



SLOVENSKI STANDARD

SIST EN 1332-3:2004

01-maj-2004

Identification card systems - Man-machine interface - Part 3: Key pads

Identification card systems - Man-machine interface - Part 3: Key pads

Identifikationskartensysteme - Schnittstelle Mensch-Maschine - Teil 3: Tastenfelder

Systemes de cartes d'identification - Interface homme machine - Partie 3: Claviers

Ta slovenski standard je istoveten z: **EN 1332-3:1999**

[SIST EN 1332-3:2004](https://standards.iteh.ai/catalog/standards/sist/588d1930-dd28-46a0-a46e-ed33224d7e78/sist-en-1332-3-2004)

<https://standards.iteh.ai/catalog/standards/sist/588d1930-dd28-46a0-a46e-ed33224d7e78/sist-en-1332-3-2004>

ICS:

35.240.15	Identifikacijske kartice in sorodne naprave	Identification cards and related devices
-----------	---	--

SIST EN 1332-3:2004

en

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN 1332-3:2004](#)

<https://standards.iteh.ai/catalog/standards/sist/588d1930-dd28-46a0-a46e-ed33224d7e78/sist-en-1332-3-2004>

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 1332-3

June 1999

ICS 35.180; 35.240.15

English version

Identification card systems - Man-machine interface - Part 3: Key pads

Systèmes de cartes d'identification - Interface homme-
machine - Partie 3: Claviers

Identifikationskartensysteme - Schnittstelle Mensch-
Maschine - Teil 3: Tastenfelder

This European Standard was approved by CEN on 5 May 1999.

CEN 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 CEN 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 CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 1332-3:2004

<https://standards.iteh.ai/catalog/standards/sist/588d1930-dd28-46a0-a46e-ed33224d7e78/sist-en-1332-3-2004>



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Central Secretariat: rue de Stassart, 36 B-1050 Brussels

Contents

	Page
Foreword	3
Introduction	4
1 Scope	5
2 Normative references	5
3 Definitions	5
4 Functional sections of the keypad	6
4.1 Function keys.....	6
4.2 Keypad.....	6
4.2.1 Numeric keys	6
4.2.2 Command keys.....	7
4.2.3 Principles for the arrangement of command keys.....	8
5 Design requirements and recommendations	10
5.1 General design recommendations	10
5.2 Colour and keypad surface.....	10
5.3 Number and positioning of key legends	10
5.4 Indication of function on keycap	11
6 Conformance	11
7 Labelling and packaging	11

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 1332-3:2004

<https://standards.iteh.ai/catalog/standards/sist/588d1930-dd28-46a0-a46e-ed33224d7e78/sist-en-1332-3-2004>



Foreword

This European Standard has been prepared by Technical Committee CEN/TC 224 "Machine-readable cards, related device interfaces and operations", the secretariat of which is held by AFNOR.

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 December 1999, and conflicting national standards shall be withdrawn at the latest by December 1999.

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

This European Standard is one of a series of standards, under the general title "Identification card systems - Man-machine interface" and the different parts are the following :

- *Part 1 : Design principles for the user interface ;*
- *Part 2 : Dimensions and location of a tactile identifier for ID-1 cards ;*
- *Part 3 : Key pads ;*
- *Part 4 : Coding of user requirements for people with special needs.*

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN 1332-3:2004](https://standards.iteh.ai/catalog/standards/sist/588d1930-dd28-46a0-a46e-ed33224d7e78/sist-en-1332-3-2004)

<https://standards.iteh.ai/catalog/standards/sist/588d1930-dd28-46a0-a46e-ed33224d7e78/sist-en-1332-3-2004>

Introduction

Machine readable cards facilitate the provision of a growing variety of services across Europe. The purpose of EN 1332 is to increase the accessibility of these services for the benefit of consumers. This will be achieved by facilitating the inter-sector and cross-border interoperability of machine readable cards and to do so with the maximum possible degree of user-friendliness.

