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Project No. 2024/01539

Responsible committee: CPL/116 Safety of motor-operated electric tools

Interested committees:

Title: BS EN IEC 62841-1/AMD1 Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety

Part 1: General requirements

Please notify the secretary if you are aware of any keywords that might assist in classifying or identifying the standard or if the content of this standard

- i) has any issues related to 3rd party IPR, patent or copyright
- ii) affects other national standard(s)
- iii) requires additional national guidance or information

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Introduction

This draft standard is based on national and international discussions. Your comments on this draft are invited and will assist in the preparation of the consequent standard.

For international standards, comments will be reviewed by the relevant UK national committee before sending the consensus UK vote and comments to the international committee, which will then decide appropriate action. If the international standard is approved, it is usual for the text to be published as a British Standard.

For national standards, comments will be reviewed by the relevant UK national committee and the resulting standards published as a British Standard.

UK Vote

Please indicate whether you consider the UK should submit a negative (with supporting technical reasons) or positive vote on this draft. Please indicate if you are aware of any reason why this draft standard should not be published as a British Standard.

Submission of Comments

- **Annotated drafts are not acceptable and will be rejected.**
- All comments should be submitted online at <https://standardsdevelopment.bsigroup.com/>. You will need to register in order to comment.

Template for comments and secretariat observations

Date: xx/xx/20xx	Document: ISO/DIS xxxx
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1	2	(3)	4	5	(6)	7
MB	Clause No./ Subclause No./Annex (e.g. 3.1)	Paragraph/Figure/ Table/Note	Type of comment	Commend (justification for change) by the MB	Proposed change by the MB	Secretariat observations on each comment submitted
	3.1	Definition 1	ed	Definition is ambiguous and needs clarifying.	Amend to read '...so that the mains connector to which no connection...'	
	6.4	Paragraph 2	te	The use of the UV photometer as an alternative cannot be supported as serious problems have been encountered in its use in the UK.	Delete reference to UV photometer.	



PROJECT NUMBER: IEC 62841-1/AMD1 ED1	
DATE OF CIRCULATION: 2024-07-05	CLOSING DATE FOR VOTING: 2024-09-27
SUPERSEDES DOCUMENTS: 116/782/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: ☐ Other TC/SCs are requested to indicate their interest, if any, in this CDV to the secretary.
FUNCTIONS CONCERNED: ☐ EMC ☐ ENVIRONMENT ☐ QUALITY ASSURANCE ☒ SAFETY	
☐ SUBMITTED FOR CENELEC PARALLEL VOTING	☒ 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 patent rights of which they are aware and to provide supporting documentation.

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 1: General requirements

PROPOSED STABILITY DATE: 2029

NOTE FROM TC/SC OFFICERS:

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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Part 1: General requirements

AMENDMENT 1

FOREWORD

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Amendment 1 to IEC 62841-1:2014 has been prepared by IEC technical committee 116: Safety of motor-operated electric tools.

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

Draft	Report on voting
116/XX/XXXX	116/XX/XXX

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

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

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

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

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

Foreword

Add, at the end of the Foreword, the following new NOTE:

NOTE 4 In Europe (EN 62841-1), the following additional paragraph applies:

When a relevant Part 2, 3, or 4 does not exist, this document can be used to support the risk assessment process in order to establish requirements for the tool.

2 Normative references

Delete the existing normative reference for ISO/TR 11690-3.

3 Terms and definitions

Add the following new terms and definitions:

3.64

entity

person, device, tool, **battery**, **charging system**, or service that interacts with a tool, **battery** or **charging system**

3.65

message

data which is transmitted from a sender (data source) to one or more receivers (data sink)

3.66

public network

network carrying digital data or analogue signals or both where access to the data and signals is not restricted by the physical space within the use environment of the tool, **battery** or **charging system**

Note 1 to entry: Determination of confinement to the physical space includes consideration of the network's range of communication, configuration, or construction.

Note 2 to entry: For the purposes of this document, examples of **public networks** include, but are not limited to:

- PAN (personal area network);
- LAN (local area network) connected devices which may or may not be connected to a gateway, such as BLE (Bluetooth Low Energy), Bluetooth or WLAN (wireless local area network);
- PLC (power line communication);
- SRD (short range devices); and
- WAN (wide area network).

Note 3 to entry: For the purposes of this document, examples of networks which are not considered as being **public networks** include, but are not limited to:

- NFC (near field communication);
- optical communication with line of sight (infra-red rays or visual rays); and

97 – hardwired configurations constructed of physical media

98 without connection to a **public network**.

99 **3.67**

100 **remote communication**

101 transmission of data between the tool, **battery** or **charging system** and an **entity** that can be
102 initiated out of sight of the tool, **battery** or **charging system** using communication means such
103 as radio wave modulation, sound wave modulation or bus systems

104 Note 1 to entry: Examples of transmission of data include, but are not limited to, remote monitoring, software
105 downloading or control parameter modifications.

