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**Elektromotorna ročna orodja, prenosna orodja ter stroji za trato in vrt - Varnost - 4-6. del: Posebne zahteve za vrtno pihalnike, vrtno sesalnike in vrtno pihalnike/sesalnike**

Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 4-6: Particular requirements for garden blowers, garden vacuums and garden blower/vacuums

Elektrische motorbetriebene handgeführte Werkzeuge, transportable Werkzeuge und Rasen- und Gartenmaschinen – Sicherheit – Teil 4-6: Besondere Anforderungen für Gartenbläser, Gartensauger und Gartenbläser/-sauger

Outils électroportatifs à moteur, outils portables et machines pour jardins et pelouses - Sécurité - Partie 4-6: Exigences particulières pour souffleurs de jardin, aspirateurs de jardin et souffleurs/aspirateurs de jardin

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**Ta slovenski standard je istoveten z: EN IEC 62841-4-6:2024**

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25.140.20	Električna orodja	Electric tools
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**SIST EN IEC 62841-4-6:2024** en



EUROPEAN STANDARD

EN IEC 62841-4-6

NORME EUROPÉENNE

EUROPÄISCHE NORM

May 2024

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English Version

Electric motor-operated hand-held tools, transportable tools and  
lawn and garden machinery - Safety - Part 4-6: Particular  
requirements for garden blowers, garden vacuums and garden  
blower/vacuums  
(IEC 62841-4-6:2022)

Outils électroportatifs à moteur, outils portables et machines  
pour jardins et pelouses - Sécurité - Partie 4-6: Exigences  
particulières pour souffleurs de jardin, aspirateurs de jardin  
et souffleurs/aspirateurs de jardin  
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transportable Werkzeuge und Rasen- und  
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Anforderungen für Gartenbläser, Gartensauger und  
Gartenbläser/-sauger  
(IEC 62841-4-6:2022)

This European Standard was approved by CENELEC on 2024-04-29. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

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European Committee for Electrotechnical Standardization  
Comité Européen de Normalisation Electrotechnique  
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

**EN IEC 62841-4-6:2024 (E)****European foreword**

The text of document 116/622/FDIS, future edition 1 of IEC 62841-4-6, prepared by IEC/TC 116 "Safety of motor-operated electric tools" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 62841-4-6:2024.

The following dates are fixed:

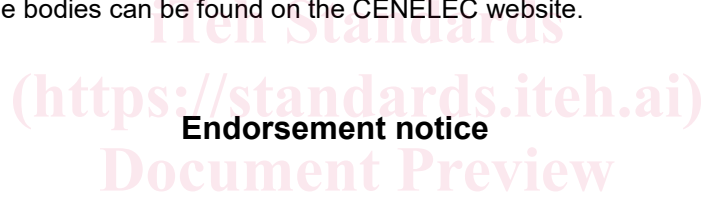
- latest date by which the document has to be implemented at national (dop) 2025-04-29 level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting with the (dow) 2028-04-29 document have to be withdrawn

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC shall not be held responsible for identifying any or all such patent rights.

This document has been prepared under a standardization request addressed to CENELEC by the European Commission. The Standing Committee of the EFTA States subsequently approves these requests for its Member States.

For the relationship with EU Legislation, see informative Annex ZZ, which is an integral part of EN IEC 62841-4-6:2024/A11:2024.

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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In the official version, for Bibliography, the following notes have to be added for the standard indicated:

IEC 60335-2-2 NOTE Approved as EN IEC 60335-2-2

IEC 60335-2-69 NOTE Approved as EN 60335-2-69



IEC 62841-4-6

Edition 1.0 2022-10

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE

**Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery – Safety –  
Part 4-6: Particular requirements for garden blowers,  
garden vacuums and garden blower/vacuums**

**Outils électroportatifs à moteur, outils portables et machines pour jardins et pelouses – Sécurité –  
Partie 4-6: Exigences particulières pour souffleurs de jardin, aspirateurs de  
jardin et souffleurs/aspirateurs de jardin**

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**ELECTRIC MOTOR-OPERATED HAND-HELD TOOLS, TRANSPORTABLE TOOLS AND LAWN AND GARDEN MACHINERY – SAFETY –****Part 4-6: Particular requirements for garden blowers, garden vacuums and garden blower/vacuums**

## FOREWORD

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IEC 62841-4-6 has been prepared by IEC technical committee 116: Safety of motor-operated electric tools. It is an International Standard.

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

Draft	Report on voting
116/622/FDIS	116/637/RVD

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 International Standard 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](http://www.iec.ch/members_experts/refdocs). The main document types developed by IEC are described in greater detail at [www.iec.ch/standardsdev/publications](http://www.iec.ch/standardsdev/publications).

This Part 4-6 is to be used in conjunction with the first edition of IEC 62841-1:2014.

This Part 4-6 supplements or modifies the corresponding clauses in IEC 62841-1, so as to convert it into the IEC Standard: Particular requirements for garden blowers, garden vacuums and garden blower/vacuums.

Where a particular subclause of Part 1 is not mentioned in this Part 4-6, 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, 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 4-6 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 will remain unchanged until the stability date indicated on the IEC website under [webstore.iec.ch](http://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.

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.

# ELECTRIC MOTOR-OPERATED HAND-HELD TOOLS, TRANSPORTABLE TOOLS AND LAWN AND GARDEN MACHINERY – SAFETY –

## Part 4-6: Particular requirements for garden blowers, garden vacuums and garden blower/vacuums

### 1 Scope

IEC 62841-1:2014, Clause 1 is applicable, except as follows:

*Addition:*

This document applies to hand-held and backpack

- **garden blowers;**
- **garden vacuums;** and
- **garden blower/vacuums.**

This document does not apply to

- walk-behind **garden blowers**, walk-behind **garden vacuums** and walk-behind **garden blower/vacuums;**
- robotic **garden blowers**, robotic **garden vacuums** and robotic **garden blower/vacuums;**
- vacuum cleaners intended primarily for use indoors, for water suction cleaning or animal grooming; and
- blowers intended primarily for use indoors, or animal grooming.

NOTE 101 Vacuum cleaners and water-suction cleaning appliances, including vacuum cleaners for animal grooming are covered by IEC 60335-2-2.

NOTE 102 Vacuum cleaners for commercial use are covered by IEC 60335-2-69.

### 2 Normative references

IEC 62841-1:2014, Clause 2 is applicable, except as follows.

*Addition:*

IEC 60664-3:2016, *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 62841-1:2014, *Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery – Safety – Part 1: General requirements*

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

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

*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*

### 3 Terms and definitions

IEC 62841-1:2014, Clause 3 is applicable, except as follows:

Addition:

#### 3.101

##### **debris**

organic material of vegetable origin such as leaves and grass clippings

#### 3.102

##### **debris collector**

part or combination of parts that provides a means for collecting **debris**

#### 3.103

##### **direct opening action**

achievement of contact separation as a direct result of a specified movement of the switch actuator through non-resilient members (e.g. non-dependent upon springs)

#### 3.104

##### **dirty fan construction**

construction where the **debris** being vacuumed up comes into contact with the air-moving fan

#### 3.105

##### **functional earth**

earthing of a point in equipment or in a system, which is necessary for a purpose other than safety

Note 101 to entry: Examples of the purpose of a **functional earth** include the reduction of the build-up of static electricity and the reduction of electromagnetic emissions.

#### 3.106

##### **garden blower**

machine intended to blow **debris**

Note 101 to entry: **Garden blowers** are also known as leaf blowers.

### 3.106.1

#### **hand-held garden blower**

**garden blower** which is supported by hand, possibly assisted by wheel(s), skids or a harness, etc. and constructed such that it cannot maintain its operating position without being held by an operator

Note 101 to entry: See Figure 101.

Note 102 to entry: Designs where the operator's hand can be optionally relieved of the machine weight by attaching the machine to a harness (e.g. a belt harness) are also considered to be hand-held.

