

SLOVENSKI STANDARD
SIST EN IEC 62841-4-4:202X/oprA1:2023
01-oktober-2023

Elektromotorna ročna orodja, prenosna orodja ter stroji za trato in vrt - Varnost - 4-4. del: Posebne zahteve za rezalnike trat, obrezovalnike tratnih robov, rezalnike trave, obrezovalnike grmičja in rezalnike grmičja - Dopolnilo A1

Amendment 1 - Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 4-4: Particular requirements for lawn trimmers, lawn edge trimmers, grass trimmers, brush cutters and brush saws

Elektrische motorbetriebene handgeführte Werkzeuge, transportable Werkzeuge und Rasen- und Gartenmaschinen – Sicherheit – Teil 4-4: Besondere Anforderungen für Rasentrimmer, Rasenkantenschneider, Grastrimmer, Freischneider und Freischneider mit Sägeblatt

Outils électroportatifs à moteur, outils portables et machines pour jardins et pelouses - Sécurité - Partie 4-4: Exigences particulières pour les taille-gazon, les coupe-bordures, les coupe-herbes, les débroussailleuses et les débroussailleuses à lame de scie

Ta slovenski standard je istoveten z: EN IEC 62841-4-4:202X/prA1:2023

ICS:

25.140.20	Električna orodja	Electric tools
65.060.70	Vrtnarska oprema	Horticultural equipment

SIST EN IEC 62841-4-4:202X/oprA1:2023 en



116/671/CDV

COMMITTEE DRAFT FOR VOTE (CDV)

PROJECT NUMBER: IEC 62841-4-4/AMD1 ED1	
DATE OF CIRCULATION: 2023-08-18	CLOSING DATE FOR VOTING: 2023-11-10
SUPERSEDES DOCUMENTS: 116/670/RR	

IEC TC 116 : SAFETY OF MOTOR-OPERATED ELECTRIC TOOLS	
SECRETARIAT: United States of America	SECRETARY: Mr Joseph Harding
OF INTEREST TO THE FOLLOWING COMMITTEES:	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 checked="" type="checkbox"/> SAFETY	
<input checked="" type="checkbox"/> SUBMITTED FOR CENELEC PARALLEL VOTING Attention IEC-CENELEC parallel voting 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. The CENELEC members are invited to vote through the CENELEC online voting system.	<input type="checkbox"/> NOT SUBMITTED FOR CENELEC PARALLEL VOTING

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Recipients of this document are invited to submit, with their comments, notification of any relevant "In Some Countries" clauses to be included should this proposal proceed. Recipients are reminded that the CDV stage is the final stage for submitting ISC clauses. (SEE [AC/22/2007](#) OR [NEW GUIDANCE DOC](#)).

TITLE:

Amendment 1 - Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 4-4: Particular requirements for lawn trimmers, lawn edge trimmers, grass trimmers, brush cutters and brush saws

PROPOSED STABILITY DATE: 2028

NOTE FROM TC/SC OFFICERS:

INTERNATIONAL ELECTROTECHNICAL COMMISSION

**ELECTRIC MOTOR-OPERATED HAND-HELD TOOLS,
TRANSPORTABLE TOOLS AND LAWN AND GARDEN MACHINERY –
SAFETY –****Part 4-4: Particular requirements for lawn trimmers, lawn edge trimmers,
grass trimmers, brush cutters and brush saws****AMENDMENT 1****FOREWORD**

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Amendment 1 to IEC 62841-4-4:2021 has been prepared by IEC technical committee 116: Safety of motor-operated electric tools.

50 The text of this Amendment is based on the following documents:

Draft	Report on voting
116/XX/FDIS	116/XX/RVD

51
52 Full information on the voting for its approval can be found in the report on voting indicated in
53 the above table.

54 The language used for the development of this Amendment is English.

55 This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in
56 accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available
57 at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are
58 described in greater detail at www.iec.ch/standardsdev/publications/.

59 The committee has decided that the contents of this document will remain unchanged until the
60 stability date indicated on the IEC website under webstore.iec.ch in the data related to the
61 specific document. At this date, the document will be

- 62 • reconfirmed,
- 63 • withdrawn,
- 64 • replaced by a revised edition, or
- 65 • amended.

66 NOTE The attention of National Committees is drawn to the fact that equipment manufacturers and testing
67 organizations may need a transitional period following publication of a new, amended or revised IEC publication in
68 which to make products in accordance with the new requirements and to equip themselves for conducting new or
69 revised tests.

