
Osnovna in varnostna načela za vmesnik človek-stroj, označevanje in identifikacijo - Načela kodiranja za indikatorje in aktuatorje

Basic and safety principles for man-machine interface, marking and identification - Coding principles for indicators and actuators

Grund- und Sicherheitsregeln für die Mensch-Maschine-Schnittstelle, Kennzeichnung - Codierungsgrundsätze für Anzeigengeräte und Bedienteile

Principes fondamentaux et de sécurité pour l'interface homme-machine, le marquage et l'identification - Principes de codage pour les indicateurs et les organes de commande

Ta slovenski standard je istoveten z: **prEN IEC 60073:2026**

ICS:

01.070	Barvno kodiranje	Colour coding
13.110	Varnost strojev	Safety of machinery
29.020	Elektrotehnika na splošno	Electrical engineering in general

oSIST prEN IEC 60073:2026**en,fr,de**

Sample Document

get full document from standards.iteh.ai



3/1785/CDV

COMMITTEE DRAFT FOR VOTE (CDV)

PROJECT NUMBER: IEC 60073 ED7	
DATE OF CIRCULATION: 2026-08-14	CLOSING DATE FOR VOTING: 2026-11-06
SUPERSEDES DOCUMENTS: 3/1695/CD, 3/1778/CC	

IEC TC 3 : DOCUMENTATION, GRAPHICAL SYMBOLS AND REPRESENTATIONS OF TECHNICAL INFORMATION	
SECRETARIAT: Sweden	SECRETARY: Mr Mikael Törnkvist
OF INTEREST TO THE FOLLOWING COMMITTEES: TC 2,SC 3C,TC 9,SC 17A,TC 18,TC 22,SC 22G,SC 22H,TC 23,SC 23B,SC 23E,SC 23H,SC 23J,TC 27,TC 31,SC 31M,SC 34D,SC 37A,TC 44,SC 45A,TC 61,TC 62,TC 64,SC 65B,TC 66,TC 69,TC 72,TC 79,TC 80,TC 85,TC 88,TC 96,TC 100,TC 108,TC 116,SC 121A,SC 121B	HORIZONTAL FUNCTION(S): TC 3 Horizontal Basic Safety
ASPECTS CONCERNED: Safety	
☒ SUBMITTED FOR CENELEC PARALLEL VOTING Attention IEC-CENELEC parallel voting The attention of IEC National Committees, members of CENELEC, is drawn to the fact that this Committee Draft for Vote (CDV) is submitted for parallel voting. The CENELEC members are invited to vote through the CENELEC online voting system.	☐ NOT SUBMITTED FOR CENELEC PARALLEL VOTING

This document is still under study and subject to change. It should not be used for reference purposes.

Recipients of this document are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

Recipients of this document are invited to submit, with their comments, notification of any relevant "In Some Countries" clauses to be included should this proposal proceed. Recipients are reminded that the CDV stage is the final stage for submitting ISC clauses. (SEE [AC/22/2007](#) OR [NEW GUIDANCE DOC](#)).

TITLE:

Basic and safety principles for man-machine interface, marking and identification - Coding principles for indicators and actuators

PROPOSED STABILITY DATE: 2032

NOTE FROM TC/SC OFFICERS:

Copyright © 2026 International Electrotechnical Commission, IEC. All rights reserved. It is permitted to download this electronic file, to make a copy and to print out the content for the sole purpose of preparing National Committee positions. You may not copy or "mirror" the file or printed version of the document, or any part of it, for any other purpose without permission in writing from IEC.

Link to Committee Draft for Vote (CDV) online document:

[Click here](#)

How to access

This link leads you to the Online Standards Development (OSD) platform for National Mirror Committee's (NMC) comments. The project draft may be found further down this document.

Resource materials

We recommend NCs to review the available materials to better understand the member commenting on the OSD platform. This includes the:

- [OSD NC roles overview](#)
- [How to add and submit comments to the IEC](#)

Contact

Should you require any assistance, please contact the [IEC IT Helpdesk](#).

