



SLOVENSKI STANDARD SIST EN 61784-3-1:2008

01-september-2008

Industrijska komunikacijska omrežja - Profili - 3-1. del: Funkcijska varnost procesnih vodil - Dodatne specifikacije za CPF 1 (IEC 61784-3-1:2007)

Industrial communication networks - Profiles - Part 3-1: Functional safety fieldbuses - Additional specifications for CPF 1

Industrielle Kommunikationsnetze - Profile - Teil 3-1: Funktional sichere Übertragung bei Feldbussen - Zusätzliche Festlegungen für die Kommunikationsprofilfamilie 1

Réseaux de communication industriels - Profils - Partie 3-1: Bus de terrain de sécurité fonctionnelle - Spécification supplémentaire pour CPF 1

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Ta slovenski standard je istoveten z: EN 61784-3-1:2008

ICS:

25.040.40	Merjenje in krmiljenje industrijskih postopkov	Industrial process measurement and control
35.100.05	X [^] • [b ^ Á] [æ } ž \ ^ ^ z ä ç ^	Multilayer applications

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English version

**Industrial communication networks -
Profiles -
Part 3-1: Functional safety fieldbuses -
Additional specifications for CPF 1
(IEC 61784-3-1:2007)**

Réseaux de communication industriels -
Profils -
Partie 3-1: Bus de terrain
de sécurité fonctionnelle -
Spécification supplémentaire pour CPF 1
(CEI 61784-3-1:2007)

Industrielle Kommunikationsnetze -
Profile -
Teil 3-1: Funktional sichere Übertragung
bei Feldbussen -
Zusätzliche Festlegungen
für die Kommunikationsprofilfamilie 1
(IEC 61784-3-1:2007)

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CENELEC

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

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Foreword

The text of document 65C/470/FDIS, future edition 1 of IEC 61784-3-1, prepared by SC 65C, Industrial networks, 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 61784-3-1 on 2008-05-01.

The following dates were fixed:

- latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2009-02-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2011-05-01

The International Electrotechnical Commission (IEC) and CENELEC draw attention to the fact that it is claimed that compliance with this document may involve the use of patents concerning the functional safety communication profiles for family 1 as follows, where the [xx] notation indicates the holder of the patent right:

US 6,999,824 [FF] System and method for implementing safety instrumented systems in a fieldbus architecture

The IEC and CENELEC take no position concerning the evidence, validity and scope of these patent rights.

The holders of these patent rights have assured the IEC that they are willing to negotiate licences under reasonable and non-discriminatory terms and conditions with applicants throughout the world. In this respect, the statements of the holders of these patent rights are registered with IEC.

Information may be obtained from: [SIST EN 61784-3-1:2008](https://standards.iteh.ai/catalog/standards/sist/90178f59-89ac-4be6-8a25-f830e942299/sist-en-61784-3-1-2008)

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Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61784-3-1:2007 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 60204-1	NOTE	Harmonized as EN 60204-1:2006 (not modified).
IEC 61158	NOTE	Harmonized in EN 61158 series (not modified).
IEC 61326-3-1	NOTE	Harmonized in EN 61326-3-1:2008 (not modified).
IEC 61326-3-2	NOTE	Harmonized in EN 61326-3-2:2008 (not modified).
IEC 61496	NOTE	Harmonized as EN 61496-1:2004 (modified) and as CLC/TS 61496-2:2006 (not modified) and CLC/TC 61496-3:2008 (not modified)
IEC 61508-4	NOTE	Harmonized as EN 61508-4:2001 (not modified).
IEC 61508-6	NOTE	Harmonized as EN 61508-6:2001 (not modified).
IEC 61784-2	NOTE	Harmonized as EN 61784-2:2008 (not modified).
IEC 61784-5	NOTE	Harmonized in EN 61784-5 series (not modified).
IEC 61800-5-2	NOTE	Harmonized as EN 61800-5-2:2007 (not modified).
IEC 62061	NOTE	Harmonized as EN 62061:2005 (not modified).
ISO 12100-1	NOTE	Harmonized as EN ISO 12100-1:2003 (not modified).
ISO 13849-1	NOTE	Harmonized as EN ISO 13849-1:2006 (not modified).
ISO 13849-2	NOTE	Harmonized as EN ISO 13849-2:2003 (not modified).

