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| STN | Nositeľné elektronické zariadenia a technológie Časť 204-1: Elektronické textilie Skúšobná metóda na hodnotenie trvanlivosti e-textilných výrobkov pri praní | STN EN IEC 63203-204-1 35 9350 |
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Wearable electronic devices and technologies - Part 204-1: Electronic textile - Test method for assessing washing durability of e-textile products

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 06/23

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Oznámením tejto normy sa od 20.04.2026 ruší
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EN IEC 63203-204-1

NORME EUROPÉENNE

EUROPÄISCHE NORM

April 2023

ICS 59.080.80; 59.080.01

Supersedes EN IEC 63203-204-1:2021

English Version

**Wearable electronic devices and technologies - Part 204-1:
Electronic textile - Test method for assessing washing durability
of e-textile products
(IEC 63203-204-1:2023)**

Technologies et dispositifs électroniques prêts-à-porter -
Partie 204-1: Textile électronique - Méthode d'essai pour
l'évaluation de la durabilité au lavage des produits e-textiles
(IEC 63203-204-1:2023)

Tragbare elektronische Geräte und Technologien -
Teil 204-1: Elektronische Textilien - Prüfverfahren zur
Beurteilung der Waschbeständigkeit von E-
Textilerzeugnissen
(IEC 63203-204-1:2023)

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

EN IEC 63203-204-1:2023 (E)**European foreword**

The text of document 124/214/FDIS, future edition 2 of IEC 63203-204-1, prepared by IEC/TC 124 "Wearable electronic devices and technologies" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 63203-204-1:2023.

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) 2024-01-20
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Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 1 Where 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.cencenelec.eu.

| <u>Publication</u> | <u>Year</u> | <u>Title</u> | <u>EN/HD</u> | <u>Year</u> |
|--------------------|-------------|---|--------------|-------------------|
| ISO 139 | - | Textiles - Standard atmospheres for conditioning and testing | EN ISO 139 | - |
| ISO 6330 | 2012 | Textiles - Domestic washing and drying procedures for textile testing | EN ISO 6330 | 2012 ¹ |

¹ This standard has been withdrawn and replaced with EN ISO 6330:2021.



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NORME INTERNATIONALE



**Wearable electronic devices and technologies –
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e-textile products**

**Technologies et dispositifs électroniques prêts-à-porter –
Partie 204-1: Textile électronique – Méthode d'essai pour l'évaluation de la
durabilité au lavage des produits e-textiles**

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Edition 2.0 2023-03

INTERNATIONAL STANDARD

NORME INTERNATIONALE



**Wearable electronic devices and technologies –
Part 204-1: Electronic textile – Test method for assessing washing durability of
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Partie 204-1: Textile électronique – Méthode d'essai pour l'évaluation de la
durabilité au lavage des produits e-textiles**

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CONTENTS

| | |
|---|----|
| FOREWORD..... | 3 |
| 1 Scope..... | 5 |
| 2 Normative references | 5 |
| 3 Terms and definitions | 5 |
| 4 Test method – General | 5 |
| 4.1 Checklist before carrying out washing durability test | 5 |
| 4.2 Washing durability test conditions | 6 |
| 4.3 Check of operation before and after washing durability test | 6 |
| 5 Test procedure | 6 |
| 5.1 Pretreatment..... | 6 |
| 5.2 Washing..... | 6 |
| 5.3 Test after washing and drying | 6 |
| 6 Test report..... | 8 |
| Annex A (informative) Result of studies – Resistance measurement | 9 |
| A.1 Test procedure..... | 9 |
| A.2 Test results | 9 |
| Bibliography..... | 11 |
| Figure 1 – Flow chart of test procedure | 7 |
| Figure A.1 – Test results of resistance measurement after laundry test..... | 10 |
| Table A.1 – Test conditions and results | 9 |

INTERNATIONAL ELECTROTECHNICAL COMMISSION

WEARABLE ELECTRONIC DEVICES AND TECHNOLOGIES –**Part 204-1: Electronic textile – Test method for assessing washing durability of e-textile products**

FOREWORD

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IEC 63203-204-1 has been prepared by IEC technical committee 124: Wearable electronic devices and technologies. It is an International Standard.

This second edition cancels and replaces the first edition published in 2021. This edition constitutes a technical revision.

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

- a) Subclause 3.2 on conductive textiles has been deleted.
- b) Subclause 3.3 on leisurewear and sportswear has been deleted.
- c) Subclause 3.2 on washing procedure has been added.
- d) Figure 1 has been updated.

- e) The optional measurement of conductive tracks has been added in 4.1 to the checklist before carrying out washing durability test.
- f) Additions have been made to the list in Clause 6.

The text of this International Standard is based on the following documents:

| Draft | Report on voting |
|--------------|------------------|
| 124/214/FDIS | 124/217/RVD |

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

A list of all parts in the IEC 63203 series, published under the general title *Wearable electronic devices and technologies*, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

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- withdrawn,
- replaced by a revised edition, or
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WEARABLE ELECTRONIC DEVICES AND TECHNOLOGIES –

Part 204-1: Electronic textile – Test method for assessing washing durability of e-textile products

1 Scope

This document specifies a household washing durability test method for e-textile products. This document includes testing procedures for e-textile products with electrically conductive components and sensors to collect the data of the user.

This document does not cover safety or heat-generation test methods. Products containing components other than those listed in this clause are not covered by this document.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

ISO 139, *Textiles – Standard atmospheres for conditioning and testing*

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