

**Fixed electric double-layer capacitors
for use in electronic equipment Part 2:
Sectional specification - Electric
double-layer capacitors for power
application**

Fixed electric double-layer capacitors for use in
electronic equipment Part 2: Sectional specification -
Electric double-layer capacitors for power application

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 62391-2:2006 sisaldab Euroopa standardi EN 62391-2:2006 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 22.09.2006 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 62391-2:2006 consists of the English text of the European standard EN 62391-2:2006.</p> <p>This document is endorsed on 22.09.2006 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala:</p> <p>This part of IEC 62391 applies to electric double-layer capacitors for power application. Electric double-layer capacitors for power are intended for applications that require discharge currents in the range from mA to A. The characteristics of the capacitors include such performance as relatively high capacitance and low internal resistance, which is applicable to Class 3 of the measurement classification specified in IEC 62391-1.</p>	<p>Scope:</p> <p>This part of IEC 62391 applies to electric double-layer capacitors for power application. Electric double-layer capacitors for power are intended for applications that require discharge currents in the range from mA to A. The characteristics of the capacitors include such performance as relatively high capacitance and low internal resistance, which is applicable to Class 3 of the measurement classification specified in IEC 62391-1.</p>
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ICS 31.060.10

Võtmesõnad:

**Fixed electric double-layer capacitors
for use in electronic equipment
Part 2: Sectional specification -
Electric double-layer capacitors
for power application
(IEC 62391-2:2006)**

Condensateurs électriques fixes
à double couche utilisés dans
les équipements électroniques
Partie 2: Spécification intermédiaire -
Condensateurs électriques fixes à double
couche pour application de puissance
(CEI 62391-2:2006)

Elektrische
Doppelschichtfestkondensatoren zur
Verwendung in Geräten der Elektronik
Teil 2: Rahmenspezifikation:
Elektrische
Doppelschichtfestkondensatoren für
Leistungsanwendungen
(IEC 62391-2:2006)

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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 40/1641/FDIS, future edition 1 of IEC 62391-2, prepared by IEC TC 40, Capacitors and resistors for electronic equipment, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 62391-2 on 2006-05-01.

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) 2007-02-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2009-05-01

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 62391-2:2006 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 60063	- ¹⁾	Preferred number series for resistors and capacitors	-	-
IEC 60068-1 + corr. October	- ¹⁾	Environmental testing - Part 1: General and guidance	EN 60068-1	1994 ²⁾
IEC 60384-1 (mod)	- ¹⁾	Fixed capacitors for use in electronic equipment - Part 1: Generic specification	EN 60384-1 + corr. October	2001 ²⁾ 2001
IEC 60410	- ¹⁾	Sampling plans and procedures for inspection - by attributes		-
IEC 62391-1	- ¹⁾	Fixed electric double-layer capacitors for use in electronic equipment - Part 1: Generic specification	EN 62391-1	2006 ²⁾
IEC 62391-2-1	- ¹⁾	Fixed electric double-layer capacitors for use in electronic equipment - Part 2-1: Blank detail specification - Electric-double layer capacitors for power application - Assessment level EZ	EN 62391-2-1	2006 ²⁾
ISO 3	- ¹⁾	Preferred numbers - Series of preferred numbers	-	-

¹⁾ Undated reference.

²⁾ Valid edition at date of issue.

INTERNATIONAL STANDARD

IEC
62391-2

First edition
2006-04

**Fixed electric double-layer capacitors
for use in electronic equipment –**

**Part 2:
Sectional specification –
Electric double-layer capacitors
for power application**



Reference number
IEC 62391-2:2006(E)

Publication numbering

As from 1 January 1997 all IEC publications are issued with a designation in the 60000 series. For example, IEC 34-1 is now referred to as IEC 60034-1.

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INTERNATIONAL STANDARD

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2006-04

Fixed electric double-layer capacitors for use in electronic equipment –

Part 2: Sectional specification – Electric double-layer capacitors for power application

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

FIXED ELECTRIC DOUBLE-LAYER CAPACITORS FOR USE IN ELECTRONIC EQUIPMENT –

Part 2: Sectional specification – Electric double-layer capacitors for power application

FOREWORD

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International Standard IEC 62391-2 has been prepared by IEC technical committee 40: Capacitors and resistors for electronic equipment.

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

FDIS	Report on voting
40/1641/FDIS	40/1713/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.

IEC 62391 consists of the following parts, under the general title *Fixed electric double-layer capacitors for use in electronic equipment*:

Part 1: Generic specification

Part 2: Sectional specification – Electric double-layer capacitors for power application

The sectional specification mentioned above does have a blank detail specification being a supplementary document, containing requirements for style, layout and minimum content of detail specifications.

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.

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

FIXED ELECTRIC DOUBLE-LAYER CAPACITORS FOR USE IN ELECTRONIC EQUIPMENT –

Part 2: Sectional specification – Electric double-layer capacitors for power application

1 General

1.1 Scope

This part of IEC 62391 applies to electric double-layer capacitors for power application.

Electric double-layer capacitors for power are intended for applications that require discharge currents in the range from mA to A. The characteristics of the capacitors include such performance as relatively high capacitance and low internal resistance, which is applicable to Class 3 of the measurement classification specified in IEC 62391-1.

The definition of power density and its calculating procedure should be in accordance with Annex A.

1.2 Object

The object of this standard is to prescribe preferred ratings and characteristics and to select from IEC 62391-1 the appropriate quality assessment procedures, tests and measuring methods and to give general performance requirements for this type of capacitor. Test severities and requirements prescribed in detail specifications referring to this sectional specification shall be of equal or higher performance level; lower performance levels are not permitted.

1.3 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 60063, *Preferred number series for resistors and capacitors*

IEC 60068-1, *Environmental testing – Part 1: General and guidance*

IEC 60384-1, *Fixed capacitors for use in electronic equipment – Part 1: Generic specification*

IEC 60410, *Sampling plans and procedures for inspection by attributes*

IEC 62391-1, *Fixed electric double-layer capacitors for use in electronic equipment – Part 1: Generic specification* ¹

IEC 62391-2-1, *Fixed electric double-layer capacitors for use in electronic equipment – Part 2-1: Electric double-layer capacitors for power application – Assessment level EZ*

ISO 3, *Preferred numbers – Series of preferred numbers*