SLOVENSKI STANDARD
SIST EN IEC 61784-5-20:2019

01-april-2019

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)

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

ICS:

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

SIST EN IEC 61784-5-20:2019 **en,fr,de**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN IEC 61784-5-20

December 2018

ICS 25.040.40; 35.100.40

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)

This European Standard was approved by CENELEC on 2018-10-04. 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.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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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

Ref. No. 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

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC shall not be held responsible for identifying any or all such patent rights.

Endorsement notice

The text of the International Standard IEC 61784-5-20:2018 was approved by CENELEC as a European Standard without any modification.

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.

Publication	Year	Title	EN/HD	Year
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.

IEC 61784-5-20

Edition 1.0 2018-08

INTERNATIONAL STANDARD

colour inside

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

INTERNATIONAL ELECTROTECHNICAL COMMISSION

ICS 25.040.40; 35.100.40

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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.

A bilingual version of this publication may be issued at a later date.

IMPORTANT – The 'colour inside' logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.

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.

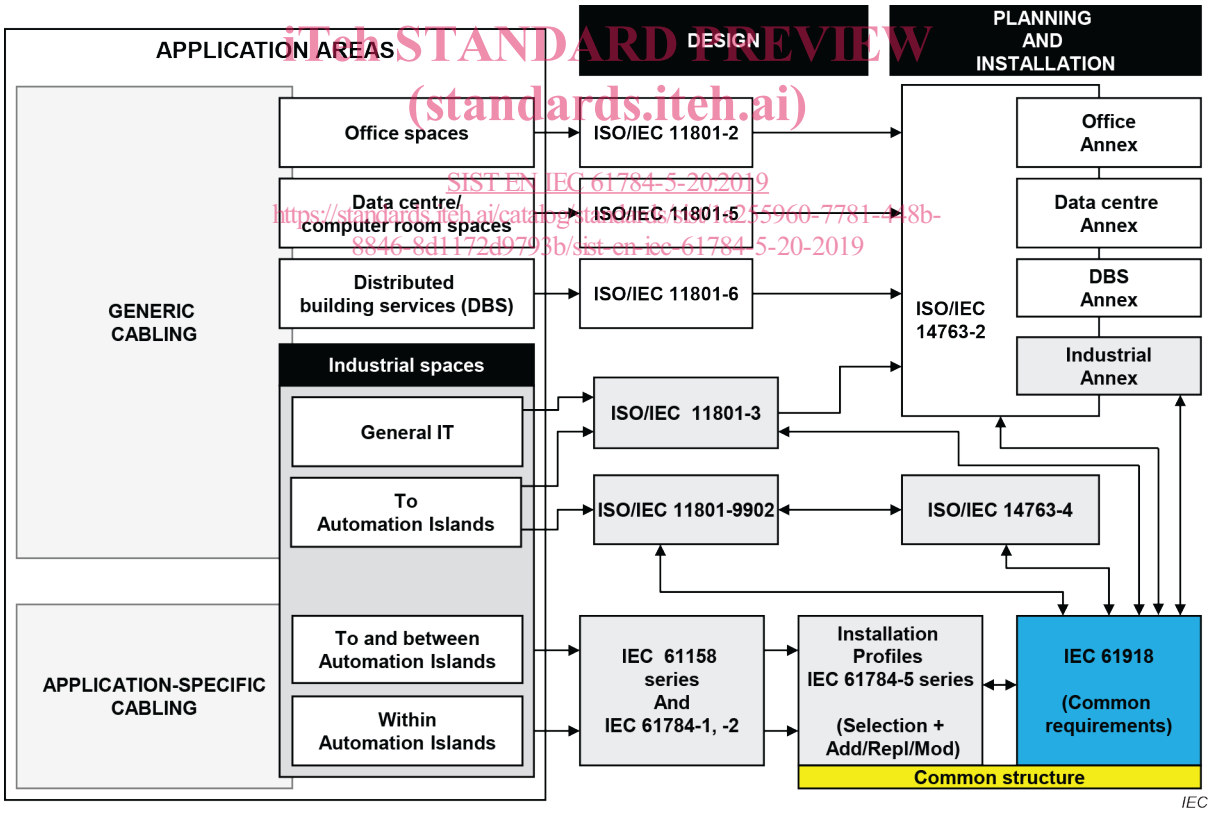

Figure 1 – Standards relationships

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[1]).

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*

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/μΣNETWORK-1000[1]) are specified in Annex A.

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

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1 ADS-net, ADS-net/μΣNETWORK-1000 and ADS-net/NX are used to describe this document.