
Merjenje kakovosti električne energije v napajalnih sistemih - 2. del: Zahteve za funkcionalne preskuse in negotovost

Power quality measurement in power supply systems - Part 2: Functional tests and uncertainty requirements

Messung der Spannungsqualität in Energieversorgungssystemen - Teil 2: Funktionsprüfungen und Anforderungen an die Messunsicherheit

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

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Ta slovenski standard je istoveten z: EN 62586-2:2017/prA1:2020

ICS:

17.220.20	Merjenje električnih in magnetnih veličin	Measurement of electrical and magnetic quantities
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85/721/CDV

COMMITTEE DRAFT FOR VOTE (CDV)

PROJECT NUMBER:
IEC 62586-2/AMD1 ED2

DATE OF CIRCULATION:
2020-05-29

CLOSING DATE FOR VOTING:
2020-08-21

SUPERSEDES DOCUMENTS:
85/700/CD, 85/711A/CC

IEC TC 85 : MEASURING EQUIPMENT FOR ELECTRICAL AND ELECTROMAGNETIC QUANTITIES	
SECRETARIAT: China	SECRETARY: Ms Guiju HAN
OF INTEREST TO THE FOLLOWING COMMITTEES: SC 77A	PROPOSED HORIZONTAL STANDARD: <input type="checkbox"/> Other TC/SCs are requested to indicate their interest, if any, in this CDV to the secretary.
FUNCTIONS CONCERNED: <input type="checkbox"/> EMC <input type="checkbox"/> ENVIRONMENT <input type="checkbox"/> QUALITY ASSURANCE <input type="checkbox"/> SAFETY	
<input checked="" type="checkbox"/> SUBMITTED FOR CENELEC PARALLEL VOTING <input type="checkbox"/> NOT SUBMITTED FOR CENELEC PARALLEL VOTING	
<p>Attention IEC-CENELEC parallel voting SIST EN 62586-2:2017/kprA1:2020 https://standards.iteh.ai/catalog/standards/sist/62586-2-2017/kprA1:2020 https://standards.iteh.ai/catalog/standards/sist/62586-2-2017/kprA1:2020 https://standards.iteh.ai/catalog/standards/sist/62586-2-2017/kprA1:2020</p> <p>The attention of IEC National Committees, members of CENELEC, is drawn to the fact that this Committee Draft for Vote (CDV) is submitted for parallel voting.</p> <p>The CENELEC members are invited to vote through the CENELEC online voting system.</p>	

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Recipients of this document are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

TITLE:

Power quality measurement in power supply systems - Part 2: Functional tests and uncertainty requirements

PROPOSED STABILITY DATE: 2025

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45		

INTERNATIONAL ELECTROTECHNICAL COMMISSION

POWER QUALITY MEASUREMENT IN POWER SUPPLY SYSTEMS –**Part 2: Functional tests and uncertainty requirements****FOREWORD**

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International Standard IEC 62586-2 has been prepared by IEC technical committee 85: Measuring equipment for electrical and electromagnetic quantities.

This second edition cancels and replaces the first edition published in 2013. This edition constitutes a technical revision.

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

- a) test procedures for RVC and current have been added;
- b) mistakes have been fixed.

This bilingual version (2017-11) corresponds to the monolingual English version, published in 2017-03.

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

CDV	Report on voting
85/525/CDV	85/571/RVC

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

The French version of this standard has not been voted upon.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

98 A list of all parts of the IEC 62586 series, published under the general title *Power quality*
99 *measurement in power supply systems*, can be found on the IEC website.

100 The committee has decided that the contents of this publication will remain unchanged until the
101 stability date indicated on the IEC website under "http://webstore.iec.ch" in the data related to the
102 specific publication. At this date, the publication will be

- 103 • reconfirmed,
- 104 • withdrawn,
- 105 • replaced by a revised edition, or
- 106 • amended.

107

108 The contents of the corrigendum of June 2018 have been included in this copy.

109

IMPORTANT – The 'colour inside' logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.

