

SLOVENSKI STANDARD SIST EN IEC 62841-3-7:2021/A11:2021

01-julij-2021

Elektromotorna ročna orodja, prenosna orodja ter stroji za trato in vrt - Varnost - 3-7. del: Posebne zahteve za premične stenske žage - Dopolnilo A11

Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 3-7: Particular requirements for transportable wall saws

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Outils électroportatifs à moteur, outils portables et machines pour jardins et pelouses -Sécurité - Partie 3-7: Exigences particulières pour les scies murales portables

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Ta slovenski standard /je istoveten z. og/stan ENSIEC 62841-3-7-2021/A11:2021 e643149c01c0/sist-en-iec-62841-3-7-2021-a11-2021

ICS:

25.080.60Strojne žage25.140.20Električna orodja

Sawing machines Electric tools

SIST EN IEC 62841-3-7:2021/A11:2021 en,fr

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EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN IEC 62841-3-7:2021/A11

May 2021

ICS 25.140.20

English Version

Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 3-7: Particular requirements for transportable wall saws

Outils électroportatifs à moteur, outils portables et machines pour jardins et pelouses - Sécurité - Partie 3-7: Exigences particulières pour les scies murales portables Elektrische motorbetriebene handgeführte Werkzeuge, transportable Werkzeuge und Rasen- und Gartenmaschinen - Sicherheit - Teil 3-7: Besondere Anforderungen für transportable Wandsägen

This amendment A11 modifies the European Standard EN IEC 62841-3-7:2021; it was approved by CENELEC on 2021-04-26. 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.

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

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European foreword

This document (EN IEC 62841-3-7:2021/A11:2021) was prepared by CLC/TC 116 "Safety and environmental aspects of motor-operated electric tools".

The following dates are fixed:

•	latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2022-04-26
		(1)	0005 04 00

 latest date by which the national (dow) 2025-04-26 standards conflicting with this document have to be withdrawn

This document modifies by common modifications EN IEC 62841-3-7:2021, which consists of the text of 116/455/FDIS (future IEC 62841-3-7, Ed. 1) prepared by IEC/TC 116 "Safety of motor-operated electric tools".

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC shall not be held responsible for identifying any or all such patent rights.

This series is divided into four parts:

Part 1: General requirements which are common to most hand-held electric motor operated tools (for the purpose of this standard referred to simply as tools) which could come within the scope of this standard;

Part 2, 3 or 4: Requirements for particular types of tools which either supplement or modify the requirements given in Part 1 to account for the particular hazards and characteristics of these specific tools. https://standards.iteh.ai/catalog/standards/sist/19a664f6-86e7-488b-ab15e643149c01c0/sist-en-iec-62841-3-7-2021-a11-2021

The Part 3-7 is to be used in conjunction with EN 62841-1:2015 and its amendments.

The Part 3-7 supplements or modifies the corresponding clauses in EN 62841-1:2015, so as to convert it into the European Standard: Particular requirements for transportable wall saws.

Where a particular subclause of Part 1 is not mentioned in Part 3-7, that subclause applies as far as relevant. When this standard states "addition", "modification" or "replacement", the relevant text in Part 1 is to be adapted accordingly.

The following print types are used:

- requirements: in roman type;
- test specifications: in italic type;
- notes: in smaller roman type.

The terms defined in Clause 3 are printed in **bold typeface**.

Subclauses, notes, tables and figures which are additional to those in Part 1 are numbered starting from 101.

Clauses, subclauses, notes, tables, figures and annexes which are additional to those in IEC 62841-3-7:2020 are prefixed "Z".

This document follows the overall requirements of EN ISO 12100.

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.

Compliance with the clauses of Part 1 together with Part 3-7 provides one means of conforming with the essential health and safety requirements of the Directive concerned.

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1 Modification to Clause 1, "Scope"

Replace the existing text of Clause 1 with the following:

"This clause of Part 1 is applicable, except as follows:

Replacement of the third paragraph:

The **rated voltage** is not more than 250 V for single-phase a.c. or d.c. tools, and 480 V for three-phase a.c. tools.

Addition:

This document applies to transportable **wall saws** guided by a **track guiding system** intended for dry cutting or to be connected to a **liquid system** for cutting concrete, stone or similar material by means of a **diamond wheel**. The rated speed of the **diamond wheel** does not exceed a peripheral speed of 100 m/s at **rated capacity**.

This document does not apply to transportable **wall saws** with a design that allows an automatic change of the cutting direction without user intervention before any change of the cutting direction.

