

**Sectional Specification: Passive filter units for
electromagnetic interference suppression (Filters for
which safety tests are required)**

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 133200:2002 sisaldab Euroopa standardi EN 133200:1999 ingliskeelset teksti.

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ICS 31.160, 33.100

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EUROPEAN STANDARD
NORME EUROPÉENNE
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Supersedes EN 133200:1994

English version

Sectional Specification:
Passive filter units for electromagnetic interference suppression
(Filters for which safety tests are required)

Spécification intermédiaire:
Filtres passifs d'antiparasitage
(Filtres pour lesquels des essais
de sécurité sont exigés)

Rahmenspezifikation:
Passive Filter für die Unterdrückung
von elektromagnetischen Störungen
(Filter für die Sicherheitsprüfungen
vorgeschrieben sind)

This European Standard was approved by CENELEC on 1999-04-01. 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.

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CENELEC

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

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FOREWORD

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This European Standard supersedes EN133200:1994.

The following dates were fixed:

- latest date by which the EN has to be implemented
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CONTENTS

	Page
FOREWORD	2
1 GENERAL	4
1.1 Scope	4
1.2 Related documents	4
1.3 Information to be given in a detail specification	5
1.4 Terminology	6
1.5 Marking	7
2 PREFERRED RATINGS AND CHARACTERISTICS	8
2.1 Preferred characteristics	8
2.2 Preferred values of ratings	8
3 QUALITY ASSESSMENT PROCEDURES	9
3.1 Primary stage of manufacture	9
3.2 Structurally similar filters	9
3.3 Certified records of released lots	9
3.4 Approval testing	9
3.5 Quality conformance inspection	10
4 TEST AND MEASUREMENT PROCEDURES	17
4.0 Capacitance and tan delta measurements	17
4.1 Visual examination and check of dimensions	17
4.2 Voltage proof	17
4.3 Insulation resistance	18
4.4 D.c. line resistance or voltage drop at rated current	19
4.5 Insertion loss	19
4.6 Resistance	20
4.7 Robustness of terminations	20
4.8 Resistance to soldering heat	20
4.9 Solderability	20
4.10 Rapid change of temperature	21
4.11 Vibration	21
4.12 Bump	21
4.13 Shock	22
4.14 Container sealing	22
4.15 Climatic sequence	23
4.16 Damp heat, steady state	24
4.17 Temperature rise	24
4.18 Impulse voltage	25
4.19 Endurance	26
4.20 Charge and discharge	27
4.21 Passive flammability	28
4.22 Current overload	29
4.23 Solvent resistance of the marking	29
4.24 Component solvent resistance	29
ANNEX A TEST SCHEDULE FOR QUALIFICATION APPROVAL	30
ANNEX B TEST SCHEDULE FOR SAFETY REQUIREMENTS ONLY	35
ANNEX C CIRCUIT FOR THE IMPULSE VOLTAGE TEST	38
ANNEX D SUITABLE CIRCUIT FOR THE ENDURANCE TEST	39
ANNEX E DECLARATION OF DESIGN (NORMATIVE)	40

1 - GENERAL

1.1 Scope

This specification applies to passive filter units for electromagnetic interference suppression which fall within the scope of the Generic Specification EN 133000.

The scope of this specification is restricted to passive filter units for which safety tests are appropriate. This implies that filters specified according to this specification will either be connected to mains supplies, when compliance with the mandatory tests of Table 2 is necessary, or used in other circuit positions where the equipment specification prescribes that some or all of these safety tests are required.

This specification applies to passive filter units which will be connected to an a.c. mains or other supply with a nominal voltage not exceeding 1000 V a.c. (r.m.s.) or 1000 V d.c. with a nominal frequency not exceeding 400 Hz.

