and Control of the Co Live working - Hand tools for use up to 1000 V a.c. and 1500 V d.c.



#### **EESTI STANDARDI EESSÕNA**

#### **NATIONAL FOREWORD**

	This Estonian standard EVS-EN 60900:2012 consists
Euroopa standardi EN 60900:2012 ingliskeelset	of the English text of the European standard EN
teksti.	60900:2012.
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.
,	Date of Availability of the European standard is 24.08.2012.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

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ICS 13.260, 29.240.20, 29.260.99

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### **EUROPEAN STANDARD**

### **EN 60900**

# NORME EUROPÉENNE EUROPÄISCHE NORM

August 2012

ICS 13.260; 29.240.20; 29.260.99

Supersedes EN 60900:2004

English version

# Live working Hand tools for use up to 1000 V a.c. and 1500 V d.c. (IEC 60900:2012)

Travaux sous tension Outils à main pour usage jusqu'à 1000 V
en courant alternatif et 1500 V en courant
continu
(CEI 60900:2012)

Arbeiten unter Spannung -Handwerkzeuge zum Gebrauch bis AC 1000 V und DC 1500 V (IEC 60900:2012)

This European Standard was approved by CENELEC on 2012-07-19. 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.

## CENELEC

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

Management Centre: Avenue Marnix 17, B - 1000 Brussels

#### **Foreword**

The text of document 78/947/FDIS, future edition 3 of IEC 60900, prepared by IEC/TC 78 "Live working" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60900:2012.

The following dates are fixed:

•	latest date by which the document has	(dop)	2013-04-19
	to be implemented at national level by		
	publication of an identical national		
	standard or by endorsement		
•	latest date by which the national	(dow)	2015-07-19
	standards conflicting with the		
	document have to be withdrawn		

This document supersedes EN 60900:2004.

EN 60900:2012 includes the following significant technical changes with respect to EN 60900:2004:

- general review of the requirements and test provisions;
- preparation of the elements of evaluation of defects, and general application of EN 61318:2008;
- deletion of Annexes D and E, not applicable according to EN 61318;
- introduction of a new normative Annex D on chronology of type tests;
- introduction of a new normative Annex F on classification of defects.

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.

#### **Endorsement notice**

The text of the International Standard IEC 60900:2012 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following note has to be added for the standard indicated:

IEC 60743 NOTE Harmonized as EN 60743.

# Annex ZA (normative)

# Normative references to international publications with their corresponding European publications

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	EN/HD	<u>Year</u>
IEC 60060-1	3	High-voltage test techniques - Part 1: General definitions and test requirements	EN 60060-1	-
IEC 60212	-	Standard conditions for use prior to and during the testing of solid electrical insulating materials	EN 60212	-
IEC 61318	-	Live working - Conformity assessment applicable to tools, devices and equipment	EN 61318	-
IEC 61477	-	Live working - Minimum requirements for the utilization of tools, devices and equipment	EN 61477	-
IEC 60417	Data base	Graphical symbols for use on equipment	-	-
ISO 1174-1	-	Assembly tools for screw and nuts - Driving squares - Part 1: Driving squares for hand socket tools	-	-
ISO 9654	-	Pliers and nippers for electronics - Single- purpose nippers - Cutting nippers	-	-
ISO 9655	-	Pliers and nippers for electronics - Single- purpose nippers - Pliers for gripping and manipulating	-	-
ISO 9656	-	Pliers and nippers for electronics - Test methods	-	-
ISO 9657	-	Pliers and nippers for electronics - General technical requirements	9,	-
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#### INTRODUCTION

This International Standard has been prepared in accordance with the requirements of IEC 61477 where applicable.

The product covered by this standard may have an impact on the environment during some or all stages of its life cycle. These impacts can range from slight to significant, be of short-term or long-term, and occur at the global, regional or local level.

This standard does not include requirements and test provisions for the manufacturers of the product, or recommendations to the users of the product for environmental improvement. venicuse, r. .ions. However, all parties intervening in its design, manufacture, packaging, distribution, use, maintenance, repair, reuse, recovery and disposal are invited to take account of environmental considerations.

#### LIVE WORKING – HAND TOOLS FOR USE UP TO 1 000 V AC AND 1 500 V DC

#### 1 Scope

This International Standard is applicable to insulated and insulating hand tools used for working live or close to live parts at nominal voltages up to 1 000 V a.c. and 1 500 V d.c.

The products designed and manufactured according to this standard contribute to the safety of the users provided they are used by skilled persons, in accordance with safe methods of work and the instructions for use (where appropriate).

#### 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60060-1, High-voltage test techniques – Part 1: General definitions and test requirements

IEC 60212, Standard conditions for use prior to and during the testing of solid electrical insulating materials

IEC 60417, Graphical symbols for use on equipment

IEC 61318, Live working - Conformity assessment applicable to tools, devices and equipment

IEC 61477, Live working – Minimum requirements for the utilization of tools, devices and equipment

ISO 1174-1, Assembly tools for screw and nuts – Driving squares – Part 1: Driving squares for hand socket tools

ISO 9654, Pliers and nippers for electronics – Single-purpose nippers – Cutting nippers

ISO 9655, Pliers and nippers for electronics – Single-purpose pliers – Pliers for gripping and manipulating

ISO 9656, Pliers and nippers for electronics – Test methods

ISO 9657, Pliers and nippers for electronics – General technical requirements

#### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 61318 and the following apply.