

SLOVENSKI STANDARD SIST EN 62841-1:2015/oprAB:2020

01-junij-2020

Elektromotorna ročna orodja, prenosna orodja ter stroji za trato in vrt - Varnost - 1. del: Splošne zahteve

Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 1: general requirements

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Ta slovenski standard je istoveten 2.62841 EN 62841-1.2015/prAB https://standards.iteh.ai/catalog/standards/sist/9ba50c31-0ba4-4440-8922

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<u>ICS:</u>

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EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

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ICS

English Version

Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 1: general requirements

To be completed

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This draft amendment prAB, if approved, will modify the European Standard EN 62841-1:2015; it is submitted to CENELEC members for enquiry.

Deadline for CENELEC: 2020-06-19.

It has been drawn up by CLC/TC 116.

If this draft becomes an amendment, 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.

This draft amendment was established by **CENELEC** 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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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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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

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10 European foreword

11 This document (EN 62841-1:2015/prAB:2020) has been prepared by CLC/TC 116 " Safety of motor-12 operated electric tools".

- 13 This document is currently submitted to the Enquiry.
- 14 The following dates are proposed:
 - latest date by which the existence of this (doa) dor + 6 months ٠ document has to be announced at national level latest date by which this document has to be (dop) dor + 12 months • implemented at national level by publication of identical national standard an or by endorsement latest date by which the national standards dor + 24 months (dow)
 - latest date by which the national standards (dow) dor + 24 months conflicting with this document have to be (to be confirmed or withdrawn modified when voting)
- 15 This document will amend EN 62841-1:2015.
- 16 This amendment was developed to correct the determination of the emission sound pressure level for
- 17 hand-held tools. Since the title of Annex I is "Measurement of noise and vibration emission", the
- requirements for noise and vibration reduction are transferred to Clause 21. In addition, the Annex ZZ
- 19 is replaced with a detailed one. And Annex ZA and Clause 2 are replaced in order to have only dated
- 20 normative references.

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- This document has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).
- For the relationship with EU Directive(s) see informative Annex ZZ, which is an integral part of this document.

1 Modification of Clause 2, "Normative references" 25

26 **Replace** the existing Clause 2 with the following:

27 "2 Normative references

- 28 Add the following normative references:
- 29 CR 1030-1:1995, Hand-arm vibration - Guidelines for vibration hazards reduction - Part 1: Engineering 30 methods by design of machinery
- 31 EN ISO 11688-1:2009, Acoustics - Recommended practice for the design of low-noise machinery and
- equipment Part 1: Planning (ISO/TR 11688-1:1995)" 32

33 2 Additions to Clause 21, "Construction"

34 Add the following new subclauses after Subclause 21.35:

35 "21.Z1 Noise reduction

36 Noise reduction at tools is an integral part of the design process and shall be achieved by particularly applying measures at source to control noise, see for example EN ISO 11688-1. The success of the 37 38 applied noise reduction measures is assessed on the basis of the actual noise emission values, 39 measured in accordance with I.2, in relation to other machines of the same type with comparable non 40 acoustical technical data.

The major sound sources of tools are: motor, fan, gear 21.22 Vibration reduction 41

42

- The vibration at the handles shall be kept as low as possible without unduly affecting the performance 43 and the ergonomics (weight, handling, etc.) of the tool. 44
- In particular vibration shall be reduced by the application of engineering measures as given in 45
- 46 CR 1030-1. The success of the applied vibration measures is assessed by comparing the vibration
- levels for the tool, measured in accordance with 1.3, with those for other tools of the same type and with 47
- a comparable specification and performance." 48

49 3 Modifications to Annex I, "Measurement of noise and vibration emissions"

- 50 **Replace** the existing Subclause I.2.Z1 with the following:
- "Delete the NOTE before I.2.1." 51
- 52 **Replace** the existing Subclause I.2.3.1 with the following:

53 "I.2.3.1 Hand-held tools

54 The A-weighted emission sound pressure level at the work station, L_{DA}, shall be determined in 55 accordance with ISO 11203 as follows:

56
$$L_{pA} = L_{WA} - Q$$
, in dB

57 where Q = 8, in dB.

58 NOTE 1 This value of Q has been determined, during experimental investigations, to be applicable to hand-59 held power tools. The resulting A-weighted emission sound pressure level at the workstation is equivalent to the value of the surface sound pressure level at a distance of 0,7 m from the power tool. This distance has been chosen 60 61 to give satisfactory reproducibility of results, and to permit comparison of the acoustic performance of different 62 hand-held power tools, which do not, in general, have uniquely defined work stations. Under free field conditions, where it could be required to estimate the emission sound pressure level, $L_{pA,r1}$, at a distance r_1 in m from the 63 64 geometric centre of the power tool, this can be done by applying the formula:

65
$$L_{pA,r1} = L_{pA} + 20 \lg(\frac{1}{r_1})$$
, in dB

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NOTE 2 At any given position in relation to a particular machine, and for given mounting and operating conditions, the emission sound pressure levels determined by the method of this document will in general be lower than the directly measured sound pressure levels for the same machine in the typical workroom where it is used. This is due to the influence of sound reflecting surfaces in the workroom compared to the free field conditions of the test specified here. A method of calculating the sound pressure levels in the vicinity of a machine operating alone in a workroom is given in ISO/TR 11690-3. Commonly observed differences are 1 dB to 5 dB, but in extreme cases the difference might be even greater.

