



SLOVENSKI STANDARD
SIST EN 60934:1996/A2:1997
01-november-1997

Circuit-breakers for equipment (CBE) - Amendment A2 (IEC 60934:1993/A2:1997)

Circuit-breakers for equipment (CBE)

Geräteschutzschalter (GS)

Disjoncteurs pour équipement (DPE)

Ta slovenski standard je istoveten z: EN 60934:1994/A2:1997

[SIST EN 60934:1996/A2:1997](https://standards.iteh.ai/catalog/standards/sist/f0a4f092-3326-4724-8eb2-e6cc9fdaf6ed/sist-en-60934-1996-a2-1997)
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ICS:

29.120.50	Xæ[çæ ^ Á Ái ~ * æ { ^ áq \ [ç} æ Á æ ææ	Fuses and other overcurrent protection devices
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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 60934/A2

April 1997

UDC 621.316.57:614.8
ICS 29.120.40 29.120.60

Descriptors: Household accessory, low-voltage equipment, circuit-breaker, automatic switching device, characteristic, test

English version

Circuit-breakers for equipment (CBE)
(IEC 60934:1993/A2:1997)

Disjoncteurs pour équipement (DPE)
(CEI 60934:1993/A2:1997)

Geräteschutzschalter (CBE)
(IEC 60934:1993/A2:1997)



REPUBLIKA SLOVENIJA
MINISTRSTVO ZA ZNANOST IN TEHNOLOGIJO
Urad RS za standardizacijo in meroslovje
LJUBLJANA
SIST. EN 60934/A2
PREVZET PO METODI RAZGLASITVE

<https://standards.iteh.ai/catalog/standards/sist/f0a4f092-3326-4724-11-52-e6cc9fda1f6d/sist-en-60934-1996-a2-1997>

This amendment A2 modifies the European Standard EN 60934:1994; it was approved by CENELEC on 1997-03-11. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this amendment 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 amendment 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, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CENELEC

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

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Foreword

The text of document 23E/265/FDIS, future amendment 2 to IEC 60934:1993, prepared by SC 23E, Circuit-breakers and similar equipment for household use, of IEC TC 23, Electrical accessories, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as amendment A2 to EN 60934:1994 on 1997-03-11.

The following dates were fixed:

- latest date by which the amendment has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 1997-12-01
- latest date by which the national standards conflicting with the amendment have to be withdrawn (dow) 1997-12-01

For products which have complied with EN 60934:1994 before 1997-12-01, as shown by the manufacturer or by a certification body, this previous standard may continue to apply for production until 2002-12-01.

Annexes designated "normative" are part of the body of the standard.

Annexes designated "informative" are given for information only.

In this standard, annexes A to E, G and ZA are normative and annex F is informative.

Annex ZA has been added by CENELEC.

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Endorsement notice

SIST EN 60934:1996/A2:1997

The text of amendment 2:1997 to the International Standard IEC 60934:1993 was approved by CENELEC as an amendment to the European Standard without any modification.



Annex ZA (normative)**Normative references to international publications
with their corresponding European publications****Addition:**

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61000-4-2	1995	Electromagnetic compatibility (EMC) Part 4: Testing and measurement techniques -- Section 2: Electrostatic discharge immunity test	EN 61000-4-2	1995
IEC 61000-4-3 (mod)	1995	Section 3: Radiated, radio-frequency, electromagnetic field immunity test	EN 61000-4-3	1996
IEC 61000-4-4	1995	Section 4: Electrical fast transient/burst immunity test	EN 61000-4-4	1995
IEC 61000-4-5	1995	Section 5: Surge immunity test	EN 61000-4-5	1995

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NORME
INTERNATIONALE
INTERNATIONAL
STANDARD

CEI
IEC
60934

1993

AMENDEMENT 2
AMENDMENT 2

1997-03

Amendement 2

Disjoncteurs pour équipement (DPE)

Amendment 2

STANDARD PREVIEW
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Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

CODE PRIX
PRICE CODE

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*Pour prix, voir catalogue en vigueur
For price, see current catalogue*

FOREWORD

This amendment has been prepared by subcommittee 23E: Circuit-breakers and similar equipment for household use, of IEC technical committee 23: Electrical accessories.

The text of this amendment is based on the following documents:

FDIS	Report on voting
23E/265/FDIS	23E/289/RVD

Full information on the voting for the approval of this standard can be found in the report of voting indicated in the above table.

Page 7

2 Normative references

Add, to the existing list, the titles of the following standards:

IEC 61000-4-2: 1995, *Electromagnetic compatibility (EMC) – Part 4: Testing and measurement techniques – Section 2: Electrostatic discharge immunity test – Basic EMC Publication*

IEC 61000-4-3: 1995, *Electromagnetic compatibility (EMC) – Part 4: Testing and measurement techniques – Section 3: Radiated, radio-frequency, electromagnetic field immunity test*

IEC 61000-4-4: 1995, *Electromagnetic compatibility (EMC) – Part 4: Testing and measurement techniques – Section 4: Electrical fast transient/burst immunity test – Basic EMC Publication*

IEC 61000-4-5: 1995, *Electromagnetic compatibility (EMC) – Part 4: Testing and measurement techniques – Section 5: Surge immunity test*

Page 137

Add, after annex F, the following new annex:

Annex G (normative)

Electromagnetic behaviour of CBEs

G.1 General

CBEs are designed specifically for being incorporated in equipment. The product standards of the various equipment specify the immunity and emission requirements the equipment has to meet, depending upon the environment where they are designed to operate. The manufacturers of equipment in designing and assembling the relevant components take into account the electromagnetic compatibility (EMC) standards (if any) for the specific equipment or the generic standards of the environment where the equipment will operate. So the EMC conditions to be fulfilled by the components (like CBEs) may differ, depending upon their incorporation in equipment. Therefore, no EMC general requirements are stated for CBEs.

Nevertheless, information shall be made available to equipment manufacturers on the electromagnetic emission and immunity characteristics of CBEs, when relevant, in order to make an appropriate choice for incorporation in the equipment to be protected.

To this purpose this annex gives information on EMC behaviour of CBEs depending on their design, defines the minimum EMC performances required for CBEs and states the additional information on EMC characteristics that the CBE manufacturer shall make available to the equipment manufacturer for the appropriate choice of CBEs.

G.2 Immunity

G.2.1 *CBEs not incorporating electronic circuits*

CBEs not incorporating electronic circuits are not sensitive to electromagnetic disturbances and, therefore, no immunity tests are required*.

The behaviour of CBEs with overvoltage or undervoltage release in case of voltage dips, short interruptions and voltage variations is verified by the tests of 7.5.4 of this standard.

G.2.2 *CBEs incorporating electronic circuits*

- a) CBEs incorporating simple rectifiers alone are not sensitive to electromagnetic disturbances and, therefore, no immunity specifications are necessary*.
- b) For CBEs with releases incorporating electronic circuits other than those of G.2.2 a) the manufacturer shall indicate the performances under the following test conditions:
 - conducted fast transients (bursts), specified in IEC 61000-4-4;
 - surge (1,2/50) immunity, specified in IEC 61000-4-5;
 - electrostatic discharges, specified in IEC 61000-4-2;
 - radiated high-frequency electromagnetic field, specified in IEC 61000-4-3.

* Phenomena referred to in T 1.1 of IEC 61543 are under consideration (IEC 61543:1995, *Residual current-operated protective devices (RCDs) for household and similar use – Electromagnetic compatibility*).