SLOVENSKI STANDARD
SIST EN IEC 62841-4-5:2022/A11:2022

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Elektromotorna ročna orodja, prenosna orodja ter stroji za trato in vrt - Varnost - 4-5. del: Posebne zahteve za škarje za travo - Dopolnilo A11

Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 4-5: Particular requirements for grass shears

Outils électroportatifs à moteur, outils portables et machines pour jardins et pelouses - Sécurité - Partie 4-5 : Exigences particulières pour les cisailles à gazon

Ta slovenski standard je istoveten z: EN IEC 62841-4-5:2021/A11:2021

ICS:

25.140.20	Električna orodja	Electric tools
65.060.70	Vrtnarska oprema	Horticultural equipment

SIST EN IEC 62841-4-5:2022/A11:2022 en,fr

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN IEC 62841-4-5:2021/A11

October 2021

ICS 25.140.20

English Version

Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 4-5: Particular requirements for grass shears

Outils électroportatifs à moteur, outils portables et machines pour jardins et pelouses - Sécurité - Partie 4-5: Exigences particulières pour les cisailles à gazon

Elektrische motorbetriebene handgeführte Werkzeuge, transportable Werkzeuge und Rasen- und Gartenmaschinen - Sicherheit - Teil 4-5: Besondere Anforderungen für Grasscheren

This amendment A11 modifies the European Standard EN IEC 62841-4-5:2021; it was approved by CENELEC on 2021-06-07. 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.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

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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European foreword

This document (EN IEC 62841-4-5:2021/A11:2021) has been 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)	2022-06-07
• latest date by which the national standards conflicting with this document have to be withdrawn	(dow)	2025-06-07

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 document referred to simply as tools) which could come within the scope of this document;

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.

The Part 4-5 is to be used in conjunction with EN 62841-1:2015 and its amendments.

The Part 4-5 supplements or ~~modifies the corresponding clauses in~~ EN 62841-1:2015, so as to convert it into the European Standard: Particular requirements for grass shears.

Where a particular subclause of Part 1 is not mentioned in the Part 4-5, that subclause applies as far as relevant. When this document 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 62841-4-5:20XX are prefixed “Z”.

This document follows the overall requirements of EN ISO 12100.

This document has been prepared under a Standardization Request given to CENELEC by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s) / Regulation(s).

For relationship with EU Directive(s) / Regulation(s), see informative Annex ZZ, which is an integral part of this document.

Compliance with the clauses of Part 1 together with Part 4-5 provides one means of conforming with the essential health and safety requirements of the Directive concerned.

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.

1 Modification to Clause 1, “Scope”

Add *the following to the existing* Clause 1:

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

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 machines covered by this standard or do not require specific action by the designer.”

2 Modification 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 the NOTE.

Replace the existing Subclause I.2.3.1 with the following:

“I.2.3.1 Hand-held tools

The A-weighted emission sound pressure level at the work station, L_{pA}, shall be determined in accordance with EN ISO 11203:2009 as follows:

$$L_{pA} = L_{WA} - Q$$

where Q = 8 dB.

NOTE 1 This value of Q has been determined, during experimental investigations, to be applicable to **hand-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 to give satisfactory reproducibility of results, and to permit comparison of the acoustic performance of different **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 geometric centre of the power tool, this can be done by applying the formula:

$$L_{pA,r1} = L_{pA} + 20 \lg\left(\frac{0,7}{r_1}\right) \text{ dB}$$

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.

If required, the C-weighted peak emission sound pressure level $L_{pC,peak}$ shall be measured at each of the five measurement positions specified in I.2.2. The C-weighted peak emission sound pressure level at the work station is the highest C-weighted peak emission sound pressure level measured at any of the five microphone positions; no corrections are permitted.”

3 Modification to Annex K, “Battery tools and battery packs”

Replace *the NOTE 101 in subclause K.21.18 with the following normative text:*

“K.21.18.Z101 Isolation and disabling device

Machines with an **integral battery** shall either be equipped:

— with an isolation device to prevent the risk of injury from mechanical hazards during servicing or **user maintenance**; or

— with a disabling device that prevents unintentional starting of the machine.

