



**SLOVENSKI STANDARD**  
**SIST EN IEC 61784-5-20:2019**  
**01-april-2019**

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**Industrijska komunikacijska omrežja - Profili - 5-20. del: Inštalacija procesnih vodil  
- Inštalacijski profili za CPF 20 (IEC 61784-5-20:2018)**

Industrial communication networks - Profiles - Part 5-20: Installation of fieldbuses -  
Installation profiles for CPF 20 (IEC 61784-5-20:2018)

Industrielle Kommunikationsnetze - Profile - Teil 5-20: Feldbusinstallation -  
Installationsprofile für die Kommunikationsprofilfamilie 20 (IEC 61784-5-20:2018)

Réseaux de communication industriels - Profils - Partie 5-20: Installation des bus de  
terrain - Profils d'installation pour CPF 20 (IEC 61784-5-20:2018)

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**Ta slovenski standard je istoveten z: EN IEC 61784-5-20:2018**

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**ICS:**

25.040.40	Merjenje in krmiljenje industrijskih postopkov	Industrial process measurement and control
35.100.40	Transportni sloj	Transport layer

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EUROPEAN STANDARD

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English Version

**Industrial communication networks - Profiles - Part 5-20:  
Installation of fieldbuses - Installation profiles for CPF 20  
(IEC 61784-5-20:2018)**

Réseaux de communication industriels - Profils - Partie 5-20: Installation des bus de terrain - Profils d'installation pour CPF 20  
(IEC 61784-5-20:2018)

Industrielle Kommunikationsnetze - Profile - Teil 5-20: Feldbusinstallation - Installationsprofile für die Kommunikationsprofilfamilie 20  
(IEC 61784-5-20:2018)

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

**CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels**

**EN IEC 61784-5-20:2018 (E)****European foreword**

The text of document 65C/924/FDIS, future edition 1 of IEC 61784-5-20, 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 approved by CENELEC as EN IEC 61784-5-20:2018.

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) 2019-07-04
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2021-10-04

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## Annex ZA (normative)

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

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 1 Where 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 61918	2018	Industrial communication networks - Installation of communication networks in industrial premises	EN IEC 61918	2018

The normative references of EN IEC 61918:2018, Clause 2, apply.

NOTE For profile specific normative references, see Clauses A.2 and B.2.

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IEC 61784-5-20

Edition 1.0 2018-08

# INTERNATIONAL STANDARD



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**Industrial communication networks – Profiles –  
Part 5-20: Installation of fieldbuses – Installation profiles for CPF 20**

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INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

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## CONTENTS

FOREWORD.....	4
INTRODUCTION.....	6
1 Scope.....	7
2 Normative references .....	7
3 Terms, definitions, symbols and abbreviations.....	7
4 CPF 20: Overview of installation profiles .....	7
5 Installation profile conventions .....	8
6 Conformance to installation profiles.....	8
Annex A (normative) CP 20/1 (ADS-net/ $\mu$ SNETWORK-1000) specific installation profile .....	10
A.1 Installation profile scope .....	10
A.2 Normative references.....	10
A.3 Installation profile terms, definitions, and abbreviated terms .....	10
A.3.1 Terms and definitions .....	10
A.3.2 Abbreviated terms .....	10
A.3.3 Conventions for installation profiles .....	10
A.4 Installation planning.....	11
A.4.1 General .....	11
A.4.2 Planning requirements.....	11
A.4.3 Network capabilities.....	11
A.4.4 Selection and use of cabling components.....	13
A.4.5 Cabling planning documentation.....	20
A.4.6 Verification of cabling planning specification.....	20
A.5 Installation implementation .....	20
A.5.1 General requirements .....	20
A.5.2 Cable installation.....	20
A.5.3 Connector installation.....	22
A.5.4 Terminator installation .....	22
A.5.5 Device installation .....	22
A.5.6 Coding and labelling.....	22
A.5.7 Earthing and bonding of equipment and devices and shield cabling.....	23
A.5.8 As-implemented cabling documentation.....	23
A.6 Installation verification and installation acceptance test .....	23
A.6.1 General .....	23
A.6.2 Installation verification.....	23
A.6.3 Installation acceptance test .....	25
A.7 Installation administration .....	25
A.8 Installation maintenance and installation troubleshooting.....	25
Annex B (normative) CP 20/2 (ADS-net/NX) specific installation profile .....	26
B.1 Installation profile scope .....	26
B.2 Normative references.....	26
B.3 Installation profile terms, definitions, and abbreviated terms .....	26
B.3.1 Terms and definitions .....	26
B.3.2 Abbreviated terms .....	26
B.3.3 Conventions for installation profiles .....	26
B.4 Installation planning.....	27



