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Edition 1.0 2016-03

INTERNATIONAL STANDARD

NORME INTERNATIONALE

colour inside

Electric welding equipment – Assessment of restrictions related to human exposure to electromagnetic fields (0 Hz to 300 GHz) – Part 2: Arc welding equipment

Matériels de soudage électrique – Évaluation des restrictions relatives à l'exposition humaine aux champs électromagnétiques (0 Hz à 300 GHz) – Partie 2: Matériels de soudage à l'arc

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Matériels de soudage électrique – Évaluation des restrictions relatives à l'exposition humaine aux champs électromagnétiques (0 Hz à 300 GHz) – Partie 2: Matériels de soudage à l'arc

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CONTENTS

FOREWORD....4
1 Scope....6
2 Normative references....6
3 Terms, definitions and abbreviations....7
3.1 Terms and definitions....7
3.2 Quantities and units....8
3.3 Constants....8
4 Requirements....8
5 Assessment methods....8
5.1 General considerations....8
5.1.1 Time averaging....8
5.1.2 Spatial averaging of external field values....8
5.1.3 Spatial averaging of intracorporeal values....9
5.1.4 Equipment with pulsed or non-sinusoidal welding current....9
5.1.5 Considerations for spectral analysis....12
5.1.6 Uncertainty of assessment....13
5.2 Measurement of external field levels....14
5.2.1 General....14
5.2.2 Measurement equipment....14
5.3 Calculation of external field levels....14
5.3.1 General....14
5.3.2 Source model and calculation equation....14
5.4 Calculation of intracorporeal levels....15
5.4.1 General....15
5.4.2 Source model....15
5.4.3 Body model for analytical calculations....15
5.4.4 Anatomical body models for numerical calculations....17
6 Assessment conditions....18
6.1 Assessment configurations....18
6.1.1 General....18
6.1.2 Exposure of the head....18
6.1.3 Exposure of the trunk....21
6.1.4 Exposure of limbs....24
6.2 Welding current conditions....26
6.2.1 General....26
6.2.2 Single operating mode....27
6.2.3 Multiple operating modes....28
6.2.4 Worst case power source capability....28
6.2.5 Current ripple....28
7 EMF data sheet and assessment report....28
Annex A (informative) Example for EMF data sheet structure....30
Annex B (informative) Assessment example for maximum power-source capability....31
B.1 Equipment description....31
B.2 Welding current measurement and spectral analysis....31
B.3 Assessment of non-thermal effects....32
Annex C (informative) Summation with approximated and piecewise linear limit values....36

Currently in preview, click buy full version

Annex D (informative) Coupling factors for various distances and disk radii 37
Bibliography 38

Figure 1 – Piecewise linear and approximated limit amplitudes 11
Figure 2 – Piecewise linear and approximated summation function phase angles 11
Figure 3 – Spectral synthesis for the validation of the analysis 12
Figure 4 – Equivalent waveform for non-repetitive signals 13
Figure 5 – Conducting disk in a uniform magnetic flux density 15
Figure 6 – Electrical conductivity for homogeneous body models 16
Figure 7 – Field measurement at head position 19
Figure 8 – Field calculation at head position 19
Figure 9 – Analytical calculation of intracorporeal metrics for the head 20
Figure 10 – Numerical calculation of intracorporeal metrics for the head 21
Figure 11 – Field measurement at trunk position 21
Figure 12 – Field calculation at trunk position 22
Figure 13 – Analytical calculation of intracorporeal metrics for the trunk 22
Figure 14 – Numerical calculation of intracorporeal metrics for the trunk 23
Figure 15 – Field measurement at limb positions, hand and thigh 24
Figure 16 – Field calculation at limb positions, hand and thigh 24
Figure 17 – Analytical calculation of intracorporeal metrics for hand and thigh 25
Figure 18 – Numerical calculation of intracorporeal metrics for hand and thigh 26
Figure B.1 – Example 1 – Current ripple 31
Figure B.2 – Example 1 – Maximum power-source capability 32
Figure B.3 – Example 1 – EI calculation element 33
Figure B.4 – Example 1 – EI calculation summary 34
Figure B.5 – Example 1 – EMF data sheet 35
Figure C.1 – EI comparison with approximated and piecewise linear values 36

Table 1 – Phase angles of weighting function or summation function 9
Table 2 – Radii and coupling factors for 2D disk models 16
Table D.1 – Coupling factors for various distances and disk radii 37

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ELECTRIC WELDING EQUIPMENT – ASSESSMENT OF RESTRICTIONS RELATED TO HUMAN EXPOSURE TO ELECTROMAGNETIC FIELDS (0 Hz to 300 GHz) –

Part 2: Arc welding equipment

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International Standard IEC 62822-2 has been prepared by IEC technical committee 26: Electric welding.

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

FDIS	Report on voting
26/584/FDIS	26/591/RVD

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

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

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ELECTRIC WELDING EQUIPMENT – ASSESSMENT OF RESTRICTIONS RELATED TO HUMAN EXPOSURE TO ELECTROMAGNETIC FIELDS (0 Hz to 300 GHz) –

Part 2: Arc welding equipment

1 Scope

This part of IEC 62822 applies to equipment for arc welding and allied processes designed for occupational use by professionals and for use by laymen.

NOTE 1 Typical allied processes are electric arc cutting and arc spraying.

This standard specifies procedures for the assessment of human exposure to magnetic fields produced by arc welding. It covers non-thermal biological effects in the frequency range from 0 Hz to 10 MHz and defines standardized test scenarios.

NOTE 2 The general term “field” is used throughout this document for “magnetic field”.

NOTE 3 For the assessment of exposure to electric fields and thermal effects, the methods specified in the Generic Standard IEC 62311 apply.

This standard does not define methods for workplace assessment regarding the risks arising from electromagnetic fields (EMF). However, the EMF data that results from the application of this standard can be used to assist in workplace assessment.

Other standards may apply to products covered by this standard. In particular this standard cannot be used to demonstrate electromagnetic compatibility with other equipment. It does not specify any product safety requirements other than those specifically related to human exposure to electromagnetic fields.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60050-851:2008, *International Electrotechnical Vocabulary – Part 851: Electric welding*

IEC 60974-1, *Arc welding equipment – Part 1: Welding power sources*

IEC 60974-6, *Arc welding equipment – Part 6: Limited duty equipment*

IEC 61786-1, *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*

IEC 61786-2, *Measurement of DC magnetic, AC magnetic and AC electric fields from 1 Hz to 100 kHz with regard to exposure of human beings – Part 2: Basic standard for measurements*

IEC 62822-1, *Electric welding equipment – Assessment of restrictions related to human exposure to electromagnetic fields (0 Hz to 300 GHz) – Part 1: Product family standard*

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