1.2 Related documents

EN 60320	series	Appliance couplers for household and similar general purposes
EN 60998-2-2	1993	Connecting devices for low voltage circuits for household and similar purposes - Part 2-2: Particular requirements for connecting devices as separate entities with screwless-type clamping units
EN 100114	1994	Rule of Procedure 14: Quality assessment procedures -- Part 1: Approval of manufacturers and other organizations
EN 130600		Sectional Specification: Fixed capacitors with ceramic dielectric, class 1
EN 130700		Sectional Specification: Fixed capacitors with ceramic dielectric, class 2
EN 132400	1994	Sectional Specification: Fixed capacitors for electromagnetic interference suppression and connection to the supply mains (Assessment level D)
EN 133000	1997	Generic Specification: Passive filter units for electromagnetic interference suppression
EN 133100	1998	Sectional Specification: Passive filter units for electromagnetic interference suppression - Filters for which safety tests are not required
EN 133201	1998	Blank Detail Specification: Passive filter units for electromagnetic interference suppression - Filters for which safety tests are required
EN 133221	1998	Blank Detail Specification: Passive filter units for electromagnetic interference suppression - Filters for which safety tests are required (safety tests only)
IEC 60060-1	1989	High-voltage test techniques -- Part 1: General definitions and test requirements
IEC 60062 A 1	1992 1988	Marking Codes for Resistors and Capacitors
IEC 60063 A 1 A 2	1963 1967 1977	Preferred number series for resistors and capacitors.
IEC 60068	series	Environmental testing
IEC 60085	1984	Thermal evaluation and classification of electrical insulation
IEC 60279	1969	Measurement of the winding resistance of an a.c. machine during operation at alternating voltage
IEC 60294	1969	Measurement of the dimensions of a cylindrical component having two axial terminations
IEC 60335-1	1976	Safety of household and similar electrical appliances -- Part 1: General requirements

IEC 60384-14	1993	Fixed capacitors for use in electronic equipment -- Part 14: Sectional Specification: Fixed capacitors for electromagnetic interference suppression and connection to the supply mains
IEC 60410	1973	Sampling plans and procedures for inspection by attributes
IEC 60536	1976	Classification of electrical and electronic equipment with regard to protection against electric shock
IEC 60760	1989	Flat, quick-connect terminations
IEC 60938	1988	Fixed inductors for radio interference suppression
IEC 60939	1988	Complete filter units for radio interference suppression
IEC 60940	1988	Guidance information on the application of capacitors, resistors, inductors and complete filter units for radio interference suppression
IEC 61210	1993	Connecting devices - Flat quick-connect terminations for electrical copper conductors - Safety requirements
ISO 3	1973	Preferred Numbers - Series of preferred numbers

1.3 Information to be given in a detail specification

The detail specifications shall be derived from the relevant blank detail specification.

Detail specifications shall not specify requirements inferior to those of the generic, sectional or blank detail specification. When more severe requirements are included, they shall be listed in 1.9 of the detail specification, and indicated in the test schedules, for example by an asterisk.

NOTE - The information given in 1.3.1 may for convenience be presented in tabular form.

The following information shall be given in each detail specification and the values quoted shall preferably be selected from the appropriate clause of this sectional specification.

1.3.1 Outline drawing and dimensions

There shall be an illustration of the filter as an aid to easy recognition and for comparison of the filter with others. Dimensions and their associated tolerances, which affect interchangeability and mounting, shall be given in the detail specification. All dimensions shall preferably be stated in millimetres.

Normally the numerical values shall be given for the length of the body, the width and height of the body and the wire spacing, or for cylindrical types, the body diameter and the length and diameter of the terminations. When necessary, for example when a range of filters is covered by a single detail specification, their dimensions and their associated tolerances shall be placed in a table following the drawing.

In addition the detail specification shall state such other dimensional information as will adequately describe the filter outline.

1.3.2 Mounting

The detail specification shall specify the method of mounting recommended for normal use and the method which is mandatory for the application of the vibration, bump, shock and endurance tests. The design of the filter may be such that special mounting fixtures or heat sinks are required in its use. In this case, the detail specification shall describe the mounting fixtures and they shall be used in the application of the vibration, bump or shock tests. The specified heat sink shall be used in the application of the endurance test.

NOTE - If recommendations for mounting for "normal" use are made, they shall be included in the detail specification under 1.8 "Additional information (not for inspection purposes)". If they are included, a warning can be given that the full vibration, bump and shock performance may not be available if mounting methods other than those specified in 1.1 of the detail specification are used.

1.3.3 Ratings and characteristics

The ratings and characteristics shall be in accordance with the relevant clauses of this specification.