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Function blocks (FB) for process control and Electronic Device Description Language (EDDL) - Part 4: EDD interpretation

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ICS 25.040.40, 35.240.50

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NORME EUROPÉENNE  
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EN 61804-4

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Supersedes CLC/TR 61804-4:2007

English Version

Function blocks (FB) for process control and Electronic Device  
Description Language (EDDL) - Part 4: EDD interpretation  
(IEC 61804-4:2015)

Blocs fonctionnels (FB) pour les procédés industriels et le  
langage de description électronique de produit (EDDL) -  
Partie 4: Interprétation EDD  
(IEC 61804-4:2015)

Funktionsbausteine für die Prozessautomation und  
elektronische Gerätebeschreibungssprache - Teil 4:  
Interpretation von Gerätebeschreibungen  
(IEC 61804-4:2015)

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## European foreword

The text of document 65E/465/FDIS, future edition 1 of IEC 61804-4, 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 approved by CENELEC as EN 61804-4:2016.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2016-08-11
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2018-11-11

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**Annex ZA**

(normative)

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

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

NOTE 1 When an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here:  
[www.cenelec.eu](http://www.cenelec.eu).

| <u>Publication</u> | <u>Year</u> | <u>Title</u>   | <u>EN/HD</u> | <u>Year</u> |
|--------------------|-------------|--|--------------|-------------|
| IEC 61784-1        | -           | Industrial communication networks - Profiles -- Part 1: Fieldbus profiles  | EN 61784-1   | -           |
| IEC 61784-2        | -           | Industrial communication networks - Profiles - Part 2: Additional fieldbus profiles for real-time networks based on ISO/IEC 8802-3 | EN 61784-2   | -           |
| IEC 61804-2        | -           | Function Blocks (FB) for process control -- Part 2: Specification of FB concept  | EN 61804-2   | -           |
| IEC 61804-3        | -           | Function blocks (FB) for process control and EDDL - Part 3: EDDL specification and communication profiles                          | EN 61804-3   | -           |
| IEC 61804-5        | -           | Function blocks (FB) for process control and EDDL - Part 5: EDDL Built-in library  | EN 61804-5   | -           |
| ISO/IEC 10918      | series      | Information technology - Digital compression and coding of continuous-tone still images: JPEG File Interchange Format (JFIF)       | -            | series      |
| ISO/IEC 15948      | -           | Information technology - Computer graphics and image processing - Portable Network Graphics (PNG) - Functional specification       | -            | -           |

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## INTRODUCTION

This part of IEC 61804 was developed using material from FDI Cooperation LLC (Foundation™ Fieldbus<sup>1</sup>), HART®<sup>2</sup> Communication Foundation (HCF), PROFIBUS™<sup>3</sup> Nutzerorganisation e.V. (PNO), OPC Foundation (OPCF) and FDT Group. IEC 61804 has the general title "Function blocks (FB) for process control and Electronic Device Description Language (EDDL)".

This edition does reflect many of the various rules defined by the different communication foundations, however it is not a complete representation of those rules defined by each of the communication foundations today. Therefore, an EDD application and EDD developer will need to rely on both IEC 61804-4 and the respective communication foundation documents (e.g. specifications, test requirements, test cases) to develop a conformant application that will meet foundation registration requirements.

Conformity assessment of an EDD application is the responsibility of the respective communication foundations. In cases of any ambiguity, the rules of the respective communication foundations apply.

This part of IEC 61804

- contains an overview of the use of EDDL;
- provides examples demonstrating the use of the EDDL constructs;
- shows how the use cases are fulfilled; and
- shows the proper EDD application interpretation for each example.

This part of IEC 61804 is not an EDDL tutorial and is not intended to replace the EDDL specification.

Instructions are provided for the EDD application, which describe what will be performed without prescribing the technology used in the host implementation. For example, the FILE construct describes data that is stored by the EDD application on behalf of the EDD. The FILE construct does not specify how the data is stored. The EDD application can use a database, a flat file, or any other implementation it chooses.

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