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## Elektrostatiska urladdningar – Del 4-8: Provningsmetoder för särskilda tillämpningar – Elektrostatisk skärmning – Påsar

*Electrostatics –  
Part 4-8: Standard test methods for specific applications –  
Electrostatic discharge shielding –  
Bags*

Som svensk standard gäller europastandarden EN 61340-4-8:2015. Den svenska standarden innehåller den officiella engelska språkversionen av EN 61340-4-8:2015.

### Nationellt förord

Europastandarden EN 61340-4-8:2015

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **IEC 61340-4-8, Second edition, 2014 - Electrostatics - Part 4-8: Standard test methods for specific applications - Electrostatic discharge shielding - Bags**

utarbetad inom International Electrotechnical Commission, IEC.

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ICS 17.220.99; 29.020.00

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Det finns många fördelar med att ha gemensamma tekniska regler för bl a mätning, säkerhet och provning och för utförande, skötsel och dokumentation av elprodukter och elanläggningar.

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EUROPEAN STANDARD

**EN 61340-4-8**

NORME EUROPÉENNE

EUROPÄISCHE NORM

January 2015

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English Version

**Electrostatics - Part 4-8: Standard test methods for specific applications - Electrostatic discharge shielding - Bags  
(IEC 61340-4-8:2014)**

Electrostatique - Partie 4-8: Méthodes d'essai normalisées pour des applications spécifiques - Blindage contre les décharges électrostatiques - Sacs  
(IEC 61340-4-8:2014)

Elektrostatik - Teil 4-8: Standard-Prüfverfahren für spezielle Anwendungen - Schirmwirkung gegen elektrostatische Entladung - Beutel  
(IEC 61340-4-8:2014)

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Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre 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 CEN-CENELEC Management Centre 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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.



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**

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Ref. No. EN 61340-4-8:2015 E

SEK Svensk Elstandard

## Foreword

The text of document 101/448/FDIS, future edition 2 of IEC 61340-4-8, prepared by IEC/TC 101 "Electrostatics" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 61340-4-8:2015.

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) 2015-10-01
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2018-01-01

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## Endorsement notice

The text of the International Standard IEC 61340-4-8:2014 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 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 60093	-	Methods of test for volume resistivity and surface resistivity of solid electrical insulating materials	HD 429 S1	-
IEC 61340-3-1	-	Electrostatics - Part 3-1: Methods for simulation of electrostatic effects - Human body model (HBM) electrostatic discharge test waveforms	EN 61340-3-1	-
IEC 61340-5-3	-	Electrostatics - Part 5-3: Protection of electronic devices from electrostatic phenomena - Properties and requirements classifications for packaging intended for electrostatic discharge sensitive devices	EN 61340-5-3	-

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

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**ELECTROSTATICS –****Part 4-8: Standard test methods for specific applications –  
Electrostatic discharge shielding – Bags****FOREWORD**

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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International Standard IEC 61340-4-8 has been prepared by IEC technical committee 101: Electrostatics.

This second edition cancels and replaces the first edition published in 2010 and constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) modification to the title to include the word "Electrostatic" before discharge shielding";
- b) removal of normative references ANSI/ESD STM5.1 and ASTM D-257-78 and replaced by normative references IEC 61340-3-1 and IEC 60093;
- c) new normative reference to IEC 61340-5-3 added, because the requirement for shielding bags have been included in this standard;
- d) imperial units have been removed.

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

FDIS	Report on voting
101/448/FDIS	101/456A/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.

A list of all parts in the IEC 61340 series, under the general title *Electrostatics*, can be found on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the stability 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.



## INTRODUCTION

It is the intention of this part of IEC 61340 to provide industry with a common, repeatable method for testing and determining the electrostatic discharge shielding ability of electrostatic discharge shielding bags.

This test method describes the use of a single current probe in order to obtain the energy value inside a bag when tested with a 1 000 V human body model discharge pulse in an ESD simulator.

The standard addresses important variables such as:

- discharge waveform characteristics;
- capacitive probe capacitance;
- bag size.

## ELECTROSTATICS –

### Part 4-8: Standard test methods for specific applications – Electrostatic discharge shielding – Bags

#### 1 Scope

This part of IEC 61340 provides a test method for evaluating the performance of electrostatic discharge shielding bags tested according to the requirements of IEC 61340-5-3. The design voltage for the test apparatus is 1 000 V d.c.

The test method presented in this standard can also be applied to packaging other than shielding bags.

The purpose of this standard is to ensure that testing laboratories who use this test method to evaluate a given packaging material will obtain similar results.

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

#### 2 Normative references

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.

IEC 60093, *Methods of test for volume resistivity and surface resistivity of solid electrical insulating materials*<sup>1</sup>

IEC 61340-3-1, *Electrostatics – Part 3-1: Methods for simulation of electrostatic effects – Human body model (HBM) electrostatic discharge test waveforms*

IEC 61340-5-3, *Electrostatics – Part 5-3: Protection of electronic devices from electrostatic phenomena – Properties and requirements classification for packaging intended for electrostatic discharge sensitive devices*