



Edition 1.2 2025-11

INTERNATIONAL STANDARD

CONSOLIDATED VERSION

Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety -

Part 3-1: Particular requirements for transportable table saws

Document Preview

IEC 62841-3-1:2014

https://standards.iteh.ai/catalog/standards/iec/8b651627-6fe4-4bfa-a0f6-6299ffeb0cca/iec-62841-3-1-2014



THIS PUBLICATION IS COPYRIGHT PROTECTED Copyright © 2025 IEC, Geneva, Switzerland

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either IEC or IEC's member National Committee in the country of the requester. If you have any questions about IEC copyright or have an enquiry about obtaining additional rights to this publication, please contact the address below or your local IEC member National Committee for further information.

IEC Secretariat Tel.: +41 22 919 02 11

3, rue de Varembé info@iec.ch CH-1211 Geneva 20 www.iec.ch Switzerland

About the IEC

The International Electrotechnical Commission (IEC) is the leading global organization that prepares and publishes International Standards for all electrical, electronic and related technologies.

About IEC publications

The technical content of IEC publications is kept under constant review by the IEC. Please make sure that you have the latest edition, a corrigendum or an amendment might have been published.

IEC publications search -

webstore.iec.ch/advsearchform

The advanced search enables to find IEC publications by a variety of criteria (reference number, text, technical committee, ...). It also gives information on projects, replaced and withdrawn publications.

IEC Just Published - webstore.iec.ch/justpublished
Stay up to date on all new IEC publications. Just Published
details all new publications released. Available online and
once a month by email.

IEC Customer Service Centre - webstore.iec.ch/csc
If you wish to give us your feedback on this publication or need further assistance, please contact the Customer Service Centre: sales@iec.ch.

IEC Products & Services Portal - products.iec.ch

Discover our powerful search engine and read freely all the publications previews, graphical symbols and the glossary. With a subscription you will always have access to up to date content tailored to your needs.

Electropedia - www.electropedia.org

The world's leading online dictionary on electrotechnology, containing more than 22 500 terminological entries in English and French, with equivalent terms in 25 additional languages. Also known as the International Electrotechnical Vocabulary (IEV) online.

Preview

IEC 62841-3-1:2014

https://standards.iteh.ai/catalog/standards/iec/8b651627-6fe4-4bfa-a0f6-6299ffeb0cca/iec-62841-3-1-201

CONTENTS

FC	REWORD	3
1	Scope	5
2	Normative references	5
3	Terms and definitions	5
4	General requirements	9
5	General conditions for the tests	10
6	Radiation, toxicity and similar hazards	10
7	Classification	10
8	Marking and instructions	10
9	Protection against access to live parts	16
10	Starting	16
11	Input and current	16
12	Heating	16
13	Resistance to heat and fire	17
14	Moisture resistance	17
15	Resistance to rusting	17
16	Overload protection of transformers and associated circuits	17
17	Endurance iTeh Standards	17
18	Abnormal operation	17
19	Abnormal operation	18
20	Mechanical strength Document Preview	
21	Construction	27
22	Internal wiring	38
tps://st	Internal wiring	.,38
24	Supply connection and external flexible cords	38
25	Terminals for external conductors	38
26	Provision for earthing	39
27	Screws and connections	39
28	Creepage distances, clearances and distances through insulation	39
An	nexes	50
An	nex I (informative) Measurement of noise and vibration emissions	50
An	nex K (normative) Battery tools and battery packs	51
Bik	oliography	52
Fig	gure 101 – Marking of the riving knife	39
Fig	gure 102 – Marking of table inserts for cutting tools other than a single saw blade	40
Fig	gure 103 – Test probe	41
Fig	gure 104 – Guarded area of the saw blade	41
	gure 105 – Probe application to the saw blade guard	
Fig	gure 106 – Height range of the riving knife tip	43
_	gure 107 – Distance between riving knife and saw blade	
Fig	gure 108 – Pull test for riving knife and extended riving knife	44
•	•	

