

Alarm systems - Intrusion and hold-up systems - Part
2-8: Intrusion detectors - Shock detectors

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 50131-2-8:2016 sisaldab Euroopa standardi EN 50131-2-8:2016 ingliskeelset teksti.	This Estonian standard EVS-EN 50131-2-8:2016 consists of the English text of the European standard EN 50131-2-8:2016.
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English Version

**Alarm systems - Intrusion and hold-up systems - Part 2-8:
Intrusion detectors - Shock detectors**

Systèmes d'alarme - Systèmes d'alarme contre l'intrusion et les hold-up - Partie 2-8: Détecteurs d'intrusion - Détecteurs de chocs

Alarmanlagen - Einbruchmeldeanlagen - Teil 2-8: Anforderungen an Erschütterungsmelder

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

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European foreword

This document (EN 50131-2-8:2016) has been prepared by Technical Committee CLC/TC 79 "Alarm systems", the secretariat of which is held by BSI.

The following dates are fixed:

latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2017-10-03
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latest date by which the national standards conflicting with this document have to be withdrawn	(dow)	2019-10-03
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This document supersedes CLC/TS 50131-2-8:2012.

EN 50131-2-8:2016 includes the following significant technical changes with respect to CLC/TS 50131-2-8:2012:

- Changed state from Technical Specification into European Standard;
- Clarified wording wherever necessary to avoid misunderstanding and to optimize for reading;
- Refined the definition of "shock";
- Refined immunity requirements in 4.4.2, 4.4.3, 4.4.4, 4.4.5 and 4.4.6 and their corresponding test sub-clauses (6.7.2, etc.);
- Refined the detection of masking requirements in 4.6.5 and the corresponding test sub-clause 6.8.5;
- Refined the electrical requirements in 4.7 and subsequent sub-clauses and updated the corresponding test sub-clauses (6.9, etc.);
- Rephrased the Basic Detection Test Method in 6.3.2 and the Verification of detection performance in 6.4.2 and subsequent sub-clauses.

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.

Introduction

This document is a European Standard for shock detectors used as part of intrusion alarm systems installed in buildings. It includes four security grades and four environmental classes.

The purpose of a shock detector is to detect the shock or series of shocks due to a forcible attack through a physical barrier (for example doors or windows).

The shock detector has to provide the necessary range of signals or messages to be used by the rest of the intrusion and hold-up alarm system.

The number and scope of these signals or messages will be more comprehensive for systems that are specified at the higher Grades.

This European Standard is only concerned with the requirements and tests for the shock detectors. Other types of detectors are covered by other documents identified as in the EN 50131-2 series.

1 Scope

This European Standard is for Shock Detectors installed in buildings to detect the shock or series of shocks due to a forcible attack through a physical barrier (for example doors or windows).

It specifies four security Grades 1-4 (in accordance with EN 50131-1), specific or non-specific wired or wire-free detectors and uses environmental Classes I-IV (in accordance with EN 50130-5).

This European Standard does not include requirements for detectors intended to detect penetration attacks on safes and vaults for example by drilling, cutting or thermal lance.

This European Standard does not include requirements for shock detectors intended for use outdoors.

A detector needs to fulfil all the requirements of the specified grade.

Functions additional to the mandatory functions specified in this European Standard may be included in the detector, providing they do not adversely influence the correct operation of the mandatory functions.

This European Standard does not deal with requirements for compliance with regulatory directives, such as EMC-directive, low-voltage directive, etc., except that it specifies the equipment operating conditions for EMC-susceptibility testing as required by EN 50130-4.

This European Standard does not apply to system interconnections.

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.

EN 50130-4, *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*

EN 50130-5, *Alarm systems — Part 5: Environmental test methods*

EN 50131-1, *Alarm systems — Intrusion and hold-up systems — Part 1: System requirements*

EN 50131-6, *Alarm systems — Intrusion and hold-up systems — Part 6: Power supplies*

EN 60068-2-75:2014, *Environmental testing — Part 2-75: Tests — Test Eh: Hammer tests (IEC 60068-2-75:2014)*

3 Terms, definitions and abbreviations

For the purposes of this document, the terms, definitions and abbreviations given in EN 50131-1 and the following apply.

3.1 Terms and definitions

3.1.1

shock

sudden transient acceleration e.g. caused by a mechanical impact as a result of a forcible attack through a physical barrier

3.1.2

incorrect operation

physical condition that causes an inappropriate signal or message from a shock detector