SLOVENSKI STANDARD
SIST EN 60404-4:2002/A2:2009

01-februar-2009

Magnetni materiali - 4. del: Metode za merjenje enosmernih magnetnih lastnosti mehkomagnetnih materialov (IEC 60404-4:1995/A2:2008)

Magnetic materials - Part 4: Methods of measurement of d.c. magnetic properties of magnetically soft materials (IEC 60404-4:1995/A2:2008)

Magnetische Werkstoffe - Teil 4: Verfahren zur Messung der magnetischen Eigenschaften von weichmagnetischen Werkstoffen im Gleichfeld (IEC 60404-4:1995/A2:2008)

Matériaux magnétiques - Partie 4: Méthodes de mesure en courant continu des propriétés magnétiques des matériaux magnétiquement doux (CEI 60404-4:1995/A2:2008)

Ta slovenski standard je istoveten z: **EN 60404-4:1997/A2:2008**

ICS:

17.220.20	Merjenje električnih in magnetnih veličin	Measurement of electrical and magnetic quantities
29.030	Magnetni materiali	Magnetic materials

SIST EN 60404-4:2002/A2:2009 **en,fr**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 60404-4/A2

November 2008

ICS 29.030; 17.220.20

English version

Magnetic materials - Part 4: Methods of measurement of d.c. magnetic properties of magnetically soft materials

(IEC 60404-4:1995/A2:2008)

Matériaux magnétiques -
Partie 4: Méthodes de mesure
en courant continu
des propriétés magnétiques
des matériaux magnétiquement doux
(CEI 60404-4:1995/A2:2008)

Magnetische Werkstoffe -
Teil 4: Verfahren zur Messung
der magnetischen Eigenschaften
von weichmagnetischen Werkstoffen
im Gleichfeld
(IEC 60404-4:1995/A2:2008)

This amendment A2 modifies the European Standard EN 60404-4:1997; it was approved by CENELEC on 2008-11-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this amendment 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 amendment 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, Bulgaria, 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

Ref. No. EN 60404-4:1997/A2:2008 E

Foreword

The text of document 68/363/CDV, future amendment 2 to IEC 60404-4:1995, prepared by IEC TC 68, Magnetic alloys and steels, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as amendment A2 to EN 60404-4:1997 on 2008-11-01.

The following dates were fixed:

– latest date by which the amendment has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2009-08-01
– latest date by which the national standards conflicting with the amendment have to be withdrawn	(dow)	2011-11-01

Endorsement notice

The text of amendment 2:2008 to the International Standard IEC 60404-4:1995 was approved by CENELEC as an amendment to the European Standard without any modification.

IEC 60404-4

Edition 2.0 2008-09

INTERNATIONAL STANDARD

NORME INTERNATIONALE

AMENDMENT 2
AMENDEMENT 2

Magnetic materials –
Part 4: Methods of measurement of d.c. magnetic properties of magnetically soft materials

Matériaux magnétiques –
Partie 4: Méthodes de mesure en courant continu des propriétés magnétiques des matériaux magnétiquement doux

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FOREWORD

This amendment has been prepared by IEC technical committee 68: Magnetic alloys and steels.

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

CDV	Report on voting
68/363/CDV	68/375/RVC

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 this amendment and the base 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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3.4 Test specimen

Replace the last sentence of the 1st paragraph by the following new sentence:

Usually the cross-sectional area is in the range of 10 mm^2 to 200 mm^2.

Replace the 3rd paragraph (from "To reduce…" to "field strength" after equation (1a) in amendment 1) by the following new text:

To reduce the effect of radial variation of the magnetic field strength, the ring shall have dimensions such that the ratio of the outer to inner diameter shall be no greater than 1,4 and preferably less than 1,25. If the ratio approaches the value 1,4, there will be a greater radial variation in the magnetic field strength.

For a stack of laminations or a toroidal wound core, the cross-sectional area of the test specimen shall be calculated from the mass, density and the value of the inner and outer diameter of the ring. The density can be the conventional density for the material supplied by the manufacturer. The cross-sectional area shall be calculated from the following equation:

$$A = \frac{2m}{\rho \pi (D + d)} \qquad (1)$$

where

A is the cross-sectional area of the test specimen, in square metres;

D is the outer diameter of the test specimen, in metres;

d is the inner diameter of the test specimen, in metres;

m is the mass of the test specimen, in kilograms;

ρ is the density of the material, in kilograms per cubic metre.