

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE



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

**Blocs fonctionnels (FB) pour les procédés industriels –  
Partie 3: Langage de description électronique de produit (EDDL)**

<https://standards.itec.ai/catalog/standards/sist/61804-3-2010>



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Withhold

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## FUNCTION BLOCKS (FB) FOR PROCESS CONTROL –

## Part 3: Electronic Device Description Language (EDDL)

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International Standard IEC 61804-3 has been prepared by subcommittee 65E: Devices and integration in enterprise systems, of IEC technical committee 65: Industrial process measurement, control and automation.

This second edition cancels and replaces the first edition published in 2006. This edition constitutes a technical revision.

The main changes with respect to the previous edition 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.;

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

- 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 non-perfect 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>"
    - 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 behavior 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.

This bilingual version, published in 2011-07, corresponds to the English version.

The text of this standard is based on the following documents:

FDIS	Report on voting
65E/162/FDIS	65E/173/RVD

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

The French version of this standard has not been voted upon.

This publication has been drafted in accordance with ISO/IEC Directives, Part 2.

A list of all parts of the IEC 61804 series, published under the general title *Function blocks (FB) for process control*, can be found on the IEC web site.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be:

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

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