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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 61131-2	- ¹⁾	Programmable controllers - Part 2: Equipment requirements and tests	EN 61131-2	2007 ²⁾
IEC 61158-2	- ¹⁾	Industrial communication networks - Fieldbus specifications - Part 2: Physical layer specification and service definition	EN 61158-2	2008 ²⁾
IEC 61158-3-1	- ¹⁾	Industrial communication networks - Fieldbus specifications - Part 3-1: Data-link layer service definition - Type 1 elements	EN 61158-3-1	2008 ²⁾
IEC 61158-4-1	- ¹⁾	Industrial communication networks - Fieldbus specifications - Part 4-1: Data-link layer protocol specification - Type 1 elements	EN 61158-4-1	2008 ²⁾
IEC 61158-5-5	- ¹⁾	Industrial communication networks - Fieldbus specifications - Part 5-5: Application layer service definition - Type 5 elements	EN 61158-5-5	2008 ²⁾
IEC 61158-5-9	- ¹⁾	Industrial communication networks - Fieldbus specifications - Part 5-9: Application layer service definition - Type 9 elements	EN 61158-5-9	2008 ²⁾
IEC 61158-6-5	- ¹⁾	Industrial communication networks - Fieldbus specifications - Part 6-5: Application layer protocol specification - Type 5 elements	EN 61158-6-5	2008 ²⁾
IEC 61158-6-9	- ¹⁾	Industrial communication networks - Fieldbus specifications - Part 6-9: Application layer protocol specification - Type 9 elements	EN 61158-6-9	2008 ²⁾
IEC 61508	Series	Functional safety of electrical/electronic/programmable electronic safety-related systems	EN 61508	Series
IEC 61511	Series	Functional safety - Safety instrumented systems for the process industry sector	EN 61511	Series
IEC 61784-1	- ¹⁾	Industrial communication networks - Profiles - Part 1: Fieldbus profiles	EN 61784-1	2008 ²⁾

¹⁾ Undated reference.

²⁾ Valid edition at date of issue.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61784-3	- ¹⁾	Industrial communication networks - Profiles - Part 3: Functional safety fieldbuses - General rules and profile definitions	EN 61784-3	2008 ²⁾
IEC 61918 (mod)	- ¹⁾	Industrial communication networks - Installation of communication networks in industrial premises	EN 61918	2008 ²⁾
IEC 62280-1	2002	Railway applications - Communication, signalling and processing systems - Part 1: Safety-related communication in closed transmission systems	-	-

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IEC 61784-3-1

Edition 1.0 2007-12

INTERNATIONAL STANDARD

**Industrial communication networks – Profiles –
Part 3-1: Functional safety fieldbuses – Additional specifications for CPF 1**

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SIST EN 61784-3-1:2008
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INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

PRICE CODE **XB**

ICS 35.100.05 25.040.40

ISBN 2-8318-9398-4

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

INDUSTRIAL COMMUNICATION NETWORKS – PROFILES

Part 3-1: Functional safety fieldbuses – Additional specifications for CPF 1

FOREWORD

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US 6,999,824	[FF]	System and method for implementing safety instrumented systems in a fieldbus architecture
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International Standard IEC 61784-3-1 has been prepared by subcommittee 65C: Industrial networks, of IEC technical committee 65: Industrial process measurement, control and automation.

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

FDIS	Report on voting
65C/470/FDIS	65C/481/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 the ISO/IEC Directives, Part 2.

The committee has decided that the contents of this publication will remain unchanged until the maintenance result 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.

The list of all parts of the IEC 61784-3 series, under the general title *Industrial communication networks – Profiles – Functional safety fieldbuses*, can be found on the IEC website.

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