
**Information technology — Keyboard
layouts for text and office systems —**

**Part 2:
Alphanumeric section**

*Technologies de l'information — Disposition des claviers conçus pour la
bureautique —*
iTeh STANDARD PREVIEW
Partie 2: Module alphanumérique
(standards.iteh.ai)

ISO/IEC 9995-2:2009

<https://standards.iteh.ai/catalog/standards/sist/7e3a51b9-634d-49bb-8099-56994e6e469c/iso-iec-9995-2-2009>

PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[ISO/IEC 9995-2:2009](https://standards.iteh.ai/catalog/standards/sist/7e3a51b9-634d-49bb-8099-56994e6e469c/iso-iec-9995-2-2009)

<https://standards.iteh.ai/catalog/standards/sist/7e3a51b9-634d-49bb-8099-56994e6e469c/iso-iec-9995-2-2009>



COPYRIGHT PROTECTED DOCUMENT

© ISO/IEC 2009

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

Contents

Page

Foreword	iv
1 Scope	1
2 Conformance	1
3 Normative references	1
4 Terms and definitions	1
5 Arrangement and Location.....	1
6 Division into zones.....	1
7 Arrangement and location of keys in the alphanumeric zone of the alphanumeric section.....	2
7.1 General keyboard arrangement	2
7.2 Harmonized 48 graphic key keyboard arrangement.....	3
8 Functions of the alphanumeric zone of the alphanumeric section.....	4
8.1 Allocation of graphic characters	4
8.2 Allocation of functions to non-graphic keys	5
8.3 Minimum function key requirements.....	6
8.3.1 Level 2 select	6
8.3.2 Level 3 select	6
8.3.3 Group select.....	6
8.3.4 Tabulation.....	7
8.3.5 Capitals lock/Level 2 lock/Generalized lock.....	7
8.3.6 Return	7
8.3.7 Backspace/Backward erase	7
8.3.8 Alternate	7
8.3.9 Control.....	7
8.3.10 Function (Fn).....	7
8.4 Keytop markings	7
Annex A (informative) Allocation guidelines.....	8
Bibliography.....	10

Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work. In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of the joint technical committee is to prepare International Standards. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

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

ISO/IEC 9995-2 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 35, *User interfaces*.

This third edition cancels and replaces the second edition (ISO/IEC 9995-2:2002), which has been technically revised. The main modifications are as follows:

- fewer zones; <https://standards.iteh.ai/catalog/standards/sist/7e3a51b9-634d-49bb-8099-56994e6e469c/iso-iec-9995-2-2009>
- minimum of 47 keys instead of 45.

ISO/IEC 9995 consists of the following parts, under the general title *Information technology — Keyboard layouts for text and office systems*:

- *Part 1: General principles governing keyboard layouts*
- *Part 2: Alphanumeric section*
- *Part 3: Complementary layouts of the alphanumeric zone of the alphanumeric section*
- *Part 4: Numeric section*
- *Part 5: Editing and function section*
- *Part 7: Symbols used to represent functions*
- *Part 8: Allocation of letters to the keys of a numeric keypad*

Information technology — Keyboard layouts for text and office systems —

Part 2: Alphanumeric section

1 Scope

Within the general scope described in ISO/IEC 9995-1, this part of ISO/IEC 9995 specifies the alphanumeric section of a keyboard and the division of that section into zones; the arrangement, number, and location of the keys in the alphanumeric zone ZA0 of the alphanumeric section; and the layout and allocation of several control functions to the keys in the function zones of the alphanumeric section.

2 Conformance iTeh STANDARD PREVIEW

Equipment is in conformance with this part of ISO/IEC 9995 if it meets the requirements of 7.1 and 8.3 or 7.2 and 8.3.

3 Normative references

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

ISO/IEC 646, *Information technology — ISO 7-bit coded character set for information interchange*

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

4 Terms and definitions

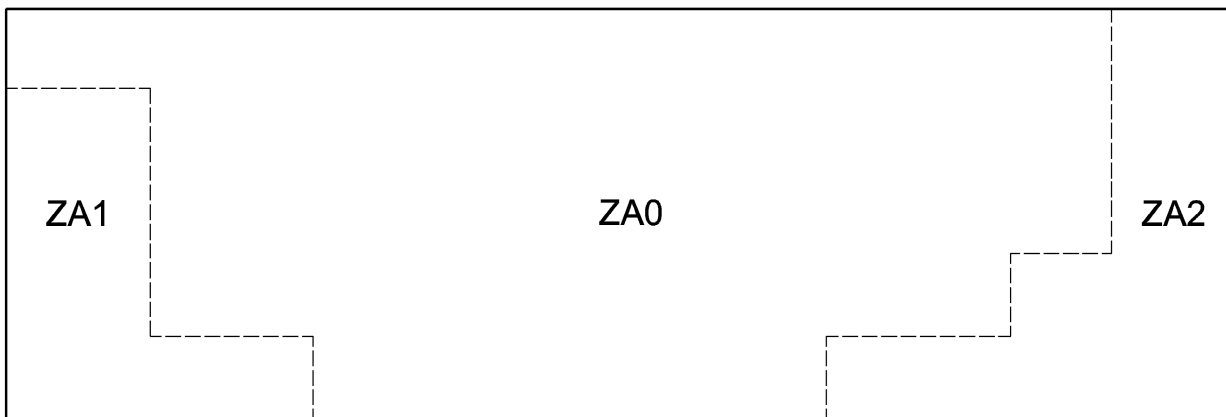
For the purposes of this document, the terms and definitions given in ISO/IEC 9995-1 apply.

