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I.S. EN 62192:2009

Live working - Insulating ropes (IEC 62192:2009 (EQV))

I.S. EN 62192:2009

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 62192

June 2009

ICS 13.260; 29.240.20; 29.260.99

English version

**Live working -
Insulating ropes
(IEC 62192:2009)**

Travaux sous tension -
Cordes isolantes
(CEI 62192:2009)

Arbeiten unter Spannung -
Isolierende Seile
(IEC 62192:2009)

This European Standard was approved by CENELEC on 2009-05-01. 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.

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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 78/773/FDIS, future edition 1 of IEC 62192, prepared by IEC TC 78, Live working, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 62192 on 2009-05-01.

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Annex ZA has been added by CENELEC.

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The text of the International Standard IEC 62192:2009 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 + A1 NOTE Harmonized as EN 60743:2001 + A1:2008 (not modified).

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following referenced documents are indispensable for the application of this document. 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>	<u>EN/HD</u>	<u>Year</u>
IEC 60060-1	- ¹⁾	High-voltage test techniques - Part 1: General definitions and test requirements	HD 588.1 S1	1991 ²⁾
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ISO 2307	- ¹⁾	Fibre ropes - Determination of certain physical and mechanical properties	EN ISO 2307	2005 ²⁾

¹⁾ Undated reference.

²⁾ Valid edition at date of issue.

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IEC 62192

Edition 1.0 2009-02

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Live working – Insulating ropes

Travaux sous tension – Cordes isolantes



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IEC 62192

Edition 1.0 2009-02

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Live working – Insulating ropes

Travaux sous tension – Cordes isolantes

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**LIVE WORKING –
INSULATING ROPES**

FOREWORD

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International Standard IEC 62192 has been prepared by technical committee 78: Live working.

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FDIS	Report on voting
78/773/FDIS	78/787/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

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

The committee has decided that the contents of this publication will remain unchanged until the maintenance result date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

INTRODUCTION

Insulating ropes 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.

This International Standard defines the required electrical properties of insulating ropes which already meet other specifications relating to mechanical strength, physical and construction properties, for use in live working at the power frequency system voltages up to and including 800 kV r.m.s.

This standard does not propose to address all the safety factors associated with the use of the insulating rope. It is the responsibility of the user to establish appropriate safety practices.

Ropes which meet this standard can bridge two or more live phase conductors, or one phase conductor and earth as required during live working. Effects of the use of insulating ropes on the dielectric strength of the installation have to be evaluated. Depending on the configuration of an installation, the use of insulating ropes will have different effects on its dielectric strength.

Cotton, sisal and hemp ropes are unsuitable for this application, as are any other ropes that exhibit electrical conductivity. Examples of ropes which are able to meet the requirements of this standard are formed from fibres that have been treated with a wax or other chemical which causes the surface of the rope to become hydrophobic.

This document has been prepared according to 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.

Except for a requirement for the selection of a testing dye and the disposal statement in the instructions for use, 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. 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 – INSULATING ROPES

1 Scope

This International Standard covers insulating ropes that are utilized during live working procedures in contact with parts of installations operating at voltages up to and including 800 kV r.m.s.

Insulating ropes for live working procedure under rain and/or d.c. conditions are not covered by this standard.

2 Normative references

The following referenced documents are indispensable for the application of this document. 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 60212:1971, *Standard conditions for use prior to and during the testing of solid electrical insulating materials*

IEC 60417, *Graphical symbols for use on equipment*

IEC 61318:2007, *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 2307, *Ropes – Determination of certain physical and mechanical properties*

3 Terms and definitions

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

3.1

creep

dimensional change with time in a test section of the rope when subjected to continued working load

3.2

elongation

initial dimensional change in a test section of the rope subjected to rated working load for a short period of time

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