

INTERNATIONAL STANDARD

NORME INTERNATIONALE



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

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

<https://standards.iteh.ai/ctmg/g/standards/Rz/ddb1cdc5-6319-4533-988f-393c1e4b4119/iec-61784-5-3-2013>



THIS PUBLICATION IS COPYRIGHT PROTECTED

Copyright © 2013 IEC, Geneva, Switzerland

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either IEC or IEC's member National Committee in the country of the requester.

If you have any questions about IEC copyright or have an enquiry about obtaining additional rights to this publication, please contact the address below or your local IEC member National Committee for further information.

Droits de reproduction réservés. Sauf indication contraire, aucune partie de cette publication ne peut être reproduite ni utilisée sous quelque forme que ce soit et par aucun procédé, électronique ou mécanique, y compris la photocopie et les microfilms, sans l'accord écrit de la CEI ou du Comité national de la CEI du pays du demandeur.

Si vous avez des questions sur le copyright de la CEI ou si vous désirez obtenir des droits supplémentaires sur cette publication, utilisez les coordonnées ci-après ou contactez le Comité national de la CEI de votre pays de résidence.

IEC Central Office
3, rue de Varembé
CH-1211 Geneva 20
Switzerland

Tel.: +41 22 919 02 11
Fax: +41 22 919 03 00
info@iec.ch
www.iec.ch

About the IEC

The International Electrotechnical Commission (IEC) is the leading global organization that prepares and publishes International Standards for all electrical, electronic and related technologies.

About IEC publications

The technical content of IEC publications is kept under constant review by the IEC. Please make sure that you have the latest edition, a corrigenda or an amendment might have been published.

Useful links:

IEC publications search - www.iec.ch/searchpub

The advanced search enables you to find IEC publications by a variety of criteria (reference number, text, technical committee,...).

It also gives information on projects, replaced and withdrawn publications.

IEC Just Published - webstore.iec.ch/justpublished

Stay up to date on all new IEC publications. Just Published details all new publications released. Available on-line and also once a month by email.

Electropedia - www.electropedia.org

The world's leading online dictionary of electronic and electrical terms containing more than 30 000 terms and definitions in English and French, with equivalent terms in additional languages. Also known as the International Electrotechnical Vocabulary (IEV) on-line.

Customer Service Centre - webstore.iec.ch/csc

If you wish to give us your feedback on this publication or need further assistance, please contact the Customer Service Centre: csc@iec.ch.

A propos de la CEI

La Commission Electrotechnique Internationale (CEI) est la première organisation mondiale qui élabore et publie des Normes internationales pour tout ce qui a trait à l'électricité, à l'électronique et aux technologies apparentées.

A propos des publications CEI

Le contenu technique des publications de la CEI est constamment revu. Veuillez vous assurer que vous possédez l'édition la plus récente, un corrigendum ou amendement peut avoir été publié.

Liens utiles:

Recherche de publications CEI - www.iec.ch/searchpub

La recherche avancée vous permet de trouver des publications CEI en utilisant différents critères (numéro de référence, texte, comité d'études,...).

Elle donne aussi des informations sur les projets et les publications remplacées ou retirées.

Just Published CEI - webstore.iec.ch/justpublished

Restez informé sur les nouvelles publications de la CEI. Just Published détaille les nouvelles publications parues. Disponible en ligne et aussi une fois par mois par email.

Electropedia - www.electropedia.org

Le premier dictionnaire en ligne au monde de termes électroniques et électriques. Il contient plus de 30 000 termes et définitions en anglais et en français, ainsi que les termes équivalents dans les langues additionnelles. Egalement appelé Vocabulaire Electrotechnique International (VEI) en ligne.

Service Clients - webstore.iec.ch/csc

Si vous désirez nous donner des commentaires sur cette publication ou si vous avez des questions contactez-nous: csc@iec.ch.



