ICS 29.100.10 SLOVENSKÁ TECHNICKÁ NORMA August 2017

STN	**Výpočet efektívnych parametrov magnetických súčiastok**	**STN EN 60205** 34 5889

Calculation of the effective parameters of magnetic piece parts

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. 07/17

Obsahuje: EN 60205:2017, IEC 60205:2016

Oznámením tejto normy sa od 23.12.2019 ruší
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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 60205

March 2017

ICS 29.100.10

Supersedes EN 60205:2006

English Version

Calculation of the effective parameters of magnetic piece parts (IEC 60205:2016)

Calcul des paramètres effectifs des pièces ferromagnétiques (IEC 60205:2016)

Berechnung der effektiven Kernparameter magnetischer Formteile (IEC 60205:2016)

This European Standard was approved by CENELEC on 2016-12-23. 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: Avenue Marnix 17, B-1000 Brussels

Ref. No. EN 60205:2017 E

European foreword

The text of document 51/1149/FDIS, future edition 4 of IEC 60205, prepared by IEC/TC 51 "Magnetic components, ferrite and magnetic powder materials" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60205:2017.

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) 2017-09-23
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2019-12-23

This document supersedes EN 60205:2006.

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Endorsement notice

The text of the International Standard IEC 60205:2016 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 62317-13	NOTE	Harmonized as EN 62317-13.

IEC 60205

Edition 4.0 2016-11

INTERNATIONAL STANDARD

Calculation of the effective parameters of magnetic piece parts

IEC 60205:2016-11(en)

IEC 60205

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INTERNATIONAL STANDARD

Calculation of the effective parameters of magnetic piece parts

INTERNATIONAL
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COMMISSION

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CONTENTS

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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CALCULATION OF THE EFFECTIVE PARAMETERS OF MAGNETIC PIECE PARTS

FOREWORD

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International Standard IEC 60205 has been prepared by IEC technical committee 51: Magnetic components, ferrite and and magnetic powder materials.

This fourth edition cancels and replaces the third edition published in 2006 and Amendment 1:2009. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

a) addition, in 5.1, of the drawing of a core of rectangular cross-section with chamfer;
b) addition, in 5.1.3, of the equation of a core of rectangular cross-section with chamfer;
c) equations in 5.1.4, 5.6, 5.7, 5.8, 5.9, 5.11, 5.12, 5.14 are amended or replaced;
d) drawings RM6-S and RM6-R in 5.7 are amended;
e) addition of EC-cores, see 5.15.

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

FDIS	Report on voting
51/1149/FDIS	51/1156/RVD

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

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

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

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

A bilingual version of this publication may be issued at a later date.

INTRODUCTION

The purpose of this revision is to provide formulae by which everybody can reach the same effective parameter values. Firstly, it is necessary to have a sufficient number of significant figures when figures are rounded off in the process of calculation. Additionally, some of the calculation formulae have been changed to get closer to the actual shape.

In this revision, the basic idea of calculation has not been changed. Recently, analysis of the magnetic field in the core has been considerably improved, so that, based on these ideas, development of new approaches and formulae can be expected.

Furthermore, the new “EC-cores” have been added.

The parameters in the existing IEC standards will be revised with the outcome from the formulae of this document.

CALCULATION OF THE EFFECTIVE PARAMETERS OF MAGNETIC PIECE PARTS

1 Scope

This document specifies uniform rules for the calculation of the effective parameters of closed circuits of ferromagnetic material.

2 Normative references

There are no normative references in this document.