106 Note 2 to entry: Transmission of data can be one-way (simplex) or two-way (duplex).

107 **8 Marking and instructions**

108 *Replace the existing text of the sixth dash of 8.3 with the following new text:*

109 – if the mass of the tool is greater than 25 kg: “> 25 kg” or the mass of the tool in kg.

110 *Add, before the last paragraph of 8.3, the following new NOTE:*

111 NOTE 3 In Europe (EN 62841-1), the following additional requirement applies:

112 Tools shall be additionally marked with the website, e-mail address or other digital contact at which the manufacturer
113 can be contacted. Where the size or nature of the tool does not allow the marking on the product, the required
114 information shall be provided on the packaging or in an accompanying document.

115 For tools where the instruction manual is provided only in a digital format, the tool shall be marked with information
116 on how to access the digital instructions. Where the size or nature of the tool does not allow the marking on the
117 product, the required information shall be provided on the packaging or in an accompanying document.

118 *Add, at the end of the NOTE in 8.14, the following new text:*

119 NOTE If the instruction manual is provided only in digital format, the following information is regarded as essential
120 for putting the tool into use and using the tool in a safe way in accordance with Regulation (EU) 2023/1230:

- 121 – safety warnings in accordance with 8.14.1; and
- 122 – instructions in accordance with 8.14.2 a), 8.14.2 b) and 8.14.2 d), as applicable.

123 *Add, at end of 8.14.1.1 2) (Electrical Safety), the following new NOTE:*

124 NOTE 1 The warnings in items a), b), d), e) and f) above can be omitted for tools covered by Annex K.

125 *Add, at the end of 8.14.2 a), the following new text:*

- 126 9) For **hand-held tools** and **transportable tools** that produce a considerable amount of
- 127 dust in accordance with 21.35, instructions how to properly connect the dust extraction
- 128 system to the tool including any associated devices.

129 *Replace the existing text of 8.14.2 b) 7) with the following new text:*

- 130 7) For tools with electronic speed or load regulators that reduce the output spindle torque
- 131 of the tool during a stalled condition and will increase the output spindle torque after the
- 132 stalled condition is removed: a warning that the tool will resume **normal operation**
- 133 immediately after the stalled condition is removed;

134 *Add, at the end of 8.14.2 c), the following new text:*

- 135 8) For **hand-held tools** and **transportable tools** that produce a considerable amount of
- 136 dust as specified in 21.35:

- 137 – information when to empty, change or maintain an integral dust collection/suction
- 138 device, if any, in order to keep its effectiveness; and

- information to read the maintenance instructions of the connected external suction device, if any, in order to keep its effectiveness.

Replace the existing text of the NOTE in 8.14.2 with the following new text:

NOTE In Europe (EN 62841-1), the following additional requirements apply:

8.14.2.Za)

Noise 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, either by a statement or by listing the actual measured value;
- A-weighted sound power level L_{WA} and its uncertainty K_{WA} , where the A-weighted sound pressure level L_{pA} exceeds 80 dB(A);
- C-weighted peak emission sound pressure value $L_{pC,peak}$, where this exceeds 130 dB in relation to 20 µPa.

- 2) Recommendation for the operator to wear hearing protection.

Continuous vibration:

- 3) For **hand-held tools** and **lawn and garden machinery** where Clause I.3 is applicable, the following applies: The vibration total value and its uncertainty measured in accordance with I.3.

Information and warnings on noise and vibration emissions:

- 4) The following information:

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

- 5) A warning:

- that the vibration emission and noise emission during actual use of the power tool can differ from the declared total value depending on the ways in which the tool 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 tool is switched off and when it is running idle in addition to the trigger time).

8.14.2 Zb)

Declaration of vibration values for **hand-held tools** and **lawn and garden machinery** where Clause I.3 is applicable:

- 1) The vibration total value (continuous vibration) and its uncertainty measured in accordance with I.3 shall be given in the instructions.
- 2) The mean value of the peak amplitude of the acceleration from repeated shock vibrations and its uncertainty shall be given in the instructions.

8.14.2 Zc)

Hazardous dust emissions:

- 1) For tools equipped with dust outlet(s) to connect an external suction device as specified in 21.35, information indicating the characteristics and at least the recommended filtration efficiency of the external suction device considering the **normal use** of the tool.

NOTE: Examples for characteristics to connect an external suction device to the tool are the appropriate connecting dimensions for the suction hose, the minimum required volume flow in m³/h and the resulting underpressure (negative pressure) at the tool interface with the external suction device in hPa necessary for **normal use**.

- 2) For tools equipped with a **liquid system** for suppressing the released dust, information indicating the required technical characteristics of the **liquid system**.

Add, at the end of 8.14.3, the following new NOTE:

NOTE In Europe (EN 62841-1), the first paragraph is replaced by the following text: