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## **Larmsystem – Passerkontrollsyste m – Del 11-1: Fordringar på system och utrustning**

*Alarm and electronic security systems –  
Part 11-1: Electronic access control systems –  
System and components requirements*

Som svensk standard gäller europastandarden EN 60839-11-1:2013. Den svenska standarden innehåller den officiella engelska språkversionen av EN 60839-11-1:2013.

### **Nationellt förord**

Europastandarden EN 60839-11-1:2013<sup>\*)</sup>

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **IEC 60839-11-1, First edition, 2013 - Alarm and electronic security systems - Part 11-1: Electronic access control systems - System and components requirements**

utarbetad inom International Electrotechnical Commission, IEC.

Tidigare fastställd svensk standard SS-EN 50133-1, utgåva 1, 1997, SS-EN 50133-1 C1, utgåva 1, 1998 och SS-EN 50133-1/A1, utgåva 1, 2003, gäller ej fr o m 2016-06-11.

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<sup>\*)</sup> Corrigendum November 2013 till EN 60839-11-1:2013 är inarbetat i standarden.

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English version

**Alarm and electronic security systems -  
Part 11-1: Electronic access control systems -  
System and components requirements  
(IEC 60839-11-1:2013)**

Systèmes d'alarme et de sécurité  
électroniques -  
Partie 11-1: Systèmes de contrôle d'accès  
électronique - Exigences système et  
exigences concernant les composants  
(CEI 60839-11-1:2013)

Alarmanlagen -  
Teil 11-1: Elektronische  
Zutrittskontrollanlagen - Anforderungen an  
Anlagen und Geräte  
(IEC 60839-11-1:2013)

This European Standard was approved by CENELEC on 2013-06-11. 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 CEN-CENELEC Management Centre 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 CEN-CENELEC Management Centre has the same status as the official versions.

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**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

The text of document 79/410/FDIS, future edition 1 of IEC 60839-11-1, prepared by IEC TC 79 "Alarm and electronic security systems" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60839-11-1:2013.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2014-03-11
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2016-06-11

This document supersedes EN 50133-1:1996, corrigendum April 1998 and A1:2003.

The contents of the corrigendum of November 2013 have been included in this copy.

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

## Endorsement notice

The text of the International Standard IEC 60839-11-1:2013 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

- |               |                                  |
|---------------|----------------------------------|
| IEC 60950-1   | NOTE Harmonised as EN 60950-1.   |
| IEC 61000-6-1 | NOTE Harmonised as EN 61000-6-1. |
| IEC 61000-6-3 | NOTE Harmonised as EN 61000-6-3. |

## Annex ZA

(normative)

### Normative references to international publications with their corresponding European publications

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.

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60068-1	-	Environmental testing - Part 1: General and guidance	EN 60068-1	-
IEC 60529	-	Degrees of protection provided by enclosures - (IP Code)	-	-
IEC 62262	-	Degrees of protection provided by enclosures for electrical equipment against external mechanical impacts (IK code)	EN 62262	-
IEC 62599-1	-	Alarm systems - Part 1: Environmental test methods	-	-
IEC 62599-2	-	Alarm systems - Part 2: Electromagnetic compatibility - Immunity requirements for components of fire and security alarm systems	-	-
IEC 62642-1	-	Alarm systems - Intrusion and hold-up systems - Part 1: System requirements	-	-
IEC 62642-6	-	Alarm systems - Intrusion and hold-up systems - Part 2-6: Intrusion detectors - Opening contacts (magnetic)	-	-

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## INTRODUCTION

This standard is part of the IEC 60839 series, written to include the following parts:

- Part 11-1 Electronic access control systems – System and components requirements
- Part 11-2 Electronic access control systems – Application guidelines

This part of IEC 60839 describes the general requirements for functionalities of electronic access control systems (EACS) for use in security applications. The design, planning, installation, operation, and maintenance are part of the application guidelines in IEC 60839-11-21. The risk analysis is not part of this standard and the risk levels are for informational purposes only.

An electronic access control system consists of one or more components that when interconnected meet the functionality criteria stated in this standard.

This standard defines different security grades and the functionalities of the access control system associated with each of these grades. It includes also the minimum environmental and EMC compliance criteria as applicable for components of the electronic access control system in every grade.

When a part of an electronic access control system (e.g. access point interface) forms a part of an alarm system (intrusion, hold-up, VSS [Video Surveillance Systems], etc.) that part shall also fulfil the relevant requirements of the applicable IEC standards. Functions additional to the mandatory functions specified in this standard may be included in the electronic access control system providing they do not prevent the requirements of this standard from being met.

This International standard also applies to access control systems sharing means of recognition, detection, triggering, interconnection, control, communication, alert signalling and power supplies with other applications. The operation of an access control system should not be adversely influenced by other applications.

An electronic access control system may consist of any number of access points. This standard addresses the security grade classification for each access point.

Compliance of the individual component parts of the electronic access control system can be assessed to this standard provided all relevant requirements are applied.

The specific requirements for access point actuators, such as electric door openers, electronic locks, turnstiles and barriers are included in other standards.

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<sup>1</sup> Under consideration.

## ALARM AND ELECTRONIC SECURITY SYSTEMS –

### Part 11-1: Electronic access control systems – System and components requirements

#### 1 Scope

This part of IEC 60839 specifies the minimum functionality, performance requirements and test methods for electronic access control systems and components used for physical access (entry and exit) in and around buildings and protected areas. It does not include requirements for access point actuators and sensors.

This standard is not intended to cover requirements for off premise transmission associated with intrusion or hold up alarm signals.

This standard applies to electronic access control systems and components intended to be used in security applications for the granting of access and includes requirements for logging, identification and control of information.

The standard comprises the following:

- A conceptual model and system architecture.
- Criteria covering:
  - classification based on performance functionalities and capabilities;
  - access point interface requirements;
  - indication and annunciation requirements (display, alert, logging);
  - duress signalling and overriding;
  - recognition requirements;
  - system self-protection requirements;
  - communication between the component parts of the electronic access control system and with other systems.
- Requirements for environmental conditions (indoor/outdoor use) and electromagnetic compatibility.
- Test methods.

#### 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.

IEC 60068-1, *Environmental testing – Part 1: General and guidance*

IEC 60529, *Degrees of protection provided by enclosures (IP Code)*

IEC 62262, *Degrees of protection provided by enclosures for electrical equipment against external mechanical impacts (IK code)*

IEC 62599-1, *Alarm systems – Part 1: Environmental test methods*

IEC 62599-2, *Alarm systems – Part 2: Electromagnetic compatibility –Immunity requirements for components of fire and security alarm systems*

IEC 62642-1, *Alarm systems – Intrusion and hold-up systems – Part 1: System requirements*

IEC 62642-6, *Alarm systems – Intrusion and hold-up systems – Part 6: Power supplies*