



# SLOVENSKI STANDARD

## SIST EN 61784-5-3:2008

01-september-2008

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### Industrijska komunikacijska omrežja - Profili - 5-3. del: Inštalacija procesnih vodil - Inštalacijski profili za CPF 3 (IEC 61784-5-3:2007)

Industrial communication networks - Profiles - Part 5-3: Installation of fieldbuses - Installation profiles for CPF 3

Industrielle Kommunikationsnetze - Profile - Teil 5-3: Feldbusinstallation - Installationsprofile für die Kommunikationsprofilfamilie 3

Réseaux de communication industriels - Profils - Partie 5-3: Installation des bus de terrain - Profils d'installation pour CPF 3

**Ta slovenski standard je istoveten z: EN 61784-5-3:2008**

#### ICS:

25.040.40	Merjenje in krmiljenje industrijskih postopkov	Industrial process measurement and control
35.100.05	X <sup>^</sup> • [ b ^ Á ] [   æ } ž \ ^ ! ^ z a ç ^	Multilayer applications

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
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**EN 61784-5-3**

June 2008

ICS 35.100.05; 25.040.40

English version

**Industrial communication networks -  
Profiles -  
Part 5-3: Installation of fieldbuses -  
Installation profiles for CPF 3  
(IEC 61784-5-3:2007)**

Réseaux de communication industriels -  
Profils -  
Partie 5-3: Installation des bus de terrain -  
Profils d'installation pour CPF 3  
(CEI 61784-5-3:2007)

Industrielle Kommunikationsnetze -  
Profile -  
Teil 5-3: Feldbusinstallation -  
Installationsprofile  
für die Kommunikationsprofilfamilie 3  
(IEC 61784-5-3:2007)

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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.

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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/471/FDIS, future edition 1 of IEC 61784-5-3, 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 61784-5-3 on 2008-05-01.

This standard is to be used in conjunction with EN 61918:2008.

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

Annex ZA has been added by CENELEC.

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## Endorsement notice

The text of the International Standard IEC 61784-5-3:2007 was approved by CENELEC as a European Standard without any modification.

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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>
-	-	Electrical apparatus for potentially explosive atmospheres - Intrinsic safety 'i'	EN 50020	- <sup>1)</sup>
IEC 60079-0 (mod)	2004	Electrical apparatus for explosive gas atmospheres - Part 0: General requirements	EN 60079-0	2006
IEC 60079-11 + corr. December	2006 2006	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"	EN 60079-11	2007
IEC 60079-27	2005	Electrical apparatus for explosive gas atmospheres - Part 27: Fieldbus intrinsically safe concept (FISCO) and Fieldbus non-incendive concept (FNICO)	EN 60079-27	2006
IEC 60793-2-10	2007	Optical fibres - Part 2-10: Product specifications - Sectional specification for category A1 multimode fibres	EN 60793-2-10	2007
IEC 60793-2-50	2004	Optical fibres - Part 2-50: Product specifications - Sectional specification for class B single-mode fibres	EN 60793-2-50 + corr. July	2004 2004
IEC 61000-4-2 A1 A2	1995 1998 2000	Electromagnetic compatibility (EMC) - Part 4-2: Testing and measurement techniques - Electrostatic discharge immunity test	EN 61000-4-2 A1 A2	1995 1998 2001
IEC/PAS 61076-2-107	2007	Connectors for electronic equipment - Product requirements - Part 2-107: Detail specification for circular hybrid connectors M12 with electrical and fibre-optical contacts with screw-locking	-	-
IEC 61156-5	2002	Multicore and symmetrical pair/quad cables for digital communications - Part 5: Symmetrical pair/quad cables with transmission characteristics up to 600 MHz - Horizontal floor wiring - Sectional specification	-	-

<sup>1)</sup> Undated reference.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61508	Series	Functional safety of electrical/electronic/programmable electronic safety-related systems	EN 61508	Series
IEC 61918 (mod)	2007	Industrial communication networks - Installation of communication networks in industrial premises	EN 61918	2008
ANSI TIA/EIA-485-A	- <sup>1)</sup>	Electrical Characteristics of Generators and Receivers for Use in Balanced Digital Multipoint Systems	-	-

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IEC 61784-5-3

Edition 1.0 2007-12

# INTERNATIONAL STANDARD

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**Industrial communication networks – Profiles –  
Part 5-3: Installation of fieldbuses – Installation profiles for CPF 3**

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INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

PRICE CODE **XE**

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

## INDUSTRIAL COMMUNICATION NETWORKS – PROFILES

## Part 5-3: Installation of fieldbuses – Installation profiles for CPF 3

## FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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International Standard IEC 61784-5-3 has been prepared by subcommittee 65C: Industrial networks, of IEC technical committee 65: Industrial-process measurement, control and automation.

