.03.2002 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala:</p> <p>This part of the standard specifies the requirements and methods of test for manual call points in fire alarm systems in buildings. It includes call points fitted with passive electronic components and specifies requirements for mounting boxes used with manual call points.</p>	<p>Scope:</p> <p>This part of the standard specifies the requirements and methods of test for manual call points in fire alarm systems in buildings. It includes call points fitted with passive electronic components and specifies requirements for mounting boxes used with manual call points.</p>
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English version

Fire detection and fire alarm systems - Part 11: Manual call points

Systèmes de détection automatique d'incendie - Partie 11:
Déclencheurs manuels d'alarme

Brandmeldeanlagen - Teil 11: Handfeuermelder

This European Standard was approved by CEN on 19 February 2001.

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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.

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of an identical text or by endorsement, at the latest by November 2001, and conflicting national standards shall be withdrawn at the latest by November 2003.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 November 2006.

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).

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).

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

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

This European Standard has been drafted on the basis of appearance and functions which should be provided on all manual call points for use in fire detection and fire alarm systems. The colours, dimensions, shapes and methods of operation are based on recognised operating principles which give confidence and recognition to the user when operated in genuine fire alarm situations.

It is important for manual call points to be recognisable and simple to use, without the need to read elaborate instructions so that anyone discovering a fire is able to use the manual call point without previous familiarity with it.

The purpose of a manual call point is to enable a person discovering a fire to initiate the operation of a fire alarm system so that appropriate measures can be taken.

The intention of this European standard is to specify requirements for operation and reliability. The methods of operation of the manual call points covered are as follows:

- Type A: direct operation (single action);
- Type B: indirect operation (double action).

Both types require the breaking or the visible displacement by change of the position of a frangible element forming part of the front face, which is considered to be the most suitable method for general application and which act as a deterrent to the misuse of the device.

Importance has been placed on identifying the manual call point, the method by which it is activated and an indication to the user that the initiation of an alarm has been given.

The resulting standard takes into account national variances in custom and practice and language in bringing together common elements that contribute towards a standard device for use throughout Europe.

1 Scope

This European Standard specifies the requirements and methods of test for manual call points in fire detection and fire alarm systems in and around buildings. It takes into account indoor and outdoor conditions, the appearance and operation of the manual call points for type A "direct operation" and type B "indirect operation" and covers those which are simple mechanical switches, those which are fitted with simple electronic components (e.g. resistors, diodes) and those which contain active electronic components and which work with the control panels for signalling and identifying, for example, an address or location.

This European standard does not cover manual call points for special applications, for example manual call points that are intrinsically safe or for use in hazardous conditions, if such applications require additional or other requirements or tests than those given in this standard.

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 (including amendments).

ISO/IEC-Publication	Year	Title	EN/HD	Year
-	-	Fire detection and fire alarm systems - Part 1: Introduction	EN 54-1	1996
-	-	Fire detection and fire alarm systems - Part 2: Control and indicating equipment	EN 54-2	1997
-	-	Safety of machinery – Ergonomics requirements for the design of displays and control actuators - Part 3: Control actuators	EN 894-3	2000
-	-	Alarm systems – Part 4: Electromagnetic compatibility - Product family standard: Immunity requirements for components of fire, intruder and social alarm systems	EN 50130-4	1995
IEC 60068-1	1988	Environmental testing. Part 1: General and guidance (IEC 60068-1 : 1988 + Corrigendum 1988 + A1 : 1992)	EN 60068-1	1994
IEC 60068-2-1	1990	Environmental testing - Part 2: Tests - Tests A: Cold (IEC 60068-2-1 : 1990)	EN 60068-2-1	1993
IEC 60068-2-1/A1	1993	Environmental testing - Part 2: Tests - Tests A: Cold (IEC 60068-2-1/ A1 : 1993)	EN 60068-2-1/A1	1993
IEC 60068-2-1/A2	1994	Environmental testing - Part 2: Tests - Tests A: Cold (IEC 60068-2-1/ A2 : 1994)	EN 60068-2-1/A2	1994
IEC 60068-2-2	1974	Basic environmental testing procedures - Part 2 : Tests - Test B: Dry heat (IEC 60068-2-2 : 1974 + IEC 68-2-2A : 1976)	EN 60068-2-2	1993
IEC 60068-2-2/A1	1993	Basic environmental testing procedures - Part 2 : Tests - Test B: Dry heat (IEC 60068-2-2/A1 : 1993)	EN 60068-2-2/A1	1993
IEC 60068-2-2/A2	1994	Basic environmental testing procedures - Part 2 : Tests - Test B: Dry heat (IEC 60068-2-2/A2 : 1994)	EN 60068-2-2/A2	1994
IEC 60068-2-3	1969	Basic environmental testing procedures - Part 2: Tests - Test Ca: Damp heat, steady state	HD 323.2.3 S2	1987
IEC 60068-2-6	1995	Environmental testing - Part 2: Tests - Test Fc: Vibration (sinusoidal) (IEC 60068-2-6 : 1995 + Corrigendum 1995)	EN 60068-2-6	1995
IEC 60068-2-18	1989	Environmental testing - Part 2: Tests - Test R and guidance: Water	-	-
IEC 60068-2-18/A1	1993	Environmental testing - Part 2: Tests - Test R and guidance: Water (Amendment 1)	-	-
IEC 60068-2-27	1987	Basic environmental testing procedures- Part 2: Tests - Test Ea and guidance: Shock (IEC 60068-2-27 : 1987)	EN 60068-2-27	1993
IEC 60068-2-30	1980	Basic environmental testing procedures - Part 2: Tests - Test Db and guidance: Damp heat, cyclic (12 + 12-hour cycle)	HD 323.2.30 S3	1988
IEC 60068-2-30/A1	1985	Basic environmental testing procedures - Part 2: Tests - Test 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	-	-
IEC 60068-2-56	1988	Environmental testing - Part 2: Tests - Test Cb: Damp heat, steady state, primarily for equipment	HD 323.2.56 S1	1990
ISO 209-1	1989	Wrought aluminium and aluminium alloys -	-	-

		Chemical composition and forms of products - Part 1: Chemical composition		
ISO 3098-0	1997	Technical product documentation - Lettering - Part 0: General requirements	EN ISO 3098-0	1997
ISO 3864	1984	Safety colours and safety signs	-	-

3 Terms and definitions

For the purposes of this European Standard, the terms and definitions given in EN 54-1 : 1996 apply together with the following:

3.1

alarm condition

the condition of the manual call point after the operating element has been activated

3.2

frangible element

a component which is glass or has the appearance of glass and which after receiving a blow or pressure as instructed, is physically broken or is visibly displaced by change of position and remains in that condition until replaced or reset

NOTE The frangible element is intended to give protection against unintentional operation and to be a deterrent against misuse. The visible displacement of the frangible element is accepted as apparent breaking.

3.2.1

non-resettable frangible element

a frangible element that needs to be replaced after the activation of the manual call point, in order for the manual call point to be able to return to the normal condition

3.2.2

resettable frangible element

a frangible element that can be returned to its original position without replacement, in order for the manual call point to be able to return to the normal condition

3.3

front face

the area within the outline of the front view of the manual call point excluding the area of the operating face

NOTE See figures 1 and 2, item 1.

3.4

manual call point

a component of a fire detection and fire alarm system which is used for the manual initiation of an alarm [EN 54-1 : 1996]

Manual call points are divided into two types depending on the method of operation:

3.4.1

type A: direct operation

a manual call point in which the change to the alarm condition is automatic (i.e. without the need for further manual action) when the frangible element is broken or displaced

3.4.2

type B: indirect operation

a manual call point in which the change to the alarm condition requires a separate manual operation of the operating element by the user after the frangible element is broken or displaced

3.5

normal condition

the condition in which the frangible element is undamaged and the manual call point is operating without giving an alarm or fault signal