IEC 61784-5-3

Edition 3.0 2013-09

INTERNATIONAL STANDARD

NORME INTERNATIONALE



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

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

<https://standards.iteh.at/ctmng/standards/Rz/dob1cdc5-6319-4533-988f-393c1e4b4119/iec-61784-5-3-2013>

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

COMMISSION
ELECTROTECHNIQUE
INTERNATIONALE

PRICE CODE
CODE PRIX XE

ICS 25.040.40; 35.100.40

ISBN 978-2-8322-1074-1

**Warning! Make sure that you obtained this publication from an authorized distributor.
Attention! Veuillez vous assurer que vous avez obtenu cette publication via un distributeur agréé.**

CONTENTS

FOREWORD	7
INTRODUCTION	9
1 Scope	10
2 Normative references	10
3 Terms, definitions and abbreviated terms	10
4 CPF 3: Overview of installation profiles	10
5 Installation profile conventions	11
6 Conformance to installation profiles	11
Annex A (normative) CP 3/1 (PROFIBUS) specific installation profile	13
A.1 Installation profile scope	13
A.2 Normative references	13
A.3 Installation profile terms, definitions, and abbreviated terms	13
A.3.1 Terms and definitions	13
A.3.2 Abbreviated terms	14
A.3.3 Conventions for installation profiles	14
A.4 Installation planning	14
A.4.1 General	14
A.4.2 Planning requirements	14
A.4.3 Network capabilities	16
A.4.4 Selection and use of cabling components	18
A.4.5 Cabling planning documentation	28
A.4.6 Verification of cabling planning specification	28
A.5 Installation implementation	28
A.5.1 General requirements	28
A.5.2 Cable installation	28
A.5.3 Connector installation	30
A.5.4 Terminator installation	33
A.5.5 Device installation	34
A.5.6 Coding and labeling	34
A.5.7 Earthing and bonding of equipment and device and shielded cabling	34
A.5.8 As-implemented cabling documentation	35
A.6 Installation verification and installation acceptance test	35
A.6.1 General	35
A.6.2 Installation verification	35
A.6.3 Installation acceptance test	37
A.7 Installation administration	43
A.8 Installation maintenance and installation troubleshooting	43
Annex B (normative) CP 3/2 (PROFIBUS) specific installation profile	44
B.1 Installation profile scope	44
B.2 Normative references	44
B.3 Installation profile terms, definitions, and abbreviated terms	44
B.3.1 Terms and definitions	44
B.3.2 Abbreviated terms	45
B.3.3 Conventions for installation profiles	45
B.4 Installation planning	46

B.4.1 General	46
B.4.2 Planning requirements.....	47
B.4.3 Network capabilities	54
B.4.4 Selection and use of cabling components	59
B.4.5 Cabling planning documentation.....	74
B.4.6 Verification of cabling planning specification	74
B.5 Installation implementation	75
B.5.1 General requirements.....	75
B.5.2 Cable installation.....	75
B.5.3 Connector installation.....	75
B.5.4 Terminator installation	77
B.5.5 Device installation	77
B.5.6 Coding and labelling.....	77
B.5.7 Earthing and bonding of equipment and device and shielded cabling.....	77
B.5.8 As-implemented cabling documentation.....	77
B.6 Installation verification and installation acceptance test.....	77
B.6.1 General	77
B.6.2 Installation verification.....	77
B.6.3 Installation acceptance test	78
B.7 Installation administration.....	78
B.8 Installation maintenance and installation troubleshooting	78
Annex C (normative) CP 3/3, CP 3/4, CP 3/5, CP 3/6 (PROFINET) specific installation profile	79
C.1 Installation profile scope	79
C.2 Normative references	79
C.3 Installation profile terms, definitions, and abbreviated terms	79
C.3.1 Terms and definitions	79
C.3.2 Abbreviated terms	79
C.3.3 Conventions for installation profiles	80
C.4 Installation planning	80
C.4.1 General	80
C.4.2 Planning requirements	80
C.4.3 Network capabilities	80
C.4.4 Selection and use of cabling components	83
C.4.5 Cabling planning documentation.....	98
C.4.6 Verification of cabling planning specification	99
C.5 Installation implementation	99
C.5.1 General requirements	99
C.5.2 Cable installation.....	99
C.5.3 Connector installation.....	100
C.5.4 Terminator installation	102
C.5.5 Device installation	102
C.5.6 Coding and labeling.....	102
C.5.7 Earthing and bonding of equipment and device and shielded cabling.....	102
C.5.8 As-implemented cabling documentation.....	103
C.6 Installation verification and installation acceptance test.....	103
C.6.1 General	103
C.6.2 Installation verification.....	103
C.6.3 Installation acceptance test	105

C.7 Installation administration	106
C.8 Installation maintenance and installation troubleshooting	107
Bibliography.....	108

