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Larmsystem – Del 4: Elektromagnetisk kompatibilitet (EMC) – Produktfamiljstandard: Immunitetsfordringar på utrustning för brand-, inbrotts-, överfalls- och trygghetslarmsystem och för system för tv-övervakning och passerkontroll

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*

Som svensk standard gäller europastandarden EN 50130-4:2011. Den svenska standarden innehåller den officiella engelska språkversionen av EN 50130-4:2011.

Nationellt förord

Tidigare fastställd svensk standard SS-EN 50130-4, utgåva 1, 1996, SS-EN 50130-4/A1, utgåva 1, 1998, SS-EN 50130-4/A2, utgåva 1, 2003 och SS-EN 50130-4/A2 C1, utgåva 1, 2003 gäller ej fr o m 2014-06-13.

ICS 13.320; 29.020

Denna standard är fastställd av SEK Svensk Elstandard,
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Det finns många fördelar med att ha gemensamma tekniska regler för bl a säkerhet, prestanda, dokumentation, utförande och skötsel av elprodukter, elanläggningar och metoder. Genom att utforma sådana standarder blir säkerhetskraven tydliga och utvecklingskostnaderna rimliga samtidigt som marknadens acceptans för produkten eller tjänsten ökar.

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English version

**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**

Systèmes d'alarme -
Partie 4: Compatibilité électromagnétique -
Norme de famille de produits: Exigences
relatives à l'immunité des composants des
systèmes d'alarme de détection d'incendie,
contre l'intrusion, contre les hold-up, CCTV,
de contrôle d'accès et d'alarme sociale

Alarmanlagen -
Teil 4: Elektromagnetische Verträglichkeit -
Produktfamilienorm: Anforderungen an die
Störfestigkeit von Anlageteilen für
Brandmeldeanlagen, Einbruch- und
Überfallmeldeanlagen, Video-
Überwachungsanlagen,
Zutrittskontrollanlagen sowie Personen-
Hilferufanlagen

This European Standard was approved by CENELEC on 2011-06-13. CENELEC 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 Central Secretariat or to any CENELEC 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 CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

Management Centre: Avenue Marnix 17, B - 1000 Brussels

Foreword

This European Standard was prepared by the Technical Committee CENELEC TC 79, Alarm systems, in cooperation with CEN Technical Committee TC 72, Fire detection and fire alarm systems.

The text of the draft was submitted to the formal vote and was approved by CENELEC as EN 50130-4 on 2011-06-13.

This document supersedes EN 50130-4:1995 + A1:1998 + A2:2003 + corrigendum March 2003.

The main changes with respect to EN 50130-4:1995 are listed below:

- 1) referenced based standards were updated to the latest versions;
- 2) significant changes were made to the test methods and/or requirements for Clauses 8, 9, 10, 11 and to a lesser degree Clause 13;
- 3) the title was corrected to match the scope of the document.

This revision was prepared to bring the procedures up to date with current technical developments, taking account of changes in the basic standards and the experience gained in the use of the standard.

The following dates were fixed:

- latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2012-06-13
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2014-06-13

This European Standard is part of the EN 50130 series of standards. This series is intended to give the requirements applicable to alarm systems in general (e.g. the EMC immunity requirements, in this case). The following associated series of European standards are intended to give the other requirements (e.g. performance requirements), which are applicable to the specific types of alarm systems:

- EN 50131 Alarm systems – Intrusion and hold-up systems;
- EN 50132 Alarm systems – CCTV surveillance systems for use in security applications;
- EN 50133 Alarm systems – Access control systems for use in security applications;
- EN 50134 Alarm systems – Social alarm systems;
- EN 50136 Alarm systems – Alarm transmission systems and equipment;
- CLC/TS 50398 Alarm systems – Combined and integrated alarm systems – General requirements;
- EN 54 Fire detection and fire alarm systems.

This European Standard has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association and covers essential requirements of EC Directive 2004/108/EC. See Annex ZZ.

Contents

1	Scope	5
2	Normative references	6
3	Terms, definitions and abbreviations	6
3.1	Terms and definitions	6
3.2	Abbreviations	7
4	Application of the tests	8
5	Conditions during testing	8
5.1	Configuration	8
5.2	Environmental conditions	8
5.3	Operating conditions	8
6	Functional test	9
7	Mains supply voltage variations	9
7.1	Object of the test	9
7.2	Principle	9
7.3	Test procedure	9
7.4	Criteria for compliance	10
8	Mains supply voltage dips and short interruptions	10
8.1	Object of the test	10
8.2	Principle	10
8.3	Test procedure	10
8.4	Criteria for compliance	11
9	Electrostatic discharge	11
9.1	Object of the test	11
9.2	Principle	11
9.3	Test procedure	12
9.4	Criteria for compliance	13
10	Radiated electromagnetic fields	13
10.1	Object of the test	13
10.2	Principle	13
10.3	Test procedure	13
10.4	Criteria for compliance	15
11	Conducted disturbances induced by electromagnetic fields	16
11.1	Object of the test	16
11.2	Principle	16
11.3	Test procedure	16
11.4	Criteria for compliance	17

