

# INTERNATIONAL STANDARD



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

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

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INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

PRICE CODE **XH**

ICS 25.040.40; 35.240.50

ISBN 978-2-88912-226-4

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## FUNCTION BLOCKS (FB) FOR PROCESS CONTROL –

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

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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.

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

FDIS	Report on voting
65C/162/FDIS	65C/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.

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

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