110

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<https://standards.iteh.ai/catalog/standards/sist/fc0578c4-f8a5-408a-adc0-cf026d7480a3/sist-en-62586-2-2017-kprA1-2020>

111

112 **5.1.4 Single "power-system influence quantities"**113 *Replace in Table 4 the footnotes ^c and ^d by the following:*114 ^c This signal represents a crest factor of 2 and applies to voltage signals.115 ^d This signal represents a crest factor of 3 and applies to current signals.

116

117 **6.2.2.2 Variations due to single influence quantities**118 *Replace the complete clause by the following:*

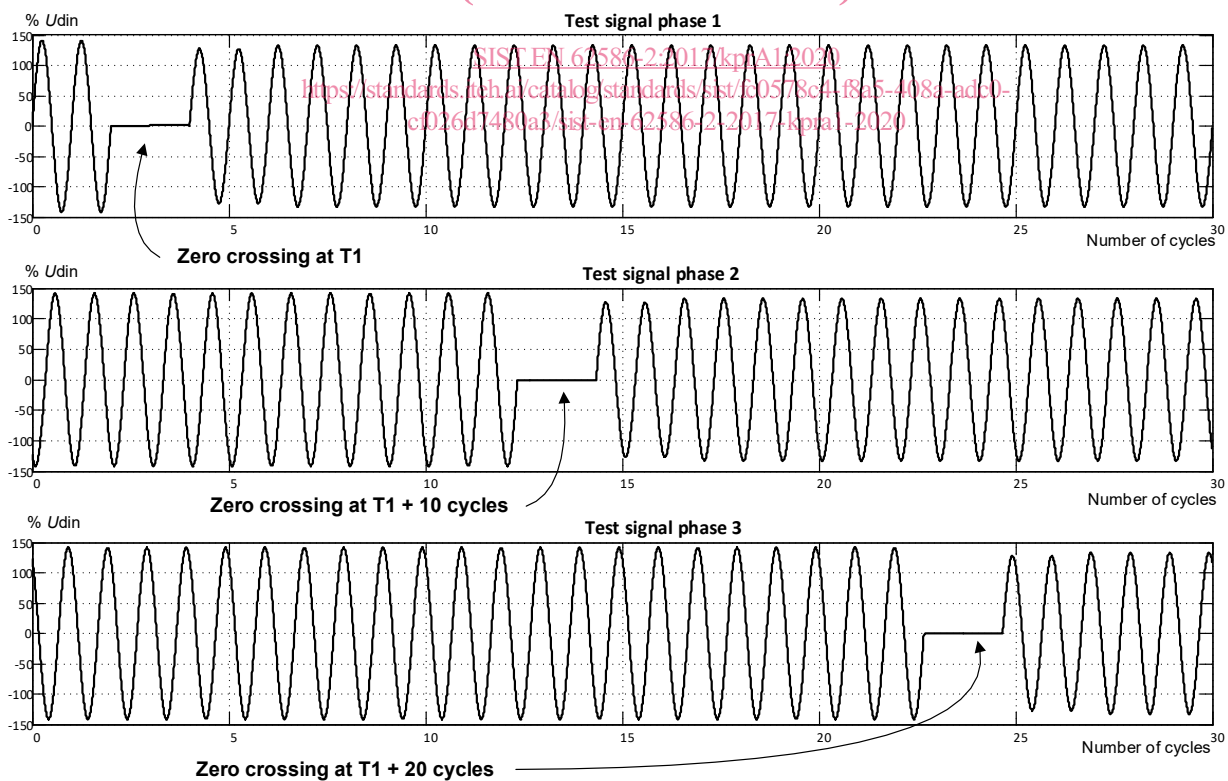
119 Each test shall last at least 1 s.

