

SLOVENSKI STANDARD SIST EN 1158:2000/A1:2003

01-oktober-2003

Stavbno okovje - Naprave za usklajeno zapiranje vrat - Zahteve in preskusne metode

Building hardware - Door cordinator devices - Requirements and test methods

Schlösser und Baubeschläge - Schließfolgeregler - Anforderungen und Prüfverfahren

Quicaillerie pour le bâtiment - Dispositifs de sélection des vantaux - Prescriptions et méthodes d'essai (standards.iteh.ai)

Ta slovenski standard je istoveten z: SIST EN 1158-1997/A1:2002

0a78596b5b71/sist-en-1158-2000-a1-2003

ICS:

91.190 Stavbna oprema Building accessories

SIST EN 1158:2000/A1:2003 en,fr,de

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EUROPEAN STANDARD NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 1158:1997/A1

December 2002

ICS 91.190

English version

Building hardware - Door cordinator devices - Requirements and test methods

Quicaillerie pour le bâtiment - Dispositifs de sélection des vantaux - Prescriptions et méthodes d'essai

Schlösser und Baubeschläge - Schließfolgeregler - Anforderungen und Prüfverfahren

This amendment A1 modifies the European Standard EN 1158:1997; it was approved by CEN on 7 November 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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EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

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

EN 1158:1997/A1:2002 (E)

Foreword

This document (EN 1158:1997/A1:2002) has been prepared by Technical Committee CEN/TC 33 "Doors, windows, shutters, building hardware and curtain walling", the secretariat of which is held by AFNOR.

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 2003, and conflicting national standards shall be withdrawn at the latest by September 2004.

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.

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Foreword

Insert the following new third paragraph: "This European Standard 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 89/106/EEC".

⇒ Insert the following new fourth paragraph:

"For relationship with EU directive 89/106/EEC, see informative annex ZA which is an integral part of this document".

 \Rightarrow Insert the following new fifth paragraph: "Wherever reference is made to classes, they are considered to be technical classes and not classes according to Article 3(2) of the Construction Products Directive (89/106/EEC)."

Delete fourth and fifth paragraphs

Contents

⇒ Insert: 9 – Evaluation of conformity;

 \Rightarrow Insert: Annex ZA (informative) - Clauses of this European Standard addressing the provisions of the EU Construction Products Directive (89/106/EEC).

⇒ Insert: Bibliography

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1 Scope

Replace first sentence of first paragraph:

"This European standard specifies requirements for the following door coordinator devices for use on double leaf swing doors:

- separately mounted door coordinator devices;
- coordinator mechanisms incorporated in door closers;
- coordinator mechanisms incorporated in door closers with electrically powered hold-open devices."
- ⇒ Insert the following new paragraph: "Door closing devices are covered by EN 1154".
- ⇒ Insert the following new paragraph: "Electrically powered hold-open devices are covered by EN 1155".

2 Normative references

Replace "prEN 1155" with "EN 1155".

Replace "prEN 1670" with "EN 1670".

Replace "prEN 1634" with "EN 1634-1 Fire resistance tests for door and shutter assemblies - Part 1: Fire doors and shutters."

 \Rightarrow Insert "EN 1634-3 Fire resistance tests for door and shutter assemblies - Part 3: Smoke control doors and shutters ".

3 Terms and definitions

Replace first sentence with: "For the purposes of this European Standard, the terms and definitions listed in EN 1154 apply together with the following:"

- **3.1.1** Delete "annex B,".
- **3.1.2** Delete "annex B,".
- 3.1.3 Delete "annex B,".
- **3.1.4** Delete "annex B,".

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3.2 Delete.

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- 3.3 Delete.
- 3.4 Delete.
- 3.5 Delete.
- 3.6 Delete "annex B" and renumber as 3.2.
- **3.7** Renumber as **3.3**.
- **3.8** Renumber as **3.4**.
- **3.9** Renumber as **3.5.**
- 3.10 Renumber as 3.6.
- **3.11** Renumber as **3.7**.
- 3.12 Renumber as 3.8.
- **3.13** Delete.
- 3.14 Renumber as 3.9.
- ⇒ Insert the following new definition:
- "3.10 Minimum waiting position.

smallest angular position at which an active leaf can be held, to allow the inactive leaf to close first."

