Teisaldatavate mootorajamiga elektritööriistade ohutus . Osa 1: Üldnõuded

Safety of transportable motor-operated electric tools - Part 1: General requirements

EESTI STANDARDIKESKUS
ESTONIAN CENTRE FOR STANDARDISATION

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 61029-1:2009 sisaldab Euroopa standardi EN 61029-1:2009 ingliskeelset teksti.	This Estonian standard EVS-EN 61029-1:2009 consists of the English text of the European standard EN 61029-1:2009.
Standard on kinnitatud Eesti Standardikeskuse 30.09.2009 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.	This standard is ratified with the order of Estonian Centre for Standardisation dated 30.09.2009 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.
Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 24.07.2009.	Date of Availability of the European standard text 24.07.2009.
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English version

Safety of transportable motor-operated electric tools - Part 1: General requirements

(IEC 61029-1:1990, modified)

Sécurité des machines-outils électriques semi-fixes -
Partie 1: Règles générales
(CEI 61029-1:1990, modifiée)

Sicherheit transportabler motorbetriebener Elektrowerkzeuge -
Teil 1: Allgemeine Anforderungen
(IEC 61029-1:1990, modifiziert)

This European Standard was approved by CENELEC on 2009-03-01. 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

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Foreword

The text of the International Standard IEC 61029-1:1990 with common modifications prepared by CENELEC TC 61F, Hand-held and transportable motor-operated electric tools, was approved by CENELEC as EN 61029-1 on 1998-09-01.

Two amendments to EN 61029-1, that had been submitted to the Unique Acceptance, were approved during 2002 and published as amendments A11:2003 and A12:2003.

Two further draft amendments (prAA and prAB), prepared by the Technical Committee CENELEC TC 61F (transformed into CENELEC TC 116, Safety of hand-held motor-operated electric tools), were submitted to the Unique Acceptance Procedure in August 2007 and March 2008.

The text of EN 61029-1:2000 together with its amendments A11:2003 and A12:2003 and the text of the draft amendments prAA and prAB were approved by CENELEC as a new edition of EN 61029-1 on 2009-03-01.

This European Standard supersedes EN 61029-1:2000 + A11:2003 + A12:2003.

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) 2009-12-29

– latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2009-12-29

In this European Standard the common modifications to the International Standard are indicated by a vertical line in the left margin of the text.

This European Standard has been prepared under a mandate given to CEN/CENELEC by the European Commission and the European Free Trade Association and supports the essential health and safety requirements of the Machinery Directive 2006/42/EC.

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

A relevant Part 2 is one in which the type of tool or an accessory which is to be used with such a tool is within the scope of that Part 2.

When a relevant Part 2 does not exist, Part 1 can help to establish the requirements for the tool, but will not by itself provide a means of conforming with the relevant essential health and safety requirements of the Machinery Directive.

Warning: Other Requirements arising from other EC Directives can be applicable to the products falling within the scope of this standard.

CEN has proposed standards for industrial machines, which may extend to transportable machines. Although CEN and CENELEC have, where appropriate, used common solutions to provide uniform levels of protection, persons using this standard should check the scope of both this and CEN standards to ensure that a correct standard is used. Where necessary normative reference is made to these standards in the relevant Part 2.

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

Subclauses, tables and figures which are prefixed “Z” are additional to those in IEC 61029-1.

NOTE In this standard the following print types are used:
- requirements proper; in roman type
- *test specifications: in italic type;*
- explanatory matter: in smaller roman type.

Introduction

This European Standard is divided into two parts:

Part 1: General requirements, comprising clauses of a general character.

Part 2: Particular requirements, dealing with particular types of tools.

The requirements in a clause in a Part 2 supplement or modify the corresponding clauses in Part 1.

Where the text of Part 2 indicates an "addition" to or a "replacement" of the relevant requirement, test specification or explanation of Part 1, these changes are made to the relevant text of Part 1, which then becomes part of the standard. Where no change is necessary, the words "This clause of Part 1 is applicable" are used in Part 2.

1 Scope

1.1 This standard consists of Part 1 and Part 2 and applies to electric motor-operated or magnetically-driven tools, intended for indoor and for outdoor use, which have all the following characteristics:

a) easily moved by one person, simple devices to facilitate transportation may be incorporated, e.g. handles, wheels and the like;

b) used in a safe stationary position with or without fixing, e.g. fast clamping devices, bolting and the like;

c) used under the control of an operator;

d) not intended for continuous production or production line use;

e) intended to be connected to electric supply by a flexible cord and a plug;

f) maximum rated voltage not exceeding 250 V single-phase, a.c. or d.c., or 440 V three-phase, a.c.;

g) maximum rated input not exceeding 2500 W, for single-phase a.c. or d.c., and 4000 W for three-phase a.c.

These tools are commonly known as "transportable motor-operated electric tools", hereinafter referred to, in the text, as tools.

Examples of these tools are: Circular saws, band saws, planers, thicknessers, radial arm saws, spindle moulders, fret saws, jig saws, mitre/chop saws, wood lathes, belt sanders, disc sanders, thicknessers-planers, chain mortisers, multipurpose machines, combing machines, metal lathes, bench grinders, bench drilling machines, pipe threaders, pipe benders, pipe saws, key cutting machines, sharpening machines, sheet metal shears, concrete drills, concrete saws, wood shredders, pipe cleaners.

This European Standard applies also to transportable motor operated tools intended to be connected to a water supply such as mains, tank or vat.

1.2 This standard does not apply to

- electric motor-operated household and similar electrical appliances according to EN 60335-1;
- hand-held electric motor-operated tools according to EN 50144-1 or EN 60745-1;
- small low voltage transformer operated bench tools intended for model making;
- machines for preparing or processing food;
- tools intended to be used in the presence of explosive atmosphere (dust, vapour or gas);
- tools intended to be used with cosmetics or pharmaceutical products;
- auxiliary equipment such as external cooling and dust extraction/collection systems.

2 Definitions

For the purpose of this European Standard, the following definitions apply.

Where the terms "voltage" and "current" are used, they imply the r.m.s. value unless otherwise specified.

2.1
rated voltage
voltage (for three-phase supply, the voltage between phases) assigned to the tool by the manufacturer

2.2
rated voltage range
voltage range assigned to the tool by the manufacturer, expressed by its lower and upper limits

2.3
working voltage
maximum voltage to which the part under consideration can be subjected when the tool is operating at its rated voltage and under normal conditions of use.

Normal conditions of use include changes of voltage within the tool imposed by likely occurrences such as the operation of a circuit breaker or the failure of a lamp.

When determining the working voltage, the effect of possible transient voltages on the supply mains is ignored

2.4
rated input
input in watts at rated voltage or the mean of the rated voltage range assigned to the tool by the manufacturer

2.5
rated current
current at rated voltage or at the mean of the rated voltage range assigned to the tool by the manufacturer

NOTE If no current is assigned to the tool, the rated current for the purpose of this standard is determined by calculation from the rated input and the rated voltage and/or by measuring the current when the tool is operating at rated voltage under normal load and at normal operating temperature.

2.6
rated frequency
frequency assigned to the tool by the manufacturer

2.7
rated frequency range
frequency range assigned to the tool by the manufacturer, expressed by its lower and upper limits

2.8
rated no-load speed
no-load speed at rated voltage or at the upper limit of the rated voltage range, assigned to the tool by the manufacturer

2.9
detachable flexible cord
flexible cord, for supply or other purposes, intended to be connected to the tool by means of a suitable appliance coupler

NOTE Cord sets are covered by EN 60799; appliance couplers for household and similar general purposes by EN 60320-1.