



SLOVENSKI STANDARD
SIST EN 60519-9:1999

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SIST EN 60519-9:2006

Safety in electroheat installations - Part 9: Particular requirements for high-frequency dielectric heating installations (IEC 60519-9:1987)

Safety in electroheat installations -- Part 9: Particular requirements for high-frequency dielectric heating installations

Sicherheit in Elektrowärmeanlagen -- Teil 9: Besondere Anforderungen für kapazitive Hochfrequenz-Erwärmungsanlagen

Sécurité dans les installations électrothermiques -- Partie 9: Règles particulières pour les installations de chauffage diélectrique à haute fréquence

Ta slovenski standard je istoveten z: EN 60519-9:1995

ICS:

25.180.10 Ò^\ dã } ^Á ^ ã Electric furnaces

SIST EN 60519-9:1999 **en**

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

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English version

Safety in electroheat installations
Part 9: Particular requirements for high-frequency
dielectric heating installations
(IEC 519-9:1987)

Sécurité dans les installations
électrothermiques
Partie 9: Règles particulières pour les
installations de chauffage diélectrique à
haute fréquence
(CEI 519-9:1987)

Sicherheit in Elektrowärmeanlagen
Teil 9: Besondere Anforderungen für
kapazitive Hochfrequenz-
Erwärmungsanlagen
(IEC 519-9:1987)

This European Standard was approved by CENELEC on 1995-09-20. 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.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

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CENELEC

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

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Foreword

The text of the International Standard IEC 519-9:1987, prepared by IEC TC 27, Industrial electroheating equipment, was approved by CENELEC as HD 491.9 S1 on 1991-03-15.

This Harmonization Document was submitted to the formal vote for conversion into a European Standard and was approved by CENELEC as EN 60519-9 on 1995-09-20.

The following date was fixed:

- latest date by which the EN has to be implemented
at national level by publication of an identical
national standard or by endorsement (dop) 1996-09-01

Annexes designated "normative" are part of the body of the standard.
In this standard, annex ZA is normative.
Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 519-9:1987 was approved by CENELEC as a European Standard without any modification.

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Annex ZA (normative)**Normative references to international publications
with their corresponding European publications**

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

NOTE: When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 50(841)	1983	International electrotechnical vocabulary (IEV) - Chapter 841: Industrial electroheating	-	-
IEC 110	1973	Recommendation for capacitors for inductive heat generating plants operating at frequencies between 40 and 24 000 Hz	HD 207 S1	1977
IEC 519-1	1984	Safety in electroheat installations Part 1: General requirements	EN 60519-1	1993
CISPR 11	1975 ¹⁾	Limits and methods of measurement of radio interference characteristics of industrial scientific and medical (ISM) radio-frequency (excluding surgical diathermy apparatus)	-	-

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1) CISPR 11:1990, mod. is harmonized as EN 55011:1991.

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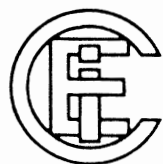
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Сécurité dans les installations électrothermiques

Neuvième partie: Règles particulières pour les installations
de chauffage diélectrique à haute fréquence

Safety in electroheat installations

Part 9: Particular requirements for high-frequency dielectric
heating installations

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

SAFETY IN ELECTROHEAT INSTALLATIONS

Part 9: Particular requirements for high-frequency dielectric heating installations

FOREWORD

- 1) The formal decisions or agreements of the IEC on technical matters, prepared by Technical Committees on which all the National Committees having a special interest therein are represented, express, as nearly as possible, an international consensus of opinion on the subjects dealt with.
- 2) They have the form of recommendations for international use and they are accepted by the National Committees in that sense.
- 3) In order to promote international unification, the IEC expresses the wish that all National Committees should adopt the text of the IEC recommendation for their national rules in so far as national conditions will permit. Any divergence between the IEC recommendation and the corresponding national rules should, as far as possible, be clearly indicated in the latter.

PREFACE

This standard has been prepared by IEC Technical Committee No. 27: Industrial Electroheating Equipment.

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

Six Months' Rule	Report on Voting	Two Months' Procedure	Report on Voting
27(CO)73	27(CO)78	27(CO)79	27(CO)83

Further information can be found in the relevant Reports on Voting indicated in the table above.

Other IEC publications quoted in this standard:

- Publications Nos. 50(841): International Electrotechnical Vocabulary (IEV), Chapter 841: Industrial Electroheating
 110 (1973): Recommendation for Capacitors for Inductive Heat Generating Plants Operating at Frequencies between 40 and 24 000 Hz.
 519-1: Safety in Electroheat Installations, Part I. General Requirements.
 C.I.S.P.R. 11: Limits and Methods of Measurement of Radio Interference Characteristics of Industrial, Scientific and Medical (ISM) Radio-frequency Equipment (excluding Surgical Diathermy Apparatus).

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SAFETY IN ELECTROHEAT INSTALLATIONS

Part 9: Particular requirements for high-frequency dielectric heating installations

1. Scope

This standard is applicable to industrial high-frequency heating installations for the purpose of thermal applications such as assembly by melting, melting and drying of partially or non-conductive materials such as plastics, wood, rubber, textiles, glass, ceramics, paper, foodstuffs, etc., in both normal and protective atmospheres, using for example inert gases or a vacuum.

This standard is to be read in conjunction with IEC Publication 519-1: Safety in Electroheat Installations, Part 1: General Requirements.

This standard relates to high-frequency dielectric heating installations, in the range 1 MHz to 300 MHz with output power greater than 50 W comprising high-frequency generators, and capacitors for the charge to be heated which, according to the requirements, may also contain the necessary mechanical devices.

Note — In accordance with C.I.S.P.R. Publication 11: Limits and Methods of Measurement of Radio Interference Characteristics of Industrial, Scientific and Medical (ISM) Radio-frequency Equipment (Excluding Surgical Diathermy Apparatus) there are preferred frequencies for industrial scientific and medical purposes. If other international or national regulations apply they shall also be met. C.I.S.P.R. Publications also give guidance regarding radio-interference suppression.

2. Definitions

For definitions of fundamental and general terms, refer to IEC Publication 50: International Electrotechnical Vocabulary (IEV), Chapter 841: Industrial Electroheating.

The following definitions apply for the purpose of this standard.

2.1 High-frequency generator

A high-frequency generator within the meaning of this standard is an electronic convertor having an operating frequency between 1 MHz and 300 MHz.

2.2 Dielectric heating installation

An equipment comprising the heating applicator, as well as the high-frequency generator, its supply and protective devices.

2.3 Heating capacitor (of a dielectric heater)

A capacitor formed by the work electrodes and the charge which is placed between them.

Note — The shape of the work electrodes is adapted to the nature and form of the charge. There are not less than two electrodes. The voltage may be connected symmetrically or asymmetrically with respect to earth potential.

2.4 Plate electrodes

Work electrodes consisting of two or more plates, from which electrical energy is transmitted to heat the charge.