



# SLOVENSKI STANDARD SIST EN 60745-2-12:2009

01-december-2009

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Hand-held motor-operated electric tools - Safety -- Part 2-12: Particular requirements for concrete vibrators

Handgeführte motorbetriebene Elektrowerkzeuge - Sicherheit -- Teil 2-12: Besondere Anforderungen für Innenrüttler  
(standards.iteh.ai)

Outils électroportatifs à moteur - Sécurité -- Partie 2-12: Règles particulières pour les vibreurs à béton  
<https://standards.iteh.ai/catalog/standards/sist/bd6415b7-a2e9-44a8-84c5-7c9192d2da95/sist-en-60745-2-12-2009>

Ta slovenski standard je istoveten z: EN 60745-2-12:2009

**ICS:**

25.140.20      Ò^ \ dã } æ ! [ å ðe      Electric tools

**SIST EN 60745-2-12:2009**      en,fr

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN 60745-2-12**

July 2009

ICS 25.140.20

Supersedes EN 60745-2-12:2003 + A1:2009

English version

**Hand-held motor-operated electric tools -  
Safety -  
Part 2-12: Particular requirements for concrete vibrators  
(IEC 60745-2-12:2003 + A1:2008, modified)**

Outils électroportatifs à moteur -  
Sécurité -  
Partie 2-12: Règles particulières  
pour les vibreurs à béton  
(CEI 60745-2-12:2003 + A1:2008,  
modifiés)

Handgeführte motorbetriebene  
Elektrowerkzeuge -  
Sicherheit -  
Teil 2-12: Besondere Anforderungen  
für Innenrüttler  
(IEC 60745-2-12:2003 + A1:2008,  
modifiziert)

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This European Standard was approved by CENELEC on 2009-07-01. 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.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

**CENELEC**

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

**Central Secretariat: Avenue Marnix 17, B - 1000 Brussels**

## Foreword

The text of document 61F/511/FDIS, future edition 2 of IEC 60745-2-12, prepared by SC 61F (transformed into IEC TC 116, Safety of hand-held motor-operated electric tools) was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60745-2-12 on 2003-09-23.

The text of document 61F/737/FDIS, future amendment 1 to IEC 60745-2-12:2003, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as amendment A1 to EN 60745-2-12:2003 on 2009-04-01.

A draft amendment (prAA), containing a number of common modifications prepared by the Technical Committee CENELEC TC 116, Safety of hand-held motor-operated electric tools, with the aim of having the standard listed in the OJEC as supporting the 'new' MD 2006/42/EC, was submitted to the Unique Acceptance Procedure.

The combined texts were approved by CENELEC as a new edition of EN 60745-2-12 on 2009-07-01.

This European Standard supersedes EN 60745-2-12:2003 + A1:2009.

The following dates were fixed:

- latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2010-01-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2012-04-01

This standard is divided into two 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: 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 European Standard has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association and supports the essential requirements of EC Directive 2006/42/EC. See Annex ZZ.

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

**Warning:** Other requirements and other EC Directives can be applicable to the products falling within the scope of this standard.

This standard follows the overall requirements of EN ISO 12100-1 and EN ISO 12100-2.

This Part 2-12 is to be used in conjunction with EN 60745-1:2009. When this standard states "addition", "modification" or "replacement", the relevant text of Part 1 is to be adapted accordingly.

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

NOTE In this standard, the following print types are used:

- requirements: in roman type;
- *test specifications: in italic type;*
- notes: in smaller roman type.

## Endorsement notice

The text of the International Standard IEC 60745-2-12:2003 +A1:2008 was approved by CENELEC as a European Standard with agreed common modifications as given below.

### COMMON MODIFICATIONS

#### 6 Void

*Replace by:*

#### 6 Environmental requirements

This clause of Part 1 is applicable except as follows:

##### 6.1.2.4 Modification:

Concrete vibrators are held and used as specified in 6.1.2.5.

##### 6.1.2.5 Modification:

Concrete vibrators are tested at normal load as specified in 3.2.9. The container shall be placed on the ground and positioned such that the tool is located under the top microphone.

#### 6.2 Vibration

##### 6.2.6.3 Modification:

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Concrete vibrators are tested under the operating conditions specified in 6.1.2.5.