4 Classification

4.1 Replace heading with: "Coding system"

4.3 Replace heading with: "Durability (second digit)".

Replace existing text with: "Two test durations are identified for door coordinator devices manufactured to this European Standard:

- grade 8: 500 000 test cycles for door coordinator devices incorporated in, or for use in conjunction with, automatic swing door operators (see 5.2.5c);
- grade 5: 50 000 test cycles for all other door coordinator devices (see 5.2.5a), and also for door coordinator devices having parts moving in conjunction with the operation of the active leaf (see 5.2.5b)."
- 4.4 Replace heading with: "4.4 Door coordinator size (third digit)".

Replace first paragraph with: "Five door coordinator sizes and related recommended door leaf widths are identified according to Table 1 of this European Standard."

Delete the example.

4.5 Replace the heading with: "Suitability for use on fire/smoke doors (fourth digit)".

First paragraph: replace "fire resistance" with "suitability for fire/smoke compartmentation doors".

Replace final paragraph with: "Annex A indicates additional requirements for door coordinator devices manufactured to grade 1."

A indicates additional requirements for door coordinator devices SIST EN 1158:2000/A1:2003

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- **4.7** Replace "prEN 1670" with "EN046700.6b5b71/sist-en-1158-2000-a1-2003
- ⇒ Insert the following new subclause between 4.7 and Table 1:
- **"4.8** Example of classification.

The following marking denotes a door coordinator with a category of use – grade 3, with durability grade 8, suitable for use in conjunction with automatic swing door operators, with a door closer power size range from size 4 to size 6, not suitable for use on fire/smoke door assemblies, with safety grade 1 and with no defined corrosion resistance."

3	8	6	0	1	0
		4			

Table 1: replace with the following table

Table 1

Door Coordinator size	Recommended maximum door leaf width	Test door leaf mass	Maximum distance between hinge centre lines	Maximum test door friction	
	mm	kg	mm	Nm	
3	950	60	1900	0,3	
4	1100	80	2200	0,4	
5	1250	100	2500	0,5	
6	1400	120	2800	0,6	
7	1600	160	3200	0,8	
NOTE This table relates to doors with equal leaves only.					

5 Requirements

- **5.1** Replace heading with: "Product information and design".
- 5.2 Replace heading with: "Performance". TANDARD PREVIEW
- 5.2.1 Insert the word "relevant" before "performance requirements..."
- **5.2.5** Paragraph b): redesignate as c). <u>SIST EN 1158:2000/A1:2003</u>

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- \Rightarrow insert the following new paragraph b)0a78596b5b71/sist-en-1158-2000-a1-2003
- "b) Grade 5 door coordinator devices having parts moving in conjunction with the operation of the active leaf: when tested in accordance with 7.2.7 these devices shall achieve 25 000 test cycles with both leaves opened solely by operating the inactive leaf, and 25 000 test cycles with both leaves operated independently to 90°, and 450 000 test cycles only operating the active leaf to 90°."
- **5.2.7.1** Replace 'prEN 1670' with 'EN 1670'.
- \Rightarrow insert the following new subclause :
- **"5.2.7.3** The acceptance criteria defined in 5.7 of EN 1670:1998 shall be met for all surfaces of the door coordinator device which are visible when the door coordinator device is fitted in service.'
- **5.2.8** Replace heading with: "Fire/smoke door suitability".

6 Test apparatus

6.3 Amend to read: "A force gauge or comparable device, with an accuracy of 1,5 % of reading or better,".

7 Test methods

7.1.1 Amend tolerances given to read:

	mass expressed in kilograms	(kg)	± 2%
_	length expressed in millimetres	(mm)	± 2%
_	angular position expressed in degrees	(°)	± 2°
_	force expressed in newtons	(N)	± 2%
_	time expressed in seconds	(s)	± 5%
_	temperature expressed in degrees Celsius	(°C)	± 2 °C
_	moment expressed in Newton-metres	(Nm)	± 2%

7.1.2 Second paragraph, amend to read:

⇒ Insert the following new third paragraph: ANDARD PREVIEW

7.2.7.1 Replace "7.2.7.4" with "7.2.7.5 i/catalog/standards/sist/0e7b1544-e71e-4cee-82f5-0a78596b5b71/sist-en-1158-2000-a1-2003

"7.2.7.4 For grade 5 door coordinator devices having parts moving in conjunction with the active leaf, set up the test apparatus to open only the active leaf smoothly to 90° in a time of 2 s to 3 s.

