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| STN | Elektrické zväracie zariadenia Posudzovanie z hľadiska obmedzenia expozície osôb elektromagnetickým poľami (0 Hz - 300 GHz) Časť 1: Všeobecné požiadavky | STN EN IEC 62822-1 05 0620 |
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Electric welding equipment - Assessment of restrictions related to human exposure to electromagnetic fields (0 Hz to 300 GHz) - Part 1: Product family standard

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 01/19

Obsahuje: EN IEC 62822-1:2018, IEC 62822-1:2016

Oznámením tejto normy sa od 28.09.2021 ruší
STN EN 50445 (36 7080) z decembra 2008

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EUROPEAN STANDARD

EN IEC 62822-1

NORME EUROPÉENNE

EUROPÄISCHE NORM

September 2018

ICS 25.160; 25.160.30

Supersedes EN 50445:2008

English Version

**Electric welding equipment - Assessment of restrictions related
to human exposure to electromagnetic fields (0 Hz to 300 GHz) -
Part 1: Product family standard
(IEC 62822-1:2016 , modified)**

Matériels de soudage électrique - Évaluation des
restrictions relatives à l'exposition humaine aux champs
électromagnétiques (0 Hz à 300 GHz) - Partie 1: Norme de
famille de produits
(IEC 62822-1:2016 , modifiée)

Bewertung elektrischer Schweißeinrichtungen in Bezug auf
Begrenzungen der Exposition von Personen gegenüber
elektromagnetischen Feldern (0 Hz bis 300 GHz) - Teil 1:
Produktfamilienorm
(IEC 62822-1:2016 , modifiziert)

This European Standard was approved by CENELEC on 2016-03-21. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

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European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

EN IEC 62822-1:2018 (E)**European foreword**

The text of document 26/583/FDIS, future edition 1 of IEC 62822-1, prepared by IEC/TC 26 "Electric welding" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 62822-1:2018.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2019-06-28
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2021-09-28

This document supersedes EN 50445:2008.

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Endorsement notice

The text of the International Standard IEC 62822-1:2016 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following note has to be added for the standard indicated:

IEC 62822-2 NOTE Harmonized as EN 62822-2.

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

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 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

| <u>Publication</u> | <u>Year</u> | <u>Title</u> | <u>EN/HD</u> | <u>Year</u> |
|--------------------|-------------|---|--------------|-------------|
| IEC 60050-851 | 2008 | International Electrotechnical Vocabulary - Part 851: Electric welding | - | - |
| IEC 60974-1 | - | Arc welding equipment -- Part 1: Welding power sources | EN 60974-1 | - |
| IEC 60974-2 | - | Arc welding equipment -- Part 2: Liquid cooling systems | EN 60974-2 | - |
| IEC 60974-5 | - | Arc welding equipment -- Part 5: Wire feeders | EN 60974-5 | - |
| IEC 60974-6 | - | Arc welding equipment -- Part 6: Limited duty equipment | EN 60974-6 | - |
| IEC 60974-8 | - | Arc welding equipment -- Part 8: Gas consoles for welding and plasma cutting systems | EN 60974-8 | - |
| IEC 62135-1 | - | Resistance welding equipment -- Part 1: Safety requirements for design, manufacture and installation | - | - |
| IEC 62311 | - | Assessment of electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (0 Hz - 300 GHz) | EN 62311 | - |
| IEC 62822-2 | - | Electric welding equipment - Assessment of restrictions related to human exposure to electromagnetic fields (0 Hz to 300 GHz) - Part 2: Arc welding equipment | EN 62822-2 | - |



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INTERNATIONAL STANDARD

NORME INTERNATIONALE

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

Matériels de soudage électrique – Évaluation des restrictions relatives à l'exposition humaine aux champs électromagnétiques (0 Hz à 300 GHz) – Partie 1: Norme de famille de produits



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IEC Central Office
 3, rue de Varembe
 CH-1211 Geneva 20
 Switzerland

Tel.: +41 22 919 02 11
 Fax: +41 22 919 03 00
info@iec.ch
www.iec.ch

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Edition 1.0 2016-03

INTERNATIONAL STANDARD

NORME INTERNATIONALE

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

**Matériels de soudage électrique – Évaluation des restrictions relatives à l'exposition humaine aux champs électromagnétiques (0 Hz à 300 GHz) –
Partie 1: Norme de famille de produits**

INTERNATIONAL
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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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

Part 1: Product family standard

FOREWORD

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International Standard IEC 62822-1 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 |
| 26/583/FDIS | 26/590/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.

This Standard has the status of a product family standard.

A list of all parts in the IEC 62822 series, published under the general title *Electric welding equipment – Assessment of restrictions related to human exposure to electromagnetic fields (0 Hz to 300 GHz)*, can be found on the IEC website.

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

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

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

Part 1: Product family standard

1 Scope

This part of IEC 62822, which is a product family standard, applies to equipment for resistance welding, arc welding and allied processes designed for occupational use by professionals and for use by laymen.

NOTE 1 Typical allied processes are resistance hard and soft soldering, resistance heating by means comparable to resistance welding equipment, electric arc cutting and arc spraying.

The frequency range covered is 0 Hz to 300 GHz.

This product family standard specifies assessment methods and criteria to evaluate electromagnetic field (EMF) emissions of electric welding equipment with regard to national and international requirements for human exposure to EMF.

NOTE 2 Magnetic fields generated by the operation of welding equipment and the resulting non-thermal effects are the main assessment concern.

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

NOTE 3 The equipment manufacturer is unaware of the overall exposure environment in which the equipment will be used (e.g. multiple sources) and is not responsible for all requirements for workplace assessment (e.g. information and training of workers, design and layout of the workplace).

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 60974-2, *Arc welding equipment – Part 2: Liquid cooling systems*

IEC 60974-5, *Arc welding equipment – Part 5: Wire feeders*

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

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IEC 60974-8, *Arc welding equipment – Part 8: Gas consoles for welding and plasma cutting systems*

IEC 62135-1, *Resistance welding equipment – Part 1: Safety requirements for design, manufacture and installation*

IEC 62311, *Assessment of electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (0 Hz – 300 GHz)*

koniec náhľadu – text ďalej pokračuje v platenej verzii STN