70 It is the recommendation of the committee that the content of this publication be adopted for implementation nationally
71 not earlier than 36 months from the date of publication.

72 <https://standards.iec.ch/catalog/standards/sist/144ff51b-0749-40ea-8b56-19a066790ed5/sist-er-iec-62841-4-4-202x-opra1-2023>

73 2 Normative references

74 *Add the following new normative reference:*

75 ISO 22867:2021, *Forestry and gardening machinery – Vibration test code for portable hand-*
76 *held machines with internal combustion engine – Vibration at the handles*

77 *Replace the existing normative reference for ISO 22868:2011 with the following new normative*
78 *reference:*

79 ISO 22868:2021, *Forestry and gardening machinery – Noise test code for portable hand-held*
80 *machines with internal combustion engine – Engineering method (Grade 2 accuracy)*

81 3 Terms and definitions


82 *Add the following new subclause:*

83 **3.16** *Addition to IEC 62841-1:2014:*

84 Note 101 to entry: Interchangeable **attachments** such as a lower shaft assembly or an interchangeable **guard** are
85 considered not to be **detachable parts**.

86 **8 Marking and instructions**

87 *Add, after the last dashed item of 8.2.101.2, the following new dashed item:*

88 – "WARNING – Keep bystanders away" or one of the safety signs specified in Figure AA.7.

89 *Delete Subclause 8.2.101.4.*

90 *Delete the first dashed item of 8.2.101.5.*

91 *Replace the existing text of the first paragraph of 8.3.101, before the first dashed item, with the*
 92 *following new text:*

93 For **brush cutters** and **brush saws**, the **cutting accessory** shall be marked with the following
 94 information:

95 *Delete Subclause 8.4.*

96 *Replace the existing text of 8.6 with the following new text:*

97 **8.6** *Modification of the following unit:*

98 n_0 **maximum speed** assigned by the manufacturer in accordance
 99 with 8.1

100 *Delete 8.14.1.101, item o).*

101 *Delete 8.14.1.102, item h).*

102 *Replace the existing text of 8.14.1.102, item i), with the following new text:*

103 i) **While operating the machine, always wear non-slip and protective footwear. Do not**
 104 **operate the machine when barefoot or wearing open sandals. This reduces the chance**
 105 **of injury to the feet from contact with the moving cutter line or blade.**

106 *Delete 8.14.1.102, Note 104.*

107 *Delete 8.14.1.102, item j).*

108 *Delete 8.14.1.102, Note 105.*

109 *Replace the existing text of 8.14.2 b), item 116), with the following new text:*

110 116) Information on the **maximum speed** of the spindle assigned by the manufacturer, if
 111 required to be marked in accordance with 8.1.

112 **18 Abnormal operation**

113 *Replace the existing text of the first row after "Overspeed prevention" in 18.8, Table 4, under*
 114 *the column "Type and purpose of SCF", with the following new text:*

115 For machines covered by 19.6 to prevent output speed above 130 % of **maximum speed** assigned by the
 116 manufacturer

117 **19 Mechanical hazards**

118 *Replace the existing text of the second paragraph of 19.101.1.3 with the following new text:*

119 The vertices of these angles lie on the axis of the **cutting head** spindle. The **guard** shall cover,
120 from above and to the operator side, the area beyond 80% of the radius of the **cutting means**.
121 See Figure 107 a).

122 *Replace the existing text of the first paragraph of 19.101.4, including the first dashed item, with*
123 *the following new text:*

124 The **guards** specified in 19.101.1 and 19.101.2 shall be

125 – imperforate in the area of the **guard** beyond 80 % of the radius of the largest **cutting means**
126 that can be used with the **guard** in accordance with 8.14.2 a); and

127 *Add, after the second dashed item of 19.101.4, the following new paragraph:*

128 The **guard** specified in 19.101.3 shall be permanently attached or secured by screws, nuts or
129 snap fits to prevent removal without the aid of a tool.