5 Arrangement and Location

The arrangement of the alphanumeric section is described in ISO/IEC 9995-1. Its extent is from column 99 to column 15.

6 Division into zones

The alphanumeric section is divided into zones as illustrated in Figure 1.



NOTE Not drawn to scale — all lines are only indicative.

Figure 1 — Division of the alphanumeric section into zones

ZA0 is the alphanumeric zone of the alphanumeric section. The zones ZA1 and ZA2 are the function zones of the alphanumeric section (see Figure 1). The arrangement, the number, and the locations of the keys as well as the allocation of graphic characters and of several functions to the keys are specified in Clause 7 and 8.

iTeh STANDARD PREVIEW

7 Arrangement and location of keys in the alphanumeric zone of the alphanumeric section

The graphic keys and the space bar shall be arranged in the alphanumeric zone ZA0.
ISO/IEC 9995-2:2009
<https://standards.iteh.ai/catalog/standards/sist/7e3a51b9-634d-49bb-8099-56994e6e469c/iso-iec-9995-2-2009>

7.1 General keyboard arrangement

This arrangement accommodates existing ISO and national keyboard layouts and is flexible enough to allow possible extended versions, especially for national linguistic requirements.

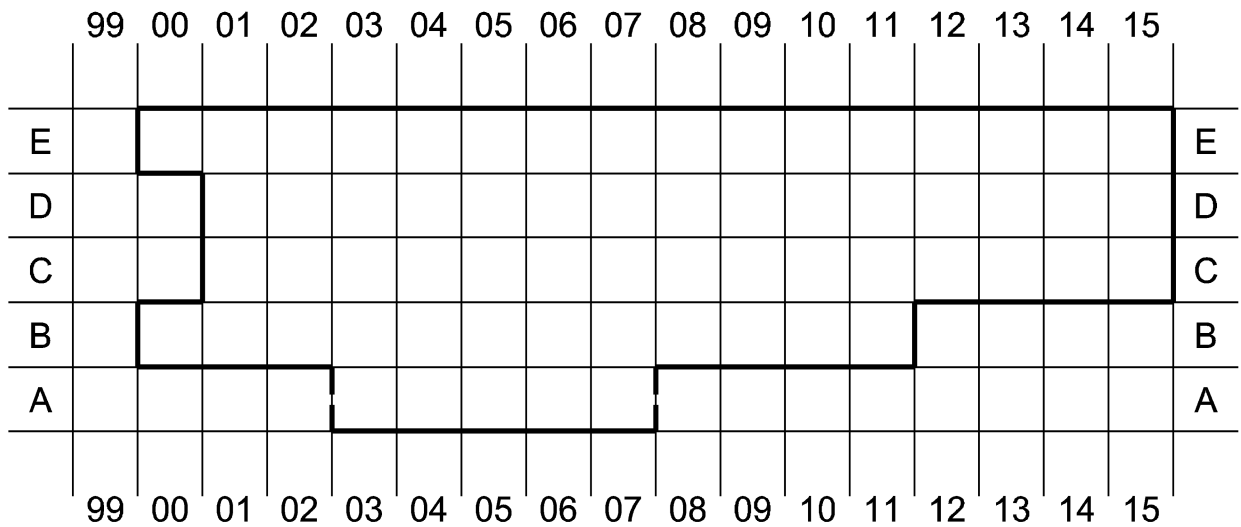
The graphic keys and the space bar shall be located as illustrated in Figure 2.

There shall be 47 or more graphic keys and the space bar in the alphanumeric zone of the alphanumeric section. They shall be arranged as follows:

- the space bar in row A, extending, as a minimum, from position A03 to A07;
- 10 keys or more in row B in positions B00 to B11;
- 11 keys or more in row C in positions C01 to C15;
- 12 keys or more in row D in positions D01 to D15;
- 12 keys or more in row E in positions E00 to E15.

The precise boundary of zone ZA0 will be dependent on the number of keys and their configuration.

In order to implement the complementary layouts as specified in ISO/IEC 9995-3, 48 graphic keys are required as a minimum.



NOTE 1 Not drawn to scale — all lines are only indicative.

NOTE 2 The grid in which the keys are shown is that specified in ISO/IEC 9995-1.

