



# SLOVENSKI STANDARD SIST EN 61784-5-6:2008

01-september-2008

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## Industrijska komunikacijska omrežja - Profili - 5-6. del: Inštalacija procesnih vodil - Inštalacijski profili za CPF 6 (IEC 61784-5-6:2007)

Industrial communication networks - Profiles - Part 5-6: Installation of fieldbuses - Installation profiles for CPF 6

Industrielle Kommunikationsnetze - Profile - Teil 5-6: Feldbusinstallation - Installationsprofile für die Kommunikationsprofilfamilie 6

Réseaux de communication industriels - Profils - Partie 5-6: Installation des bus de terrain - Profils d'installation pour CPF 6

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Ta slovenski standard je istoveten z: EN 61784-5-6:2008

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### 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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**Industrial communication networks -  
Profiles -  
Part 5-6: Installation of fieldbuses -  
Installation profiles for CPF 6  
(IEC 61784-5-6:2007)**

Réseaux de communication industriels -  
Profils -  
Partie 5-6: Installation des bus de terrain -  
Profils d'installation pour CPF 6  
(CEI 61784-5-6:2007)

Industrielle Kommunikationsnetze -  
Profile -  
Teil 5-6: Feldbusinstallation -  
Installationsprofile  
für die Kommunikationsprofilfamilie 6  
(IEC 61784-5-6:2007)

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This European Standard was approved by CENELEC on 2008-05-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

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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/471/FDIS, future edition 1 of IEC 61784-5-6, 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 61784-5-6 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 61784-5-6:2007 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following note has to be added for the standard indicated:

IEC 61158 NOTE Harmonized in EN 61158 series (not modified).

[SIST EN 61784-5-6:2008](https://standards.iteh.ai/catalog/standards/sist/578d4c57-138e-4187-94cb-1e1139247074/sist-en-61784-5-6-2008)

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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 60794-1-2	2003	Optical fibre cables - Part 1-2: Generic specification - Basic optical cable test procedures	EN 60794-1-2	2003
IEC 61076-3-106	2006	Connectors for electronic equipment - Product requirements - Part 3-106: Rectangular connectors - Detail specification for protective housings for use with 8-way shielded and unshielded connectors for industrial environments incorporating the IEC 60603-7 series interface	EN 61076-3-106	2006
IEC 61156-1	2002	Multicore and symmetrical pair/quad cables - for digital communications - Part 1: Generic specification	-	-
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	-	-
IEC 61918 (mod)	2007	Industrial communication networks - Installation of communication networks in industrial premises	EN 61918	2008

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IEC 61784-5-6

Edition 1.0 2007-12

# INTERNATIONAL STANDARD

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**Industrial communication networks – Profiles –  
Part 5-6: Installation of fieldbuses – Installation profiles for CPF 6**

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## CONTENTS

FOREWORD.....	5
INTRODUCTION.....	7
1 Scope.....	8
2 Normative references.....	8
3 Terms, definitions and abbreviated terms.....	8
4 CPF 6: Overview of installation profiles.....	8
5 Installation profile conventions.....	8
6 Conformance to installation profiles.....	10
Annex A (Normative) CPF 6 Type 8 network specific installation profile.....	11
A.1 Installation profile scope.....	11
A.2 Normative references.....	11
A.3 Installation profile terms, definitions, and abbreviated terms.....	11
A.3.1 Terms and definitions.....	11
A.3.2 Abbreviated terms.....	12
A.3.3 Conventions for installation profiles.....	12
A.4 Installation planning.....	13
A.4.1 Introduction.....	13
A.4.2 Planning requirements.....	13
A.4.3 Network capabilities.....	14
A.4.4 Selection and use of cabling components.....	19
A.4.5 Cabling planning documentation.....	26
A.4.6 Verification of cabling planning specification.....	26
A.5 Installation implementation.....	26
A.5.1 General requirements.....	26
A.5.2 Cable installation.....	26
A.5.3 Connector installation.....	28
A.5.4 Terminator installation.....	30
A.5.5 Device installation.....	30
A.5.6 Coding and labeling.....	30
A.5.7 Earthing and bonding of equipment and devices and shield cabling.....	30
A.5.8 As-implemented cabling documentation.....	30
A.6 Installation verification and installation acceptance test.....	31
A.6.1 Introduction.....	31
A.6.2 Installation verification.....	31
A.6.3 Installation acceptance test.....	32
A.7 Installation administration.....	32
A.8 Installation maintenance and installation Troubleshooting.....	33
Annex B (Normative) CP 6/2 Ethernet network specific installation profile.....	34
B.1 Installation profile scope.....	34
B.2 Normative references.....	34
B.3 Installation profile terms, definitions, and abbreviated terms.....	34
B.3.1 Terms and definitions.....	34
B.3.2 Abbreviated terms.....	34
B.3.3 Conventions for installation profiles.....	34
B.4 Installation planning.....	35
B.4.1 Introduction.....	35