130 *Replace the existing text of the caption of 19.102.1, Figure 112 b), with the following new text:*

131 **b) Gripping length of a handle supported centrally (i.e. T-type)**

132 *Replace the existing text of the third paragraph of 19.102.1.1 with the following new text:*

133 This measurement of 250 mm does not apply to two handled **hand-held trimmers** with a mass
134 of 3,5 kg or less.

135 *Replace the existing text of the third paragraph of 19.102.1.2 with the following new text:*

136 The handles of **grass trimmers**, **brush cutters** and **brush saws** shall be adjustable so that a
137 suitable ergonomic working position can be achieved. An adjustment below the minimum
138 distance *l* shall be prevented by design or the machine shall be marked in accordance with
139 8.3.102. <https://standards.iteh.ai/catalog/standards/sist/144ff51b-0749-40ea-8b56-19a066790ed5/sist-en-iec-62841-4-4-202x-oprA1-2023>

140 *Replace the existing text of the title and the first paragraph of 19.102.3, before the first dashed*
141 *item, with the following new text:*

142 **19.102.3 Dimensions of handles supported centrally (T-type)**

143 If a handle is supported centrally (i.e. T-type), there shall be a minimum radial clearance of
144 25 mm around the gripping length. The gripping length shall be calculated as follows (see
145 Figure 112 b)):

146 **20 Mechanical strength**

147 *Delete the eighth paragraph (starting with “In addition”) of 20.3.1.*

148 *Replace the existing text of the last paragraph of 20.3.1 with the following new text:*

149 *Each drop shall be conducted on a separate sample, unless a single sample can be subjected*
150 *to multiple drops without failure. If a sample has been subjected to multiple drops and fails,*
151 *then the drop in the orientation that resulted in the failure is repeated using a new sample. If*
152 *the new sample passes the test for the drop in that orientation, then the requirements for the*
153 *drop in that orientation are considered to be fulfilled. The test is continued in this manner until*
154 *all drops in each of the three orientations are completed.*

155 **21 Construction**

156 *Replace the existing text of 21.17.1 with the following new text:*

157 This subclause of Part 1 is also applicable for an **operator presence sensor** whose motion is
158 mechanically obstructed and either

- 159 – functions as a lock-off device; or
- 160 – is locked off by the lock-off device.

161 *Replace the existing text of the last two paragraphs of 21.18.101 with the following new text:*

162 *Additionally, for lock-off devices that are actuated in a direction generally perpendicular to the*
163 *longitudinal vertical plane of the machine, (see Figure 119), and that are located within any*
164 *gripping surface of handle(s) or grasping surface(s) identified in accordance with 8.14.2 a), to*
165 *determine if it is possible to actuate the locked-off control (i.e. the **power switch** or the **operator***
166 ***presence sensor**, as applicable) and the lock-off device with a single grasping motion or a*
167 *straight line motion, compliance is checked by the following test:*

168 *With the **power switch** in the "off" position, the lock-off device shall not be actuated by the*
169 *cylindrical face of a 25 mm diameter x 75 mm long steel rod when applied with a force not*
170 *exceeding 20 N. The axis of the rod is applied perpendicular to the axis of the handle and is*
171 *either:*

- 172 – *rotated around the handle, see Figure 122; or*
- 173 – *applied in the direction perpendicular to the handle axis, see Figure 123,*

174 *while bridging the handle surface and surface of the lock-off device and any surface adjacent*
175 *to the lock-off device. When applying the steel rod, the circular end faces and edges shall not*
176 *be used for probing.*

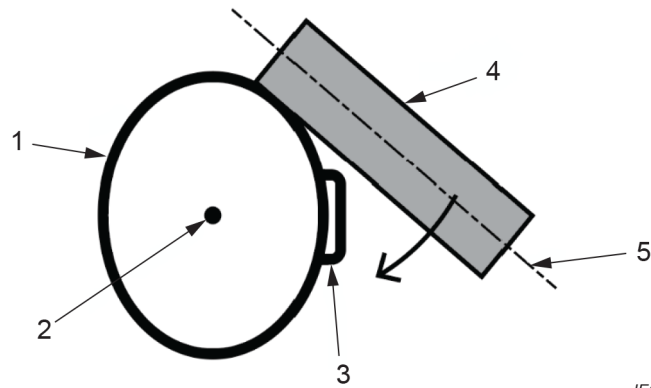
177 *During the test, it shall not be possible to actuate the locked-off control by applying a force as*
178 *specified in Table 7.*

179

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<https://standards.iteh.ai/catalog/standards/sist/144ff51b-0749-40ea-8b56-19a066790ed5/sist-en-iec-62841-4-4-202x-opra1-2023>

