IEC 62841-4-3

Edition 1.1 2025-07

INTERNATIONAL STANDARD

CONSOLIDATED 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

ICS 65.060.70

ISBN 978-2-8327-0602-2

CONTENTS

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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FOREWORD

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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 amendment has been prepared for user convenience.

IEC 62841-4-3 edition 1.1 contains the first edition (2020-11) [documents 116/467/FDIS and 116/478/RVD] and its amendment 1 (2025-07) [documents 116/898/FDIS and 116/906/RVD].

In this Redline version, a vertical line in the margin shows where the technical content is modified by amendment 1. 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 62841-4-3 has been prepared by IEC technical committee 116: Safety of motor-operated electric tools.

The text of this International standard is based on the following documents:

FDIS	Report on voting
116/467/FDIS	116/478/RVD

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

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

This Part 4-3 is to be used in conjunction with the first edition of IEC 62841-1:2014 and IEC 62841-1:2014/AMD1:2025.

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

Where a particular subclause of Part 1 is not mentioned in this Part 4-3, that subclause applies as far as reasonable. Where 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 small 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.

Subclauses, notes, tables and figures in Annex K and Annex L which are additional to those in the main body of this Part 4-3 are numbered starting from 301.

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 amendment 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, 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 document applies to the design of pedestrian controlled walk-behind

– **cylinder lawnmowers**;

and

– **rotary lawnmowers**

equipped with

– metallic **cutting means**; and/or
– rigid non-metallic **cutting means**; and/or
– non-metallic **cutting means** with one or more cutting elements pivotally mounted on a generally circular drive unit, where these cutting elements rely on centrifugal force to achieve cutting, and have a kinetic energy for each single cutting element of greater than 10 J.

NOTE 101 Machines that have non-metallic **cutting means** and a kinetic energy for each single cutting element of less than or equal to 10 J are considered to be lawn trimmers.

This document does not apply to

– robotic lawnmowers;
– remote-controlled lawnmowers;
– flail mowers or flail-type attachments;
– scissors type lawnmowers;
– grassland mowers;
– sickle bar mowers;
– towed/semi-mounted grass-cutting machines;
– scrub-clearing machines;
– lawn trimmers and lawn edge trimmers;
– lawn edgers;
– grass trimmers;
– brush cutters;
– brush saws;
– agricultural mowers;
– trailing seat/sulky units;
– ride-on machines, including those that can be operated in pedestrian controlled mode;
– non-powered lawnmowers;
– combustion engine powered lawnmowers;
– hybrid and fuel cell powered machines and associated charging systems; and
– garden tractors or their attachments.

NOTE 102 Robotic lawnmowers are covered by IEC 60335-2-107, and will be covered by a future part of IEC 62841.

~~NOTE 103 Lawn trimmers and lawn edge trimmers are covered by IEC 60335-2-91.~~

NOTE ~~104~~103 Lawn trimmers, lawn edge trimmers, grass trimmers, brush cutters and brush saws ~~will be~~ are covered by ~~a future part of~~ IEC 62841-4-4.

NOTE ~~105~~104 Lawn edgers ~~will be~~ are covered by ~~a future part of~~ IEC 62841-4-11[1].

NOTE 105 Battery powered ride-on lawnmowers will be covered by a future part of IEC 62841.

NOTE 106 In Europe (EN IEC 62841-4-3), the following requirements apply:

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 Normative references

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

Addition:

IEC 60112:2020, *Method for the determination of the proof and the comparative tracking indices of solid insulating materials*

IEC 60664-3, *Insulation coordination for equipment within low-voltage systems – Part 3: Use of coating, potting or moulding for protection against pollution*

IEC 60664-4:2005, *Insulation coordination for equipment within low-voltage systems – Part 4: Consideration of high-frequency voltage stress*

IEC 61058-2-6:2018, *Switches for appliances – Part 2-6: Particular requirements for switches used in electric motor-operated hand-held tools, transportable tools and lawn and garden machinery*

IEC 61672-1:2013, *Electroacoustics – Sound level meters – Part 1: Specifications*

ISO 354:2003, *Acoustics – Measurement of sound absorption in a reverberation room*

ISO 5395-1:2013, *Garden equipment – Safety requirements for combustion-engine-powered lawnmowers – Part 1: Terminology and common tests*
ISO 5395-1:2013/AMD1:2017

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ISO 9773:2024, *Plastics – Determination of burning behaviour of thin flexible vertical specimens in contact with a small flame ignition source*

[1] Under preparation. Stage at the time of publication: IEC/FDIS 62841-4-11:2025.

ISO 11684:2023, *Tractors, machinery for agriculture and forestry, powered lawn and garden equipment – Safety labels – General principles*

ISO 13857:2019, *Safety of machinery – Safety distances to prevent hazard zones being reached by upper and lower limbs*

~~ANSI B71.1:2017, *Consumer turf care equipment – Pedestrian-controlled mowers and ride-on mowers – Safety specifications*~~

EN 12096, *Mechanical Vibration – Declaration and Verification of Vibration Emission Values*

Replacement:

IEC 61058-1:2016, *Switches for appliances – Part 1: General requirements*

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*

ISO 11201:2010, *Acoustics – Noise emitted by machinery and equipment – Determination of emission sound pressure levels at a work station and at other specified positions in an essentially free field over a reflecting plane with negligible environmental corrections*

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