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Fixed electric double-layer capacitors for use in electric and electronic equipment - Part 1: Generic specification

## EESTI STANDARDI EESSÕNA

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See Eesti standard EVS-EN 62391-1:2016 sisaldab Euroopa standardi EN 62391-1:2016 ingliskeelset teksti.	This Estonian standard EVS-EN 62391-1:2016 consists of the English text of the European standard EN 62391-1:2016.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 19.02.2016.	Date of Availability of the European standard is 19.02.2016.
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ICS 31.060.10

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English Version

## Fixed electric double-layer capacitors for use in electric and electronic equipment - Part 1: Generic specification (IEC 62391-1:2015)

Condensateurs électriques fixes à double couche utilisés  
dans les équipements électriques et électroniques -  
Partie 1: Spécification générique  
(IEC 62391-1:2015)

Elektrische Doppelschichtkondensatoren zur Verwendung  
in elektrischen und elektronischen Geräten -  
Teil 1: Fachgrundspezifikation  
(IEC 62391-1:2015)

This European Standard was approved by CENELEC on 2015-11-27. 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

## European foreword

The text of document 40/2393/FDIS, future edition 2 of IEC 62391-1, prepared by IEC/TC 40 "Capacitors and resistors for electronic equipment" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 62391-1:2016.

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) 2016-08-27
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2018-11-27

This document supersedes EN 62391-1:2006.

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## Endorsement notice

The text of the International Standard IEC 62391-1:2015 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 60068-2-47:2005	NOTE	Harmonized as EN 60068-2-47:2005 (not modified).
IEC 60384-1:2008	NOTE	Harmonized as EN 60384-1:2009 (not modified).
IEC 61881-3:2012	NOTE	Harmonized as EN 61881-3:2012 (not modified).
IEC 62391-1:2006	NOTE	Harmonized as EN 62391-1:2006 <sup>1)</sup> (not modified).
IEC 62391-2:2006	NOTE	Harmonized as EN 62391-2:2006 (not modified).
IEC 62391-2-1:2006	NOTE	Harmonized as EN 62391-2-1:2006 (not modified).
IEC 62576:2009	NOTE	Harmonized as EN 62576:2010 (not modified).
ISO 80000-1:2009	NOTE	Harmonized as EN ISO 80000-1:2013 (not modified).

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<sup>1)</sup> Superseded by EN 62391-1:2015 (IEC 62391-1:2015).

## Annex ZA (normative)

### Normative references to international publications with their corresponding European publications

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE 1 When an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: [www.cenelec.eu](http://www.cenelec.eu)

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60027	series	Letter symbols to be used in electrical technology	EN 60027	series
IEC 60050	series	International Electrotechnical Vocabulary	-	-
IEC 60062	-	Marking codes for resistors and capacitors	EN 60062	-
IEC 60063	-	Preferred number series for resistors and capacitors	EN 60063	-
IEC 60068-1	2013	Environmental testing - Part 1: General and guidance	EN 60068-1	2014
IEC 60068-2-1	2007	Environmental testing - Part 2-1: Tests - Test A: Cold	EN 60068-2-1	2007
IEC 60068-2-2	2007	Environmental testing - Part 2-2: Tests - Test B: Dry heat	EN 60068-2-2	2007
IEC 60068-2-6	2007	Environmental testing - Part 2-6: Tests - Test Fc: Vibration (sinusoidal)	EN 60068-2-6	2008
IEC 60068-2-14	2009	Environmental testing - Part 2-14: Tests - Test N: Change of temperature	EN 60068-2-14	2009
IEC 60068-2-20	2008	Environmental testing - Part 2-20: Tests - Test T: Test methods for solderability and resistance to soldering heat of devices with leads	EN 60068-2-20	2008
IEC 60068-2-21	2006	Environmental testing - Part 2-21: Tests - Test U: Robustness of terminations and integral mounting devices	EN 60068-2-21	2006
IEC 60068-2-45	1980	Basic environmental testing procedures - Part 2-45: Tests - Test XA and guidance: Immersion in cleaning solvents	EN 60068-2-45	1992
+A1	1993		+A1	1993
IEC 60068-2-54	2006	Environmental testing - Part 2-54: Tests - Test Ta: Solderability testing of electronic components by the wetting balance method	EN 60068-2-54	2006

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60068-2-58	2015	Environmental testing - Part 2-58: Tests - Test Td: Test methods for solderability, resistance to dissolution of metallization and to soldering heat of surface mounting devices (SMD)	EN 60068-2-58	2015
IEC 60068-2-69	2007	Environmental testing - Part 2: Tests - Test Te: Solderability testing of electronic components for surface mounting devices (SMD) by the wetting balance method	EN 60068-2-69	2007
IEC 60068-2-78	2012	Environmental testing - Part 2-78: Tests - Test Cab: Damp heat, steady state	EN 60068-2-78	2013
IEC 60294	2012	Measurement of the dimensions of a cylindrical component with axial terminations	EN 60294	2012
IEC 60617-DB	-	Graphical symbols for diagrams	-	-
IEC 60695-11-5	-	Fire hazard testing - Part 11-5: Test flames - Needle-flame test method - Apparatus, confirmatory test arrangement and guidance	EN 60695-11-5	-
IEC 60717	2012	Method for the determination of the space required by capacitors and resistors with unidirectional terminations	EN 60717	2012
IEC 61193-2	-	Quality assessment systems - Part 2: Selection and use of sampling plans for inspection of electronic components and packages	EN 61193-2	-

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