12 Fast transient bursts	18
12.1 Object of the test.....	18
12.2 Principle.....	18
12.3 Test procedures.....	18
12.4 Criteria for compliance.....	19
13 Slow high energy voltage surge	19
13.1 Object of the test.....	19
13.2 Principle.....	19
13.3 Test procedures.....	20
13.4 Criteria for compliance.....	22
14 Conducted, common mode disturbances from 0 Hz to 150 kHz	22
Annex ZZ (informative) Coverage of Essential Requirements of EC Directives	23
Bibliography	24

Figures

Figure 1 – Forms of the modulation types relative to the continuous wave.....	15
Figure 2 – Coupling method 1, if CDN is not applicable.....	21
Figure 3 – Typical arrangement for coupling onto screened signal lines.....	21

Tables

Table 1 – Mains supply voltage variations – Conditioning.....	10
Table 2 – Mains supply voltage reductions – Conditioning.....	11
Table 3 – Electrostatic discharge – Conditioning.....	12
Table 4 – Radiated electromagnetic fields – Conditioning.....	14
Table 5 – Conducted disturbances induced by electromagnetic fields – Conditioning.....	17
Table 6 – Fast transient bursts – Conditioning.....	19
Table 7 – Slow high energy voltage surge – Conditioning.....	22

1 Scope

This EMC product-family standard, for immunity requirements, applies to the components of the following alarm systems, intended for use in and around buildings in residential, commercial, light industrial and industrial environments:

- access control systems, for security applications;
- alarm transmission systems ¹⁾;
- CCTV systems, for security applications;
- fire detection and fire alarm systems;
- hold-up alarm systems;
- intruder alarm systems;
- social alarm systems;

The tests and severities to be used are the same for indoor and outdoor applications of fixed, movable and portable equipment.

The levels do not cover extreme cases, which may occur in any location, but with an extremely low probability of occurrence, or in special locations close to powerful emitters (e.g. radar transmitters).

Equipment within the scope of this standard should be designed in order to operate satisfactorily in the environmental electromagnetic conditions of residential, commercial, light industrial and industrial environments. This implies particularly that it should be able to operate correctly within the conditions fixed by the electromagnetic compatibility levels for the various disturbances on the low voltage public supply system as defined by EN 61000-2-2. The immunity tests in this standard only concern the most critical disturbance phenomena.

For equipment using radio signalling, mains signalling or with connections to the public telephone system, additional requirements, from other standards specific to these signalling media, might apply.

This standard does not specify basic safety requirements, such as protection against electrical shocks, unsafe operation, insulation coordination and related dielectric tests.

This standard does not cover EMC emission requirements. These are covered by other appropriate standards.

1) Apart from equipment which is part of a public communication network.

2 Normative references

The following referenced documents are indispensable for the application 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.

EN 60068-1:1994	Environmental testing – Part 1: General and guidance (IEC 60068-1:1988 + Corr. Oct. 1988 + A1:1992)
EN 61000-4-2:2009	Electromagnetic compatibility (EMC) – Part 4-2: Testing and measurement techniques – Electrostatic discharge immunity test (IEC 61000-4-2:2008)
EN 61000-4-3:2006 + A1:2008 + A2:2010	Electromagnetic compatibility (EMC) – Part 4-3: Testing and measurement techniques – Radiated, radio-frequency, electromagnetic field immunity test (IEC 61000-4-3:2006 + A1:2007 + A2:2010)
EN 61000-4-4:2004 + A1:2010	Electromagnetic compatibility (EMC) – Part 4-4: Testing and measurement techniques – Electrical fast transient/burst immunity test (IEC 61000-4-4:2004 + A1:2010)
EN 61000-4-5:2006	Electromagnetic compatibility (EMC) – Part 4-5: Testing and measurement techniques – Surge immunity test (IEC 61000-4-5:2005)
EN 61000-4-6:2009	Electromagnetic compatibility (EMC) – Part 4-6: Testing and measurement techniques – Immunity to conducted disturbances, induced by radio-frequency fields (IEC 61000-4-6:2008)
EN 61000-4-11:2004	Electromagnetic compatibility (EMC) – Part 4-11: Testing and measurement techniques – Voltage dips, short interruptions and voltage variations immunity tests (IEC 61000-4-11:2004)
EN 61000-4-20:2010	Electromagnetic compatibility (EMC) – Part 4-20: Testing and measurement techniques – Emission and immunity testing in transverse electromagnetic (TEM) waveguides (IEC 61000-4-20:2010)
ETSI EN 301 489 (series)	Electromagnetic compatibility and radio spectrum matters (ERM); Electromagnetic compatibility (EMC) standard for radio equipment and services