### 3.106.2

#### **backpack garden blower**

**garden blower** designed in such a way that a portion of the machine weight is carried on the operator's back by means of a harness

Note 101 to entry: A machine where only the **separable battery pack** is carried on the operator's back by means of a harness is considered not to be a **hand-held garden blower**.

Note 102 to entry: See Figure 102.

### 3.107

#### **garden blower/vacuum**

machine which can be configured to operate either as a **garden blower** or as a **garden vacuum**

#### 3.107.1

##### **hand-held garden blower/vacuum**

**garden blower/vacuum** which is supported by hand, possibly assisted by wheel(s), skids or a harness, etc. and constructed such that it cannot maintain its operating position without being held by an operator

Note 101 to entry: Designs where the operator's hand can be optionally relieved of the machine weight by attaching the machine to a harness (e.g. a belt harness) are also considered to be hand-held.

#### 3.107.2

##### **backpack garden blower/vacuum**

**garden blower/vacuum** designed in such a way that a portion of the machine weight, but not solely the **debris collector**, is carried on the operator's back by means of a harness

Note 101 to entry: A machine where only the **separable battery pack** is carried on the operator's back by means of a harness is considered not to be a **hand-held garden blower/vacuum**.

### 3.108

#### **garden vacuum**

machine intended to collect **debris** by suction into a **debris collector** which can also have a facility for shredding **debris**

Note 101 to entry: **Garden vacuums** are also known as leaf collectors.

#### 3.108.1

##### **hand-held garden vacuum**

**garden vacuum** which is supported by hand, possibly assisted by wheel(s), skids or a harness, etc. and constructed such that it cannot maintain its operating position without being held by an operator

Note 101 to entry: See Figure 103.

Note 102 to entry: Designs where the operator's hand can be optionally relieved of the machine weight by attaching the machine to a harness (e.g. a belt harness) are also considered to be hand-held.

**3.108.2****backpack garden vacuum**

**garden vacuum** designed in such a way that a portion of the machine weight, but not solely the **debris collector**, is carried on the operator's back by means of a harness

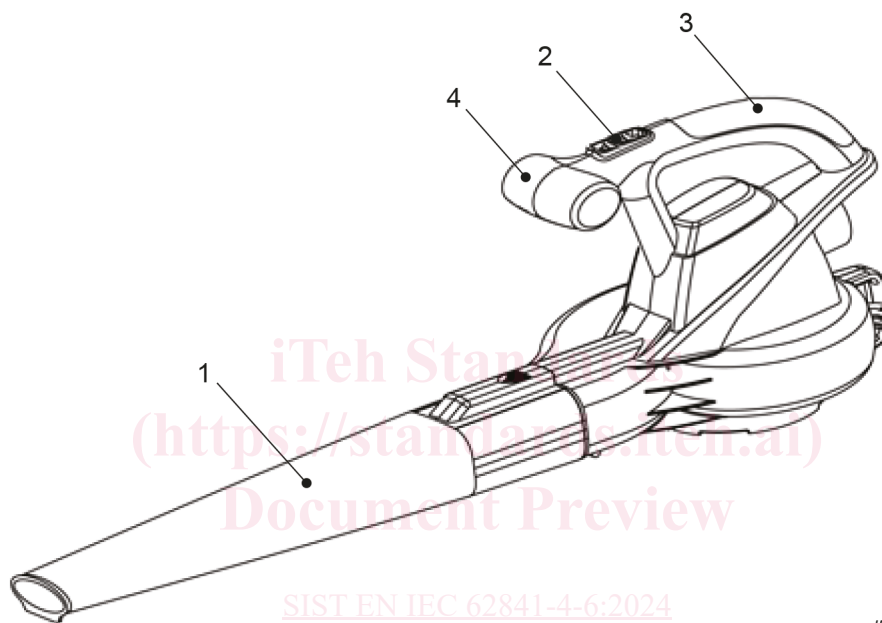
Note 101 to entry: A machine where only the **separable battery pack** is carried on the operator's back by means of a harness is considered not to be a **hand-held garden vacuum**.

