



National Standards Authority of Ireland

IRISH STANDARD

**I.S. EN 125000:1999**

ICS 29.180

National Standards  
Authority of Ireland  
Glasnevin, Dublin 9  
Ireland

Tel: +353 1 807 3800  
Fax: +353 1 807 3838  
<http://www.nsai.ie>

## **GENERIC SPECIFICATION: CORES MADE OF FERRITE MATERIALS**

**Sales**  
<http://www.standards.ie>

*This Irish Standard was  
published under the  
authority of the National  
Standards Authority of  
Ireland and comes into  
effect on:*

*March 26, 1999*

**NO COPYING WITHOUT NSAI  
PERMISSION EXCEPT AS  
PERMITTED BY COPYRIGHT  
LAW**

© NSAI 1999

**Price Code G**

Údarás um Chaighdeán Náisiúnta na hÉireann



EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN 125000**

December 1997

ICS 29.100.10

Supersedes CECC 25 000:1976

Descriptors: Ferrite cores, generic specification, quality assessment, capability approval, test and measurement procedures

English version

**Generic Specification:  
Cores made of ferrite materials**

Spécification générique:  
Noyaux réalisés à partir de  
matériaux ferrites

Fachgrundspezifikation:  
Ferritkerne

This European Standard was approved by CENELEC on 1997-10-01. 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, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and 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

This European Standard was prepared by the Technical Committee CENELEC TC/CECC SC 51X, Magnetic Components: Cores and soft magnetic materials.

It is based, wherever possible on the Publications of the International Electrotechnical Commission, and in particular on IEC 60367 and IEC 60723.

The text of the draft was submitted to the Unique Acceptance Procedure and was approved by CENELEC as EN 125000 on 1997-10-01.

This European Standard supersedes CECC 25 000:1976 (including its amendment A1:1982).

The following dates were 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) 1998-09-01
- latest date by which the national standards conflicting  
with the EN have to be withdrawn (dow) 1998-09-01

**Contents**

	Page
<b>1. GENERAL</b>	<b>4</b>
1.1 Scope	4
1.2 Normative references	4
1.3 Units, symbols and terminology	5
1.3.1 Multiples and sub-multiples of units	5
1.3.2 Letter symbols	5
1.3.3 Definitions	5
1.3.4 List of parameters useful for core characterization.	5
1.4 Standard and preferred values	6
1.4.1 Dimensions of cores	6
1.4.2 Nominal value of inductance factor $A_L$	6
1.5 Marking of cores and packaging	6
1.6 Subcontracting	6
1.7 Validity of release	6
<b>2. QUALITY ASSESSMENT PROCEDURES</b>	<b>6</b>
2.1 Qualification approval	6
2.1.1 Primary stage of manufacture	6
2.1.2 Qualification approval procedures	7
2.1.3 Quality conformance inspection requirements	7
2.1.3.1 Delayed delivery	7
2.1.3.2 Certified test records	7
2.2 Capability Approval	7
2.2.1 General	7
2.2.1.1 Eligibility for Capability Approval	7
2.2.1.2 Primary stage of manufacture	7
2.2.1.3 Subcontracting	8
2.2.1.4 Incorporated components	8
2.2.1.5 Validity of release	8
2.2.1.6 Rework	8
2.2.2 Procedures for capability approval	8
2.2.2.1 Application for capability approval	8
2.2.2.2 Granting of capability approval	8
2.2.2.3 Description of capability	9
2.2.2.4 Capability Qualifying Components (CQCs)	9
2.2.2.4.1 Process description	11
2.2.2.4.2 Selection of CQCs vs process steps	14
2.2.2.5 Demonstration and verification of capability	15
2.2.2.6 Procedures to be followed in the event of CQC failures	15
2.2.2.7 Abstract of description of capability	15
2.2.3 Procedures following the granting of Capability Approval	15
2.2.3.1 Maintenance of capability approval	15
2.2.3.2 Modifications likely to affect the validity of capability approval	15
2.2.4 Release for delivery	15
<b>3. TEST AND MEASUREMENT PROCEDURES (General guidance)</b>	<b>15</b>

## 1. GENERAL

### 1.1 Scope

This Generic Specification is applicable to cores made of ferrite materials. These products are used in a wide range of inductive components required for many applications in almost all industries.

It establishes standard terms, inspection procedures and methods of testing for use in sectional and detail specifications within the CECC System for electronic components.

### 1.2 Normative references

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 amendments or revision. For undated references the latest edition of the publication referred to applies.

CECC 00 111		Rule of Procedure 11: Specifications
CECC 00 114		Rule of Procedure 14: Quality assessment procedures
CECC 00 200		Register of firms, products and services approved under the CECC System
CECC 00 400		Handbook for the production of CECC documents
EN 60068-2		Basic environmental testing procedures
EN 125500	1996	Magnetic oxide ring cores for interference suppression and low level signal transformer applications
IEC 60027	1971	Letter symbols to be used in electrical technology
IEC 60050		International Electrotechnical Vocabulary (including the Advanced Edition of Section 901 on magnetic materials)
IEC 60133	1985	Dimensions for pot-cores made of magnetic oxides and associated parts
IEC 60205	1966	Calculation of the effective parameters of magnetic piece parts (+ A1:1976 + A2:1981)
IEC 60226	1967	Dimensions of cross-cores (X-cores) made of magnetic oxides and associated parts (+ A1:1982)
IEC 60367-1		Cores for inductors and transformers for telecommunications - Part 1: Measuring Methods (+ A1:1984 + A2:1992)
IEC 60367-2		Cores for inductors and transformers for telecommunications - Part 2: Guides for the drafting of performance specifications (+ A1:1983)
IEC 60367-2A		Cores for inductors and transformers for telecommunications - Part 2: Guides for the drafting of performance specifications - First supplement
IEC 60401	1993	Ferrite materials - Guide on the format of data appearing in manufacturers' catalogues of transformer and inductor cores
IEC 60410	1973	Sampling plans and procedures for inspection by attributes
IEC 60424	1973	Guide to the specification of limits for physical imperfections of parts made from magnetic oxides
IEC 60431	1983	Dimensions of square cores (RM-cores) made of magnetic oxides and associated parts
IEC 60492	1974	Measuring method for aerial rods
IEC 60556	1982	Measuring methods for properties of gyromagnetic materials intended for application at microwave frequencies
IEC 60617	1985	Graphical symbols for diagrams
IEC 60647	1979	Dimensions for magnetic oxide cores intended for use in power supplies (EC-cores)
IEC 60701	1981	Axial lead cores made of magnetic oxide or iron powder
IEC 60723-1	1982	Inductor and transformer cores for telecommunication. Part 1: Generic specification
IEC 60732	1982	Measuring methods for cylinder cores, tube cores and screw cores of magnetic oxide

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

- 
- Looking for additional Standards? Visit Intertek Inform Infostore
  - Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation
-