INTERNATIONAL STANDARD

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AMENDMENT 1
2002-06

Amendment 1

Medical electrical equipment – Dosimeters with ionization chambers and/or semi-conductor detectors as used in X-ray diagnostic imaging

Amendement 1

Appareils électromédicaux –
Dosimètres à chambres d'ionisation et/ou
à détecteurs à semi-conducteurs utilisés
en imagerie de diagnostic à rayonnement X

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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/333/FDIS	62C/339/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- withdrawn;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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Add, on page 5, after 6.8.3, the title of the new subclause 6.8.4, and renumber the existing 6.8.4 as 6.8.5:

6.8.4 Surges

6.8.5 Voltage dips, short interruptions and voltage variations

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Add the following new subclause 6.8.4:

6.8.4 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 7). The test is not to be performed on the connection lines between the detector 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.

Renumber the existing subclause 6.8.4 as 6.8.5 and replace the text, as follows:

6.8.5 Voltage dips, short interruptions and voltage variations

The maximum spurious indications (both transient and permanent) of the display or data output terminals due to voltage dips, short interruptions and voltage variations shall be less than the limits given in table 7.

For mains-operated instruments, compliance with this performance requirement 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, both with and without the presence of conducted disturbances induced by voltage dips, 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 A complete "latch-up" of the MEASURING ASSEMBLY which would not lead to an incorrect AIR KERMA, AIR KERMA LENGTH or AIR KERMA RATE value being indicated is allowed.

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Table 7 – LIMITS OF VARIATION for the effects of INFLUENCE QUANTITITES

Amend the reference conditions for radiation quality, d) ATTENUATED BEAM to read as follows (modifications are underlined):

INFLUENCE QUANTITY	MINIMUM RATED RANGE	REFERENCE CONDITIONS	LIMITS OF VARIATION *L*	Subclause
ATTENUATED BEAM [1)]	100 –150 kV W 12,5 – 47,5 mm Al	120 kV 42,5 mm Al (RQA 9 IEC 61267)	±5 %	6.1