

INTERNATIONAL STANDARD

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AMENDMENT 1
2002-06

Amendment 1

Medical electrical equipment – Dosimeters with ionization chambers as used in radiotherapy

Amendement 1

*Appareils électromédicaux –
Dosimètres à chambres d'ionisation
utilisés en radiothérapie*

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Commission Electrotechnique Internationale
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Международная Электротехническая Комиссия

PRICE CODE

C

For price, see current catalogue

FOREWORD

This amendment has been prepared by subcommittee SC 62C: Equipment for radiotherapy, nuclear medicine and radiation dosimetry, of IEC Technical Committee 62: Electrical equipment in medical practice.

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

FDIS	Report on voting
62C/332/FDIS	62C/338/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 the base publication and its amendments will remain unchanged until 2006. At this date, in accordance with the committee's decision, the publication will be

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- withdrawn;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

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6.1.6 Electromagnetic compatibility

Replace subclauses 6.1.6.3 to 6.1.6.5 by the following:

6.1.6.3 Conducted disturbances induced by bursts and radio-frequencies

The maximum spurious indications (both transient and permanent) of the display or data output due to conducted disturbances induced by bursts and radio-frequencies shall be less than the limits given in table 3c).

For mains-operated instruments, compliance shall be checked by observing and recording the indications of the display and any data output terminals while measurements are performed on the most sensitive range (if the ranges are selectable), both with and without the presence of conducted disturbances induced by bursts (IEC 61000-4-4) and conducted disturbances induced by radio-frequency fields (IEC 61000-4-6). The severity level shall in both cases be level 3 as described in these standards. A radioactive check source may be used for these measurements.

NOTE Complete "latch-up" of the MEASURING ASSEMBLY which would not lead to an incorrect DOSE / DOSE RATE value being indicated is allowed.

6.1.6.4 Surges

The maximum spurious indications (both transient and permanent) of the display or data output due to surges shall be less than the limits given in table 3c). The test is not to be performed on the connection lines between the ion chamber and the measuring assembly.

For mains-operated instruments compliance shall be checked by observing and recording the indications of the display and any data output terminals while measurements are performed on the most sensitive range (if the ranges are selectable), both with and without the presence of disturbances induced by surges (IEC 61000-4-5). The severity level shall be level 3 as described in that standard.

NOTE Complete "latch-up" of the MEASURING ASSEMBLY which would not lead to an incorrect DOSE / DOSE RATE value being indicated is allowed.

6.1.6.5 Voltage dips, short interruptions and voltage variations

The maximum spurious indications (both transient and permanent) of the display or data output due to voltage dips and short interruptions shall be less than the limits given in table 3c).

For mains-operated instruments compliance shall be checked by observing and recording the indications of the display and any data output terminals while measurements are performed on the most sensitive range (if the ranges are selectable), both with and without the presence of disturbances induced by voltage dips and short interruptions and voltage variations as described in IEC 61000-4-11. Test levels shall be 40 % U_T with duration of 25 periods for voltage dips and interruptions and 2 s/1 s/2 s for decreasing voltage/reduced voltage/increasing voltage in the case of voltage variations.

NOTE Complete "latch-up" of the MEASURING ASSEMBLY which would not lead to an incorrect DOSE / DOSE RATE value being indicated is allowed.