**3.109****handle**

part intended to be held by the hand for guiding the machine or nozzle in **normal use**

**3.110****shredding means**

device designed to cut **debris** into smaller pieces



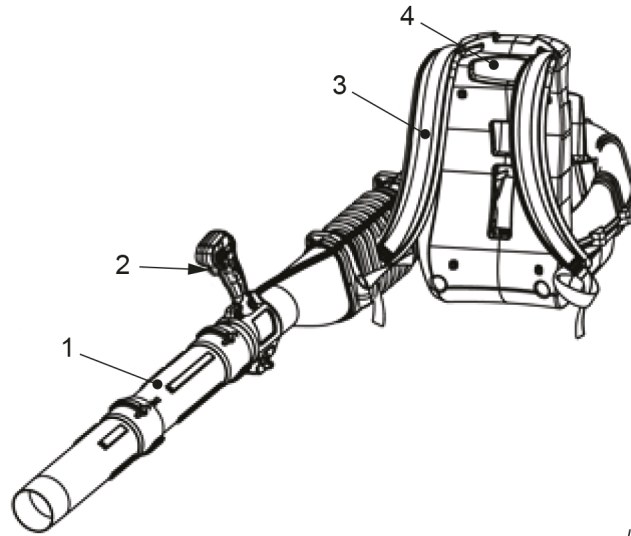
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**Key**

- 1 blower tube
- 2 power switch
- 3 handle
- 4 auxiliary handle

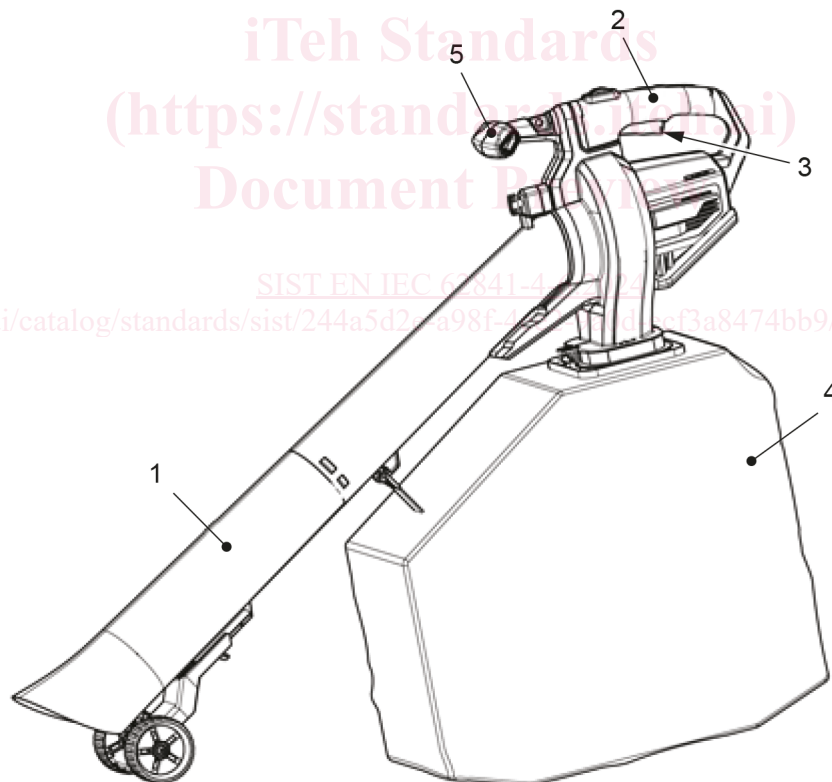
**Figure 101 – Example of a hand-held garden blower**



IEC

**Key**

- 1 blower tube
- 2 **power switch**
- 3 backpack harness
- 4 auxiliary handle

**Figure 102 – Example of a backpack garden blower**

IEC

**Key**

- 1 vacuum tube
- 2 **handle**
- 3 **power switch**
- 4 **debris collector**
- 5 auxiliary handle

**Figure 103 – Example of a hand-held garden vacuum**