



NSAI
Standards

Irish Standard
I.S. EN 54-4:1998

Fire detection and fire alarm systems - Part 4: Power supply equipment

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I.S. EN 54-4:1998

Incorporating amendments/corrigenda issued since publication:

EN 54-4:1997/AC:1999

EN 54-4:1997/A1:2002

EN 54-4:1997/A2:2006

The National Standards Authority of Ireland (NSAI) produces the following categories of formal documents:

I.S. xxx: Irish Standard – national specification based on the consensus of an expert panel and subject to public consultation.

S.R. xxx: Standard Recommendation - recommendation based on the consensus of an expert panel and subject to public consultation.

SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

This document replaces/revises/consolidates the NSAI adoption of the document(s) indicated on the CEN/CENELEC cover/Foreword and the following National document(s):

NOTE: The date of any NSAI previous adoption may not match the date of its original CEN/CENELEC document.

This document is based on:
EN 54-4:1997

Published:
24 April, 1998

This document was published
under the authority of the NSAI
and comes into effect on:
24 April, 1998

ICS number:
13.220.20

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Údarás um Chaighdeáin Náisiúnta na hÉireann

I.S. EN 54-4:1998

EUROPEAN STANDARD

EN 54-4:1997/A2

NORME EUROPÉENNE

EUROPÄISCHE NORM

August 2006

ICS 13.220.20

English Version

Fire detection and fire alarm systems - Part 4: Power supply equipment

Systèmes de détection et d'alarme incendie - Partie 4 :
Équipement d'alimentation électrique

Brandmeldeanlagen - Teil 4:
Energieversorgungseinrichtungen

This amendment A2 modifies the European Standard EN 54-4:1997; it was approved by CEN on 3 May 2006.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for inclusion of this amendment into the relevant national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

This amendment 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 Central Secretariat has the same status as the official versions.

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

Management Centre: rue de Stassart, 36 B-1050 Brussels

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Amendments to Contents:

In 9.9 "Electrostatic discharges (operational)" **is deleted and replaced with:** "Electromagnetic compatibility (EMC) immunity tests (operational)".

Delete "9.10 Radiated electromagnetic interference (operational)" **and replace with:** "9.10 (deleted)."

Delete "9.11 Voltage transients – fast transient bursts (operational)" **and replace with:** "9.11 (deleted)."

Delete "9.12 Voltage transients – slow high energy transients (operational)" **and replace with:** "9.12 (deleted)."

Delete "9.13 Mains voltage dips and interruptions (operational)" **and replace with:** "9.13 (deleted)."

Foreword

This document (EN 54-4:1997/A2:2006) has been prepared by Technical Committee CEN/TC 72 “Fire detection and fire alarm systems”, the secretariat of which is held by BSI.

This Amendment to the European Standard EN 54-4:1997 shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by February 2007, and conflicting national standards shall be withdrawn at the latest by August 2009.

This document 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).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document.

Amendment 2 to this standard improves the additional requirements for integrated power supplies and makes a number of miscellaneous changes, to correct errors and better reflect the current state of the art. It also replaces the descriptions of the individual electromagnetic compatibility immunity tests with a reference to the EMC Product Family standard EN 50130-4, makes editorial changes to generally improve clarity and updates the normative references.

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

Introduction

This Amendment is intended to:

- a) add requirements for power supply equipment integrated in other fire alarm products and to bring them into line with current practice;
- b) bring the EMC immunity requirements specified in EN 54-4:1997 up to date and in line with the EMC Product Family standard for alarm systems;
- c) make a number of miscellaneous changes to correct errors and better reflect current practice;
- d) make editorial changes to improve clarity;
- e) update the normative references.

Foreword

Replace Date of Withdrawal to read:

August 2009

1 Scope

Delete the contents of the Scope and replace with the following text:

This European Standard specifies requirements, methods of test and performance criteria for power supply equipment of fire detection and fire alarm systems installed in buildings. This includes component L of Figure 1 of EN 54-1:1996 and power supply equipment that supplies power directly to components other than the control and indicating equipment, unless otherwise specified in other Parts of EN 54.

2 Normative references

In Clause 2 delete the list of references starting from “EN 54 Fire detection and fire alarm system” and until the end of the clause and replace it with the following:

EN 54-1:1996, *Fire detection and fire alarm systems — Part 1: Introduction*

EN 54-2:1997, *Fire detection and fire alarm systems — Part 2: Control and indicating equipment*

EN 54-7:2000, *Fire detection and fire alarm systems - Part 7: Smoke detectors - Point detectors using scattered light, transmitted light or ionization*

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 + corr. October 1988 + A1:1992)*

EN 60068-2-1:1993, *Environmental testing; part 2: tests; tests A: cold (IEC 60068-2-1:1990)*

EN 60068-2-6:1995, *Environmental testing - Part 2: Tests - Tests Fc: Vibration (sinusoidal) (IEC 60068-2-6:1995 + Corrigendum 1995)*