B.4.2	Planning requirements .....	35
B.4.3	Network capabilities .....	36
B.4.4	Selection and use of cabling components .....	39
B.4.5	Cabling planning documentation .....	45
B.4.6	Verification of cabling planning specification .....	45
B.5	Installation implementation .....	45
B.5.1	General requirements .....	45
B.5.2	Cable installation .....	45
B.5.3	Connector installation .....	47
B.5.4	Terminator installation .....	48
B.5.5	Device installation .....	48
B.5.6	Coding and labeling .....	48
B.5.7	Earthing and bonding of equipment and devices and shield cabling .....	49
B.5.8	As-implemented cabling documentation .....	49
B.6	Installation verification and installation acceptance test .....	49
B.6.1	Introduction .....	49
B.6.2	Installation verification .....	49
B.6.3	Installation acceptance test .....	49
B.7	Installation administration .....	49
B.8	Installation maintenance and installation Troubleshooting .....	49
Bibliography	.....	50

**ITeH STANDARD PREVIEW**  
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Table A.1	– Basic network characteristics for balanced cabling not based on Ethernet .....	17
Table A.2	– Network characteristics for optical fibre cabling .....	18
Table A.3	– Information relevant to balanced cable: fixed cables .....	19
Table A.4	– Information relevant to balanced cable: cords .....	20
Table A.5	– Remote bus fibre optic cable length .....	22
Table A.6	– Connectors for balanced cabling CPs not based on Ethernet .....	23
Table A.7	– Optical fibre connecting hardware .....	23
Table A.8	– Colour code for balanced cables used by Type 8 networks .....	24
Table A.9	– Parameters for balanced cables .....	27
Table A.10	– Parameters for silica optical fibre cables .....	27
Table A.11	– Parameters for POF optical fibre cables .....	27
Table A.12	– Parameters for hard cladded silica optical fibre cables .....	28
Table A.13	– Pin assignment of the terminal connector .....	30
Table B.1	– Network characteristics for balanced cabling based on Ethernet .....	37
Table B.2	– Network characteristics for optical fibre cabling .....	38
Table B.3	– Information relevant to balanced cable: fixed cables .....	39
Table B.4	– Information relevant to balanced cable: cords .....	40
Table B.5	– Information relevant to optical fibre cables .....	41
Table B.6	– Connectors for balanced cabling CPs based on Ethernet .....	42
Table B.7	– Optical fibre connecting hardware .....	42
Table B.8	– Dimensions of the sealed SC-RJ free connector .....	43
Table B.9	– Dimensions of the sealed SC-RJ fixed adaptor .....	44
Table B.10	– Typical parameters for copper cables .....	46

Table B.11 – Typical parameters for Silica fibre cables ..... 46

Table B.12 – POF fibre cables..... 46

Table B.13 – Hard cladded silica fibre cables ..... 47

Table B.14 – Connector pin assignment ..... 48

Figure 1 – Standards relationships ..... 7

Figure A.1 – Type 8 network structure example ..... 15

Figure A.2 – Example of a Type 8 network configuration..... 16

Figure A.3 – Sub-D connector pin assignments..... 29

Figure A.4 – M23 circular connector pin assignments ..... 29

Figure A.5 – M12 circular connector pin assignments ..... 30

Figure A.6 – Terminal connector at the device ..... 30

Figure B.1 – Sealed SC-RJ free connector ..... 43

Figure B.2 – Sealed SC-RJ fixed adaptor..... 44

Figure B.3 – Terminal connector at the device ..... 48

Figure B.4 – Pin numbering..... 48

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SIST EN 61784-5-6:2008

<https://standards.iteh.ai/catalog/standards/sist/578d4c57-138e-4187-94cb-1e1139247074/sist-en-61784-5-6-2008>

## INTERNATIONAL ELECTROTECHNICAL COMMISSION

## INDUSTRIAL COMMUNICATION NETWORKS – PROFILES

## Part 5-6: Installation of fieldbuses – Installation profiles for CPF 6

## 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 61784-5-6 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 (e.g. IEC 61784-5-6 for CPF 6), allows readers to work with standards of a convenient size.

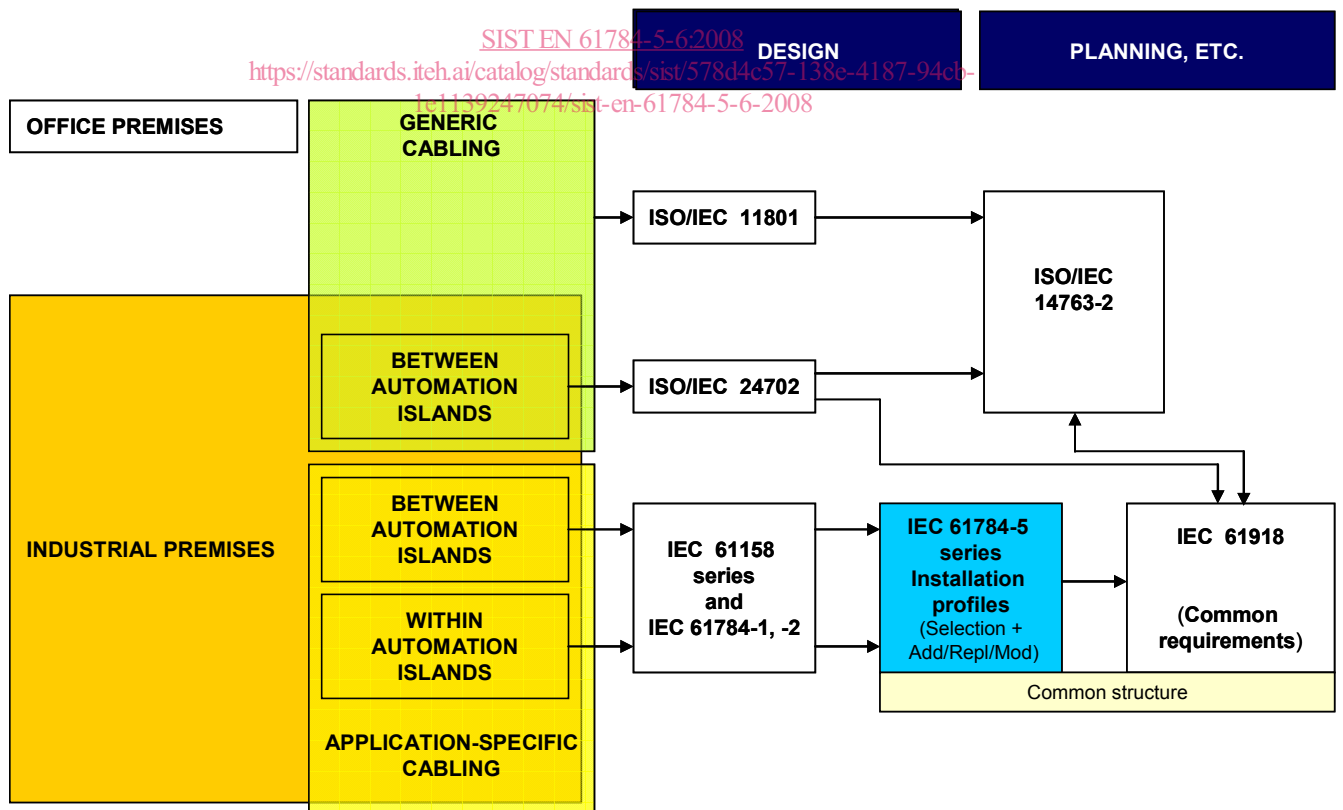


Figure 1 – Standards relationships

## INDUSTRIAL COMMUNICATION NETWORKS – PROFILES

### Part 5-6: Installation of fieldbuses – Installation profiles for CPF 6

#### 1 Scope

This part of IEC 61784 specifies the installation profiles for the media specified in CPF 6 (INTERBUS)<sup>1</sup>.

The installation profiles are specified in the annexes. These annexes are read in conjunction with IEC 61918:2007.

#### 2 Normative references

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.

IEC 61918:2007, *Industrial communication networks – Installation of communication networks in industrial premises*

The normative references of IEC 61918:2007, Clause 2, apply. For profile specific normative references see A.2, and B.2.

#### 3 Terms, definitions and abbreviated terms

For the purpose of this document, the terms, definitions and abbreviated terms of IEC 61918:2007, Clause 3, apply. For profile specific terms, definitions and abbreviated terms see A.3 and B.3.

#### 4 CPF 6: Overview of installation profiles

CPF 6 consists of seven CPs (see IEC 61784-1 for CP 6/1, CP 6/2, CP 6/3, see 61784-2 for CP 6/4, CP 6/5, CP 6/6, see 61784-3-6 for FSCP 6/7).

The CPF 6 Type 8 network (non Ethernet based) installation profile is specified in Annex A.

The CP 6/2 Ethernet specific installation profile file is specified in Annex B

#### 5 Installation profile conventions

The numbering of the clauses and subclauses in the annexes of this standard corresponds to the numbering of IEC 61918:2007 main clauses and subclauses.

The annex clauses and subclauses of this standard supplement, modify, or replace the respective clauses and subclauses in IEC 61918:2007.

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<sup>1</sup> INTERBUS is a trade name of INTERBUS Club, an independent organisation of users and vendors of INTERBUS products. This information is given for the convenience of users of this International Standard and does not constitute an endorsement by IEC of the trademark holder or any of its products. Compliance to this profile does not require use of the trade name INTERBUS. Use of the trade name INTERBUS requires permission of the trade name holder.

Where there is no corresponding subclause of IEC 61918:2007 in the normative annexes in this standard, the subclause of IEC 61918:2007 applies without modification.

The annex heading letter represents the installation profile assigned in Clause 4. The annex heading number shall represent the corresponding numbering of IEC 61918:2007.

EXAMPLE “Annex A.4.4” in IEC 61784-5-6 means that the installation profile for the Type 8 network profiles specifies the Subclause 4.4 of IEC 61918:2007.

All main clauses of IEC 61918:2007 are cited and apply in full unless otherwise stated in each normative installation profile annex.

If all subclauses of a (sub)clause are omitted, then the corresponding IEC 61918 (sub)clause applies.

If in a (sub)clause it is written “Not applicable”, then the corresponding IEC 61918 (sub)clause does not apply.

If in a (sub)clause it is written “Addition”, then the corresponding IEC 61918 (sub)clause applies with the additions written in the profile.

If in a (sub)clause it is written “Replacement”, then the text provided in the profile replaces the text of the corresponding IEC 61918 (sub)clause.

NOTE A replacement can also comprise additions.

If in a (sub)clause it is written “Modification”, then the corresponding IEC 61918 (sub)clause applies with the modifications written in the profile.

If all (sub)clauses of a (sub)clause are omitted but in this (sub)clause it is written “(sub)clause x has “Addition” (or “Replacement”) or is “Not applicable””, then (sub)clause x becomes valid as declared and all the other corresponding IEC 61918 (sub)clauses apply.