Electrostatics - Part 2-1: Measurement methods - Ability of materials and products to dissipate static electric charge



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English Version

Electrostatics - Part 2-1: Measurement methods - Ability of materials and products to dissipate static electric charge (IEC 61340-2-1:2015)

Electrostatique - Partie 2-1: Méthodes de mesure - Capacité des matériaux et des produits à dissiper des charges électrostatiques (IEC 61340-2-1:2015)

Elektrostatik - Teil 2-1: Messverfahren - Fähigkeit von Materialien und Erzeugnissen, elektrostatische Ladungen abzuleiten (IEC 61340-2-1:2015)

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

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European foreword

The text of document 101/446/CDV, future edition 2 of IEC 61340-2-1, prepared by IEC/TC 101 "Electrostatics" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 61340-2-1:2015.

The following dates are fixed:

- latest date by which the document has to be implemented at (dop) 2016-07-02 national level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting with (dow) 2018-10-02 the document have to be withdrawn

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In the official version, for Bibliography, the following note has to be added for the standard indicated :

IEC 61340-5-1 NOTE Harmonized as EN 61340-5-1.

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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	EN/HD	<u>Year</u>
IEC 61340-4-6	-	Electrostatics - Part 4-6: Standard test methods for specific applications - Wrist straps	EN 61340-4-6	-
IEC 61340-4-7				-

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INTRODUCTION

Measurements of the rate of dissipation of static charge belong to the essential measurement techniques in the field of electrostatics.

For homogeneous conductive materials, this property can be evaluated indirectly by measuring resistance or resistivity parameters. Care should be exercised when determining the homogeneity of materials, as some materials that appear homogenous do exhibit nonhomogeneous electrical characteristics. If the homogeneity of materials is not known and cannot be otherwise verified, resistance measurements may not be reliable or may not give st uve ves (e.g. rge should enough information. Resistance measurements may also not be reliable when evaluating materials in the dissipative or insulative range and especially for high ohmic materials including conductive fibres (e.g. textiles with a metallic grid). In such cases, the rate of dissipation of static charge should be measured directly.