No.	Target of the test	Testing points according 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 Clause8).	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 Clause8).	P3 for voltage magnitude	S1 for harmonics	TC10/12(unc) on ch1 compared to a reference voltage

120

121 **6.4.1 General**

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122 *Replace Figure 1 by the following: (standards.iteh.ai)*

123

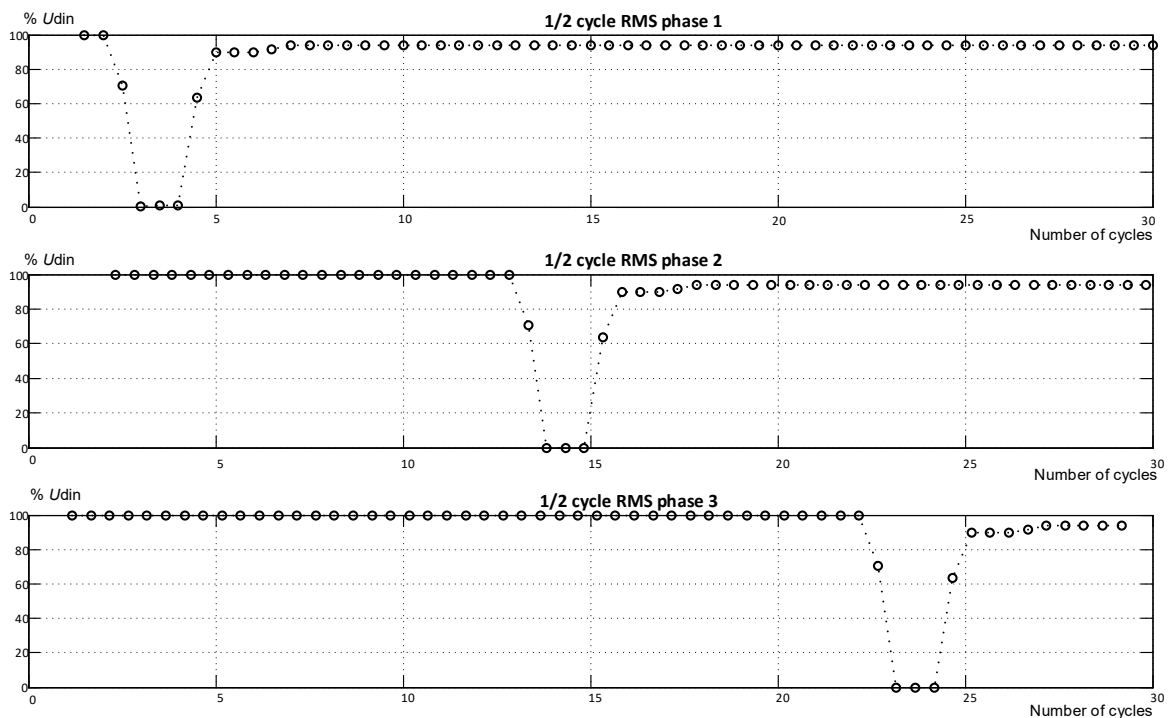
124

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

125

126

127 Replace Figure 2 by the following:

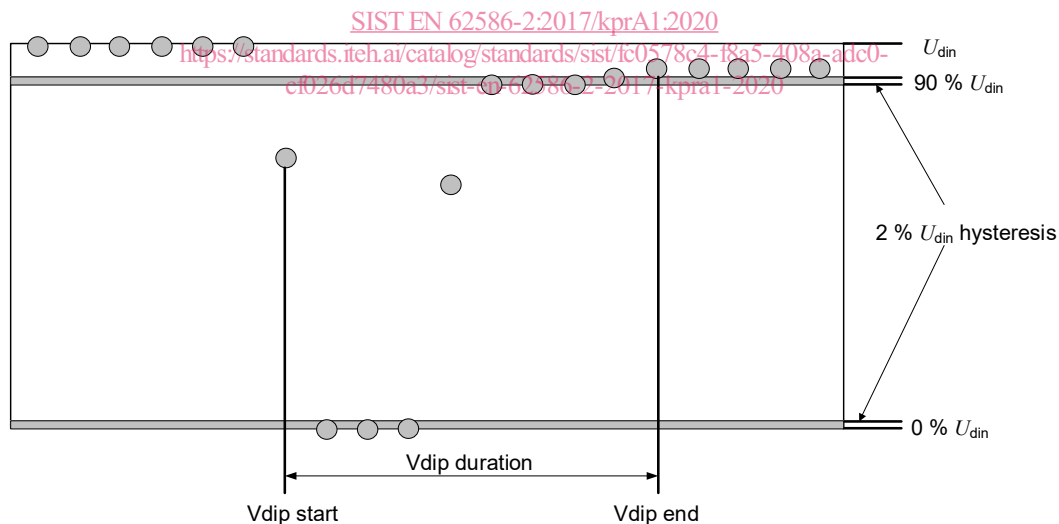


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128 **Figure 2 – Detail 1 of waveform for test of dips according to test A4.1.1**