IEC 62841-3-1:2014+AMD1:2021+AMD2:2025 CSV © IEC 2025 REDLINE VERSION

Figure 109 – Side pull test for riving knife and extended riving knife	44
Figure 110 – Push stick	45
Figure 111 – Push stick force test	45
Figure 112 – Bevel angle measurement	46
Figure 113 – Dimensions of the saw table	46
Figure 114 – Minimum distance from the front edge of the table top to the front edge of the saw blade guard	
Figure 115 – Test of an anti-kickback device	47
Figure 116 – Flange characteristics	48
Figure 117 – Workpiece of a common wood	49
Table 4 – Required performance levels	17
Table I 101 – Noise test conditions for table saws	50

iTeh Standards (https://standards.iteh.ai) Document Preview

IEC 62841-3-1:2014

https://standards.iteh.ai/catalog/standards/iec/8b651627-6fe4-4bfa-a0f6-6299ffeb0cca/iec-62841-3-1-2014

INTERNATIONAL ELECTROTECHNICAL COMMISSION

Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 3-1: Particular requirements for transportable table saws

FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
- 3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
- 4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter.
- 5) IEC itself does not provide any attestation of conformity. Independent certification bodies provide conformity assessment services and, in some areas, access to IEC marks of conformity. IEC is not responsible for any services carried out by independent certification bodies.
- 6) All users should ensure that they have the latest edition of this publication.
- nembers of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
 - 8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
 - 9) IEC draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). IEC takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, IEC had not received notice of (a) patent(s), which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at https://patents.iec.ch. IEC shall not be held responsible for identifying any or all such patent rights.

This consolidated version of the official IEC Standard and its amendments has been prepared for user convenience.

IEC 62841-3-1 edition 1.2 contains the first edition (2014-06) [documents 116/168/FDIS and 116/182/RVD] and its corrigendum (2015-11), its amendment 1 (2021-03) [documents 116/485/FDIS and 116/492/RVD] and its amendment 2 (2025-11) [documents 116/920/FDIS and 116/933/RVD].

In this Redline version, a vertical line in the margin shows where the technical content is modified by amendments 1 and 2. Additions are in green text, deletions are in strikethrough red text. A separate Final version with all changes accepted is available in this publication.

International Standard IEC 62841-3-1 has been prepared by IEC technical committee 116: Safety of motor-operated electric tools.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

This Part 3-1 is to be used in conjunction with the first edition of IEC 62841-1 (2014).

This Part 3-1 supplements or modifies the corresponding clauses in IEC 62841-1, so as to convert it into the IEC Standard: Particular requirements for transportable table saws.

Where a particular subclause of Part 1 is not mentioned in this Part 3-1, that subclause applies as far as reasonable. Where 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 small roman type.

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

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

A list of all parts of the IEC 62841 series, under the general title: Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety, can be found on the IEC website.

The committee has decided that the contents of this document and its amendments 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

https://s

- reconfirmed,
 - withdrawn, or
 - revised.

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

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

1 Scope

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

Addition:

This part of IEC 62841 applies to transportable table saws with

- a toothed single blade; or
- stacked blades that cut a single groove or slot; or
- a moulding head cutter

intended for cutting wood and analogous materials, plastics and nonferrous metals except magnesium with a saw blade diameter between 105 mm and 315 mm, which hereinafter may simply be referred to as saw or tool.

This standard does not apply to **table saws** intended to cut other metals, such as magnesium, steel and iron. This standard does not apply to **table saws** with an automatic feeding device.

This standard does not apply to saws designed for use with abrasive wheels.

NOTE 101 Saws designed for use with abrasive wheels as cut-off machines are covered by IEC 62841-3-10.

This standard does not apply to table saws with more than one spindle such as for a scoring blade.

NOTE 102 In Europe (EN 62841-3-1), the following conditions apply:

This standard applies to table saws having a mass of:

- maximum 25 kg for tools capable of being lifted by hand by one person;
- maximum 50 kg for tools capable of being lifted by hand by two persons.

This standard does not apply to stationary **table saws**. 1627-6fe4-4bfa-a0f6-6299ffeb0cca/iec-62841-3-1-2014

2 Normative references

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

Addition:

ISO 180:2019, Plastics – Determination of Izod impact strength

NOTE In Europe (EN 62841-3-1), the following normative reference applies:

EN 847-1, Tools for woodworking - Safety requirements - Part 1: Milling tools, circular saw blade

3 Terms and definitions

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

Addition:

3.101

anti-kickback device

device that allows the movement of the workpiece in the cutting direction but reduces the likelihood of the rapid movement of the workpiece in the direction opposite of feed