Adjust the regulators of the door closing device such that the active leaf closes smoothly from 90° to fully closed within 5 s to 7 s.

Continue cycling to a total of 500 000 test cycles."

7.2.7.4 Renumber: 7.2.7.5".

Amend paragraph 4 to read: "Ensure that the inactive leaf is always closed before the active

leaf reaches the minimum waiting position."

7.3.6 Replace "prEN 1670" with "EN 1670".

8 Marking

Amend first paragraph to read: "Each door coordinator device and separately supplied accessory manufactured to this European Standard shall be marked with the following:"

Replace the wording of the note with: "The information under e) can be in a coded form".

[&]quot;For door coordinator devices recommended for different door closer power sizes two test samples A shall be used, one with the door closer adjusted to the minimum and one with the door closer adjusted to the maximum power size claimed by the manufacturer. Sample B shall be adjusted to its minimum power size".

[&]quot;For the minimum cases, the door closer shall be adjusted so that its closing moment is as near as possible to the value specified in Table 1, column 4 of EN 1154. For the maximum case, the door closer shall be adjusted so that its closing moment is as near as possible to the value specified in Table 1, column 5 of EN 1154:1996."

[⇒] Insert the following new subclause between subclause 7.2.7.3 and subclause 7.2.7.4:

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Replace second paragraph with: "For accessories, including separately supplied carry bars (where there may be insufficient space to provide the above information required in this clause), only item a) is mandatory."

Add the following new third paragraph: "Accessories claiming compliance with annex A shall be marked with the information a) to e) above. In preferential order the information shall be placed:

- a) on the product itself; or
- b) on label attached to it; or
- c) on the installation instructions; or
- d) on its packaging."
- ⇒ insert note after last paragraph:
- "For CE marking and labelling, see clause ZA.3 of annex ZA".

⇒ Insert the following new clause

9 Evaluation of conformity

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9.1 Initial type test

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Samples, selected in accordance with 7.1.2, representing the series, shall be subjected to the full test sequence of clause 7 and, where relevant, to annex A.

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If necessary, (for example, after component changes or redesigns likely to affect the product performance) this initial type test shall be repeated.

9.2 Factory production control

9.2.1 Documentation

- **9.2.1.1** The manufacturer of coordinator devices to this European Standard shall document, operate and maintain an adequate factory production control system to enable the achievement of the required product characteristics and the effective operation of the production control system to be checked.
- **9.2.1.2** The manufacturer shall draw up and keep up-to-date documents defining the factory production control which he applies. The manufacturer's documentation and procedures shall be appropriate to the product and manufacturing process. The factory production control system shall achieve an appropriate level of confidence in the conformity of the product. This involves :
- a) the preparation of documented procedures and instructions relating to factory production control operations;
- b) the effective implementation of these procedures and instructions;
- c) the recording of these procedures and their results;
- the use of these results to correct any deviations, repair the effects of such deviations, treat any resulting instances of non-conformity and, if necessary, revise the factory production control to rectify the cause of nonconformity.

9.2.2 Unit checks during manufacture

The manufacturer shall conduct the following unit checks during manufacture:

- a) check that the components meet the specifications;
- b) check the operation of the device;
- c) check the marking.

9.2.3 Treatment of non conforming products

The manufacturer shall treat non-conforming products as follows:

- a) isolate and identify non-conforming products;
- b) undertake the necessary corrective actions;
- c) repeat tests as appropriate to prove that product meets the specifications.

9.3 Further testing of samples

At intervals of not more than six months, samples taken from finished product stock, selected in accordance with 7.1.2 and representative of the series, shall be subjected to the full test sequence of 7.2.

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