129 Replace Figure 3 by the following:



IEC

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

131 Replace Figure 4 by the following:

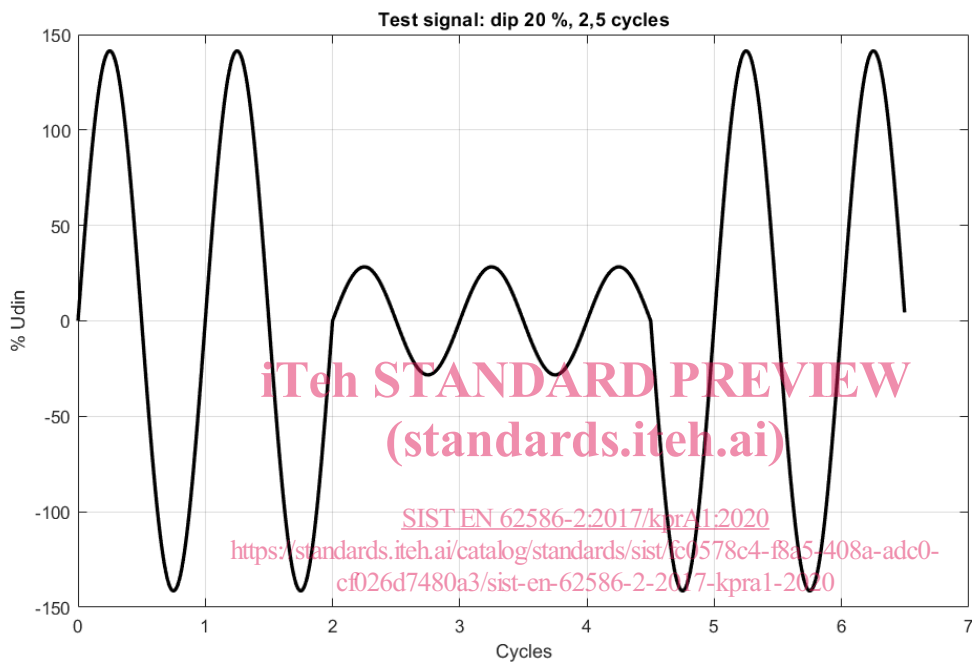
$U_{rms(\frac{1}{2})}$ N	$U_{rms(\frac{1}{2})}$ $N + 1$	$U_{rms(\frac{1}{2})}$ $N + 2$	$U_{rms(\frac{1}{2})}$ $N + 3$	$U_{rms(\frac{1}{2})}$ $N + 4$	$U_{rms(\frac{1}{2})}$ $N + 5$	$U_{rms(\frac{1}{2})}$ $N + 6$	$U_{rms(\frac{1}{2})}$ $N + 7$
100 % U_{din}	70,7% U_{din}	0 % U_{din}	0 % U_{din}	0 % U_{din}	63,6% U_{din}	90 % U_{din}	90 % U_{din}
$U_{rms(\frac{1}{2})}$ $N + 8$	$U_{rms(\frac{1}{2})}$ $N + 9$	$U_{rms(\frac{1}{2})}$ $N + 10$	$U_{rms(\frac{1}{2})}$ $N + 11$	$U_{rms(\frac{1}{2})}$ $N + 12$	$U_{rms(\frac{1}{2})}$ $N + 13$	$U_{rms(\frac{1}{2})}$ $N + 14$	$U_{rms(\frac{1}{2})}$ $N + 15$
90 % U_{din}	92 % U_{din}	94 % U_{din}	94 % U_{din}	94 % U_{din}	94 % U_{din}	94 % U_{din}	94 % U_{din}

