
Industrijske inštalacije za električno gretje - Preskusne metode za indukcijske kanale in indukcijske žarilne peči (IEC 62076:2006)

Industrial electroheating installations - Test methods for induction channel and induction crucible furnaces (IEC 62076:2006)

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English version

**Industrial electroheating installations -
Test methods for induction channel
and induction crucible furnaces
(IEC 62076:2006)**

Installations électrothermiques
industrielles -
Méthodes d'essai
pour fours à induction à canal et
pour fours à induction à creuset
(CEI 62076:2006)

Industrielle Elektrowärmeanlagen -
Prüfverfahren für Induktionsrinnen- und
Induktionstiegelöfen
(IEC 62076:2006)

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This European Standard was approved by CENELEC on 2006-10-01. 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, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

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 document 27/523/FDIS, future edition 1 of IEC 62076, prepared by IEC TC 27, Industrial electroheating equipment, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 62076 on 2006-10-01.

This European Standard supersedes HD 610 S1:1992 and EN 60646:1998.

The significant changes with respect to HD 610 S1:1992 and EN 60646:1998 are as follows:

- EN 60519-1:2003 has been taken into account;
- definitions have been brought into line with the second edition of IEC 60050-841;
- one additional test (5.8 Determination of the rated useful charge G_{nu}) has been introduced;
- informative Annex B with the list of symbols used in the standard has been added.

The following dates were fixed:

- | | | |
|--|-------|------------|
| <ul style="list-style-type: none"> - latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement | (dop) | 2007-07-01 |
| <ul style="list-style-type: none"> - latest date by which the national standards conflicting with the EN have to be withdrawn | (dow) | 2009-10-01 |

Annex ZA has been added by CENELEC.

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The text of the International Standard IEC 62076:2006 was approved by CENELEC as a European Standard without any modification.

Annex ZA
(normative)

**Normative references to international publications
with their corresponding European publications**

The following referenced documents are indispensable for the application 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 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 60050-151	- ¹⁾	International Electrotechnical Vocabulary (IEV) Part 151: Electrical and magnetic devices	-	-
IEC 60050-841	2004	International electrotechnical vocabulary Part 841: Industrial electroheat	-	-
IEC 60398	1999	Industrial electroheating installations - General test methods	-	-
IEC 60519-1	- ¹⁾	Safety in electroheat installations Part 1: General requirements	EN 60519-1	2003 ²⁾
IEC 60519-3	- ¹⁾	Safety in electroheat installations Part 3: Particular requirements for induction and conduction heating and induction melting installations	EN 60519-3	2005 ²⁾

¹⁾ Undated reference.

²⁾ Valid edition at date of issue.

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Méthodes d'essai pour fours à induction
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Commission Electrotechnique Internationale
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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**INDUSTRIAL ELECTROHEATING INSTALLATIONS –
TEST METHODS FOR INDUCTION CHANNEL AND
INDUCTION CRUCIBLE FURNACES**

FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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International Standard IEC 62076 has been prepared by IEC technical committee 27: Industrial electroheating equipment.

IEC 62076 cancels and replaces the second edition of IEC 60396 (1991) and the second edition of IEC 60646 (1992) and constitutes a combined technical revision thereof.

The significant changes with respect to these standards are as follows:

- the latest edition of IEC 60519-1 (2003) has been taken into account;
- definitions have been brought into line with the second edition of IEC 60050-841;
- one additional test (5.8 Determination of the rated useful charge G_{nu}) has been introduced;
- informative Annex B with the list of symbols used in the standard has been added.

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

FDIS	Report on voting
27/523/FDIS	27/539/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.

The committee has decided that the contents of this publication will remain unchanged until the maintenance result date indicated on the IEC web site 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.

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INDUSTRIAL ELECTROHEATING INSTALLATIONS – TEST METHODS FOR INDUCTION CHANNEL AND INDUCTION CRUCIBLE FURNACES

1 Scope and object

This International Standard applies to electrical installations comprising industrial induction channel furnaces and induction crucible furnaces for melting, holding and superheating.

Its object is the standardization of test methods to determine the essential parameters and technical characteristics of electroheat installations comprising furnaces of the type indicated above.

With the exception of the safety tests given in items a), b) and c) of 4.2.1, the list of tests given in this standard is neither mandatory nor restrictive. Tests may be selected from this list as required for the characterization and evaluation of a furnace. Additional tests may be carried out, preferably in agreement between the manufacturer and the user of the furnaces concerned.

2 Normative references

The following referenced documents are indispensable for the application 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.

IEC 60050-151, *International Electrotechnical Vocabulary (IEV) – Part 151: Electrical and magnetic devices*

IEC 60050-841:2004, *International Electrotechnical Vocabulary (IEV) – Part 841: Industrial electroheat*

IEC 60398:1999, *Industrial electroheating installations – General test methods*

IEC 60519-1, *Safety in electroheat installations – Part 1: General requirements*

IEC 60519-3, *Safety in electroheat installations – Part 3: Particular requirements for induction and conduction heating and induction melting installations*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 60050-151, IEC 60050-841 (some of which are repeated below), IEC 60519-1 and IEC 60519-3, as well as the following, apply.

NOTE For definitions of terms from 3.12 to 3.24, see also the explanatory diagrams in Annex A. The symbols are also listed in Annex B.