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INTERNATIONAL SPECIAL COMMITTEE ON RADIO INTERFERENCE

Electromagnetic compatibility – Requirements for household appliances, electric tools and similar apparatus –

Part 1: Emission

Withdrawn

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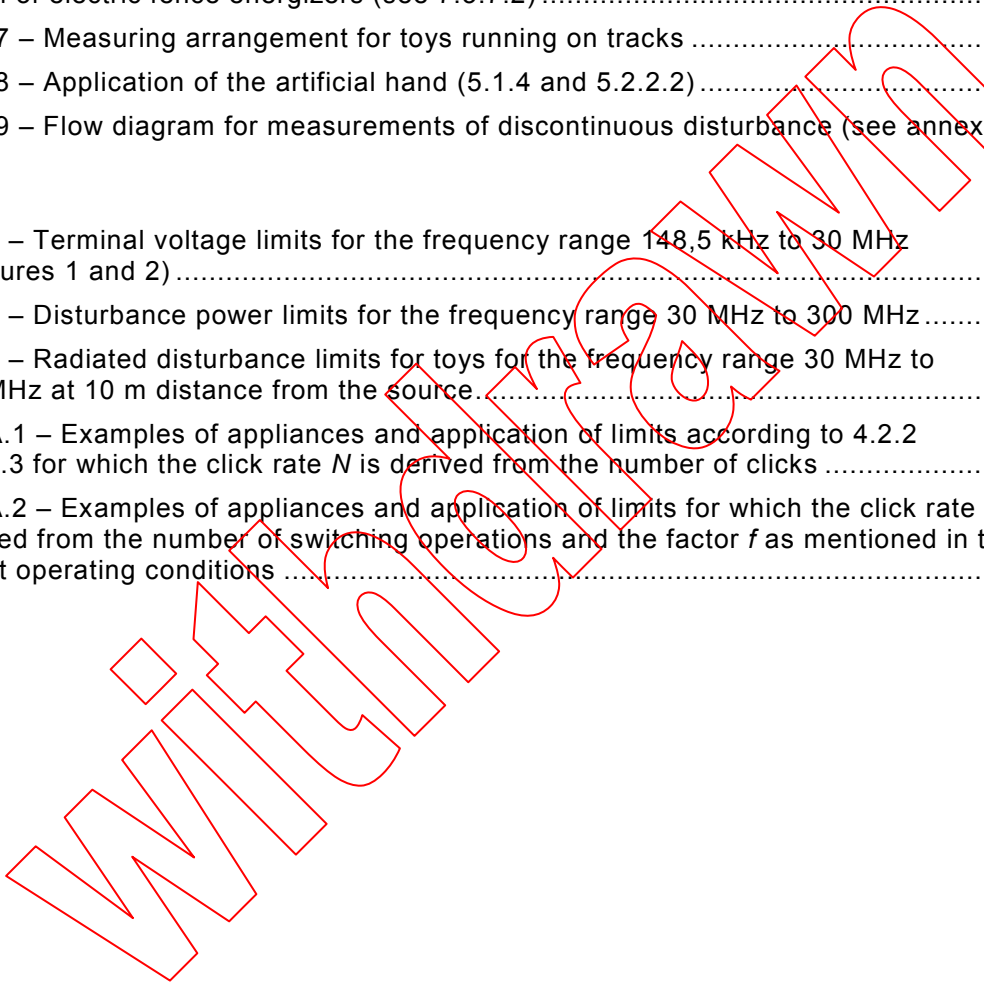


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**ELECTROMAGNETIC COMPATIBILITY –
REQUIREMENTS FOR HOUSEHOLD APPLIANCES,
ELECTRIC TOOLS AND SIMILAR APPARATUS –**

Part 1: Emission

FOREWORD

- 1) The formal decisions or agreements of the CISPR on technical matters, prepared by subcommittees on which all the National Committees and other Member Organizations of the CISPR having a special interest therein are represented, express, as nearly as possible, an international consensus on the subjects dealt with.
- 2) They have the form of recommendations for international use and they are accepted by the National Committees and other Member Organizations of the CISPR in that sense.
- 3) In order to promote international unification, the CISPR expresses the wish that all National Committees should adopt the text of the CISPR recommendations for their national rules in so far as national conditions will permit. Any divergence between the CISPR recommendations and the corresponding national rules should, as far as possible, be clearly indicated in the latter.

This publication has been prepared by CISPR subcommittee F: Interference relating to household appliances, tools, lighting equipment and similar apparatus.

It has the status of a product family EMC publication in accordance with IEC Guide 107.

