

INTERNATIONAL STANDARD

**Electric motor-operated tools – Dust measurement procedure –
Part 2-11: Particular requirements for hand-held reciprocating saws**

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IEC 63241-2-11

Edition 1.0 2024-10

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INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

ICS 25.140.20

ISBN 978-2-8322-9794-0

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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DUST MEASUREMENT PROCEDURE –****Part 2-11: Particular requirements for hand-held reciprocating saws****FOREWORD**

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IEC 63241-2-11 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
116/818/FDIS	116/839/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. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

This document is to be used in conjunction with the first edition of IEC 63241-1:2023.

This document supplements or modifies the corresponding clauses in IEC 63241-1, so as to convert it into the IEC Standard: *Electric motor-operated tools – Dust measurement procedure – Particular requirements for hand-held reciprocating saws*.

Where a particular subclause of IEC 63241-1 is not mentioned in this document, that subclause applies as far as relevant. Where this document states "addition", "modification" or "replacement", the relevant text in IEC 63241-1 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 IEC 63241-1 are numbered starting from 101.

A list of all parts in the IEC 63241 series, published under the general title *Electric motor-operated tools – Dust measurement procedure*, 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 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.

ELECTRIC MOTOR-OPERATED TOOLS – DUST MEASUREMENT PROCEDURE –

Part 2-11: Particular requirements for hand-held reciprocating saws

1 Scope

IEC 63241-1:2023, Clause 1 is applicable except as follows:

Addition:

This part of IEC 63241 applies to **jig saws** and **sabre saws**.

2 Normative references

IEC 63241-1:2023, Clause 2 is applicable, except as follows:

Addition:

IEC 63241-1:2023, *Electric motor-operated tools – Dust measurement procedure – Part 1: General requirements*

ISO 16893:2016, *Wood-based panels – Particleboard*

3 Terms and definitions

IEC 63241-1:2023, Clause 3 is applicable, except as follows:

Addition:

3.101

reciprocating saw

tool intended for cutting various material with a blade or blades acting in a reciprocating or oscillating motion

3.102

jig saw

reciprocating saw equipped with a base plate that may allow bevel adjustments

3.103

sabre saw

reciprocating saw with a guide plate that may allow tilting movements

4 Test procedure

IEC 63241-1:2023, Clause 4 is applicable except as follows:

4.3 Operating conditions

Addition:

Jig saws and sabre saws intended to cut wood are tested under load observing the conditions shown in Table 101.

Table 101 – Operating conditions for jig saws and sabre saws intended to cut wood

Material and set-up	Particleboard (chipboard), class P-LB-Reg in accordance with ISO 16893:2016, density (610 ± 60) kg/m ³ , thickness (19 ± 1) mm, width (400 ± 2) mm, any length. For jig saws : The particleboard (chipboard) is mounted horizontally on a bench with a suitable working height (approximately 900 mm). For sabre saws : The particleboard (chipboard) is mounted vertically by screws, clamps or the like.
Orientation and operation	Sawing of approximately 10 mm wide strips over the width of 400 mm.
Tool bit/settings	New saw blade as specified by the manufacturer for sawing particleboard (chipboard) at the beginning of each of the three tests. Speed setting devices, if any, shall be adjusted to the setting specified for sawing particleboard (chipboard). Pendulum setting, if any, is set to maximum.
Feed force	The feed force applied to the tool shall be sufficient to ensure stable operation with good performance.
Test	During the working time of one test cycle, 20 cuts as specified above are performed equally distributed over the working time. If the above cannot be achieved within 10 min, the time is extended to allow the required number of strips to be cut.

5 Instrumentation

IEC 63241-1:2023, Clause 5 is applicable.

6 Information to be reported

IEC 63241-1:2023, Clause 6 is applicable except as follows:

Replacement of item o):

- o) information about the extension of the cycle time in case 20 strips cannot be achieved within 10 min.