This document does not apply to transportable wall saws that employ hydraulic systems.

This document does not apply to hand-held cut-off machines.

NOTE 101 Hand-held cut-off machines will be covered by a future part of IEC 62841-2.

This document covers all significant hazards, hazardous situations or hazardous events relevant for tools covered by this standard.

NOTE Z101 Essential requirements not mentioned in Table ZZ.1 are deemed to be not applicable, because the corresponding hazards are either not relevant for tools covered by this standard or do not require specific action by the designer."

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2 Addition to Clause 2 arth Normative references 846-86e7-488b-ab15-

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Add the following normative reference and information and delete from the Bibliography:

"Replacement of normative reference ISO 11203:

ISO 11203:1995, Acoustics — Noise emitted by machinery and equipment — Determination of emission sound pressure levels at a work station and at other specified positions from the sound power level"

3 Modification to Clause 3, "Terms and definitions"

Replace the existing 3.106 with the following:

"3.106

saw unit

unit on which the **diamond wheel**, the **wheel guard**, the **saw unit** feed motor, if any, and the interface to connect it to the **track guiding system** are mounted"

4 Modifications to Clause 8, "Marking and instructions"

Add the following additional safety warning to 8.14.1.101:

"f) **Never leave the wall saw unattended during operation.** This reduces the risk of jamming the diamond wheel which could cause loss of control or damage to the wall saw.

NOTE This warning is omitted, if the wall saw is equipped with a **momentary power switch** without a provision to lock it in the "on" position."

Replace the text and NOTE after 8.14.2 c) 101) with the following:

"8.14.2 Za) Replacement:

Emissions

- 1) The noise emission, measured in accordance with I.2, as follows:
 - A-weighted emission sound pressure level L_{pA} and its uncertainty K_{pA} , where L_{pA} exceeds 70 dB(A).

Where L_{pA} does not exceed 70 dB(A), this fact shall be indicated;

- A-weighted sound power level L_{WA} and its uncertainty K_{WA} , where the A-weighted emission sound pressure level L_{pA} exceeds 80 dB(A);
- C-weighted peak emission sound pressure level L_{pC,peak}, where this exceeds 130 dB in relation to 20 μPa.
- 2) Recommendation for the operator to wear hearing protection.
- 3) The following information:
 - that the declared noise emission value(s) have been measured in accordance with a standard test method and may be used for comparing one tool with another;
 - that the declared noise emission value(s) may also be used in a preliminary assessment of exposure.
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- 4) A warning:

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- that the noise emissions during actual use of the power tool can differ by up to 10 dB compared to the declared values, depending on the **diamond wheel** and working conditions, which should be taken into account when selecting hearing protection; and 488-able-
- of the need to identify safety measures to protect the operator that are based on an estimation of the noise exposure in the actual conditions of use (taking account of all parts of the operating cycle such as the times when the tool is switched off and when it is running idle in addition to the trigger time)."

5 Addition to Clause 19, "Mechanical hazards"

Add the following new subclause 19.4:

"**19.4** Addition:

Wall saws with manual feed shall have at least one handle or grasping surface to ensure safe handling during use."

6 Modifications to Clause 20, "Mechanical strength"

Add the following new subclause 20.3:

"20.3 Addition:

If a **wall saw** includes any hand-held unit(s) such as a **remote control**, only 20.3.1 applies for these hand-held unit(s)."

Replace the first paragraph of subclause 20.5 with the following:

"**Wall saw** handles and grasping surfaces for safe handling during use as required by 19.4 shall have adequate mechanical strength in order to provide insulation between the grasping area and the output shaft."

7 Modifications to Clause 21, "Construction"

Replace the existing subclause 21.30 with the following:

"21.30 This subclause of Part 1 is applicable for handles and grasping surfaces for safe handling during use as required by 19.4."

Replace the third paragraph of subclause 21.102 with the following:

"Controls on the saw unit shall override commands from the remote control."

Delete the existing subclause 21.104.

Replace the existing subclause 21.105 with the following:

"21.105 Tools equipped with motor-fed **saw units** shall be fitted with (an) additional control(s), separate from the **power switch**, for

- selecting the direction of travel for the saw unit feed motor; and
- turning the **saw unit** feed motor off and on.

The actuating member of this control(s) shall be easily visible and accessible.

Switching on the **power switch** shall not result in starting the **saw unit** feed motor.

The stopping of all movements shall be possible with one actuation of a single control.

Compliance is checked by inspection and by practical test."