EN 1332 addresses the needs of all users, including people with special needs, for example the aged, minors, the disabled, the visually impaired, those with learning difficulties, first time users, those not conversant with the local language.

EN 1332 specifies :

- a) the design principles for the user interface (including symbols) to be incorporated into the design of card operated equipment, but not the machine operations associated with the selection and delivery of goods or services ;
- b) a tactile identifier to be incorporated into the design of machine readable cards ;
- c) a standard layout for the keypads of card operated equipment.

The contents of EN 1332 are generically based, not sector specific, and cover card operated equipment. It is recognised that the equipment may also be operated by other means, such as the insertion of notes and coins, but the scope of this standard has been, as indicated, narrowly defined.

Issues relating to such consumer concerns at the man-machine interface as PIN presentation are not dealt with in EN 1332.

This European Standard covers the ergonomic layout and usability of keypads; the principal input device when using machine readable cards. The keypad may consist of numeric, command, function and alphanumeric keys. On the basis that keypad layout impacts on performance (keying, speed, errors), this European Standard aims to :

- enhance usability ;
- ensure ease of use through consistency ;
- increase customer confidence ;
- reduce customer error ;
- improve operating time ;
- ensure ergonomic handling of card and data entry.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN 1332-3:2004](https://standards.iteh.ai/catalog/standards/sist/588d1930-dd28-46a0-a46e-ed33224d7e78/sist-en-1332-3-2004)

<https://standards.iteh.ai/catalog/standards/sist/588d1930-dd28-46a0-a46e-ed33224d7e78/sist-en-1332-3-2004>

1 Scope

This European Standard specifies the arrangement, the number and location of numeric and command keys. The arrangement of function keys is outside the scope of this European Standard, as are alphanumeric keys. Design requirements and recommendations are given, as are example layouts.

2 Normative references

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.

EN 1332-1, *Identification card systems - Man - machine interface - Part 1 : Design principles for the user interface.*

EN 29564-1:1993, *Banking - Personal Identification Number management and security - Part 1 : PIN protection principles and techniques (ISO 9564-1:1991).*

ISO 9241-4:1998, *Ergonomic requirements for office work with visual display terminals (VDTs) – Part 4 : Keyboard requirements .*

ISO/IEC 9995-1, *Information technology - Keyboard layouts for text and office systems - Part 1 : General principles governing keyboard layouts.*

ISO/IEC 9995-4, *Information technology - Keyboard layouts for text and office systems - Part 4 : Numeric section.*

ISO/IEC 9995-6, *Information technology - Keyboard layouts for text and office systems - Part 6 : Function section.*

3 Definitions

For the purposes of this standard, the following definitions apply :

3.1

ergonomics

see EN 1332-1

3.2

personal Identification Number (PIN)

see EN 29564-1:1993

3.3

alphanumeric keyboard

see ISO 9241-4:1998

3.4

graphic symbol

see ISO/IEC 9995-1

3.5

numeric keys

see ISO/IEC 9995-4

3.6

function keys

see ISO/IEC 9995-6

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN 1332-3:2004](https://standards.iteh.ai/catalog/standards/sist/588d1930-dd28-46a0-a46e-ed33224d7e78/sist-en-1332-3-2004)

<https://standards.iteh.ai/catalog/standards/sist/588d1930-dd28-46a0-a46e-ed33224d7e78/sist-en-1332-3-2004>

3.7

command keys

the keys "cancel", "enter" and "clear". These keys are used in conjunction with numeric keys. These keys are described in table 1

3.8

disability

any restriction or lack of ability to perform an activity in the manner or within the range considered normal for a human being. Disability may be temporary

3.9

keypad

an arrangement of numeric, command and, where required, function and or alphanumeric keys laid out in a specific manner

4 Functional sections of the keypad

There may be three functional sections of the keypad :

- section for function keys ;
- section for numeric and command keys ;
- alphanumeric section.