- 173 If required, the C-weighted peak emission sound pressure level L_{pCpeak} shall be measured at each of 174 the five measurement positions specified in I.2.2. The C-weighted peak emission sound pressure level
- 75 at the work station is the highest C-weighted peak sound pressure level measured at any of the five 76 microphone positions; no corrections are permitted."
- 77 **Replace** the existing Subclause I.3.Z1 with the following:
- 78 "Delete the NOTE before I.3.1."

Replacement of the Annex ZA, "Normative references to international publications with their corresponding European publications"

81 **Replace** the existing Annex ZA with the following:

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82	"	
83		Annex ZA
84		(normative)
85		
86		Normative references to international publications
87		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 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: <u>www.cenelec.eu.</u>

Publication	Year	Title	<u>EN/HD</u>	Year
IEC 60061	2005 ¹	Lamp caps and holders together with gauges for the control of	-	-
	iTe	interchangeability and safety PREV	EW	
IEC 60065 (mod)	2001	Audio, video and similar electronic apparatus - Safety requirements al	EN 60065	2002
		SIST EN 62841-1:2015/oprAB:2020	+ corr. August	2007
+ A1 (mod)	h <mark>2</mark> 995star	ndards.iteh.ai/catalog/standards/sist/9ba50c31-0ba4-		2006
+ A2 (mod)	2010	2f7f9f326717/sist-en-62841-1-2015-oprab-2020	⁰ + A2	2010
-	-		+ A11	2008
-	-		+ A12	2011
IEC 60068-2-75	1997	Environmental testing – Part 2–75: Tests - Test Eh: Hammer tests	EN 60068-2-75	1997
IEC/TR 60083	2015 ¹	Plugs and socket-outlets for domestic and similar general use standardized in member countries of IEC	-	-
IEC 60085	2007	Electrical insulation - Thermal evaluation and designation	EN 60085	2008
IEC 60127	series	Miniature fuses	EN 60127	series
IEC 60227	series	Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V	-	-
IEC 60238	-	Edison screw lampholders	EN IEC 60238	2018
IEC 60245	series	Rubber insulated cables - Rated voltages up to and including 450/750 V	3 -	-

¹ Dated as no equivalent European Standard exists.

Publication	<u>Year</u>	Title	<u>EN/HD</u>	<u>Year</u>
IEC 60252-1	-	AC motor capacitors - Part 1: General - Performance, testing and rating - Safety requirements - Guidance for installation and operation	EN 60252-1	2011
			+ A1	2013
IEC 60320	series	Appliance couplers for household and similar general purposes	EN 60320	series
IEC 60320-1	-	Appliance couplers for household and similar general purposes - Part 1: Genera requirements	EN 60320-1 al	2015
IEC 60335-1 (mod)) 2010	Household and similar electrical appliances - Safety - Part 1: General requirements	EN 60335-1	2012
-	-		+ A11	2014
-	-		+ AC	2014
-	-		+ A13	2017
IEC 60384-14	-	Fixed capacitors for use in electronic equipment - Part 14: Sectional specification - Fixed capacitors for	EN 60384-14	2013
	iTe	electromagnetic interference suppression	EW	
		and connection to the supply mains (standards.iteh.ai)	+ A1	2016
IEC 60417	1973 ¹ https://stan	Graphical symbols for use on equipment. Index, survey and compliation of the dsingle sheets.g/standards/sist/9ba50c31-0ba4-		-
IEC 60529	1989	2f719f326717/sist-en-62841-1-2015-oprab-2020 Degrees of protection provided by enclosures (IP Code)	EN 60529	1991
-	-		+ corrigendum Ma	y 1993
+ A1	1999		+ A1	2000
+ A2	2013		+ A2	2013
IEC 60664-1	-	Insulation coordination for equipment within low-voltage systems - Part 1: Principles, requirements and tests	EN 60664-1	2007
IEC 60695-2-11	2000	Fire hazard testing – Part 2–11: Glowing/hot-wire based test methods - Glow-wire flammability test method for end products	EN 60695-2-11	2001
IEC 60695-2-13	2010	Fire hazard testing - Part 2–13: Glowing/hot-wire based test methods - Glow-wire ignition temperature (GWIT) test method for materials	EN 60695-2-13	2010
IEC 60695-10-2	2003	Fire hazard testing – Part 10–2: Abnormal heat - Ball pressure test	EN 60695-10-2	2003
IEC 60695-11-10	2013	Fire hazard testing - Part 11–10: Test flames - 50 W horizontal and vertical flame test methods	EN 60695-11-10	2013
IEC 60730-1 (mod)) 2010	Automatic electrical controls for household and similar use – Part 1: General requirements	EN 60730-1	2011