# SLOVENSKI STANDARD
# SIST EN 1387:1998

**01-junij-1998**

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**Machine readable cards - Health care applications - Cards: General characteristics**

Machine readable cards - Health care applications - Cards: General characteristics

Maschinenlesbare Karten - Anwendungen im Gesundheitswesen - Karten: Allgemeine Eigenschaften

Cartes lisibles par machine - Applications pour la santé - Cartes: Caractéristiques générales



**Ta slovenski standard je istoveten z:** **EN 1387:1996**



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**ICS:**

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

**SIST EN 1387:1998** **en**

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English version

# Machine readable cards - Health care applications - Cards: General characteristics

Cartes lisibles par machine - Applications pour la santé - Cartes: Caractéristiques générales

Maschinenlesbare Karten - Anwendungen im Gesundheitswesen - Karten: Allgemeine Eigenschaften



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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.

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**CEN**

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

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

## Foreword

This European Standard has been prepared by the 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of an identical text or by endorsement, at the latest by February 1997, and conflicting national standards shall be withdrawn at the latest by February 1997.

In accordance with the CEN/CENELEC Internal Regulations, the following countries are bound to implement this European Standard : Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

## Introduction

This European Standard is one of a series of standards describing the characteristics of machine readable cards in the health care sector and the use of such cards for European interchange.

Other card technologies could be taken into account in the future.

Users can select from the technologies described in this standard to organize and store health care data in the card and to meet the security needs and functions of the card system.

## 1 Scope

This European Standard specifies directly or by reference the requirements for cards used for health care, health care coverage or health care entitlement.

This European Standard specifies the physical characteristics of cards and the recording techniques, but not the security requirements. It defines the area on each side of the surface of the card allocated to each type of media.

Test methods applying to this European Standard are as defined in ISO/IEC 10373.



## 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 23166 | Codes for the representation of names of countries (ISO 3166:1993) |
| EN 27810 | Identification cards - Physical characteristics (ISO 7810:1985, ed.1) |
| EN 27811-1 | Identification cards - Recording technique - Part 1 : Embossing (ISO 7811-1:1985, ed.1) |
| EN 27811-2 | Identification cards - Recording technique - Part 2 : Magnetic stripe (ISO 7811-2:1988, ed.1) |
| EN 27811-3 | Identification cards - Recording technique - Part 3 : Location of embossed characters on ID-1 cards (ISO 7811-3:1985, ed.1) |
| EN 27811-4 | Identification cards - Recording technique - Part 4 : Location of read-only magnetic tracks - Tracks 1 and 2 (ISO 7811-4:1985, ed.1) |

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| EN 27811-5 | Identification cards - Recording technique - Part 5 : Location of read-write magnetic track - Track 3 (ISO 7811-5:1985, ed.1) |
| EN 27816-1 | Identification cards - Integrated circuit(s) with contacts - Part 1 :Physical characteristics (ISO 7816-1:1987, ed.1) |
| EN 27816-2 | Identification cards - Integrated circuit(s) with contacts - Part 2 : Dimensions and location of the contacts (ISO 7816-2:1988, ed.1) |
| EN 27816-3 | Identification cards - Integrated circuit(s) cards with contacts - Part 3 : Electronic signals and transmission protocols (ISO/IEC 7816-3:1989 edition 1) |
| EN 27816-3:1992/A1:1993 | Identification cards - Integrated circuit(s) cards with contacts - Part 3 : Electronic signals and transmission protocols - Amendment 1 : Protocol type T=1, asynchronous half duplex block transmission protocol (ISO/IEC 7816-3:1989, Amendment 1:1992) |
| ISO 8859-1 | Information processing - 8-bit single-byte coded graphic character sets - Part 1 : Latin alphabet No. 1 |
| ISO/IEC 10373 | Identification cards - Test methods |
| ISO/IEC 11693 | Identification cards - Optical memory cards - General characteristics |
| ISO/IEC 11694-1 | Identification cards - Optical memory cards - Linear recording method - Part 1 : Physical characteristics |
| ISO/IEC 11694-2 | Identification cards - Optical memory cards - Linear recording method - Part 2 : Dimensions and location of the accessible optical area |
| ISO/IEC 11694-3 | Identification cards - Optical memory cards - Linear recording method - Part 3 : Optical properties and characteristics |

## 3 Definitions

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

**3.1 health care card :** Personal portable record included in a card containing administrative and/or medical data to facilitate health care.

**3.2 front side of the card :** Face of the card carrying visual information containing numbers identifying the card and the card holder.

**3.3 back side of the card :** The opposite face from the front.

## 4 Abbreviations

IC Integrated circuit

## 5 Physical characteristics

The physical characteristics shall conform to EN 27810 and EN 27816-1.

## 6 Recording techniques



This European Standard refers to several different recording techniques. Depending on the particular combination of techniques chosen there may be conflicts in implementing them in one card. It is the responsibility of card issuers to detect and resolve any such conflicts within the standards concerned.



### 6.1 Embossing, engraving, printing

#### 6.1.1 Technical specification

If embossing is used it shall be as specified in EN 27811-1 and EN 27811-3.

#### 6.1.2 Organization and location of the visually readable data

NOTE : The visually readable information consist of 5 lines referred to as L1, L2, L3, L4 and L5, as given in table 1.

##### 6.1.2.1 L1 and L2

L1 and L2 shall be included on all cards and shall be located on the front side of the card (see 3.2).

If embossed, they shall comply with EN 27811-3.

If not embossed (printed, engraved etc.) their location and the size of their contents are at the discretion of the issuer.

L1 is made up of the following components :

- the industry identifier (2 characters) ;

- the country code, as defined in EN 23166 (3 characters) ;

- the issuer identifier (5 characters) ;

- the check digit (1 digit), calculated on all preceeding characters using the Luhn modulus 10 formula (see annex B).

Spaces, if used, shall separate the above components.

L2, the card holder identification number, consists of up to 27 characters. This string of characters shall represent a cardholder identifier provided by the card issuer.

#### 6.1.2.2 L3, L4 and L5

The use of lines L3, L4 and L5 is at the discretion of the issuer but if these lines are used for the name of the card holder the following rules should be followed :



a) the name shall be the first data to appear after L2 ;

b) the name can appear on one or several lines with the most significant part (usually the surname) coming first, followed by the least significant part (usually the given names). If there is ambiguity in separation between the two parts, only a separator in the form of a foreword oblique (/) may be introduced.



If not embossed (printed, engraved etc.), their location and their size are at the discretion of the issuer.

**Table 1 : Organization of the visually readable data**

| Line | Data name | Length | Character set |
|---|---|---|---|
| L1 | Card issuer identifier | 11 characters | Decimal characters and spaces only |
| L2 | Card holder identification number | Up to 27 characters | Latin alphabet n° 1[1)] |
| L3 | Reserved for issuer | Not specified | Not specified |
| L4 | Reserved for issuer | Not specified | Not specified |
| L5 | Reserved for issuer | Not specified | Not specified |
| 1) As defined in ISO 8859-1. | | | |