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KONSOLIDEERITUD TEKST

Safety of machinery - Integral lighting of machines
CONSOLIDATED TEXT

EESTI STANDARDIKESKUS
ESTONIAN CENTRE FOR STANDARDISATION

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 1837:1999+A1:2009 sisaldab Euroopa standardi EN 1837:1999+A1:2009 ingliskeelset teksti.	This Estonian standard EVS-EN 1837:1999+A1:2009 consists of the English text of the European standard EN 1837:1999+A1:2009.
Standard on kinnitatud Eesti Standardikeskuse 30.10.2009 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.	This standard is ratified with the order of Estonian Centre for Standardisation dated 30.10.2009 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 09.09.2009.	Date of Availability of the European standard text 09.09.2009.
Standard on kättesaadav Eesti standardiorganisatsioonist.	The standard is available from Estonian standardisation organisation.

ICS 13.110, 91.160.10

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 1837:1999+A1

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ICS 13.110; 91.160.10

Supersedes EN 1837:1999

English Version

Safety of machinery - Integral lighting of machines

Sécurité des machines - Eclairage intégré aux machines

Sicherheit von Maschinen - Maschinenintegrierte Beleuchtung

This European Standard was approved by CEN on 25 January 1999 and includes Amendment 1 approved by CEN on 30 July 2009.

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Foreword

This document (EN 1837:1999+A1:2009) has been prepared by Technical Committee CEN/TC 169 "Light and lighting", the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by March 2010, and conflicting national standards shall be withdrawn at the latest by March 2010.

This document includes Amendment 1, approved by CEN on 2009-07-30.

The start and finish of text introduced or altered by amendment is indicated in the text by tags ⟨A1⟩ ⟨A1⟩.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

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⟨A1⟩ For relationship with EU Directive(s), see informative Annexes ZA and ZB, which are integral parts of this document. ⟨A1⟩

⟨A1⟩ This European Standard is a type B standard as stated in EN ISO 12100. The machinery concerned and the extent to which hazards are covered are indicated in the scope of this standard. ⟨A1⟩

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

Introduction

To illuminate visual tasks within and/or at machines integral lighting systems (built in or at machines) can be required. These integral lighting systems require special characteristics that allow both safe use and efficient performance of the visual task by the operator during operation and service.

1 Scope

This standard specifies the parameters of integral lighting systems designed to provide illumination in and/or at both stationary and mobile machines to enable the safe use of the machine and the efficient performance of the visual task within and/or at the machine to be carried out.

This standard does not specify lighting systems mounted on the machine to specifically illuminate visual tasks outside the machine. The function and requirements of these systems are specified in the European Standard dealing with the lighting of work places. This European Standard is under preparation.

This standard does not establish additional requirements for the operation of lighting systems

— in severe conditions (extreme environmental conditions such as freezer applications, high temperatures, etc.);

— subject to special rules (e.g. explosive atmospheres);

— where the transmittance is reduced by environmental conditions, such as smoke, splashing, etc.

2 Normative references

[A1] The following referenced documents are indispensable for the application of this document. For dated references only the edition cited applies. For undated references, the last edition of the referenced document (including any amendments) applies. [A1]

[A1] *deleted text* [A1]

[A1] *deleted text* [A1]

[A1] EN 1838, *Lighting applications – Emergency lighting* [A1]

[A1] *deleted text* [A1]

[A1] EN 12464-1:2002, *Light and lighting - Lighting of work places – Part 1: Indoor work places*

EN 12464-2, *Light and lighting – Lighting of work places – Part 2: Outdoor work places* [A1]

[A1] EN 12665:2002, *Light and lighting – Basic terms and criteria for specifying lighting requirements* [A1]

[A1] EN ISO 12100-1:2003, *Safety of machinery – Basic concepts, general principles for design – Part 1: Basic terminology, methodology (ISO 12100-1:2003)*

EN ISO 12100-2:2003, *Safety of machinery – Basic concepts, general principles for design – Part 2: Technical principles (ISO 12100-2:2003)* [A1]