This consolidated version of CISPR 14-1 is based on the fourth edition (2000) [documents CISPR/F/300/FDIS and CISPR/F/306/RVD], its amendment 1 (2001) [documents CISPR/F/332/FDIS and CISPR/F/339/RVD] and its amendment 2 (2002) [documents CISPR/F/355/FDIS and CISPR/F/361/RVD].

It bears the edition number 4.2.

A vertical line in the margin shows where the base publication has been modified by amendments 1 and 2.

Annex A forms an integral part of this CISPR publication.

Annexes B and C are for information only.

The committee has decided that the contents of the base publication and its amendments will remain unchanged until 2004. At this date, the publication will be

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- withdrawn;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

INTRODUCTION

The intention of this standard is to establish uniform requirements for the radio disturbance level of the equipment contained in the scope, to fix limits of disturbance, to describe methods of measurement and to standardize operating conditions and interpretation of results.

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ELECTROMAGNETIC COMPATIBILITY – REQUIREMENTS FOR HOUSEHOLD APPLIANCES, ELECTRIC TOOLS AND SIMILAR APPARATUS –

Part 1: Emission

1 Scope

1.1 This standard applies to the conduction and the radiation of radio-frequency disturbances from appliances whose main functions are performed by motors and switching or regulating devices, unless the r.f. energy is intentionally generated or intended for illumination.

It includes such equipment as: household electrical appliances, electric tools, regulating controls using semiconductor devices, motor-driven electro-medical apparatus, electric/electronic toys, automatic dispensing machines as well as cine or slide projectors.

Also included in the scope of this standard are:

- separate parts of the above mentioned equipment such as motors, switching devices e.g. (power or protective) relays, however no emission requirements apply unless formulated in this standard.

This standard gives for the time being no requirements for apparatus that cannot be measured on a test site; requirements for *in situ* measurements are under consideration.

Excluded from the scope of this standard are:

- apparatus for which all emission requirements in the radio frequency range are explicitly formulated in other IEC or CISPR standards;

NOTE 1 Examples are:

- luminaires, including portable child-appealing luminaires, discharge lamps and other lighting devices: CISPR 15;
 - audio and video equipment and electronic music instruments, other than toys: CISPR 13 and CISPR 20 (see also 7.3.5.4.2);
 - mains communication devices, as well as baby surveillance systems: IEC 61000-3-8;
 - equipment for generation and use of radio frequency energy for heating and therapeutic purposes: CISPR 11;
 - microwave ovens: CISPR 11 (but be aware of 1.3 on multifunction equipment);
 - information technology equipment, e.g. home computers, personal computers, electronic copying machines: CISPR 22;
 - electronic equipment to be used on motor vehicles: CISPR 12;
 - radio controls, walkie-talkies and other types of radio-transmitters, also when used with toys.
- regulating controls and equipment with regulating controls incorporating semiconductor devices with a rated input current of more than 25 A per phase;
 - stand-alone power supplies.

NOTE 2 Toys powered by the supply system of a motor-powered vehicle, ship or aircraft are not covered by this standard.

1.2 The frequency range covered is 9 kHz to 400 GHz.

1.3 Multifunction equipment which is subjected simultaneously to different clauses of this standard and/or other standards shall meet the provisions of each clause/standard with the relevant functions in operation; details are given in 7.2.1.

1.4 The limits in this standard have been determined on a probabilistic basis, to keep the suppression of disturbances economically feasible while still achieving an adequate radio protection. In exceptional cases radio frequency interference may occur, in spite of compliance with the limits. In such a case, additional provisions may be required.

1.5 The effects of electromagnetic phenomena relating to the safety of apparatus are excluded from the scope of this standard.

2 Normative references

The following referenced documents are indispensable for the application 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.

The following standards are referred to in this publication:

IEC 60050(161):1990, *International Electrotechnical Vocabulary – Chapter 161: Electromagnetic compatibility*

IEC 60335-2-76:1997, *Safety of household and similar electrical appliances – Part 2: Particular requirements for electric fence energizers*

CISPR 16-1:1993, *Specification for radio disturbance and immunity measuring apparatus and methods – Part 1: Radio disturbance and immunity measuring apparatus*
Amendment 1 (1997)*

CISPR 16-2:1996, *Specification for radio disturbance and immunity measuring apparatus and methods – Part 2: Methods of measurement of disturbances and immunity*
Amendment 1 (1999)**

CISPR 22, *Information technology equipment – Radio disturbance characteristics – Limits and methods of measurement*

IEC 60598-2-10:1987, *Luminaires – Part 2: Particular requirements – Section 10: Portable child-appealing luminaires*

* A consolidated edition has been issued in 1998.

** A consolidated edition has been issued in 1999.