

# SLOVENSKI STANDARD SIST EN IEC 62841-4-3:2021/A11:2021

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Elektromotorna ročna orodja, prenosna orodja ter stroji za trato in vrt - Varnost - 4-3. del: Posebne zahteve za ročno vodene vrtne kosilnice - Dopolnilo A11

Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 4-3: Particular requirements for pedestrian controlled walk-behind lawnmowers

Elektrische motorbetriebene handgeführte Werkzeuge, transportable Werkzeuge und Rasen- und Gartenmaschinen - Sicherheit - Teil 4-3: Besondere Anforderungen für handgeführte Rasenmäher (standards.iteh.ai)

Outils électroportatifs à moteur, outils portables et machines pour jardins et pelouses -Sécurité - Partie 4-3. Exigences particulières pour tondeuses à gazon à conducteur à pied

Ta slovenski standard je istoveten z: EN IEC 62841-4-3:2021/A11:2021

#### ICS:

25.140.20 Električna orodja Electric tools

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#### **English Version**

Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 4-3: Particular requirements for pedestrian controlled walk-behind lawnmowers

Outils électroportatifs à moteur, outils portables et machines pour jardins et pelouses - Sécurité - Partie 4-3: Exigences particulières pour tondeuses à gazon à conducteur à pied Elektrische motorbetriebene handgeführte Werkzeuge, transportable Werkzeuge und Rasen- und Gartenmaschinen - Sicherheit - Teil 4-3: Besondere Anforderungen für handgeführte Rasenmäher

This amendment A11 modifies the European Standard EN IEC 62841-4-3:2021; it was approved by CENELEC on 2021-05-31. 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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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 62841-4-3:2021/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 (dop) 2022–05–31 implemented at national level by publication of an identical national standard or by endorsement
- latest date by which the national standards (dow) 2025–05–31 conflicting with this document have to be withdrawn

This document modifies by common modifications EN IEC 62841-4-3:2021, which consists of the text of 116/467/FDIS (IEC 62841-4-3, Ed 1) prepared by IEC/TC 116 "Safety of motor-operated electric tools".

This document 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 4-3 is to be used in conjunction with EN 62841-1:2015 and its amendments. (standards.iteh.ai)

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The Part 4-3 supplements or modifies the corresponding clauses in EN 62841-1:2015, so as to convert it into the European Standard: Particular requirements for pedestrian controlled walk-behind lawnmowers.

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Where a particular subclause of Part 1 is not mentioned in Part 1-30 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 62841-4-3:2020 are prefixed "Z".

This document follows the overall requirements of EN ISO 12100:2010.

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.

#### EN IEC 62841-4-3:2021/A11:2021

Compliance with the clauses of Part 1 together with Part 4-3 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.

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#### 1 Modification to Clause 1, "Scope"

**Add** the following to the existing Clause 1:

"This document does not apply to lawnmowers with a swing-over handle.

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 document or do not require specific action by the designer."

#### 2 Modification to Clause 2, "Normative references"

**Delete** the normative reference for ANSI B71.1:2017.

#### 3 Modifications to Clause 8, "Marking and instructions"

Replace the existing subclause 8.3 with the following:

#### "8.3 Addition:

For **rotary lawnmowers**, the **cutting means**, where replaceable during **user maintenance**, shall be marked to identify the part number(s) and the manufacturer, importer or supplier. This marking is not required to be clearly discernible from the outside of the machine.

## Replacement of the sixth dash: STANDARD PREVIEW

 the mass of the machine in kg. For this requirement, the mass of the machine includes the mass of a supply cord with a length not less than 10 m, if any, in addition to the items specified in 5.17."

Replace the text and NOTE after 8.14.2 c) 109) with the following:

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**\*\*8.14.2 Za)** Replacement 1515a9f9cd/sist-en-iec-62841-4-3-2021-a11-2021

#### Emissions:

- 1) The noise emission, measured in accordance with Clause 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 measured and guaranteed sound power level LwA.
- 2) Recommendation for the operator to wear hearing protection.
- 3) The vibration total value and its uncertainty measured in accordance with Clause I.3.

When the vibration total value does not exceed 2,5 m/s<sup>2</sup>, this shall be stated.

When the vibration total value exceeds 2,5 m/s<sup>2</sup>, its value shall be given in the instructions.

#### 4) The following information:

- that the declared vibration total value has been measured in accordance with a standard test method and may be used for comparing one machine with another;
- that the declared vibration total value may also be used in a preliminary assessment of exposure.

#### 5) A warning:

- that the vibration emission during actual use of the machine can differ from the declared value depending on the ways in which the machine is used; and
- of the need to identify safety measures to protect the operator that are based on an estimation of exposure in the actual conditions of use (taking account of all parts of the operating cycle such as the times when the machine is switched off and when it is running idle in addition to the trigger time)."