This standard is to be used in conjunction with IEC 61918:2007.

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

FDIS	Report on voting
65C/471/FDIS	65C/482/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.

A list of all parts of the IEC 61784-5 series, under the general title *Industrial communication networks – Profiles – Installation of fieldbuses*, can be found on the IEC website.

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.

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## INTRODUCTION

This International Standard is one of a series produced to facilitate the use of communication networks in industrial control systems.

IEC 61918:2007 (Ed. 1.0) provides the common requirements for the installation of communication networks in industrial control systems. This installation profile standard provides the installation profiles of the communication profiles (CP) of a specific communication profile family (CPF) by stating which requirements of IEC 61918 fully apply and, where necessary, by supplementing, modifying, or replacing the other requirements (see Figure 1).

For general background on fieldbuses, their profiles, and relationship between the installation profiles specified in this standard, see IEC/TR 61158-1.

Each CP installation profile is specified in a separate annex of this standard. Each annex is structured exactly as the reference standard IEC 61918 for the benefit of the persons representing the roles in the fieldbus installation process as defined in IEC 61918 (planner, installer, verification personnel, validation personnel, maintenance personnel, administration personnel). By reading the installation profile in conjunction with IEC 61918, these persons immediately know which requirements are common for the installation of all CPs and which are modified or replaced. The conventions used to draft this standard are defined in Clause 5.

The provision of the installation profiles in one standard for each CPF (for example IEC 61784-5-3 for CPF 3) allows readers to work with standards of a convenient size.

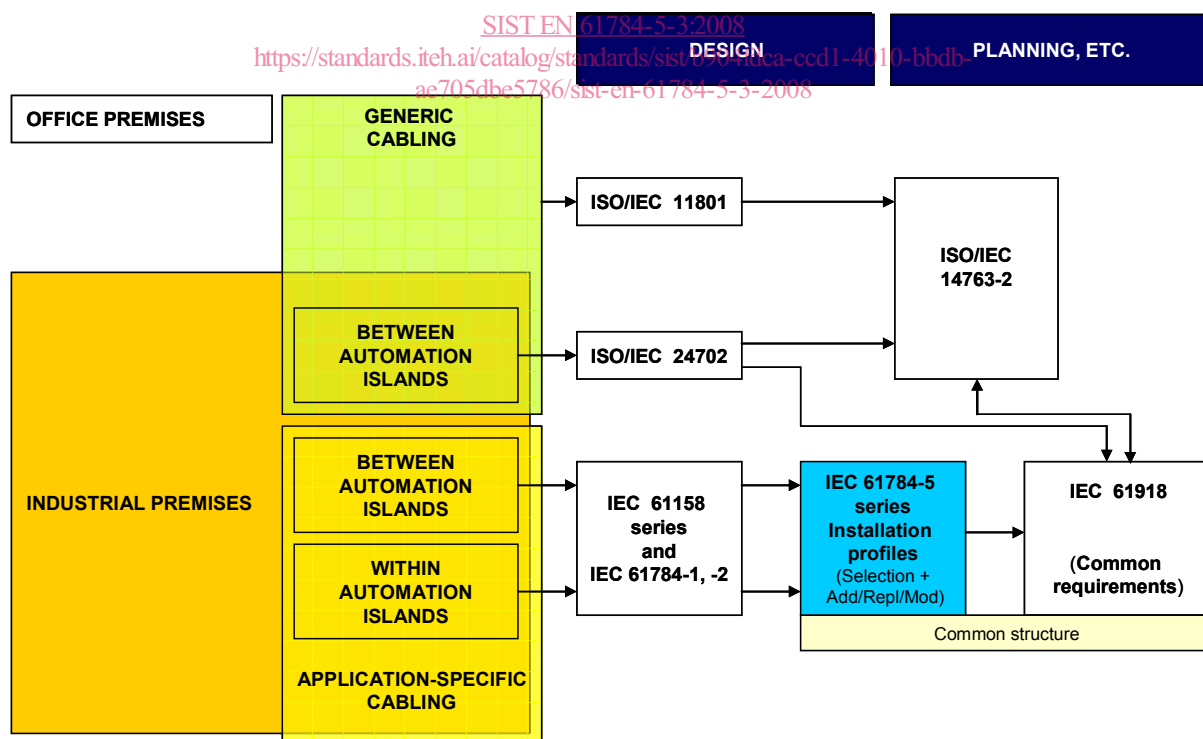


Figure 1 – Standards relationships