IEC 61786-1

Edition 1.0 2024-07

INTERNATIONAL STANDARD

NORME INTERNATIONALE

HORIZONTAL PUBLICATION
PUBLICATION HORIZONTALE

AMENDMENT 1
AMENDEMENT 1

Measurement of DC magnetic, AC magnetic and AC electric fields from 1 Hz to 100 kHz with regard to exposure of human beings – Part 1: Requirements for measuring instruments

Mesure de champs magnétiques continus et de champs magnétiques et électriques alternatifs dans la plage de fréquences de 1 Hz à 100 kHz dans leur rapport à l'exposition humaine – Partie 1: Exigences applicables aux instruments de mesure

IEC 61786-1:2013-12/AMD1:2024-07(en-fr)

IEC Secretariat
3, rue de Varembé
CH-1211 Geneva 20
Switzerland

Tel.: +41 22 919 02 11
info@iec.ch
www.iec.ch

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

COMMISSION ELECTROTECHNIQUE INTERNATIONALE

ICS 17.220.20

ISBN 978-2-8322-9449-9

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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MEASUREMENT OF DC MAGNETIC, AC MAGNETIC AND AC ELECTRIC FIELDS FROM 1 Hz TO 100 kHz WITH REGARD TO EXPOSURE OF HUMAN BEINGS –

Part 1: Requirements for measuring instruments

AMENDMENT 1

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Amendment 1 to IEC 61786-1:2013 has been prepared by IEC technical committee 106: Methods for the assessment of electric, magnetic and electromagnetic fields associated with human exposure.

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

Draft	Report on voting
106/647/FDIS	106/655/RVD

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 Amendment 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/.

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- reconfirmed,
- withdrawn, or
- revised.

2 Normative references

Add the following new reference:

IEC 61000-6-1:2016, *Electromagnetic compatibility (EMC) – Part 6-1: Generic standards – Immunity standard for residential, commercial and light-industrial environments*

5.4 Pass-band

Replace the penultimate sentence with the following:

This range is not as broad as the pass band but shall be still broad enough to cover all frequencies of interest.

5.7 Readability of scale

Delete the first paragraph.

Delete the first sentence of the last paragraph.

5.8.1 General schema

Replace the 5.8.1 title with the following new title:

5.8.1 General schematic

Replace the first sentence with the following:

A general schematic of a meter is given in Figure 1.

Replace the title of Figure 1 with the following new title:

Figure 1 – Schematic of a field meter

Replace the paragraph below Figure 1 with the following:

The probes should be three-axis. For the weighted peak method (see IEC 61786-2:2014, 4.2.3), three-axis probes shall be used.

5.8.4 Support for electric field meter

Replace the first paragraph with the following:

The support for the electric field meter shall be made of insulating materials, such as synthetic or composite materials, or wood.

5.9.1 Immunity

c) Radiated electromagnetic fields

Replace the first paragraph with the following:

The operation of instrumentation shall not be affected by electromagnetic radiation for an electric field defined in IEC 61000-6-1:2016, Table 1, rows 1.2 and 1.3. Equipment intended to be used in industrial environment should reference the equivalent tables of IEC 61000-6-2 [37].

Delete NOTE 2.

5.9.2 Emissions

b) Conducted disturbances – 0,15 MHz to 30 MHz (instrumentation connected to AC power supply)

Replace the first paragraph by the following:

The conducted disturbances shall be less than the limits defined in Table 4 of CISPR 11:2024, as reproduced in Table 1 below.