8 Modification to Clause 24, "Supply connection and external flexible cords"

Replace the existing subclause 24 4 with the following: iteh.ai)

"24.4 Replacement:

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Supply cords shall be not lighter than heavy polychloroprene or PUR sheathed flexible cord (code designation 60245 IEC 66, H07RN-F(or H07BQ-F) or equivalent 1-a11-2021

Compliance is checked by inspection and by measurement."

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

Replace the title of Annex I with the following:

"Annex I

(normative)

Measurement of noise and vibration emissions"

and delete NOTE 101.

Replace the 3rd paragraph of I.2.2.3 with the following:

"The radius *R* of the hemisphere shall start from the ground (centre of the measurement hemisphere on the reflecting plane, see key item 8 of Figure I.101). The radius *R* may be reduced to a minimum of 1 m from the reference box, if this is needed for technical reasons. The radius *R* shall be reported. The number of microphones is 10 according to Table B.1 and Figure B.1 describing the key microphone positions of ISO 3744:2010. It may be reduced down to 6 observing the requirements given in ISO 3744:2010, 8.1.1, but the microphone positions 2, 4, 6, 8, 10 and 12 shall be used in that case."

Replace the existing I.2.3.2 with the following:

"I.2.3.2 Transportable tools

Replacement:

The A-weighted emission sound pressure level L_{DA} at the work station shall be determined in accordance with ISO 11201:2010, grade 2 at the operator's position in normal operation according to I.2.4 and I.2.5.

The microphone position during measuring and respectively the method to obtain L_{pA} shall be at 0,7 m distance from the handle or grasping surface for manual feeding of the wall saw at the position of the operator's head, 10 cm from the ear, on the side with the highest sound pressure level.

For the case of no defined work station and for wall saws operated with a remote control, the Aweighted emission sound pressure level L_{pA} at the work station shall be determined in accordance with ISO 11203:1995 as follows:

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

where Q = 14 dB.

Three measurements shall be made and the arithmetic mean value of the measured respectively calculated value of L_{pA} shall be reported.

The operator's position (work station) or the location where L_{pA} is determined shall be recorded."

Replace the 2nd paragraph of I.2.4 with the following:

"The concrete workpiece is of non-reinforced concrete with a compressive strength of 40 N/mm² to 55 N/mm². The thickness of the concrete workpiece shall be approximately 200 mm and the width and length shall be suitable for the cut to be performed. The workpiece shall be positioned on a support from wood or resilient material of a thickness that just enables positioning with a fork lift (see Figure I.101).

NOTE 101 An example of non-reinforced concrete with the required compressive strength is C40/50 or C45/55 in accordance with EN 206-1."

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In I.2.5, add the following paragraph after NOTE lards/sist/19a664f6-86e7-488b-ab15-e643149c01c0/sist-en-tec-62841-3-7-2021-a11-2021

"Three consecutive tests shall be carried out and the result of the test L_{WA} shall be the arithmetic mean, rounded to the nearest decibel, of the three tests."

Replace the 1st line of I.2.9 as follows:

"Replacement of the second paragraph:"

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

Add the following new Annex ZA:

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 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: www.cenelec.eu.

Annex ZA of EN 62841-1:2015 is applicable, except as follows: VIEW

Publication	Year	<u>Title</u> (standards.iteh.ai)	EN/HD	Year
Replacement:		SISTENDEC (2841-2-72021/A11-2021		
ISO 3744	20110s://s	SIST EN IEC 62841-3-7:2021/A11:2021 Acoustics — Determination of sound power levels b1: and sound energy levels of noise sources using sound pressure – Engineering methods for an essentially free field over a reflecting plane	5_EN ISO 3744	2010
ISO 11201	2010	Acoustics – Noise emitted by machinery and equipment – Determination of emission sound pressure levels at a work station and at other specified positions in an essentially free field over a reflecting plane with negligible environmental corrections	EN ISO 11201	2010
ISO 11203	1995	Acoustics - Noise emitted by machinery and equipment - Determination of emission sound pressure levels at a work station and at other specified positions from the sound power level	EN ISO 11203	2009
Addition:				
IEC 61008-1 + A1 + A2	2010 2012 2013	Residual current operated circuit-breakers without integral overcurrent protection for household and similar uses (RCCBs) - Part 1: General rules	EN 61008-1 + A1 + A2	2012 2014 2014
IEC 62841-1	2014	Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery – Safety – Part 1: General requirements	EN 62841-1	2015
ISO 6603-1		Plastics – Determination of puncture impact behaviour of rigid plastics – Part 1: Non- instrumented impact testing	EN ISO 6603-1	2000

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