IEC

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

133

134 *Replace Figure 5 by the following:*



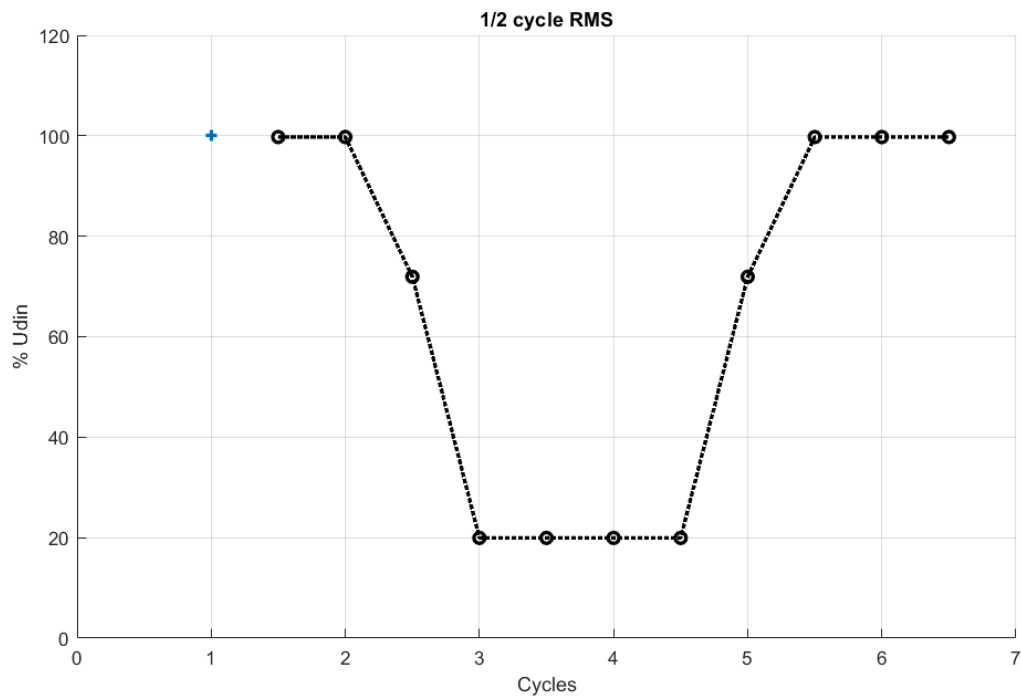
135

136

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

137

Replace Figure 6 by the following:



138

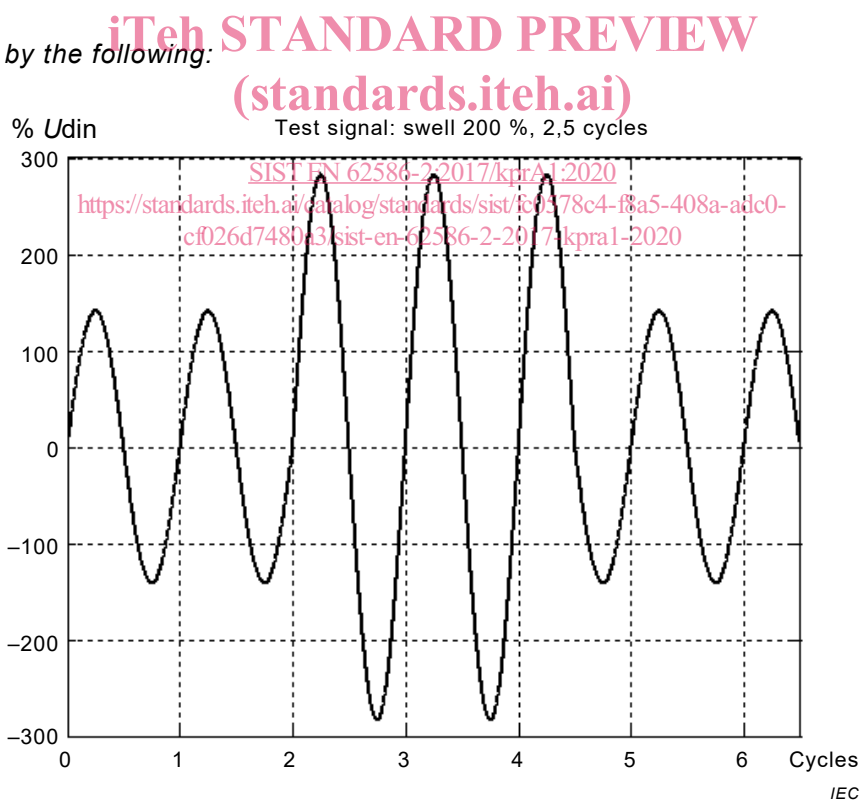
139

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

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141

Replace Figure 7 by the following:



142

143

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

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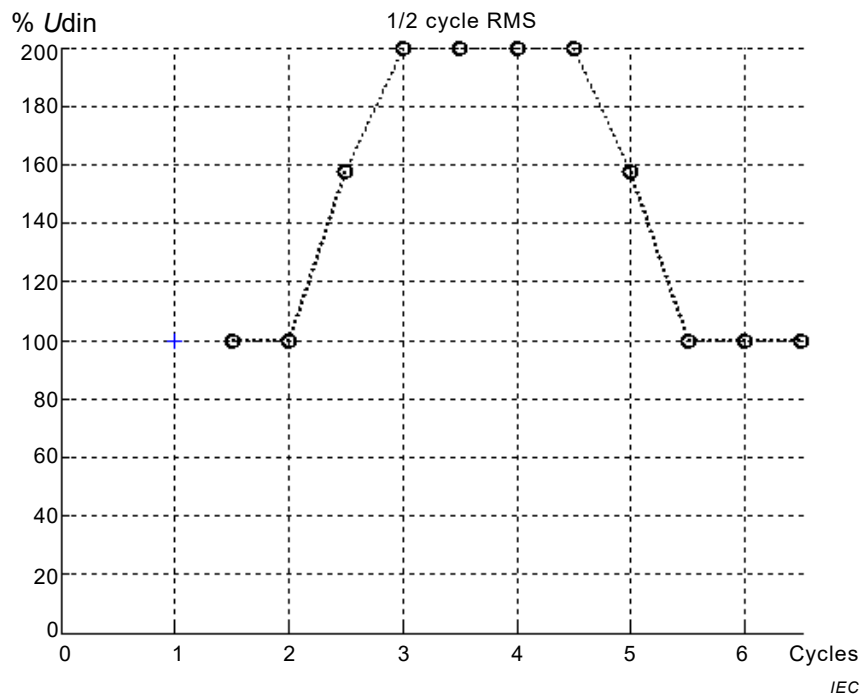
145

146

147

148 Replace Figure 8 by the following:

149



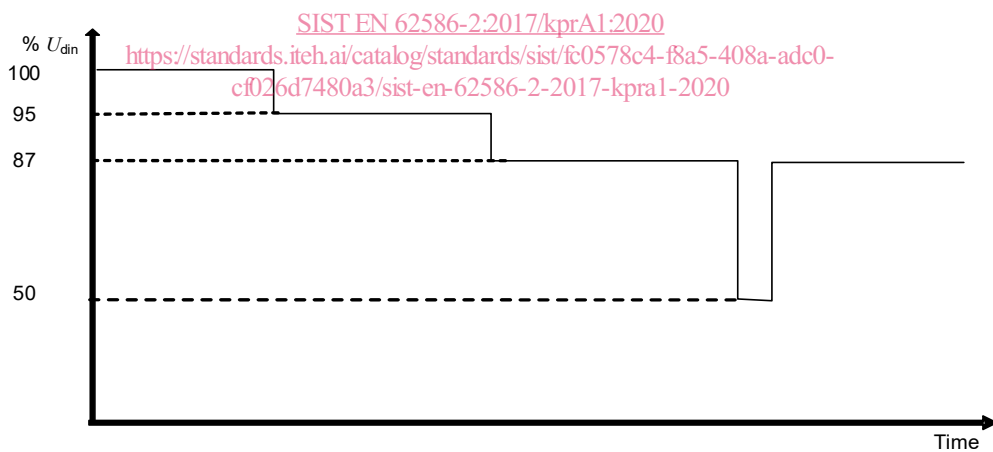
150

151 **Figure 8 – Detail 2 of waveform for tests of swells according to test A4.1.2**

152

153

Replace Figure 9 by the following:



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155 **Figure 9 – Sliding reference voltage test**

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158

159