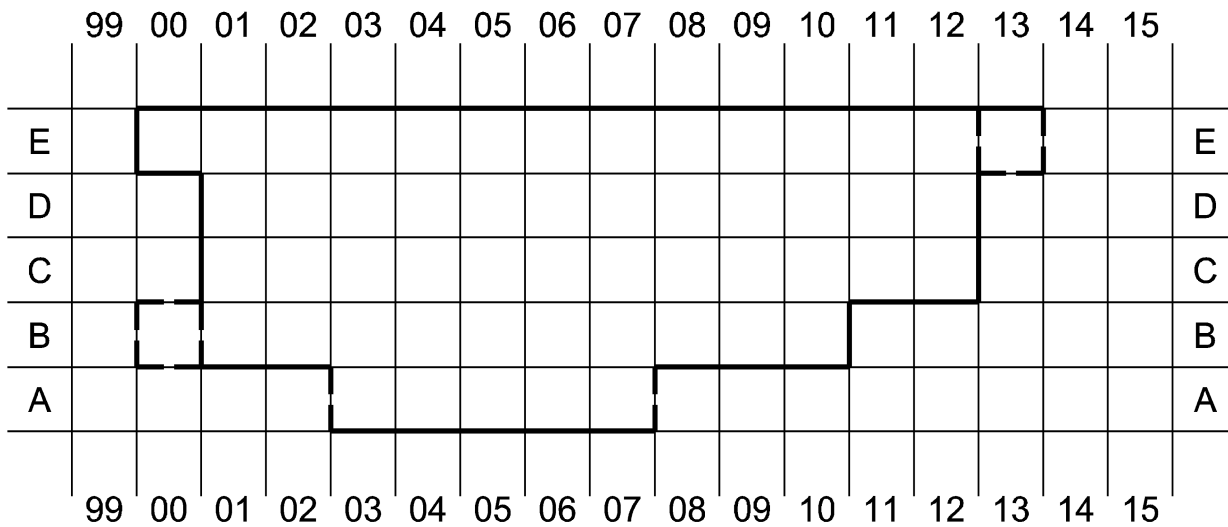
Figure 2 — Arrangement and location of keys in the alphanumeric zone of the alphanumeric section ZA0 for the general keyboard arrangement

7.2 Harmonized 48 graphic key keyboard arrangement

On a harmonized keyboard having 48 graphic keys and a space bar, the keys and the space bar shall be located as illustrated in Figure 3.

There shall be 48 graphic keys and the space bar in the alphanumeric zone of the alphanumeric section. The 48 keys shall be arranged as follows:

- the space bar in row A, extending, as a minimum, from position A03 to A07;
- 10 keys in row B in positions B01 to B10, or, if there is no key in position E13, 11 keys in positions B00 to B10;
- 12 keys in row C in positions C01 to C12;
- 12 keys in row D in positions D01 to D12;
- 13 keys in row E in positions E00 to E12, or, if there is no key in position B00, 14 keys in positions E00 to E13.



NOTE 1 Not drawn to scale — all lines are only indicative.

NOTE 2 The grid in which the keys are shown is that specified in ISO/IEC 9995-1.

Figure 3 — Arrangement and location of keys in the alphanumeric zone of the alphanumeric section ZA0 for the harmonized 48 graphic key keyboard arrangement

ITeH STANDARD PREVIEW
(standards.iteh.ai)

8 Functions of the alphanumeric zone of the alphanumeric section

The functions to be allocated to the keys of the alphanumeric zone ZA0 are graphic characters including the character space.

ISO/IEC 9995-2:2009
<https://standards.iteh.ai/catalog/standards/sist/7e3a51b9-634d-49bb-8099-56994e6e469c/iso-iec-9995-2-2009>

8.1 Allocation of graphic characters

The allocation of graphic characters is determined by either a national standard or by national usage.

NOTE Annex A gives recommendations on allocations that are suitable for use in national standards.

When the characters of the Latin alphabet are allocated to the keys of the alphanumeric zone ZA0, the following requirements apply:

- a) the 83 invariant graphic characters of ISO 646 shall be accommodated. These characters are:
 - the 26 small letters a to z of the Latin alphabet;
 - the 26 capital letters A to Z of the Latin alphabet;
 - the ten digits 0 to 9, see "b)" below;
 - exclamation mark;
 - quotation mark;
 - percent sign;
 - ampersand;
 - apostrophe;

- asterisk;
- left parenthesis;
- right parenthesis;
- plus sign;
- comma;
- hyphen, minus sign;
- full stop;
- solidus;
- colon;
- semicolon;
- less-than sign;
- equals sign;
- greater-than sign;
- question mark;
- low line;
- the character space, see "c)" below;

STANDARD PREVIEW
(standards.iteh.ai)

[ISO/IEC 9995-2:2009](https://standards.iteh.ai/catalog/standards/sist/7e3a51b9-634d-49bb-8099-2699460469c/iso-iec-9995-2-2009)

<https://standards.iteh.ai/catalog/standards/sist/7e3a51b9-634d-49bb-8099-2699460469c/iso-iec-9995-2-2009>

- b) the digits 0 to 9 shall be allocated to the keys in row E;
- c) the character space shall be allocated to the space bar in row A.

8.2 Allocation of functions to non-graphic keys

Keyboards usually provide one or more of the following functions on non-graphic keys.

- level 2 select;
- tabulation;
- capitals lock/level 2 lock/generalized lock;
- return;
- backspace/backward erase;
- level 3 select;
- group select;
- control;
- alternate.