The arrangement of alphanumeric keys is outside the scope of this standard. The different sections of the keypad, eg numeric keys and command keys, should as a general rule be separated vertically and horizontally by at least half a key-pitch (see 6.1.3 of ISO 9241-4:1998).

4.1 Function keys

The number and type of function keys is dependent upon the application. Function keys may be located on the device, on the screen or adjacent to the screen. They may be dedicated to one function (hard keys) or change function according to the mode of operation (soft keys). If keys are to have a function as specified in EN 1332-1, the function shall be indicated by the relevant graphic symbol provided in EN 1332-1.

Function keys (except command keys "cancel", "clear" and "enter") should be clearly separated from numeric keys in order to avoid pressing the wrong key.

NOTE Given the number of different applications and different uses of a card reading device it is not practicable to provide a standard allocation for all functions. This is because the ergonomically correct allocation of function is dependent upon a number of factors as follows :

- intended use of system (task to be performed) ;
- sequence of use (the order in which the task is to be performed) ;
- intended user groups and their different characteristics;

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 1332-3:2004

<https://standards.iteh.ai/catalog/standards/sist/588d1930-dd28-46a0-a46e-ed33224d7e78/sist-en-1332-3-2004>

4.2 Keypad

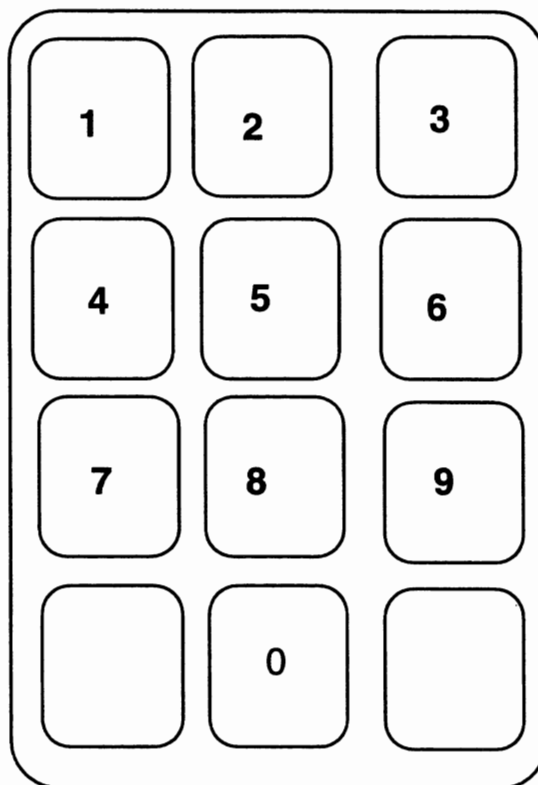
The keypad is an arrangement of, as a minimum, numeric and the command keys "cancel" and "enter" as shown in Figure 2. The command key "clear" may also be present on the keypad as shown in Figures 3 and 4.

4.2.1 Numeric keys

All keypads shall provide for the entry of the decimal numeric characters 0 to 9.

The arrangement of numeric keys shall be according to Figure 1.

To assist blind and visually impaired people, the "5" key should be identified by a suitable tactile identifier such as a raised dot.



NOTE Figure 1 is not to scale.

Figure 1 - Arrangement of numeric keys on keypad

4.2.2 Command keys

The command keys "cancel" and "enter" shall always be present on a keypad. If required, the command key "clear" may also be present.

The functional description of the command keys is as according to Table 1.

Table 1 - Functional description of command keys

Functional indication in English language	Functional description	Background colour	Symbol to be used
Enter	Confirms an action	Green	✓
Cancel	Either cancels the whole transaction or, if no clear key is present, cancels the operation in progress	Red	X
Clear	Erases the numeric or alphabetic characters previously entered	Yellow	←

It is recognized that the functional indication may be in local language equivalents.