SLOVENSKI STANDARD
SIST EN 62586-2:2017/A1:2022

01-februar-2022

Merjenje kakovosti električne energije v napajalnih sistemih - 2. del: Zahteve za funkcionalne preskuse in negotovost - Dopolnilo A1 (IEC 62586-2:2017/AMD1:2021)

Power quality measurement in power supply systems - Part 2: Functional tests and uncertainty requirements (IEC 62586-2:2017/AMD1:2021)

Messung der Spannungsqualität in Energieversorgungssystemen - Teil 2: Funktionsprüfungen und Anforderungen an die Messunsicherheit (IEC 62586-2:2017/AMD1:2021)

Mesure de la qualité de l'alimentation dans les réseaux d'alimentation - Partie 2: Essais fonctionnels et exigences d'incertitude (IEC 62586-2:2017/AMD1:2021)

Ta slovenski standard je istoveten z: **EN 62586-2:2017/A1:2021**

ICS:

17.220.20	Merjenje električnih in magnetnih veličin	Measurement of electrical and magnetic quantities

SIST EN 62586-2:2017/A1:2022 **en,fr,de**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 62586-2:2017/A1

October 2021

ICS 17.220.20

English Version

Power quality measurement in power supply systems - Part 2: Functional tests and uncertainty requirements (IEC 62586-2:2017/AMD1:2021)

Mesure de la qualité de l'alimentation dans les réseaux d'alimentation - Partie 2: Essais fonctionnels et exigences d'incertitude
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(IEC 62586-2:2017/AMD1:2021)

This amendment A1 modifies the European Standard EN 62586-2:2017; it was approved by CENELEC on 2021-10-20. 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 national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CENELEC member.

This amendment 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.

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CENELEC

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

Ref. No. EN 62586-2:2017/A1:2021 E

European foreword

The text of document 85/770/FDIS, future IEC 62586-2/AMD1, prepared by IEC/TC 85 “Measuring equipment for electrical and electromagnetic quantities” was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 62586-2:2017/A1:2021.

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) 2022–07–20
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2024–10–20

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This document has been prepared under a Standardization Request given to CENELEC by the European Commission and the European Free Trade Association.

Any feedback and questions on this document should be directed to the users’ national committee. A complete listing of these bodies can be found on the CENELEC website.

Endorsement notice

The text of the International Standard IEC 62586-2:2017/AMD1:2021 was approved by CENELEC as a European Standard without any modification.

IEC 62586-2

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INTERNATIONAL STANDARD

NORME INTERNATIONALE

colour inside

AMENDMENT 1
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Part 2: Functional tests and uncertainty requirements

Mesure de la qualité de l'alimentation dans les réseaux d'alimentation –
Partie 2: Essais fonctionnels et exigences d'incertitude

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POWER QUALITY MEASUREMENT IN POWER SUPPLY SYSTEMS –

Part 2: Functional tests and uncertainty requirements

AMENDMENT 1

FOREWORD

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Amendment 1 to IEC 62586-2:2017 has been prepared by IEC technical committee 85: Measuring equipment for electrical and electromagnetic quantities.

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

FDIS	Report on voting
85/770/FDIS	85/795/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 Amendment 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/standardsdev/publications/.

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

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

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5.1.4 Single "power-system influence quantities"

Replace in Table 4 the footnotes [c] and [d] with:

[c] This signal represents a crest factor of 2 and applies to voltage signals.

[d] This signal represents a crest factor of 3 and applies to current signals.

6.2.2.2 Variations due to single influence quantities

Replace Subclause 6.2.2.2 by the following:

Each test shall last at least 1 s.

No.	Target of the test	Testing points according to Table 3	Complementary test conditions according to Table 4	Test criterion (if test is applicable)
A2.3.1	Measure influence of frequency on measurement uncertainty (for further calculations as required in 8)	P3 for voltage magnitude	S1 for frequency S3 for frequency	TC10/12(unc)
A2.3.2	Measure influence of harmonics on measurement uncertainty (for further calculations as required in 8)	P3 for voltage magnitude	S1 for harmonics	TC10/12(unc) on ch1 compared to a reference voltage

6.4.1 General

Clarification about units of y axis; replace Figure 1 by the following:

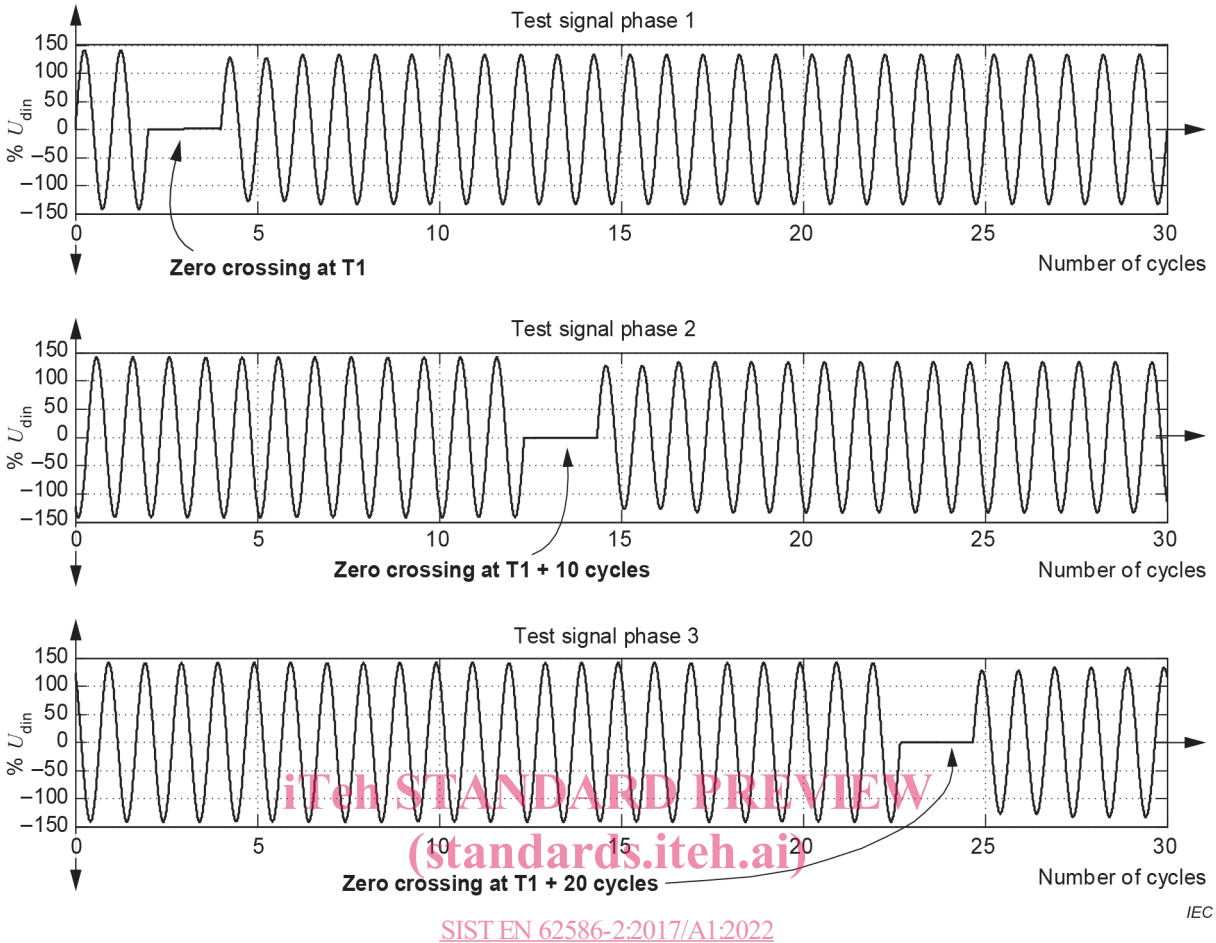

Figure 1 – Overview of test for dips according to test A4.1.1

Clarification about units of y axis; replace Figure 2 by the following:

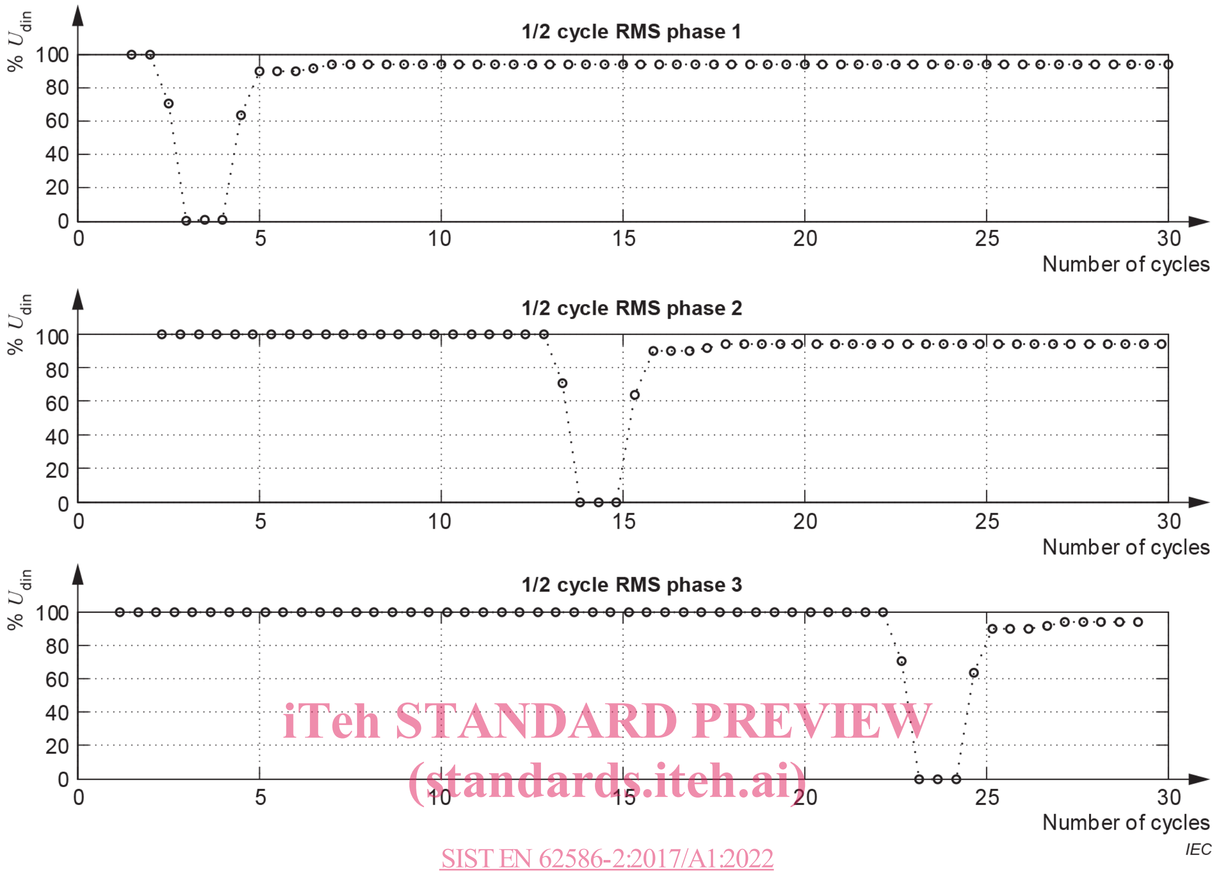

Figure 2 – Detail 1 of waveform for test of dips according to test A4.1.1

Replace Figure 3 by the following (clarification about hysteresis):

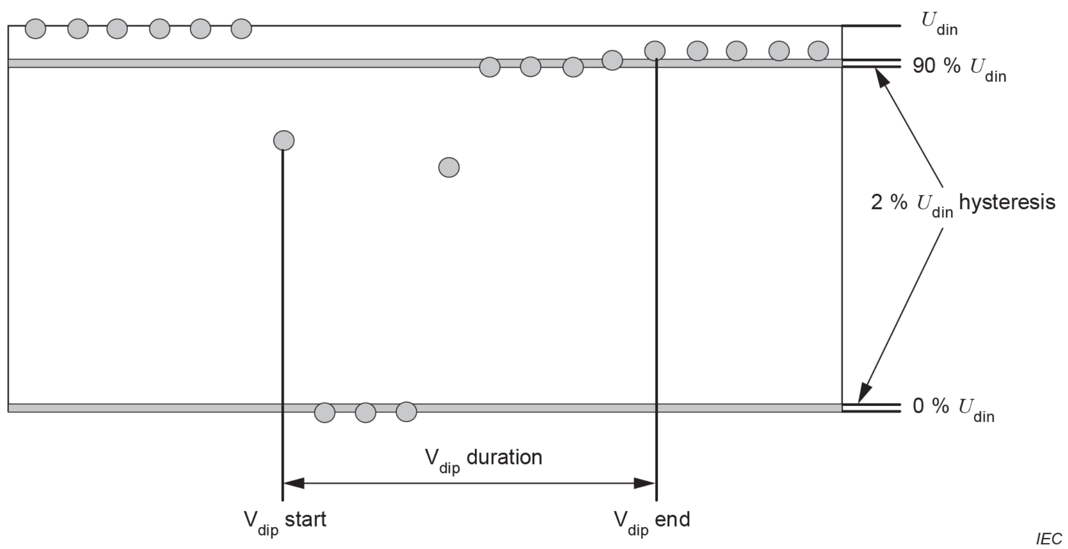

Figure 3 – Detail 2 of waveform for tests of dips according to A4.1.1

In Figure 4, correction of values, by expressing them in % of U_{din} and by adding a significant digit. Replace Figure 4 by the following:

$U_{rms(½)}$ N	$U_{rms(½)}$ $N + 1$	$U_{rms(½)}$ $N + 2$	$U_{rms(½)}$ $N + 3$	$U_{rms(½)}$ $N + 4$	$U_{rms(½)}$ $N + 5$	$U_{rms(½)}$ $N + 6$	$U_{rms(½)}$ $N + 7$
100 % U_{din}	70,7 % U_{din}	0 % U_{din}	0 % U_{din}	0 % U_{din}	63,6 % U_{din}	90 % U_{din}	90 % U_{din}

$U_{rms(½)}$ $N + 8$	$U_{rms(½)}$ $N + 9$	$U_{rms(½)}$ $N + 10$	$U_{rms(½)}$ $N + 11$	$U_{rms(½)}$ $N + 12$	$U_{rms(½)}$ $N + 13$	$U_{rms(½)}$ $N + 14$	$U_{rms(½)}$ $N + 15$
90 % U_{din}	92 % U_{din}	94 % U_{din}	94 % U_{din}	94 % U_{din}	94 % U_{din}	94 % U_{din}	94 % U_{din}

Figure 4 – Detail 3 of waveform for tests of dips according to test A4.1.1

In Figure 5, correction of signal level to match test point P3 for dips/interruptions, and correction of scale now expressed in % of U_{din}. Replace Figure 5 by the following:

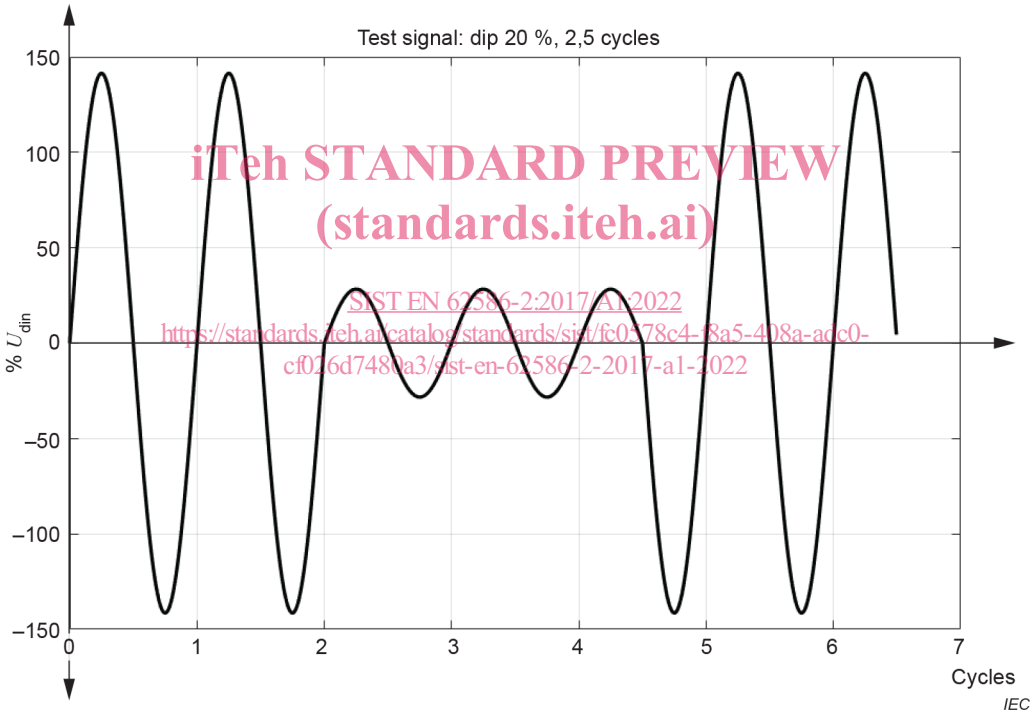

Figure 5 – Detail 1 of waveform for test of dips according to test A4.1.2

In Figure 6, correction of signal level to match test point P3 for dips/interruptions, and correction of scale now expressed in % of U_{din}. Replace Figure 6 by the following:

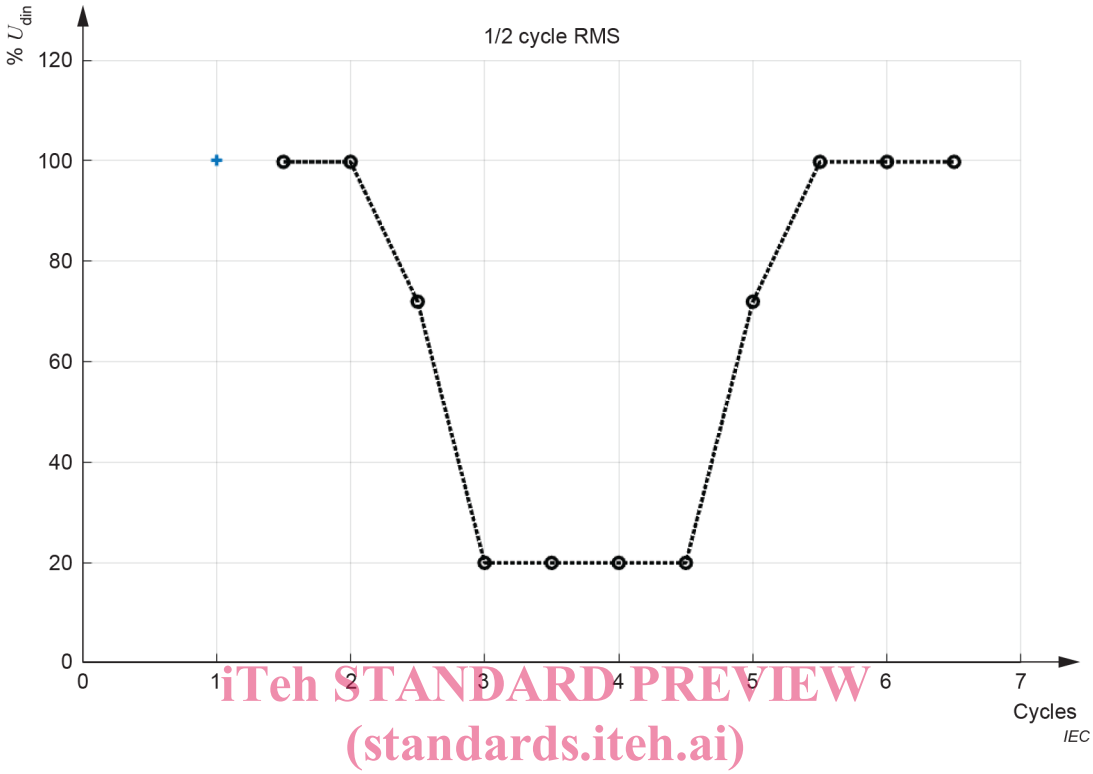

Figure 6 – Detail 2 of waveform for tests of dips according to test A4.1.2

In Figure 7, correction of the scale, now expressed in % of U_{din}. Replace Figure 7 by the following:

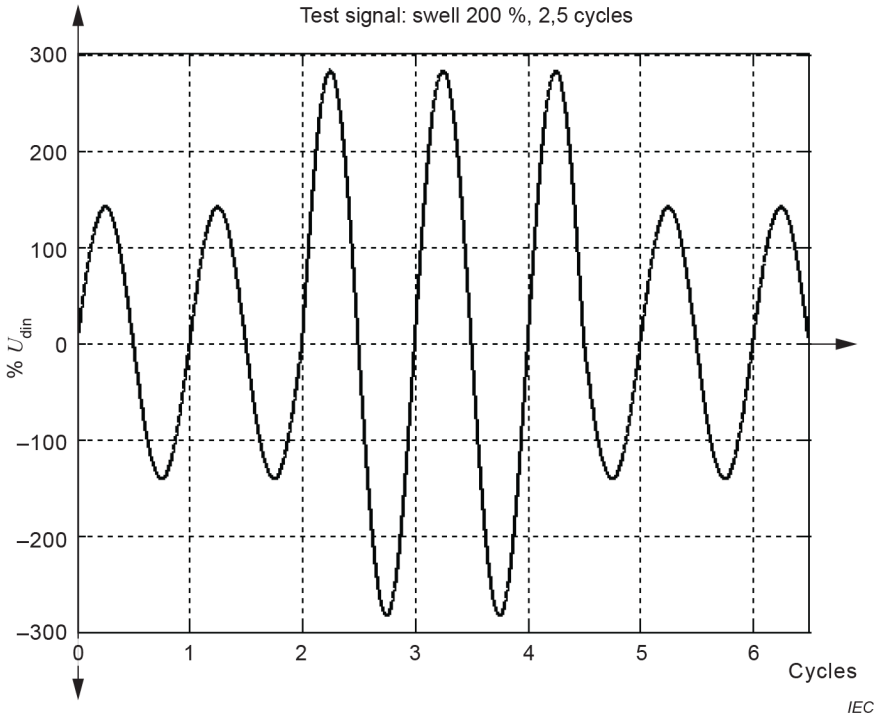

Figure 7 – Detail 1 of waveform for test of swells according to test A4.1.2