#### 21 Construction

*Add after 21.32:*

**21.Z1** This subclause of Part 1 is not applicable.

**Add the following annex:**

**Annex ZZ**  
(informative)

**Coverage of Essential Requirements of Directive 2006/42/EC**

This European Standard has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association and within its scope the standard covers all relevant Essential Requirements as given in Annex I of the EC Directive 2006/42/EC (Machinery Directive).

Compliance with this standard provides one means of conformity with the specified essential requirements of the Directive concerned.

WARNING: Other requirements and other EC Directives may be applicable to the products falling within the scope of this standard.

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IEC 60745-2-12

Edition 2.1 2008-07

# INTERNATIONAL STANDARD

# NORME INTERNATIONALE

Hand-held motor-operated electric tools – Safety –  
Part 2-12: Particular requirements for concrete vibrators

Outils électroportatifs à moteur – Sécurité –  
Partie 2-12: Règles particulières pour les vibreurs à béton

INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

COMMISSION  
ELECTROTECHNIQUE  
INTERNATIONALE

PRICE CODE  
CODE PRIX

**CB**

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**HAND-HELD MOTOR-OPERATED ELECTRIC TOOLS–  
SAFETY –****Part 2-12: Particular requirements for concrete vibrators**

## 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.
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- 9) Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 60745-2-12 has been prepared by subcommittee 61F: Safety of hand-held, motor-operated electric tools, of IEC technical committee 61: Safety of household and similar electrical appliances.

Main changes include Clause 3: Definitions, moving the description for the tools covered by this standard from Clause 1: Scope to the definitions, Clause 24: Supply connection and external flexible cords, in respect to minimum cable specifications and length. Other requirements have not substantially been changed, but partly reworded and moved to more appropriate clauses.

This consolidated version of IEC 60745-2-12 consists of the second edition (2003) [documents 61F/511/FDIS and 61F/522/RVD] and its amendment 1 (2008) [documents 61F/737/FDIS and 61F/757/RVD].

The technical content is therefore identical to the base edition and its amendment and has been prepared for user convenience.



It bears the edition number 2.1.

A vertical line in the margin shows where the base publication has been modified by amendment 1.

The French version of this standard has not been voted upon.

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

This Part 2-12 is to be used in conjunction with the third edition of IEC 60745-1: Safety of hand-held motor-operated electric tools – Part 1: General requirements. When this standard states “addition”, “modification” or “replacement”, the relevant text in Part 1 is to be adapted accordingly.

With amendment 1, this Part 2 is established on the basis of the fourth edition (2006) of IEC 60745-1, *Hand-held motor-operated electric tools – Safety – Part 1: General requirements*.

Main changes include editorial modifications to match with the fourth edition of IEC 60745-1 and clarifications in Annex K.

NOTE In this standard, the following print types are used:

- requirements: in roman type;
- *test specifications: in italic type;*
- notes: in smaller roman type.

Subclauses, tables and figures which are additional to those in Part 1 are numbered starting from 101; additional annexes are lettered AA, BB, etc.

IEC 60745 consists of the following parts, under the general title *Hand-held motor-operated electric tools – Safety*:

- SIST EN 60745-2-12:2009
- Part 1: General requirements
  - Part 2-1: Particular requirements for drills and impact drills
  - Part 2-2: Particular requirements for screwdrivers and impact wrenches
  - Part 2-3: Particular requirements for grinders, polishers and disk-type sanders
  - Part 2-4: Particular requirements for sanders and polishers other than disk type
  - Part 2-5: Particular requirements for circular saws and circular knives
  - Part 2-6: Particular requirements for hammers
  - Part 2-7: Particular requirements for spray guns for non-flammable liquids
  - Part 2-8: Particular requirements for shears and nibblers
  - Part 2-9: Particular requirements for tappers
  - Part 2-11: Particular requirements for reciprocating saws (jig and sabre saws)
  - Part 2-12: Particular requirements for concrete vibrators
  - Part 2-13: Particular requirements for chain saws
  - Part 2-14: Particular requirements for planers
  - Part 2-15: Particular requirements for hedge trimmers
  - Part 2-16: Particular requirements for tackers
  - Part 2-17: Particular requirements for routers and trimmers
  - Part 2-18: Particular requirements for strapping tools
  - Part 2-19: Particular requirements for jointers
  - Part 2-20: Particular requirements for band saws
  - Part 2-21: Particular requirements for drain cleaners