B.4.1	General .....	27
B.4.2	Planning requirements .....	27
B.4.3	Network capabilities .....	27
B.4.4	Selection and use of cabling components .....	29
B.4.5	Cabling planning documentation .....	36
B.4.6	Verification of cabling planning specification .....	36
B.5	Installation implementation .....	36
B.5.1	General requirements .....	36
B.5.2	Cable installation .....	36
B.5.3	Connector installation .....	38
B.5.4	Terminator installation .....	38
B.5.5	Device installation .....	38
B.5.6	Coding and labelling .....	38
B.5.7	Earthing and bonding of equipment and devices and shield cabling .....	39
B.5.8	As-implemented cabling documentation .....	39
B.6	Installation verification and installation acceptance test .....	39
B.6.1	General .....	39
B.6.2	Installation verification .....	39
B.6.3	Installation acceptance test .....	41
B.7	Installation administration .....	41
B.8	Installation maintenance and installation troubleshooting .....	41
Bibliography	.....	42
Figure 1 – Standards relationships .....		6
Table A.1 – Network characteristics for balanced cabling based on Ethernet .....		12
Table A.2 – Network characteristics for optical fibre cabling .....		13
Table A.3 – Information relevant to copper cable: fixed cables .....		14
Table A.4 – Information relevant to copper cable: cords .....		14
Table A.5 – Information relevant to optical fibre cables .....		15
Table A.6 – Connectors for balanced cabling CPs based on Ethernet .....		15
Table A.7 – Optical fibre connecting hardware .....		16
Table A.8 – Relationship between FOC and fibre types (CP 20/1) .....		16
Table A.9 – Parameters for balanced cables .....		20
Table A.10 – Parameters for silica optical fibre cables .....		21
Table B.1 – Network characteristics for balanced cabling based on Ethernet .....		28
Table B.2 – Network characteristics for optical fibre cabling .....		29
Table B.3 – Information relevant to copper cable: fixed cables .....		30
Table B.4 – Information relevant to copper cable: cords .....		30
Table B.5 – Information relevant to optical fibre cables .....		31
Table B.6 – Connectors for balanced cabling CPs based on Ethernet .....		31
Table B.7 – Optical fibre connecting hardware .....		32
Table B.8 – Relationship between FOC and fibre types (CP 20/2) .....		32
Table B.9 – Parameters for balanced cables .....		36
Table B.10 – Parameters for silica optical fibre cables .....		37

## INTERNATIONAL ELECTROTECHNICAL COMMISSION

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**INDUSTRIAL COMMUNICATION NETWORKS –  
PROFILES –**
**Part 5-20: Installation of fieldbuses –  
Installation profiles for CPF 20**
**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 61784-5-20 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 61918:2018.

The text of this International Standard is based on the following documents:

FDIS	Report on voting
65C/924/FDIS	65C/925/RVD

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

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

A list of all parts of the IEC 61784-5 series, published 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 document will remain unchanged until the stability date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific document. At this date, the document 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 61918:2018 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 document, see IEC 61158-1. Each CP installation profile is specified in a separate annex of this document. 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 document are defined in Clause 5. The provision of the installation profiles in one standard for each CPF (for example IEC 61784-5-20 for CPF 20) allows readers to work with standards of a convenient size.