#### Modification to Clause 18, "Abnormal operation"

Replace the existing subclause 18.8 with the following:

"18.8 Replacement of Table 4:

Table 4 — Required performance levels

Type and purpose of SCFRD PREVIEV	Minimum Performance Level (PL)
Power switch (operator presence control) 2 prevent unwanted switch-on	b
Power switch (operator presence control) - provide desired switch-off	bdla-
Provide desired direction of the cutting means -2021-a11-2021	Not an <b>SCF</b>
Provide desired direction of rotation of the traction drive	а
Function to fulfil the requirements of Clause 18	a
Service brake as in 19.101.1.2	b
Parking brake as in 19.101.1.3	b
Interlocked grass catcher or guard as in 19.102.2.1	b
Prevent exceeding 150 % of the <b>cutting means</b> stopping time as required in 19.102.4 and 19.103.4	а
Prevent increase of rotational speed of <b>cutting means</b> that would cause non-compliance with 19.102.5	а
Prevent increase of rotational speed of <b>cutting means</b> that would cause non-compliance with 20.101.1	а
Prevent increase of rotational speed of <b>cutting means</b> that would cause non-compliance with 20.101.2	а
Prevent increase of rotational speed of <b>cutting means</b> that would cause non-compliance with 20.101.3	b
Any other speed limiting device	Not an SCF
Lock-off function as required by 21.104.2	b
Traction drive control system as in 21.104.3.1	b
Prevent self-resetting as required in 23.3	а

#### 5 Modifications to Clause 19, "Mechanical hazards"

In subclause 19.102.1.2.1, **replace** the last paragraph with the following:

"Compliance is checked by inspection, by measurement and by applying the test of 19.102.1.2.2 where the probe shall not enter the path of the cutting means."

**Delete** the subclauses 19.102.3.2, 19.102.6 and 19.102.7.

#### 6 Modification to Clause 20, "Mechanical strength"

In Subclause 20.102.2, 2nd paragraph, replace "ISO 5395:2013" with "ISO 5395-1:2013".

#### 7 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.

In Subclause I.2.2.1, replace the NOTE with the following one:

NOTE The determination of the sound power level in accordance with I.2.2.4 also provides the A-weighted measured and guaranteed sound power level two required by the European Directive 2000/14/EC and its amendments."

In Subclause I.2.2.4, delete the last paragraph (all text after Table I.102).

**Add** the following subclause 3.2.9.5a9f9cd/sist-en-iec-62841-4-3-2021-a11-2021

#### "I.2.9 Declaration and verification of noise emission values

Replacement of the first paragraph as follows:

The declaration of the A-weighted emission sound pressure level shall be a dual number value according to ISO 4871:1996. It shall declare the noise emission value  $L_{pA}$  and the respective uncertainty  $K_{pA}$ .

The A-weighted sound power level  $L_{WA}$  shall be declared as measured value and additionally as guaranteed value (guaranteed A-weighted sound power level). The latter shall be the single number value as defined in ISO 4871:1996.

NOTE The guaranteed A-weighted sound power level  $L_{WA}$  is used in the European Directive 2000/14/EC. However, its determination is not clearly defined. Considering the description in part 4 of the "Guidelines for the application of the Directive 2000/14/EC of the European Parliament and of the Council of 8 May 2000" from 2017, it is technically appropriate to equate the guaranteed value of the A-weighted sound power level with the single number value defined in ISO 4871:1996."

#### 8 Modifications to Annex K, "Battery tools and battery packs"

**Replace** the 6<sup>th</sup> dash in Subclause K.8.3 with the following:

"— the mass of the machine in kg."

and delete NOTE 3.

**Replace** the existing subclause K.18.8 with the following:

"K.18.8 Addition to Table 4:

Table 4 — Required performance levels

Type and purpose of SCF	Minimum Performance Level (PL)
Any disabling device as in K.21.302.2	b

Replace the NOTE 101 after K.20.101.3 with the following normative text:

#### "K.21.18.Z101 Isolation device

Machines with an **integral battery** shall be equipped with an isolation device to prevent the risk of injury from mechanical hazards during servicing or **user maintenance**.

An isolation device shall:

- provide disconnection of all poles 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 **operator presence control** with a direct mechanical link between the actuator and the contact.

NOTE 2 The risk of accidental reconnection for an **operator presence control** is addressed by the requirement of 21.104.2. The other examples in NOTE 1 achieve this by the necessary actions for reconnection.

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Compliance is checked by inspection and by manual test/0b935bb5-2caf-4e8b-bd1a-

Replace the existing subclause K.21.302.1 with the following:

**"K.21.302.1** For machines with **integral batteries**, there shall be a means of disconnecting the **cutting means** motor circuit which is separate from the **operator presence control**. The actuation of this means shall be easily accessible with the machine in its normal operating position.

This requirement may be fulfilled by a single device that also fulfils the requirements of a **disabling device** as specified in K.21.302.2.

In addition, this requirement may be fulfilled by a single device that also fulfils the requirements of an isolation device as specified in K.21.18.Z101.

Compliance is checked by inspection."

# 9 Modifications to Annex L, "Battery tools and battery packs provided with mains connection or non-isolated sources"

**Replace** the 6<sup>th</sup> dash in subclause L.8.3 with the following:

"— the mass of the machine in kg."

and delete NOTE 102.