An isolation device shall:

— provide disconnection of at least one pole of the **battery** from the serviceable region of the machine;

— be equipped with an unambiguous indication of the state of the disconnection device which corresponds to each position of its manual control (actuator);

— be provided with protection against accidental reconnection.

NOTE 1 Examples of methods to achieve this disconnection include removable jumpers, **integral batteries** that can be disconnected for servicing or **user maintenance**, or an electromechanical **power switch** with a direct mechanical link between the actuator and the contact.

NOTE 2 The risk of accidental reconnection for a **power switch** is addressed by the requirement of 21.18.103. The other examples in NOTE 1 achieve this by the necessary actions for reconnection.

A disabling device may be achieved by any of the following:

— a self-restoring or non-self-restoring lock-off device where two separate and dissimilar actions are necessary before the motor is switched on (e.g. a **power switch** which has to be pushed in before it can be moved laterally to close the contacts to start the motor). It shall not be possible to achieve these two actions with a single grasping motion or a straight-line motion;

— a removable disabling device provided with the machine where it shall not be possible for the machine to be operated when either applied or removed.

Compliance is checked by inspection and by manual test.”

4 Modification to Annex L, “Battery tools and battery packs provided with mains connection or non-isolated sources”

Replace *the NOTE 101 in subclause L.21.18 with the following normative text:*

“L.21.18.Z101 Isolation and disabling device

Machines with an **integral battery** shall either be equipped:

— with an isolation device to prevent the risk of injury from mechanical hazards during servicing or **user maintenance**; or

— with a disabling device that prevents unintentional starting of the machine.

An isolation device shall:

— provide disconnection of at least one pole of the **battery** from the serviceable region of the machine;

— be equipped with an unambiguous indication of the state of the disconnection device which corresponds to each position of its manual control (actuator);

— be provided with protection against accidental reconnection.

NOTE 1 Examples of methods to achieve this disconnection include removable jumpers, **integral batteries** that can be disconnected for servicing or **user maintenance**, or an electromechanical **power switch** with a direct mechanical link between the actuator and the contact.

NOTE 2 The risk of accidental reconnection for a **power switch** is addressed by the requirement of 21.18.103. The other examples in NOTE 1 achieve this by the necessary actions for reconnection.

A disabling device may be achieved by any of the following:

— a self-restoring or non-self-restoring lock-off device where two separate and dissimilar actions are necessary before the motor is switched on (e.g. a **power switch** which has to be pushed in before it can be moved laterally to close the contacts to start the motor). It shall not be possible to achieve these two actions with a single grasping motion or a straight-line motion;

— a removable disabling device provided with the machine where it shall not be possible for the machine to be operated when either applied or removed.

Compliance is checked by inspection and by manual test."

5 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:

Publication	Year	Title	EN/HD	Year
Addition:				
IEC 60664-3	-	Insulation coordination for equipment within low-voltage systems – Part 3: Use of coating, potting or moulding for protection against pollution	EN 60664-3	2017
IEC 60664-4	-	Insulation coordination for equipment within low-voltage systems – Part 4: Consideration of high-frequency voltage stress	EN 60664-3	2006
ISO 354	2003	Acoustics – Measurement of sound absorption in a reverberation room	EN ISO 354	2003

Publication	Year	Title	EN/HD	Year
ISO 22868	2011	Forestry and gardening machinery – Noise test code for portable hand-held machines with internal combustion engine – Engineering method (Grade 2 accuracy)	EN ISO 22868	2011
Replacement:				
IEC 60664-1	-	Insulation coordination for equipment within low-voltage systems - Part 1: Principles, requirements and tests	EN 60664-1	2007
ISO 3744	2010	Acoustics – Determination of sound power levels and sound energy levels of noise sources using sound pressure – Engineering methods for an essentially free field over a reflecting plane	EN ISO 3744	2010
ISO 3864-2	2016[1]	Graphical symbols - Safety colours and safety signs – Part 2: Design principles for product safety labels	-	-
ISO 7010	-	Graphical symbols - Safety colours and safety signs - Registered safety signs	EN ISO 7010	2012
			+ A1	2014
			+ A2	2014
			+ A3	2014
			+ A4	2014
			+ A5	2015
			+ A6	2016
			+ A7	2017
ISO 11203	2009	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

“

[1] Dated as no equivalent European Standard exists.