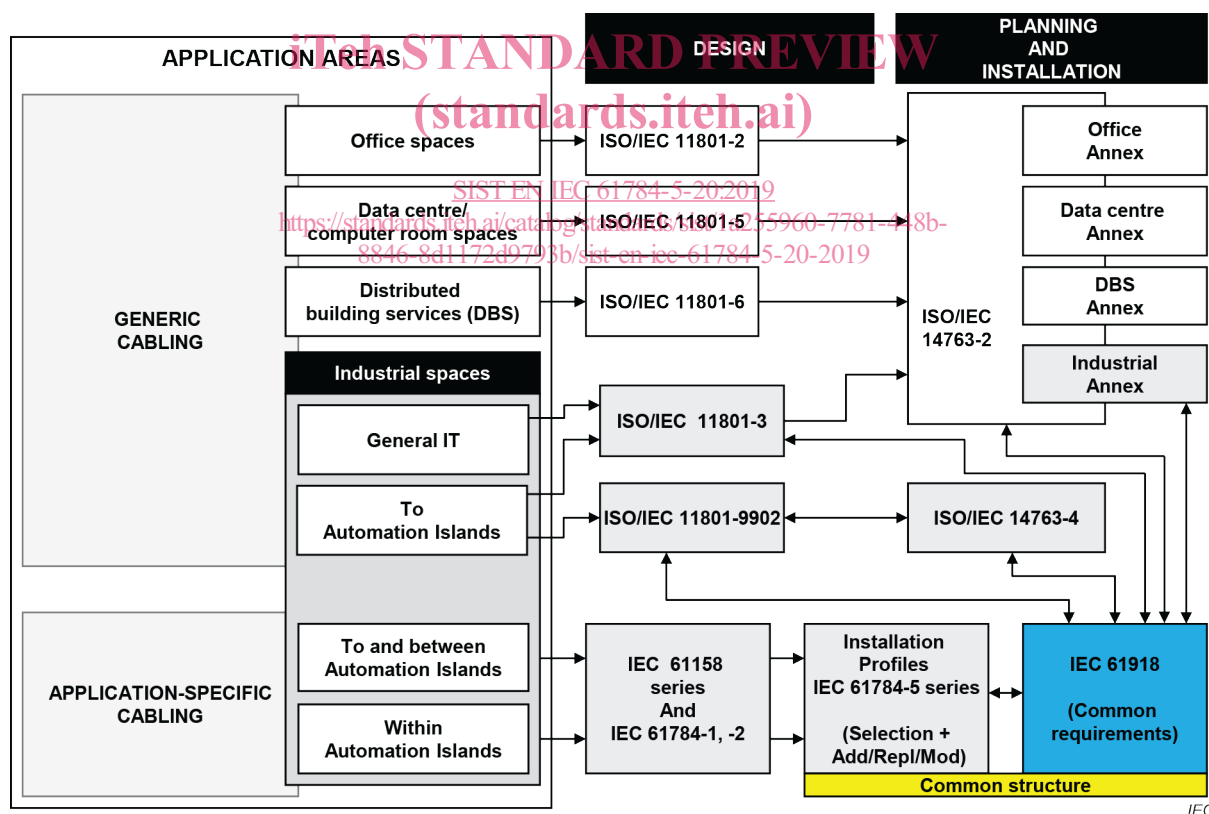


Figure 1 – Standards relationships

## INDUSTRIAL COMMUNICATION NETWORKS – PROFILES –

### Part 5-20: Installation of fieldbuses – Installation profiles for CPF 20

#### 1 Scope

This part of IEC 61784 specifies the installation profiles for CPF 20 (ADS-net<sup>1</sup>).

The installation profiles are specified in the annexes. These annexes are read in conjunction with IEC 61918:2018.

#### 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 61918:2018, *Industrial communication networks – Installation of communication networks in industrial premises* (standards.iteh.ai)

The normative references of IEC 61918:2018, Clause 2, apply.

NOTE For profile specific normative references, see Clauses A.2 and B.2.

#### 3 Terms, definitions, symbols and abbreviations

For the purposes of this document, the terms and definitions given in IEC 61918 apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

NOTE For profile specific terms, definitions and abbreviated terms see Clauses A.3 and B.3.

#### 4 CPF 20: Overview of installation profiles

CPF 20 consists of two Communication Profiles as specified in IEC 61784-2.

The installation requirements for CP 20/1 (ADS-net/ $\mu$ SNETWORK-1000<sup>1</sup>) are specified in Annex A.

The installation requirements for CP 20/2 (ADS-net/NX<sup>1</sup>) are specified in Annex B.

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<sup>1</sup> ADS-net, ADS-net/ $\mu$ SNETWORK-1000 and ADS-net/NX are used to describe this document.