EN 60068-2-47:2005, *Environmental testing - Part 2-47: Test Mounting of specimens for vibration, impact and similar dynamic tests (IEC 60068-2-47:2005)*

EN 60068-2-75:1997, *Environmental testing — Part 2-75: Tests — Test Eh: Hammer tests (IEC 60068-2-75:1997)*

EN 60068-2-78:2001, *Environmental testing — Part 2-78: Tests, Test Cab: Damp heat, steady state (IEC 60068-2-78:2001)*

EN 60529:1991, *Degrees of protection provided by enclosures (IP code) (IEC 60529:1989)*

EN 60721-3-3:1995, *Classification of environmental conditions - Part 3: Classification of groups of environmental parameters and their severities - Section 3: Stationary use at weatherprotected locations (IEC 60721-3-3:1994)*

I.S. EN 54-4:1998

EUROPEAN STANDARD

EN 54-4:1997/A1

NORME EUROPÉENNE

EUROPÄISCHE NORM

December 2002

ICS 13.220.20

English version

Fire detection and fire alarm systems - Part 4: Power supply equipment

Systèmes de détection et d'alarme incendie - Partie 4:
Équipement d'alimentation électrique

Brandmeldeanlagen - Teil 4:
Energieversorgungseinrichtungen

This amendment A1 modifies the European Standard EN 54-4:1997; it was approved by CEN on 23 September 2002.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for inclusion of this amendment into the relevant 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 amendment 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, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.



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Foreword

This document (EN 54-4:1997/A1:2002) has been prepared by Technical Committee CEN/TC 72 "Fire detection and fire alarm systems", the secretariat of which is held by BSI.

This Amendment to the European Standard EN 54-4:1997 shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by June 2003, and conflicting national standards shall be withdrawn at the latest by December 2005.

This document 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).

For relationship with EU Directive(s), see informative Annex ZA which is an integral part of this document.

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, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

Contents

At the end of the existing table of contents, delete:

Annex A (normative) Special national condition

and insert the following new entries:

Annex ZA (informative) Clauses of this European Standard addressing essential requirements of the Construction Products or other provisions of EU Directives

Bibliography

Scope

Delete the note and replace it with the following paragraph:

This standard does not cover the power supplies for self-contained smoke alarms or the battery powered parts of wire-free fire detection and fire alarm systems.

Clause 9.3.1.1

Delete the final sentence and replace it with the following:

For other battery types, the discharge current shall be that for which the battery manufacturer specifies the rated capacity.

Annex A

Delete the whole of annex A.

New annex ZA and Bibliography

After the existing annex A, add annex ZA and bibliography as follows.

I.S. EN 54-4:1998

EUROPEAN STANDARD

EN 54-4:1997/AC

NORME EUROPÉENNE

February 1999

EUROPÄISCHE NORM

Février 1999

Februar 1999

English version
Version Française
Deutsche Fassung

Fire detection and fire alarm systems - Part 4: Power supply equipment

**Systèmes de détection et d'alarme incendie
- Partie 4: Equipement d'alimentation
électrique**

**Brandmeldeanlagen - Teil 4:
Energieversorgungseinrichtungen**

This corrigendum becomes effective on 25 February 1999 for incorporation in the official English version of the EN.

Ce corrigendum prendra effet le 25 février 1999 pour incorporation dans la version anglaise officielle de l'EN.

Die Berichtigung tritt am 25. Februar 1999 zur Einarbeitung die offizielle Englische Fassung der EN in Kraft.



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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 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).

EN 54 is published in a series of parts. 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.

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 April 1998, and conflicting national standards shall be withdrawn at the latest by April 1999. In addition, a further 36 months shall be allowed for certification purposes for equipment conforming to the national standard.

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 is drafted on the basis of functions which are to be provided on all power supply equipments. The power supply equipment may have its own cabinet, or may be housed with other equipment of the fire detection and fire alarm system, such as the control and indicating equipment of EN 54-2. A fire detection and fire alarm system may use more than one power supply equipment.

1 Scope

This European Standard specifies requirements, methods of test and performance criteria for power supply equipment (see component L of figure 1 of EN 54-1) of fire detection and fire alarm systems installed in buildings.

NOTE: Power supply equipment with special characteristics, developed for particular applications, is not necessarily the subject of this standard and may require further tests.

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.

EN 54	Fire detection and fire alarm systems
	Part 1:1996 Introduction
	Part 2:1997 Control and indicating equipment.
ENV 50142:1994	Electromagnetic compatibility - Basic immunity standard - Surge immunity tests
IEC 68	Basic environmental testing procedures
	Part 1:1988: General and guidance
	Part 2: Tests
68-2-1:1990	Test A: Cold
68-2-3:1969+	A1:1984 Test Ca: Damp heat, steady state
68-2-6:1982+	A1:1983+A2:1985: Test Fc and guidance; Vibration, sinusoidal
68-2-47:1982:	Specification for mounting of components, equipment and other articles for dynamic tests
IEC 529:1989:	Classification of degrees of protection provided by enclosures

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