180 Add, at the end of 21.18.101, the following new Figure 122 and Figure 123:



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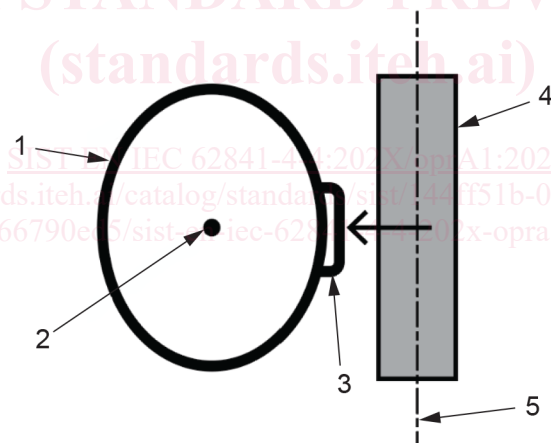
181

182 **Key**

- 183 1 handle
 184 2 handle axis
 185 3 lock-off device
 186 4 steel rod
 187 5 steel rod axis

188

Figure 122 – Application of steel rod when rotated around the handle



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189

190 **Key**

- 191 1 handle
 192 2 handle axis
 193 3 lock-off device
 194 4 steel rod
 195 5 steel rod axis

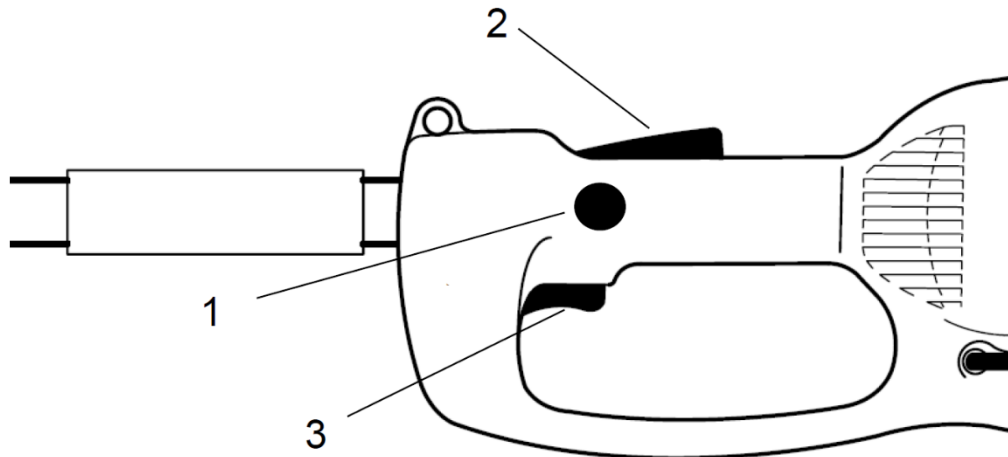
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Figure 123 – Application of steel rod when applied in the direction perpendicular to the handle axis

197

198

199 *Replace the existing Figure 119 in 21.18.102 with the following new Figure 119:*



200

201 **Key**

- 202 1 lock-off device
 203 2 **operator presence sensor**
 204 3 **power switch**

205

Figure 119 – Example of an operator presence sensor

206 *Replace the existing text of the third paragraph of 21.107.1 with the following new text:*

207 *For machines provided with an appliance inlet or a **supply cord** with a length between 0,2 m*
 208 *and 0,5 m, a mass of (300 ± 20) g is suspended from either*

- 209 – *the appliance inlet; or*
 210 – *the **supply cord** plug; or*
 211 – *any **supply cord** retaining device in accordance with 8.14.2,*

212 *whichever is the most unfavourable.*

213 *For machines provided with a **supply cord** with a length not less than 6 m, the **supply cord** is*
 214 *placed resting on the ground.*

215 *Replace the existing text of the last dashed item of 21.107.1 with the following new text:*

- 216 – *for **brush cutters** and **brush saws**: a distance from the ground to the nearest point of the*
 217 ***cutting accessory** shall be (200 ± 100) mm.*

218 *Replace the existing text of the third paragraph of 21.107.2 with the following new text:*

219 *A mass of (300 ± 20) g is suspended from either*

- 220 – *the appliance inlet; or*
 221 – *the **supply cord** plug; or*
 222 – *any **supply cord** retaining device in accordance with 8.14.2,*

223 *whichever is the most unfavourable.*