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## KÄESHOITAVAD ELEKTRIMOOTORIGA TÖÖRIISTAD, TRANSPORDITAVAD TÖÖRIISTAD JA MURU- NING AIATÖÖMASINAD. OHUTUS. OSA 2-17: ERINÕUDED KÄESHOITAVATELE HÖÖVLITELE

Electric Motor-Operated Hand-Held Tools, Transportable Tools and Lawn and Garden Machinery -Safety - Part 2-17: Particular requirements for hand-held routers



## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

3.			
See Eesti standard EVS-EN 62841-2-17:2017 sisaldab Euroopa standardi EN 62841-2-17:2017 ingliskeelset teksti.	This Estonian standard EVS-EN 62841-2-17:2017 consists of the English text of the European standard EN 62841-2-17:2017.		
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.		
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 15.12.2017.	Date of Availability of the European standard is 15.12.2017.		
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.		

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile <u>standardiosakond@evs.ee</u>.

#### ICS 25.140.20

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# EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

## EN 62841-2-17

December 2017

ICS 25.140.20

Supersedes EN 60745-2-17:2010

**English Version** 

## Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 2-17: Particular requirements for hand-held routers (IEC 62841-2-17:2017, modified)

Outils électroportatifs à moteur, outils portables et machines pour jardins et pelouses - Sécurité - Partie 2-17: Exigences particulières pour les défonceuses portatives (IEC 62841-2-17:2017, modifiée)

Elektrische motorbetriebene handgeführte Werkzeuge, transportable Werkzeuge und Rasen- und Gartenmaschinen - Sicherheit - Teil 2-17: Besondere Anforderungen für handgeführte Oberfräsen (IEC 62841-2-17:2017, modifiziert)

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## European foreword

The text of document 116/335/FDIS, future edition 1 of IEC 62841-2-17, 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 62841-2-17:2017.

A draft amendment, which covers common modifications to IEC 62841-2-17 (116/335/FDIS), was prepared by CLC/TC 116 "Safety of motor-operated electric tools" and approved by CENELEC.

The following dates are fixed:

- latest date by which this document has to be implemented (dop) 2018-06-15 at national level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting (dow) 2021-12-15 with this document have to be withdrawn

EN 62841-2-17:2017 supersedes EN 60745-2-17:2010.

This European Standard is divided into four parts:

- Part 1: General requirements which are common to most hand-held electric motor operated tools (for the purpose of this standard referred to simply as tools) which could come within the scope of this standard;
- Part 2, 3 or 4: Requirements for particular types of tools which either supplement or modify the requirements given in Part 1 to account for the particular hazards and characteristics of these specific tools.
- This Part 2-17 is to be used in conjunction with EN 62841-1:2015.

This Part 2-17 supplements or modifies the corresponding clauses in EN 62841-1:2015, so as to convert it into the European Standard: Particular requirements for hand-held routers.

Where a particular subclause of Part 1 is not mentioned in this Part 2-17, that subclause applies as far as relevant. When 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 smaller 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.

Clauses, subclauses, notes, tables, figures and annexes which are additional to those in IEC 62841-2-17:2017 are prefixed "Z".

This European Standard follows the overall requirements of EN ISO 12100.

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 mandate given to CENELEC by the European Commission and the European Free Trade Association and supports essential requirements of EU Directive.

For the relationship with EU Directive, see informative Annex ZZ, which is an integral part of this document.

Compliance with the clauses of Part 1 together with this Part 2-17 provides one means of conforming with the essential health and safety requirements of the Directive concerned.

#### **Endorsement notice**

The text of the International Standard IEC 62841-2-17:2017 was approved by CENELEC as a European Standard with agreed common modifications.

#### **COMMON MODIFICATIONS**

#### 18 Abnormal operation

**Replace** the existing subclause 18.8 with the following:

18.8 Replacement of Table 4:

#### Table 4 – Required performance levels

Type and purpose of SCF	Minimum Performance Level (PL)
Power switch - prevent unwanted switch-on for type 1 routers	b
Power switch - prevent unwanted switch-on for type 2 routers	С
Power switch - provide desired switch-off	b
Any electronic control to pass the test of 18.3	а
Overspeed prevention to prevent output speed above 130 % of rated no- load speed	b
Provide desired direction of rotation	а
Prevent exceeding thermal limits as in Clause 18	а
Prevent self-resetting as required in 23.3 for type 1 routers	а
Prevent self-resetting as required in 23.3 for type 2 routers	b
Prevent unwanted lock-on of the power switch function	b
Lock-off function as required by 21.18.1.2 for type 1 routers	а
Lock-off function as required by 21.18.1.2 for type 2 routers	b
Restart prevention as required by 21.18.1.1	b
truction	P.CO
he existing Subclause 21.18.1.1 with the following:	6
Addition:	J.
s either	

#### 21 Construction

**Replace** the existing Subclause 21.18.1.1 with the following:

21.18.1.1 Addition:

#### For routers, either

the power switch shall be a momentary power switch without having a locking arrangement in the \_ "on" position;

or

- the tool shall not restart after an interruption of the mains supply without releasing and re-actuating the **power switch**.

