Irish Standard
I.S. EN 1300:2018

Secure storage units - Classification for high security locks according to their resistance to unauthorized opening

I.S. EN 1300:2018

Incorporating amendments/corrigenda/National Annexes issued since publication:

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.

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National Foreword

I.S. EN 1300:2018 is the adopted Irish version of the European Document EN 1300:2018, Secure storage units - Classification for high security locks according to their resistance to unauthorized opening

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 1300

December 2018

ICS 13.310

Supersedes EN 1300:2013

English Version

Secure storage units - Classification for high security locks according to their resistance to unauthorized opening

Unités de stockage en lieu sûr - Classification des serrures haute sécurité en fonction de leur résistance à l'effraction

Wertbehältnisse - Klassifizierung von Hochsicherheitsschlössern nach ihrem Widerstandswert gegen unbefugtes Öffnen

This European Standard was approved by CEN on 3 September 2018.

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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 CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.

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Ref. No. EN 1300:2018 E

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European foreword

This document (EN 1300:2018) has been prepared by Technical Committee CEN/TC 263 “Secure storage of cash, valuables and data media”, 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 June 2019, and conflicting national standards shall be withdrawn at the latest by June 2019.

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

This document supersedes EN 1300:2013.

In comparison with EN 1300:2013, the following changes have been made:

General changes:

— references have been updated in Clause 2;

— definitions in Clause 3 have been added (locking element, unsecured condition, firmware, application software and trusted device). Other definitions have been defined more precisely;

— Clarifications in 5.1.2.4, 5.1.5.1, 5.1.5.3, 5.1.6.7, 5.1.8.2.3, 5.2.6.3, Clause 6, 8.2.5.8, 8.2.6.1, Clause 10 and Figure 1, Annex D.

Technical changes for any type of lock:

— the requirements for HSL with more than one mode of authentication have been added in 5.2.1

— the shock test has changed (see 8.2.6.2);

— the immersion test is changed and now done with salt water. In addition, it is now done with the input unit sunk in water and in a second new test with the input unit outside of the water (see 8.2.6.3);

— Cycling test has been updated (see 8.3.1.1);

— The manipulation test has been renewed. A third basic value has been added (see 8.2.2.5) and the power supply test is now required for electronic locks (5.1.6.8 and 8.2.5);

— The test report shall initiate the name and version of this standard (9.2);

— The manufacturers declaration in Annex C has been updated.

Technical changes for mechanical key operated locks:

— The requirements for the production of mechanical key operated HSL have been raised (see 5.1.4.1).

Technical changes for electronic locks:

— New requirements for electronic HSL have been added for instance in 5.1.6.1, 5.1.6.2, 5.1.6.3, 5.1.6.8, 5.2.5.4, 5.2.6.1, 5.2.6.3, Table 2. 8.2.5.5, 8.2.5.6, 8.2.6.4, and Annex A. This includes a new EMC test with higher frequency.

— Requirements for one-time-code locks have been added in 5.1.6.9 and Annex A

— The requirements of class A locks of the type “electronic token” and “distributed system” have been raised to the requirements of class B (see 5.1.7.4, 5.1.8.1.6, 5.1.8.1.8, 5.1.8.1.9.1 and 5.1.8.2.2)

— Requirements for the viewing protection of distributed systems with remote input units have been added.

— Requirements for firmware and firmware updates have been added in 5.1.9, Table 1 and in Annex F (“firmware declaration”).

— Design requirements for a certain type of electronic lock have been added in new Annex E.

This document reflects the market demand to include requirements for distributed systems and electronic locks and responds to the state of the art requirements when it was written down.

This document has been prepared by the Working Group 3 of CEN/TC 263 as one of a series of standards for secure storage of cash valuable and data media. Other standards in the series are, among others:

— EN 1047-1, *Secure storage units — Classification and methods of test for resistance to fire — Part 1: Data cabinets and diskette inserts*

— EN 1047-2, *Secure storage units — Classification and methods of test for resistance to fire — Part 2: Data rooms and data container*

— EN 1143-1, *Secure storage units — Requirements, classification and methods of test for resistance to burglary — Part 1: Safes, ATM safes, strongroom doors and strongrooms*

— EN 1143-2, *Secure storage units — Requirements, classification and methods of test for resistance to burglary — Part 2: Deposit systems*

— EN 14450, *Secure storage units — Requirements, classification and methods of test for resistance to burglary — Secure safe cabinets*

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

Introduction

This document also specifies requirements for high security electronic locks (HSL) which are controlled remotely. Regarding distributed systems, this standard responds to the state of the art requirements when it was written down. It is mandatory that the standard has to be revised with a frequency of 3 years as the research in the area of cryptography and relevant attacks evolve with high speed as well as the referenced standards.

1 Scope

This document specifies requirements for high security locks (HSL) for reliability, resistance to burglary and unauthorized opening with methods of testing. It also provides a scheme for classifying HSL in accordance with their assessed resistance to burglary and unauthorized opening.

It applies to mechanical and electronic HSL. The following features can be included as optional subjects but they are not mandatory:

a) recognized code for preventing code altering and/or enabling/disabling parallel codes;

b) recognized code for disabling time set up;

c) integration of alarm components or functions;

d) remote control duties;

e) resistance to attacks with acids;

f) resistance to X-rays;

g) resistance to explosives;

h) time functions.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 1143-1, *Secure storage units - Requirements, classification and methods of test for resistance to burglary - Part 1: Safes, ATM safes, strongroom doors and strongrooms*

EN 1143-2, *Secure storage units - Requirements, classification and methods of tests for resistance to burglary - Part 2: Deposit systems*

EN 60068-2-1, *Environmental testing - Part 2-1: Tests - Test A: Cold (IEC 60068-2-1)*

EN 60068-2-2, *Environmental testing - Part 2-2: Tests - Test B: Dry heat (IEC 60068-2-2)*

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

EN 61000-4-2, *Electromagnetic compatibility (EMC) - Part 4-2: Testing and measurement techniques - Electrostatic discharge immunity test (IEC 61000-4-2)*

EN 61000-4-3, *Electromagnetic compatibility (EMC) - Part 4-3: Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test (IEC 61000-4-3)*

EN 61000-4-5, *Electromagnetic compatibility (EMC) - Part 4-5: Testing and measurement techniques - Surge immunity test (IEC 61000-4-5)*