

SLOVENSKI STANDARD SIST EN 62040-1:2009/A1:2013

01-julij-2013

Sistemi z neprekinjanim napajanjem (UPS) - 1. del: Splošne in varnostne zahteve za UPS

Uninterruptible power systems (UPS) -- Part 1: General and safety requirements for UPS

Unterbrechungsfreie Stromversorgungssysteme (USV) -- Teil 1: Allgemeine Anforderungen und Sicherheitsanforderungen

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Alimentations sans interruption (ASI) refrartie 1: Exigences générales et règles de sécurité pour les ASI

SIST EN 62040-1:2009/A1:2013

Ta slovenski standard je istoveten z: EN 62040-1:2008/A1:2013

<u>ICS:</u>

29.200 Usmerniki. Pretvorniki. Stabilizirano električno napajanje

Rectifiers. Convertors. Stabilized power supply

SIST EN 62040-1:2009/A1:2013 en

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EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

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English version

Uninterruptible power systems (UPS) -Part 1: General and safety requirements for UPS (IEC 62040-1:2008/A1:2013)

Alimentations sans interruption (ASI) -Partie 1: Exigences générales et règles de sécurité pour les ASI (CEI 62040-1:2008/A1:2013)

Unterbrechungsfreie Stromversorgungssysteme (USV) -Teil 1: Allgemeine Anforderungen und Sicherheitsanforderungen (IEC 62040-1:2008/A1:2013)

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This amendment A1 modifies the European Standard EN 62040-1:2008; it was approved by CENELEC on 2013-02-14. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this amendment the status of a national standard without any alteration.

Up-to-date lists and bibliographical, references concerning, such initial standards may be obtained on application to the CEN-CENELEC Management Centre or to any CENELEC member.

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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 22H/151/FDIS, future edition 1 of IEC 62040-1:2008/A1, prepared by SC 22H, "Uninterruptible power systems (UPS)", of IEC TC 22, "Power electronic systems and equipment" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 62040-1:2008/A1:2013.

The following dates are fixed:

•	latest date by which the document has to be implemented at national level by publication of an identical national	(dop)	2013-11-17
•	standard or by endorsement latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2016-02-14

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The text of the International Standard IEC 62040-1:2008/A1:2013 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 When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

Addition to Annex ZA of EN 62040-1:2008:

Publication	Year	Title	<u>EN/HD</u>	<u>Year</u>
IEC 61439-1	2011	Low-voltage switchgear and controlgear assemblies - Part 1: General rules	EN 61439-1	2011

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AMENDMENT 1 AMENDEMENT 1

Uninterruptible power systems (UPS) ARD PREVIEW Part 1: General and safety requirements for UPS ai)

Alimentations sans interruption (ASI) Partie 1: Exigences générales et règles de sécurité pourses ASI a741e137b444/sist-en-62040-1-2009-a1-2013

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FOREWORD

This amendment has been prepared by subcommittee 22H: Uninterruptible power systems (UPS), of IEC technical committee 22: Power electronic systems and equipment.

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

FDIS	Report on voting	
22H/151/FDIS	22H/155/RVD	

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

The committee has decided that the contents of this amendment and the base 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.

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SIST EN 62040-1:2009/A1:2013 https://standards.iteh.ai/catalog/standards/sist/edae85a8-d799-452c-b9c4-INTROPHYSCTLONSI-CTO2040E-20MENDMENT

This amendment determines the short-time withstand current test requirements for the purpose of verifying the safety of the **UPS** when a short circuit is applied across the output terminals under prescribed modes of operation wherein the output power is delivered by the a.c. input through a **low impedance path**.

FOREWORD

Add, at the end of the list beginning " – update of normative references" the following new item:

 Amendment 1 introduces short-time withstand current requirements when a short-circuit is applied at the output of the UPS (5.5.4).

2 Normative references

Add the following new reference:

IEC 61439-1:2011, Low-voltage switchgear and controlgear assemblies – Part 1: General rules

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3.2 UPS electrical ratings

Add the following new terms and definitions:

3.2.4

rated peak withstand current

*I*_{pk} value of peak short-circuit current, declared by the **UPS** manufacturer, that can be withstood under specified conditions

NOTE For the purpose of this standard, I_{pk} refers to the initial asymmetric peak value of the prospective test current listed in Table 3

3.2.5

rated short-time withstand current

I_{cw}

r.m.s. value of short-time current, declared by the **UPS** manufacturer, that can be carried without damage under specified conditions, defined in terms of current and time

3.2.6

rated conditional short-circuit current

I_{cc}

r.m.s. value of **prospective short-circuit current**, declared by the **UPS** manufacturer, that can be withstood for the total operating time (clearing time) of the short-circuit protective device (SCPD) under specified conditions

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NOTE The short-circuit protective device may form an integral part of the **UPS** or may be a separate unit.

3.2.7

low impedance path

path containing devices that for **UPS** load purposes present negligible impedance such as cabling, switching devices, protecting devices and filtering devices

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NOTE The devices in a **low impedance path** may under short-circuit conditions present current limiting characteristics. Examples include current limiting fuses, current limiting circuit-breakers, transformers and inductors.

3.2.8

prospective short-circuit current

I_{cp}

r.m.s. value of the current which would flow if the supply conductors to the circuit are shortcircuited by a conductor of negligible impedance located as near as practicable to the supply terminals of the **UPS**

4.7.2 Power rating

Add to the end of the list, the following new item:

 rated short-time withstand current (I_{cw}) or rated conditional short-circuit current (I_{cc}) in accordance with 5.5.4.

Renumber the existing note as Note 1 and add the following new Note 2:

NOTE 2 Table 3 values may be exceeded and so marked.