



SLOVENSKI STANDARD
SIST EN 61543:1998/A2:2006
01-junij-2006

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Residual current-operated protective devices (RCDs) for household and similar use -
Electromagnetic compatibility (IEC 61543:1995/A2:2005)

Fehlerstromschutzeinrichtungen (RCDs) für Hausinstallationen und ähnliche
Verwendung - Elektromagnetische Verträglichkeit (IEC 61543:1995/A2:2005)

Dispositifs différentiels résiduels (DDR) pour usages domestiques et analogues -
Compatibilité électromagnétique (CEI 61543:1995/A2:2005)

[SIST EN 61543:1998/A2:2006](https://standards.iteh.ai/catalog/standards/sist/3f302f49-110a-4e74-9fdc-a0185a252ca3/sist-en-61543-1998-a2-2006)

[Ta slovenski standard je istoveten z: EN 61543:1995/A2:2006](https://standards.iteh.ai/catalog/standards/sist/3f302f49-110a-4e74-9fdc-a0185a252ca3/sist-en-61543-1998-a2-2006)

ICS:

29.020

29.120.50

SIST EN 61543:1998/A2:2006

en

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for household and similar use -
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This amendment A2 modifies the European Standard EN 61543:1995; it was approved by CENELEC on 2005-12-01. 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, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, 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/588/FDIS, future amendment 2 to IEC 61543:1995, 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 61543:1995 on 2005-12-01.

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) 2006-09-01
- latest date by which the national standards conflicting
with the amendment have to be withdrawn (dow) 2008-12-01

Endorsement notice

The text of amendment 2:2005 to the International Standard IEC 61543:1995 was approved by CENELEC as an amendment to the European Standard without any modification.

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NORME
INTERNATIONALE
INTERNATIONAL
STANDARD

CEI
IEC

61543

1995

AMENDEMENT 2
AMENDMENT 2
2005-11

Amendement 2

**Dispositifs différentiels résiduels (DDR)
pour usages domestique et analogues –
Compatibilité électromagnétique**

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Amendment 2

[SIST EN 61543:1998/A2:2006](https://standards.iteh.ai/catalog/standards/sist/36302819-110a-4e74-961c-ab185a152ca3/sist-en-61543-1998-a2-2006)

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**Residual current-operated protective devices
(RCDs) for household and similar use –
Electromagnetic compatibility**

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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/588/FDIS	23E/594/RVD

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

The committee has decided that the contents of this amendment and the base publication will remain unchanged until the maintenance result date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

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Table 2

Add the following:

Reference	Phenomena	Environmental conditions
T2.6	Conducted common mode disturbances in the frequency range lower than 150 kHz	Direct connection to the low voltage main network

[SIST EN 61543:1998/A2:2006](https://standards.iteh.ai/catalog/standards/sist/3f302f49-110a-4e74-9fdc-ab185a352ca3/sist-en-61543-1998-a2-2006)
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Table 5

Add the following:

Reference (see Table 2)	Electromagnetic phenomena	Reference of basic standard for test description	Test level and test specification	Subclauses including the performance criteria
T 2.6 ^(*)	Conducted common mode disturbances in the frequency range lower than 150 kHz	Values derived from IEC 61000-4-16	-Level 2 ^j for $I_{\Delta n} < 30$ mA -Level 3 ^j for $I_{\Delta n} \geq 30$ mA	5.1.1
^j <ul style="list-style-type: none"> Current levels are given in Table 5a. They are derived from IEC 61000-4-16, taking into account a common mode impedance of 150 Ω. Conventional test currents are applied according to Figure 1. The test circuit is given in Figure 1. In order to simplify the tests: the test is made once with a residual current of 0,3 $I_{\Delta n}$ at rated frequency, by sweeping the frequency from 1 kHz to 150 kHz at the rate according to IEC 61000-4-16, Subclause 6.1.3. The device shall not trip; tripping tests, with residual current of 1,25 $I_{\Delta n}$ at rated frequency, are carried out on each sample at 5 different frequency values selected at random over the frequency range and different from one sample to another. The device shall trip. <p>(*) In the USA, this test is not applicable.</p>				