Sample Document

get full document from standards.iteh.ai

CONTENTS

Contact.....	2
CONTENTS	1
FOREWORD.....	3
INTRODUCTION.....	5
1 Scope	6
2 Normative references	6
3 Terms and definitions	7
4 Coding principles	9
4.1 General.....	9
4.2 Visual signals	11
4.2.1 General	11
4.2.2 Coding by colours.....	11
4.2.3 Coding by shapes or position or both	13
4.2.4 Coding by changing of characteristics over time	14
4.3 Acoustic signals	14
4.4 Tactile signals.....	15
5 Application requirements	16
5.1 Indication modes.....	16
5.2 Actuation modes	7
5.2.1 General	7
5.2.2 Non-illuminated HMI actuators.....	7
5.2.3 Illuminated HMI actuators	8
5.3 HMI actuators as a part of pictorial presentation on a video display terminal	9
5.3.1 Identification of HMI actuators	9
5.3.2 Emergency operations	9
Annex A (normative) Special requirements for mechanical indicators.....	10
A.1 Marking.....	10
A.2 Colours	10
A.2.1 Mechanical indicators with graphical symbols or words.....	10
A.2.2 Mechanical indicators without graphical symbols or words.....	10
Annex B (informative) Example for the application of indication coding (using colours)	11
Annex C (informative) Examples of visual, acoustic and tactile signals	13
Bibliography.....	16
Figure B.1 – Indicators and actuators associated with a test station.....	11
Table 1 –	4
Table 2 – Means of coding and their characteristics to be considered	10
Table 3 – Meaning of colours – General principles.....	12
Table 4 – Meaning of shapes – General principles	13
Table 5 – Meaning of acoustic codes – General principles	15
Table 6 – Meaning of tactile signals – General principles.....	16
Table 7 – Meaning of indication signals with respect to the safety of persons, property or the environment.....	1

Table 8 – Meaning of indication signals with respect to the condition of the process	2
Table 9 – Meaning of indication signals with respect to the state of equipment	4
Table 10 – General meaning of the signals for HMI actuators	5
Table B.1 – Information to be coded	12
Table B.2 – Complete information concept for the example	12
Table C.1 – Examples of visual signals	13
Table C.2 – Examples of acoustic signals	14
Table C.3 – Examples of tactile signals.....	15

Sample Document

get full document from standards.iteh.ai

INTERNATIONAL ELECTROTECHNICAL COMMISSION

Basic and safety principles for man-machine interface, marking and identification - Coding principles for indicators and actuators

FOREWORD

1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.

2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.

3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.

4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter.

5) IEC itself does not provide any attestation of conformity. Independent certification bodies provide conformity assessment services and, in some areas, access to IEC marks of conformity. IEC is not responsible for any services carried out by independent certification bodies.

6) All users should ensure that they have the latest edition of this publication.

7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.

8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.

9) IEC draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). IEC takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, IEC [had/had not] received notice of (a) patent(s), which may be required to implement this document. However, implementers are cautioned that this may not represent the latest

information, which may be obtained from the patent database available at <https://patents.iec.ch>. IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 60073 has been prepared by IEC technical committee 3: Basic and safety principles for man-machine interface, marking and identification. It is an international standard.

This seventh edition cancels and replaces the sixth edition published in 2002. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) the title of the document has been modified to be gender neutral
- b) definition of terms has been updated
- c) definition of the term "information" is provided
- d) requirements based on out-dated technology has been removed;
- e) wording improved to make requirements clearer;
- f) the word "actuator" is replaced by "HMI actuator" throughout the document.

It has the status of a Basic safety publication in accordance with IEC Guide 104.

The text of this International Standard is based on the following documents:

Table 1 –	
FDIS	Report on voting
3/XX/FDIS	3/XX/RVD

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

The language used for the development of this International Standard is English [change language if necessary].

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

Annex A forms an integral part of this standard.

Annex B and **Annex C** are for information only.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn, or
- revised.

INTRODUCTION

Supervision and intervention are the principal tasks of personnel engaged in the monitoring and control of equipment or processes.

Indicators for the representation of conditions, and actuating devices to enable intervention under normal and fault conditions, are essential to this purpose.

The information presented should meet the needs of the users for the monitoring and control tasks which they are required to perform, for example, in extensive industrial processes.

Safety and ergonomic aspects should also be taken into account. The use of only a single means of coding is often insufficient to ensure unambiguous representation of information.

Apart from an unambiguous marking of the indicating and actuating devices, there is a requirement for a clear and consistent system of coding.

The choice of a code will depend on the information which it is intended to impart. This may relate to the state of equipment (or part of it), to the condition of a process, and/or to the effects which this condition has on persons, property and the environment.

The user is required to decide on which of these criteria the coding for the relevant application is to be based.

Sample Document

get full document from standards.iteh.ai