Figure 1 – Standards relationships.....	9
---	---

Figure A.1 – Recommended combination of shielding and earthing for CP 3/1 networks with RS 485-IS.....	26
--	----

Figure A.2 – Sub-D connector pin numberings (front view).....	31
---	----

Figure A.3 – 5-pin M12 female socket.....	32
---	----

Figure A.4 – 5-pin M12 male plug for CP 3/1.....	32
--	----

Figure A.5 – Test circuit A – Resistance measurement of data line B and shield	38
--	----

Figure A.6 – Test circuit B –Resistance measurement of data line A and shield	38
---	----

Figure A.7 – Test circuit C – Resistance measurement of data line A, data line B, and shield.....	39
---	----

Figure A.8 – Test circuit D – Resistance measurement between data line A and B.....	39
---	----

Figure A.9 – Resistance measurement without 9-pin Sub-D plug	39
--	----

Figure A.10 – Loop core resistance (cable type A)	40
---	----

Figure A.11 – Action and resolution tree for measurement 1 (RS 485 and RS 485-IS)	41
---	----

Figure A.12 – Action and resolution tree for measurement 2 (RS 485 and RS 485-IS)	42
---	----

Figure A.13 – Action and resolution tree for measurement 3 (RS 485 and RS 485-IS)	42
---	----

Figure B.1 – Connection of CP 3/1 networks.....	47
---	----

Figure B.2 – Typical fieldbus architecture	49
--	----

Figure B.3 – Fieldbus with stations supplied by auxiliary power sources	50
---	----

Figure B.4 – Fieldbus model	52
-----------------------------------	----

Figure B.5 – Current modulation (Manchester II code)	53
--	----

Figure B.6 – Tree topology	54
----------------------------------	----

Figure B.7 – Bus topology	55
---------------------------------	----

Figure B.8 – Combination of the tree topology and the bus topology	55
--	----

Figure B.9 – Fieldbus extension.....	56
--------------------------------------	----

Figure B.10 – Recommended combination of shielding and earthing	69
---	----

Figure B.11 – Ideal combination of shielding and earthing	70
---	----

Figure B.12 – Capacitive earthing	71
---	----

Figure B.13 – Galvanic isolated field device.....	73
---	----

Figure B.14 – Pin assignment of the male and female connectors IEC 60947-5-2 (A-coding)	76
---	----

Figure C.1 – Definition of end-to-end-link.....	93
---	----

Figure C.2 – End-to-end link without interconnections.....	94
--	----

Figure C.3 – Assembled end-to-end link	94
--	----

Figure C.4 – Connectionless optical fibre link	95
--	----

Figure C.5 – Assembled optical fibre link	95
---	----

Figure C.6 – Shielded connectors for CP 3/3, CP 3/4, CP 3/5 and CP 3/6 fieldbus networks.....	101
---	-----

