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INTERNATIONAL SPECIAL COMMITTEE ON RADIO INTERFERENCE

Electromagnetic compatibility (EMC) – Conducted emission requirements on the low voltage AC mains port in the frequency range 9 kHz to 150 kHz for equipment intended to operate in residential environments

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

ICS 33.100.10

ISBN 978-2-8322-9867-1

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

ELECTROMAGNETIC COMPATIBILITY (EMC) –**Conducted emission requirements on the low voltage AC mains port in the frequency range 9 kHz to 150 kHz for equipment intended to operate in residential environments**

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CISPR 39 has been prepared by CISPR subcommittee H: Limits for the protection of radio services. It is a Publicly Available Specification.

The text of this Publicly Available Specification is based on the following documents:

Draft	Report on voting
CIS/H/505/DPAS	CIS/H/517/RVDPAS

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

The language used for the development of this Publicly Available Specification is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn, or
- revised.

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INTRODUCTION

This PAS complements IEC 61000-6-3:2020 by the addition of the following:

- addition of normative requirements for conducted emissions at the low voltage AC mains port in the frequency range 9 kHz to 150 kHz;
- addition of an informative annex providing background information on the normative limits;
- addition of an informative annex with recommendations to limit the spectral density of non-intentional emissions (NIE).

The technical content of this PAS was derived from a fragment of the maintenance of IEC 61000-6-3 and, as CIS/H/459/CDV, this fragment received 100 % support from the National Committees.

This PAS is published due to the urgent market needs for these requirements.

ELECTROMAGNETIC COMPATIBILITY (EMC) –

Conducted emission requirements on the low voltage AC mains port in the frequency range 9 kHz to 150 kHz for equipment intended to operate in residential environments

1 Scope

This document is applicable to electrical and electronic equipment within the scope of IEC 61000-6-3:2020, for which no relevant dedicated product or product family EMC emission standard has been published.

It defines low voltage AC mains conducted emission requirements in the frequency range 9 kHz to 150 kHz which are considered essential and have been selected to provide an adequate level of protection to both radio reception and Mains Communicating Systems (MCS) in the defined electromagnetic environment.

The emission requirements in this document are not intended to be applicable to the intentional transmissions and their harmonics from a radio transmitter as defined by the ITU.

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.

NOTE The normative references in this clause are identical to those published in IEC 61000-6-3:2020.

CISPR 16-1-1:2019, *Specification for radio disturbance and immunity measuring apparatus and methods – Part 1-1: Radio disturbance and immunity measuring apparatus – Measuring Apparatus*

CISPR 16-1-2:2014, *Specification for radio disturbance and immunity measuring apparatus and methods – Part 1-2: Radio disturbance and immunity measuring apparatus – Coupling devices for conducted disturbance measurements*

CISPR 16-1-2:2014/AMD 1:2017

CISPR 16-2-1:2014, *Specification for radio disturbance and immunity measuring apparatus and methods – Part 2-1: Methods of measurement of disturbances and immunity – Conducted disturbance measurements*

CISPR 16-2-1:2014/A1:2017

IEC 61000-6-3:2020, *Electromagnetic compatibility (EMC) – Part 6-3: Generic standards – Emission standard for equipment in residential environments*