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Safety of machinery –

Indication, marking and actuation –

Part 3: Requirements for the location and operation of actuators

Som svensk standard gäller europastandarden EN 61310-3:1999. Den svenska standarden innehåller den officiella engelska språkversionen av EN 61310-3:1999.

Nationellt förord

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består av:

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- **IEC 61310-3, First edition, 1999 - Safety of machinery - Indication, marking and actuation - Part 3: Requirements for the location and operation of actuators**

utarbetad inom International Electrotechnical Commission, IEC.

ICS 13.110; 29.120.60

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Upplysningar om **sakinnehållet** i standarden lämnas av SEK.
Telefon: 08 - 444 14 00. Telefax: 08 - 444 14 30
E-post: sek@sekom.se
Prisgrupp P

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EN 61310-3

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English version

Safety of machinery - Indication, marking and actuation
Part 3: Requirements for the location and operation of actuators
(IEC 61310-3:1999)

Sécurité des machines
Indication, marquage et manoeuvre
Partie 3: Spécifications sur la position
et le fonctionnement des organes de
service
(CEI 61310-3:1999)

Sicherheit von Maschinen
Anzeigen, Kennzeichen und Bedienen
Teil 3: Anforderungen an die Anordnung
und den Betrieb von Bedienteilen
(Stellteilen)
(IEC 61310-3:1999)

This European Standard was approved by CENELEC on 1999-04-01. 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, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CENELEC

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

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Foreword

The text of this European Standard has been developed by IEC TC 44, Safety of machinery - Electrotechnical aspects, from the document prepared as prEN 50099-3 by the Technical Committee CENELEC TC 44X in collaboration with the Technical Committee CEN TC 114. It was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61310-3 on 1999-04-01.

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) 2000-01-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2002-04-01

This standard has the status of a horizontal standard (type B standard in CEN as defined in subclause 3.2 of EN 414:1992) and may be used, e.g. as a reference standard, by technical committees in CEN and CENELEC preparing product family or dedicated product standards (type C standards in CEN as defined in subclause 3.1 of EN 414:1992) for machines. The requirements of this standard can also be applied by suppliers for machines for which no product family or dedicated product standard exists. Where a product family or dedicated product standard exists, its requirements take precedence.

Machinery designed and constructed in accordance with the safety requirements of this European Standard will be presumed to conform to the corresponding essential safety requirements (ESRs) of the Machinery Directive 89/392/EEC and associated EFTA Regulations. The extent to which the ESRs are covered is indicated in the Scope of this standard.

This European Standard also fulfils the requirements of the Low Voltage Directive 73/23/EEC.

Endorsement notice

The text of the International Standard IEC 61310-3:1999 was approved by CENELEC as a European Standard without any modification.

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

IEC 60947-5-5 NOTE: Harmonized as EN 60947-5-5:1997 (not modified).

Annex ZA (normative)

**Normative references to international publications
with their corresponding European publications**

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

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 60204-1	1997	Safety of machinery - Electrical equipment of machines Part 1: General requirements	EN 60204-1 + corr. September	1997 1998
IEC 60447	1993	Man-machine interface (MMI) - Actuating principles	EN 60447	1993
IEC 61310-1	1995	Safety of machinery - Indication, marking and actuation Part 1: Requirements for visual, auditory and tactile signals	EN 61310-1	1995
IEC 61310-2	1995	Part 2: Requirements for marking	EN 61310-2	1995
ISO/TR 12100-1	1992	Safety of machinery - Basic concepts, general principles for design Part 1: Basic terminology, methodology	-	-
ISO/TR 12100-2	1992	Part 2: Technical principles and specifications	-	-
Fel! Bokmärket är inte definierat. EN 894-2	1997	Safety of machinery - Ergonomics requirements for the design of displays and control actuators Part 2: Displays	-	-

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SAFETY OF MACHINERY – INDICATION, MARKING AND ACTUATION –

Part 3: Requirements for the location and operation of actuators

1 Scope

This part of IEC 61310 specifies safety-related requirements for actuators, operated by the hand or by other parts of the human body, at the man-machine interface.

It gives general requirements for

- the standard direction of movement for actuators;
- the arrangement of an actuator in relation to other actuators;
- the correlation between an action and its final effects.

It is based on IEC 60447, but is also applicable to non-electrotechnical technologies, such as mechanical and fluid-powered systems.

It covers single actuators as well as groups of actuators forming part of an assembly.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of IEC 61310. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of IEC 61310 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of IEC and ISO maintain registers of currently valid International Standards. IEC 60073:1996, *Basic and safety principles for man-machine interface, marking and identification – Coding principles for indication devices and actuators*

IEC 60204-1:1997, *Safety of machinery – Electrical equipment of machines – Part 1: General requirements*

IEC 60447:1993, *Man-machine interface (MMI) – Actuating principles*

IEC 61310-1:1995, *Safety of machinery – Indication, marking and actuation – Part 1: Requirements for visual, auditory and tactile signals*

IEC 61310-2:1995, *Safety of machinery – Indication, marking and actuation – Part 2: Requirements for marking*

ISO TR 12100-1:1992, *Safety of machinery – Basic concepts, general principles for design – Part 1: Basic terminology, methodology*

ISO TR 12100-2:1992, *Safety of machinery – Basic concepts, general principles for design – Part 2: Technical principles and specifications*

EN 894-2:1997, *Safety of machinery – Ergonomics requirements for the design of displays and control actuators – Part 2: Displays*

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