Majapidamis- ja muud taolised elektriseadmed. Ohutus. Osa 2-94: Erinõuded käärteradega murupügamismasinatele

Household and similar electrical appliances - Safety - Part 2-94: Particular requirements for scissors type grass shears

EESTI STANDARDIKESKUS
ESTONIAN CENTRE FOR STANDARDISATION

EESTI STANDARDI EESSÕNA	NATIONAL FOREWORD
See Eesti standard EVS-EN 50636-2-94:2014 sisaldab Euroopa standardi EN 50636-2-94:2014 ingliskeelset teksti.	This Estonian standard EVS-EN 50636-2-94:2014 consists of the English text of the European standard EN 50636-2-94:2014.
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 20.06.2014.	Date of Availability of the European standard is 20.06.2014.
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 standardiosakond@evs.ee.

ICS 65.060.70

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 50636-2-94

June 2014

ICS 65.060.70

English Version

Household and similar electrical appliances - Safety - Part 2-94: Particular requirements for scissors type grass shears

Appareils électrodomestiques et analogues - Sécurité - Partie 2-94: Règles particulières pour les coupe-gazon de type ciseaux

Sicherheit elektrischer Geräte für den Hausgebrauch und ähnliche Zwecke - Teil 2-94: Besondere Anforderungen für Grasscheren mit Scherblättern

This European Standard was approved by CENELEC on 2013-09-30. 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 CEN-CENELEC Management Centre 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 CEN-CENELEC Management Centre has the same status as the official versions.

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

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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Ref. No. EN 50636-2-94:2014 E

Contents

Figures

Tables

Foreword

This document (EN 50636-2-94:2014) has been prepared by CLC/TC 116 "Safety of motor-operated electric tools".

The following dates are fixed:

• latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2014-12-20
• latest date by which the national standards conflicting with this document have to be withdrawn	(dow)	2016-09-30

EN 50636-2-94:2014 includes the following significant technical changes:

– alignment to the European Machinery Directive 2006/42/EC;

– alignment to EN 60335-1:2012.

This document is to be used in conjunction with EN 60335-1:2012 "*Household and similar electrical appliances - Safety – Part 1: General requirements*".

When "Part 1" is mentioned in this standard, it refers to EN 60335-1:2012.

This document supplements or modifies the corresponding clauses in Part 1, so as to convert that publication into the European Standard "*Safety requirements for **scissors type grass shears***".

Where a particular subclause of Part 1 is not mentioned in this document, that subclause applies as far as is relevant. Where this standard states "addition", "modification" or "replacement", the relevant text in Part 1 is to be adapted accordingly.

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

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

Other harmonised standards referred to in this European Standard are listed in Annex ZC of Part 1 and this document. The annex lists the valid edition of those documents at the time of issue of this EN. All references are however to be understood as references to the latest edition.

The following numbering system is used:

– subclauses that are numbered starting from 101 are additional to those in Part 1;

– additional annexes are lettered AA, BB, etc.;

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

Words in **bold** in the text are defined in Clause 3. When a definition concerns an adjective, the adjective and the associated noun are also in bold.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC [and/or CEN] 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 2006/42/EC, see informative Annex ZZ, which is an integral part of this document.

Warning: Other requirements arising from other EU Directives can be applicable to the products falling within the scope of this European Standard.

Introduction

This document is a type C standard as stated in EN ISO 12100:2010.

The machinery concerned and the extent to which hazards, hazardous situations and events are covered is as indicated in the scope of this document.

When provisions of this type C standard are different from those which are stated in type A or B standards, the provisions of this type C standard take precedence over the other standards, for machines which have been built and designed to the provisions of this type C standard.

1 Scope

This clause of Part 1 is replaced by the following.

This European Standard specifies safety requirements and their verification for the design and construction of electric powered **hand-held scissors type grass shears** with a maximum cutting width of 200 mm designed primarily for cutting grass, their **rated voltage** being not more than 250 V for a.c. or 75 V d.c.

In this European Standard the term “machine” means “electric powered scissors type grass shear”.

This European Standard does not apply to hedge trimmers as covered by EN 60745–2–15.

Requirements for chargers are covered by EN 60335-2-29:2004.

Requirements for batteries are covered by EN 62133:2003.

EMC and environmental aspects except for noise have not been considered in this European Standard.

This European Standard deals with all the significant hazards presented by **hand-held scissors type grass shears** when they are used as intended and under conditions of misuse which are reasonably foreseeable.

2 Normative references

This clause of Part 1 is applicable except as follows.

Addition:

EN 12449:1999 [1)], *Copper and copper alloys – Seamless, round tubes for general purposes*

EN 28662-1:1992, *Hand-held portable power tools – Measurement of vibrations at the handle — Part 1: General* (ISO 8662-1:1988)

EN 60320 (all parts), *Appliance couplers for household and similar general purposes* (IEC 60320 (all parts))

EN 60335-1:2012, *Household and similar electrical appliances – Safety – Part 1: General requirements* (IEC 60335-1:2010, mod.)

EN 62233:2008, *Measurement methods for electromagnetic fields of household appliances and similar apparatus with regard to human exposure* (IEC 62233:2005, mod.)

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

EN ISO 3744:2010, *Acoustics – Determination of sound power levels and sound energy levels of noise sources using sound pressure – Engineering method for an essentially free field over a reflecting plane* (ISO 3744:2010)

EN ISO 4871:2009*, Acoustics – Declaration and verification of noise emission values of machinery and equipment (ISO 4871:1996)*

1) Superseded by EN 12449:2012.

EN 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* (ISO 11201:2010)

EN ISO 11688-1:2009, *Acoustics – Recommended practice for the design of low-noise machinery and equipment – Part 1: Planning* (ISO/TR 11688-1:1995)

EN ISO 12100:2010, *Safety of machinery – General principles for design – Risk assessment and risk reduction* (ISO 12100:2010)

ISO 3767-1:1998, *Tractors, machinery for agriculture and forestry, powered lawn and garden equipment – Symbols for operator controls and other displays – Part 1: Common symbols*

ISO 3767-3:1995, *Tractors, machinery for agriculture and forestry, powered lawn and garden equipment – Symbols for operator controls and other displays – Part 3: Symbols for powered lawn and garden equipment*

ISO 7000, *Graphical symbols for use on equipment – Registered symbols*

EN ISO 7010, *Graphical symbols - Safety colours and safety signs - Registered safety signs* (ISO 7010)

ISO 11684:1995, *Tractors, machinery for agriculture and forestry, powered lawn and garden equipment – Safety signs and hazard pictorials – General principles*

3 Terms and definitions

This clause of Part 1 is applicable except as follows.

3.1.9 *Replacement:*

3.1.9
normal operation
operation of the machine under the following conditions: the machine is operated at **rated voltage** with the load necessary to attain **rated power input**

3.5.2 *Replacement:*

3.5.2
hand-held machine
portable machine intended to be held in the hand during normal use, including machines which will not maintain their operating position unless supported, possibly with an **extension shaft** and/or assisted by wheel(s), skid(s) or similar

Addition:

3.101
width of cut
the effective cutting width of the cutting device measured from the inside edge of the first **blade tooth** or shear plate tooth to the inside edge of the last **blade tooth** or shear plate tooth, whichever is the greater (see Figure 101)

3.102
scissors type grass shears
grass-cutting machine with two blades where the one **cutter blade** reciprocates along a straight or curved path (see Figure 102)

3.103
blade tooth
part of the **cutter blade** which is sharpened to perform the shearing action (see Figure 101)