Add the following new Table 5a after Table 5:

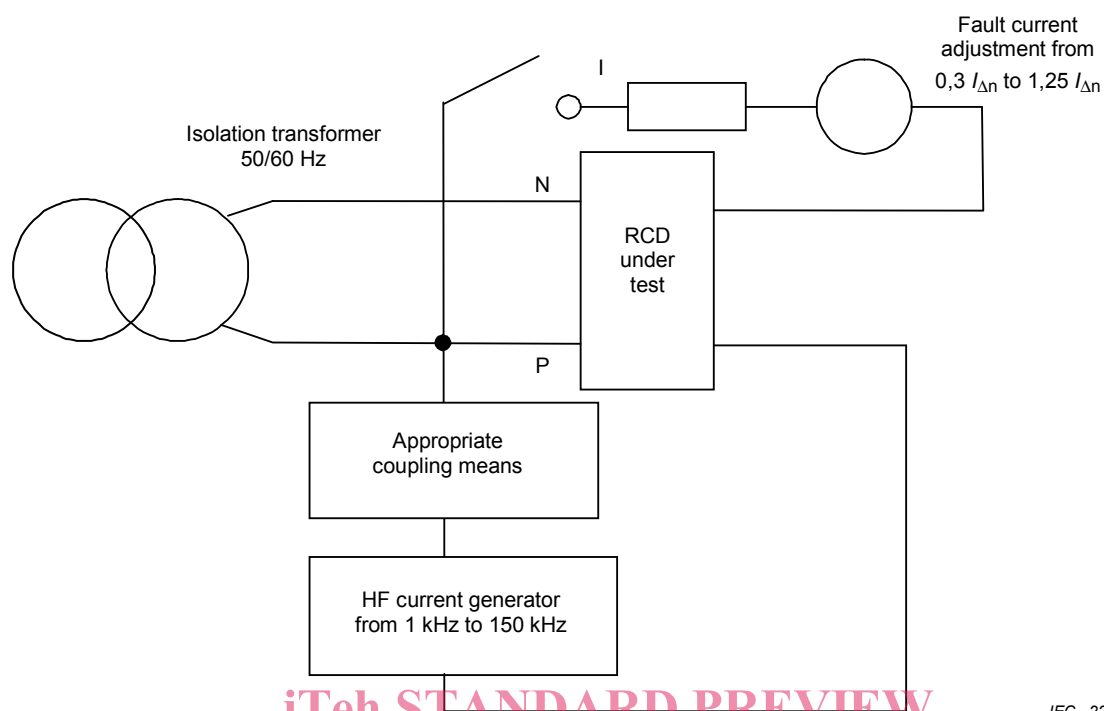
Table 5a – Current level according to the frequency and RCD sensitivity for the conditions of T 2.6

Frequency range	RMS current value for Level 2	RMS current value for Level 3
	$I_{\Delta n} < 30$ mA	$I_{\Delta n} \geq 30$ mA
1 kHz to 1,5 kHz	2 mA ^a	6,6 mA ^a
1,5 kHz to 15 kHz	2 mA to 20 mA ^b	6,6 mA to 66 mA ^b
15 kHz to 150 kHz	20 mA ^a	66 mA ^a
^a Constant current level in the complete range ^b The current level increases from 1,5 kHz to 15 kHz at 20 dB/decade.		

Add the following sentence after Table 5a:

Unless otherwise stated in the relevant product standard, the test is carried out on three samples as a single phase test on one pole on each sample as shown in Figure 1. Three new samples, lowest $I_{\Delta n}$ and any I_n , are submitted to test if one sample does not comply with the criteria.

Add the following new Figure 1:



IEC 2293/05

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The characteristics of HF generator shall comply with IEC 61000-4-16.

If the RCD has an earthing terminal, it shall be connected to the neutral terminal, if any, and if so marked on the RCD or, failing that, to any phase terminal.

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Figure 1 – Example of an appropriate test circuit