**Replace** the title of Annex I by the following:

## Annex I

#### (normative)

#### Measurement of noise and vibration emissions

and delete the note.

## Annex K

(normative)

## Battery tools and battery packs

Add the following new subclause:

#### K.21.18.Z101 Isolation and disabling device

Tools with an integral battery shall either be equipped

- with an isolation device to prevent the risk of injury from mechanical hazards during servicing or user maintenance; or
- with a disabling device that prevents unintentional starting of the tool.

An isolation device shall

- provide disconnection of all poles of the **battery** from the serviceable region of the tool;
- be equipped with an unambiguous indication of the state of the disconnection device which corresponds to each position of its manual control (actuator);
- be provided with protection against accidental reconnection.

NOTE 1 Examples of methods to achieve this disconnection include removable jumpers, **integral batteries** that can be disconnected for servicing or **user maintenance**, or an electromechanical **power switch** with a direct mechanical link between the actuator and the contact.

NOTE 2 The risk of accidental reconnection for a **power switch** is addressed by the requirement of 21.18.1.2. The other examples in NOTE 1 achieve this by the necessary actions for reconnection.

A disabling device may be achieved by any of the following:

- a self-restoring or non-self-restoring lock-off device where two separate and dissimilar actions are
  necessary before the motor is switched on (e.g. a **power switch** which has to be pushed in before it
  can be moved laterally to close the contacts to start the motor). It shall not be possible to achieve
  these two actions with a single grasping motion or a straight-line motion;
- a removable disabling device provided with the tool where it shall not be possible for the tool to be operated when either applied or removed.

Compliance is checked by inspection and by manual test.

## Annex L

#### (normative)

## Battery tools and battery packs provided with mains connection or nonisolated sources

Add the following new subclause:

#### L.21.18.Z101 Isolation and disabling device

Tools with an integral battery shall either be equipped

- with an isolation device to prevent the risk of injury from mechanical hazards during servicing or user maintenance; or
- with a disabling device that prevents unintentional starting of the tool.

An isolation device shall

- provide disconnection of all poles of the **battery** from the serviceable region of the tool;
- be equipped with an unambiguous indication of the state of the disconnection device which corresponds to each position of its manual control (actuator);
- be provided with protection against accidental reconnection.

NOTE 1 Examples of methods to achieve this disconnection include removable jumpers, integral batteries that can be disconnected for servicing or user maintenance, or an electromechanical power switch with a direct mechanical link between the actuator and the contact.

NOTE 2 The risk of accidental reconnection for a power switch is addressed by the requirement of 21.18.1.2. The other examples in NOTE 1 achieve this by the necessary actions for reconnection.

A disabling device may be achieved by any of the following:

- a self-restoring or non-self-restoring lock-off device where two separate and dissimilar actions are necessary before the motor is switched on (e.g. a **power switch** which has to be pushed in before it can be moved laterally to close the contacts to start the motor). It shall not be possible to achieve these two actions with a single grasping motion or a straight-line motion;
- a removable disabling device provided with the tool where it shall not be possible for the tool to be operated when either applied or removed.

Compliance is checked by inspection and by manual test.

Add the following annex:

## Annex ZZ

#### (informative)

## Relationship between this European Standard and the essential requirements of Directive 2006/42/EC [2006 OJ L157] aimed to be covered

This European Standard has been prepared under a Commission's standardisation request M/396 to provide one voluntary means of conforming to essential requirements of Directive 2006/42/EC of the European Parliament and of the Council of 17 May 2006 on machinery, and amending Directive 95/16/EC.

Once this standard is cited in the Official Journal of the European Union under that Directive, compliance with the normative clauses of this standard given in Table ZZ.1 confers, within the limits of the scope of this standard, a presumption of conformity with the corresponding essential requirements of that Directive, and associated EFTA regulations.

#### Table ZZ.1 – Correspondence between this European Standard and Annex I of Directive 2006/42/EC

Essential Requirements of Directive 2006/42/EC	Clause(s) / sub-clause(s) of this EN	Remarks / Notes
Annex I	All clauses	All corresponding requirements are covered by complying with all clauses.

**WARNING 1**: Presumption of conformity stays valid only as long as a reference to this European standard is maintained in the list published in the Official Journal of the European Union. Users of this standard should consult frequently the latest list published in the Official Journal of the European Union.

**WARNING 2**: Other Union legislation may be applicable to the product(s) falling within the scope of this standard.