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Elektrostatiska urladdningar (ESD) – Del 5-3: Skydd av elektronik – Klassning av egenskaper och fordringar för förpackningar för ESD-känsliga komponenter

Electrostatics –

*Part 5-3: Protection of electronic devices from electrostatic phenomena –
Properties and requirements classifications for packaging intended
for electrostatic discharge sensitive devices*

Som svensk standard gäller europastandarden EN 61340-5-3:2010. Den svenska standarden innehåller den officiella engelska språkversionen av EN 61340-5-3:2010.

Nationellt förord

Europastandarden EN 61340-5-3:2010

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **IEC 61340-5-3, First edition, 2010 - Electrostatics - Part 5-3: Protection of electronic devices from electrostatic phenomena - Properties and requirements classifications for packaging intended for electrostatic discharge sensitive devices**

utarbetad inom International Electrotechnical Commission, IEC.

Standarder underlättar utvecklingen och höjer elsäkerheten

Det finns många fördelar med att ha gemensamma tekniska regler för bl a säkerhet, prestanda, dokumentation, utförande och skötsel av elprodukter, elanläggningar och metoder. Genom att utforma sådana standarder blir säkerhetskraven tydliga och utvecklingskostnaderna rimliga samtidigt som marknadens acceptans för produkten eller tjänsten ökar.

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Arbetet i de tekniska kommittéerna är öppet för alla svenska organisationer, företag, institutioner, myndigheter och statliga verk. Den årliga avgiften för deltagandet och intäkter från försäljning finansierar SEKs standardiseringsverksamhet och medlemsavgift till IEC och CENELEC.

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Du som vill dra nytta av dessa möjligheter är välkommen att kontakta SEKs kansli för mer information.

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**Electrostatics -
Part 5-3: Protection of electronic devices from electrostatic phenomena -
Properties and requirements classifications for packaging intended
for electrostatic discharge sensitive devices
(IEC 61340-5-3:2010)**

Electrostatique -
Partie 5-3: Protection des dispositifs
électroniques contre les phénomènes
électrostatiques -
Classifications des propriétés
et des exigences relatives à l'emballage
destiné aux dispositifs sensibles
aux décharges électrostatiques
(CEI 61340-5-3:2010)

Elektrostatik -
Teil 5-3: Schutz von elektronischen
Bauelementen gegen elektrostatische
Phänomene -
Eigenschaften und Anforderungen
für die Klassifizierung von Verpackungen
welche für Bauelemente verwendet
werden, die gegen elektrostatische
Entladungen empfindlich sind
(IEC 61340-5-3:2010)

This European Standard was approved by CENELEC on 2010-05-01. 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, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

CENELEC

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

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Foreword

The text of document 101/295/FDIS, future edition 1 of IEC 61340-5-3, prepared by IEC TC 101, Electrostatics, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61340-5-3 on 2010-05-01.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN and CENELEC shall not be held responsible for identifying any or all such patent rights.

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) | 2011-02-01 |
| – latest date by which the national standards conflicting with the EN have to be withdrawn | (dow) | 2013-05-01 |

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61340-5-3:2010 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:

- | | | |
|----------------------|------|---------------------------------|
| [2] IEC 61340-5-1 | NOTE | Harmonized as EN 61340-5-1. |
| [3] IEC/TR 61340-5-2 | NOTE | Harmonized as CLC/TR 61340-5-2. |
| [4] IEC 61340-3-1 | NOTE | Harmonized as EN 61340-3-1. |
| [5] IEC 61340-3-2 | NOTE | Harmonized as EN 61340-3-2. |
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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 61340-2-3	-	Electrostatics - Part 2-3: Methods of test for determining the resistance and resistivity of solid planar materials used to avoid electrostatic charge accumulation	EN 61340-2-3	-
IEC 61340-4-8	-	Electrostatics - Part 4-8: Standard test methods for specific applications - Discharge shielding - Bags	-	-
ANSI/ESD STM 11.13	-	Two-point resistance measurement	-	-

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INTRODUCTION

Packaging is necessary to protect electrostatic discharge sensitive devices (ESDS) from physical and environmental damage during manufacture, transportation and storage.

Additionally, packaging for ESDS should also prevent damage from static electricity.

ELECTROSTATICS –

Part 5-3: Protection of electronic devices from electrostatic phenomena – Properties and requirements classification for packaging intended for electrostatic discharge sensitive devices

1 Scope

This part of IEC 61340 defines the ESD protective packaging properties needed to protect electrostatic discharge sensitive devices (ESDS) through all phases of production, transport and storage. Test methods are referenced to evaluate packaging and packaging materials for these product and material properties. Performance limits are provided.

This standard does not address protection from electromagnetic interference (EMI), radio frequency interference (RFI), electromagnetic pulsing (EMP) nor protection of volatile materials.

2 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 61340-2-3, *Electrostatics – Part 2-3: Methods of test for determining the resistance and resistivity of solid planar materials used to avoid electrostatic charge accumulation*

IEC 61340-4-8, *Electrostatics – Part 4-8: Standard test methods for specific applications – Discharge shielding - Bags*

ANSI/ESD STM 11.13, *Two-point resistance measurement*

