



# SLOVENSKI STANDARD

## SIST EN 61804-3:2011

01-junij-2011

Nadomešča:  
SIST EN 61804-3:2007

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**Funkcijski bloki (FB) za nadzor procesov - 3. del: Opisni jezik za elektronske naprave (EDDL) (IEC 61804-3:2010)**

Function blocks (FB) for process control - Part 3: Electronic Device Description Language (EDDL) (IEC 61804-3:2010)

Funktionsbausteine für die Prozessautomation - Teil 3: Elektronische Gerätebeschreibungssprache (EDDL) (IEC 61804-3:2010)

Blocs fonction pour les processus industriels - Partie 3: Langage de description électronique du produit (EDDL) (IEC 61804-3:2010)

**Ta slovenski standard je istoveten z: EN 61804-3:2011**

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**ICS:**

25.040.40	Merjenje in krmiljenje industrijskih postopkov	Industrial process measurement and control
35.240.50	Uporabniške rešitve IT v industriji	IT applications in industry

**SIST EN 61804-3:2011** en

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
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**EN 61804-3**

March 2011

ICS 25.040.40; 35.240.50

Supersedes EN 61804-3:2007

English version

**Function Blocks (FB) for process control -  
Part 3: Electronic Device Description Language (EDDL)  
(IEC 61804-3:2010)**

Blocs Fonctionnels (FB) pour le contrôle  
de processus industriel - Partie 3:  
Langage de description d'un équipement  
électronique (EDDL)  
(CEI 61804-3:2010)

Funktionsbausteine für die  
Prozessautomation -  
Teil 3: Elektronische  
Gerätebeschreibungssprache (EDDL)  
(IEC 61804-3:2010)

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This European Standard was approved by CENELEC on 2011-01-03. 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, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

**CENELEC**

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

**Management Centre: Avenue Marnix 17, B - 1000 Brussels**

## Foreword

The text of document 65E/162/FDIS, future edition 2 of IEC 61804-3, prepared by SC 65E, Devices and integration in enterprise systems, of IEC TC 65, Industrial-process measurement, control and automation, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61804-3 on 2011-01-03.

This European Standard supersedes EN 61804-3:2007.

The main changes with respect to EN 61804-3:2007 are listed below <sup>1)</sup>.

### Additions

- Language elements to support modular devices, see 7.9, 7.10, 7.36.1, 7.36.2, 7.36.3, 7.36.13 and 7.36.15;
- Language elements to support offline configuration, 7.31;
- Usage of UTF-8, see A.2.3;
- Various BuiltIns;
- BLOCK\_A referencing. Updates to support access to multiple blocks, see 7.4.1, 7.38.18 up to 7.38.26;
- Add VALIDITY attribute to various lexical structures;
- Support of multi-language images, see 7.18.2.1;
- In 7.23.1 deleted the restriction of the MENU item list;
- Syntactical limitation on conditionals in 7.23.2.1 to restrict the MENU layout;
- Add LIST and delete VARIABLE\_LIST of the MENU items in 7.23.2.1;
- Additional return value data types for METHOD TYPE, see 7.24.2.3;
- Replace reference by a context specific specification in Table 170;
- Clarification on KEY\_POINTS behaviour, see 7.35.2.4;
- Add TRANSPARENT to the lexical structure to make the list of attributes consistent, see 7.36.11;
- Clarification on file behaviour, see 7.36.10;
- Add in Table A.5 the new key-words;
- Add the formal EDDL syntax in A.6.

### Corrections

- Deleted in A.6 all non-needed constructs using the auxiliary ...\_listR. These were created by a non-perfect syntax-checking tool.
- Deleted in A.6 all non-needed "stmt1:" and "stmt2:". These were created by a nonperfect syntax-checking tool.
- Made A.6 consistent about using a colon at the end of a term by amending colons in a consistent way.
- Deleted not used references.
- Deleted in several lexical structures the brackets and "<exp>".

<sup>1)</sup> The historical background to the EDDL specification is given in Annex E.

- Deleted in lexical structures the “[ ... <expr>]” where the conditional expression was not possible.
- Exchanged the attribute WIDTH by HEIGHT in the subclause specifying HEIGHT.
- Spelling errors like GUAGE exchanged to GAUGE.
- Syntactical limitation on conditionals in ACTIONS (for example see 7.14.2.3 and 7.14.2.4) to support conditionals only in the METHODS.
- Clarification on file behaviour in 7.15.
- Add GRID and IMAGES to the attribute list, see 7.19.
- Deleted a duplication of element list in 7.23.2.1.
- Defining and calling METHODS with parameter and return value, see 7.24.
- Restriction on METHOD CLASS, see 7.24.2.2.
- Clarification on SCALING\_FACTOR behaviour, see Table 165.
- Deleted EDDL operators from EDDL keyword list, see Table A.5.
- Clarification on TIME\_VALUE coding providing the absolute basis, see Table D.16 and Table D.17.

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

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The following dates were fixed: **(standards.iteh.ai)**

- latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement **(dop)** 2011-10-03
- latest date by which the national standards conflicting with the EN have to be withdrawn **(dow)** 2014-01-03

Annex ZA has been added by CENELEC.

### Endorsement notice

The text of the International Standard IEC 61804-3:2010 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 61131-3	NOTE	Harmonized as EN 61131-3.
IEC 61804-2	NOTE	Harmonized as EN 61804-2.
IEC/TR 61804-4	NOTE	Harmonized as CLC/TR 61804-4.

## Annex ZA (normative)

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

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.

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 61499-1	2005	Function blocks - Part 1: Architecture	EN 61499-1	2005
IEC/TS 61804-1	2003	Function blocks (FB) for process control - Part 1: Overview of system aspects	-	-
ISO/IEC 2022	-	Information technology - Character code structure and extension techniques	-	-
ISO/IEC 2375	2003	Information technology - Procedure for registration of escape sequences and coded character sets	-	-
ISO/IEC 7498-1	-	Information technology - Open Systems Interconnection - Basic Reference Model: The Basic Model	-	-
ISO/IEC 8859-1	1998	Information technology - 8-bit single-byte coded graphic character sets - Part 1: Latin alphabet No.1	-	-
ISO/IEC 9899	-	Programming languages - C	-	-
ISO/IEC 10646-1	2000	Information technology - Universal Multiple- Octet Coded Character Set (UCS) - Part 1: Architecture and Basic Multilingual Plane	-	-
ISO 639	-	Codes for the representation of names of languages	-	-
ISO 3166-1	2006	Codes for the representation of names of countries and their subdivisions - Part 1: Country codes	EN ISO 3166-1	2006
IEEE 754	1985	Binary Floating-Point Arithmetic (R1990)	-	-
RFC 3629	2003	UTF-8, User Datagram Protocol, available at <a href="http://www.ietf.org/rfc/rfc0768.txt">http://www.ietf.org/rfc/rfc0768.txt</a>	-	-



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# INTERNATIONAL STANDARD



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**Function blocks (FB) for process control –  
Part 3: Electronic Device Description Language (EDDL)**

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