Figure C.7 – Pin-assignment for a straight cable.....	101
---	-----

Table A.1 – Excerpt of MICE definition.....	16
---	----

Table A.2 – Basic network characteristics for balanced cabling not based on Ethernet (ISO/IEC 8802-3)	17
Table A.3 – Network characteristics for optical fibre cabling.....	18
Table A.4 – Information relevant to copper cable: fixed cables.....	19
Table A.5 – Information relevant to optical fibre cables	20
Table A.6 – Connectors for copper cabling CPs not based on Ethernet.....	21
Table A.7 – Optical fibre connecting hardware	21
Table A.8 – Relationship between FOC and fibre types (CP 3/1).....	21
Table A.9 – Parameters for balanced cables	28
Table A.10 – Parameters for silica optical fibre cables	29
Table A.11 – Parameters for POF optical fibre cables	29
Table A.12 – Parameters for hard clad silica optical fibre cables	29
Table A.13 – Use of 9 pin Sub-D connector pins (RS 485)	31
Table A.14 – Use of 9 pin Sub-D connector pins (RS 485-IS).....	31
Table A.15 – Use of M12 connector pins (RS 485).....	33
Table A.16 – Use of M12 connector pins (RS 485-IS)	33
Table A.17 – Maximum fibre channel attenuation for CP 3/1 (PROFIBUS)	43
Table B.1 – Valid parameter range of the FISCO model for use as EEx ib IIC / IIB.....	51
Table B.2 – Valid parameter range of the FISCO model for use as EEx ia IIC	51
Table B.3 – Power supply (operational values)	57
Table B.4 – Line lengths which can be achieved	57
Table B.5 – Limit values for distortion, reflection and signal delay.....	58
Table B.6 – Recommended maximum cable lengths including spurs	58
Table B.7 – Recommended length of the spurs	59
Table B.8 – Maximum length of the splices	59
Table B.9 – Information relevant to copper cable: fixed cables.....	60
Table B.10 – Safety limit values for the fieldbus cable	61
Table B.11 – Connectors for copper cabling CPs not based on Ethernet.....	62
Table B.12 – Mixing devices from different categories	64
Table B.13 – Electrical characteristics of fieldbus interfaces	65
Table B.14 – Recommended data sheet specifications for CP 3/2 devices	66
Table B.15 – Parameters for balanced cables	75
Table B.16 – Contact assignments for the external connector for harsh industrial environments	76
Table C.1 – General transmission media selection information	81
Table C.2 – Network characteristics for balanced cabling based on Ethernet (ISO/IEC 8802-3)	82
Table C.3 – Network characteristics for optical fibre cabling	82
Table C.4 – Information relevant to copper cable: CP 3/3, CP 3/4, CP 3/5 and CP 3/6 type A fixed cables	83
Table C.5 – Information relevant to copper cable: CP 3/3, CP 3/4, CP 3/5 and CP 3/6 type B flexible cables	84
Table C.6 – Information relevant to copper cable: CP 3/3, CP 3/4, CP 3/5 and CP 3/6 type C special cables	85
Table C.7 – Information relevant to copper cable: CP 3/3, CP 3/4, CP 3/5 and CP 3/6 of cabinet cord sets	85

Table C.8 – Information relevant to optical fibre cables	86
Table C.9 – Requirements for plastic and hard clad silica optical fibre cables	87
Table C.10 – Requirements for glass multimode optical fibre cables	88
Table C.11 – Requirements for glass singlemode optical fibre cables	89
Table C.12 – Information relevant to hybrid cables (application type B)	90
Table C.13 – Information relevant to hybrid cables (application type C)	91
Table C.14 – Connectors for balanced cabling CPs based on Ethernet	92
Table C.15 – Optical fibre connecting hardware	92
Table C.16 – Relationship between FOC and fibre types (CP 3/3, CP 3/4, CP 3/5, CP3/6)	93
Table C.17 – Typical fibre channels common for industrial applications	96
Table C.18 – Parameters for balanced cables	99
Table C.19 – Parameters for silica optical fibre cables	99
Table C.20 – Parameters for POF optical fibre cables	100
Table C.21 – Parameters for hard clad silica optical fibre cables	100
Table C.22 – Colour coding of 2 pair cabling for CP 3/3, CP 3/4, CP 3/5 and CP 3/6 connectors	101
Table C.23 – Colour coding of 4 pair cabling for CP 3/3, CP 3/4, CP 3/5 and CP 3/6 connectors	102
Table C.24 – Formula for NEXT limits for an end-to-end link	106
Table C.25 – Maximum fibre channel attenuation for CP 3/3, CP 3/4, CP 3/5 and CP 3/6 (PROFINET)ET	106

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.
- 2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
- 3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
- 4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter.
- 5) IEC itself does not provide any attestation of conformity. Independent certification bodies provide conformity assessment services and, in some areas, access to IEC marks of conformity. IEC is not responsible for any services carried out by independent certification bodies.
- 6) All users should ensure that they have the latest edition of this publication.
- 7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
- 8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
- 9) Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

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 third edition cancels and replaces the second edition published in 2010. This edition constitutes a technical revision.

This edition includes an addition of 4-pair cabling (see C.4.4.1.2.1 and C.5.3.2), an addition of the connector M12 X-Coding (see C.4.4.2.2), an addition of the definition of end-to-end links (see C.4.4.3.1), a revision of Table C.17 (see C.5.2.1) and a formula for the NEXT limits of end-to-end links (see C.6.3.2.1.2).

This standard is to be used in conjunction with IEC 61918:2013.

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

FDIS	Report on voting
65C/738/FDIS	65C/743/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 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 stability 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.

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.

<https://standards.iteh.at/vetting/standards/ko/dob1cdc5-6319-4533-988f-393c1e4b4119/iec-61784-5-3-2013>

INTRODUCTION

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

IEC 61918:2013 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 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.

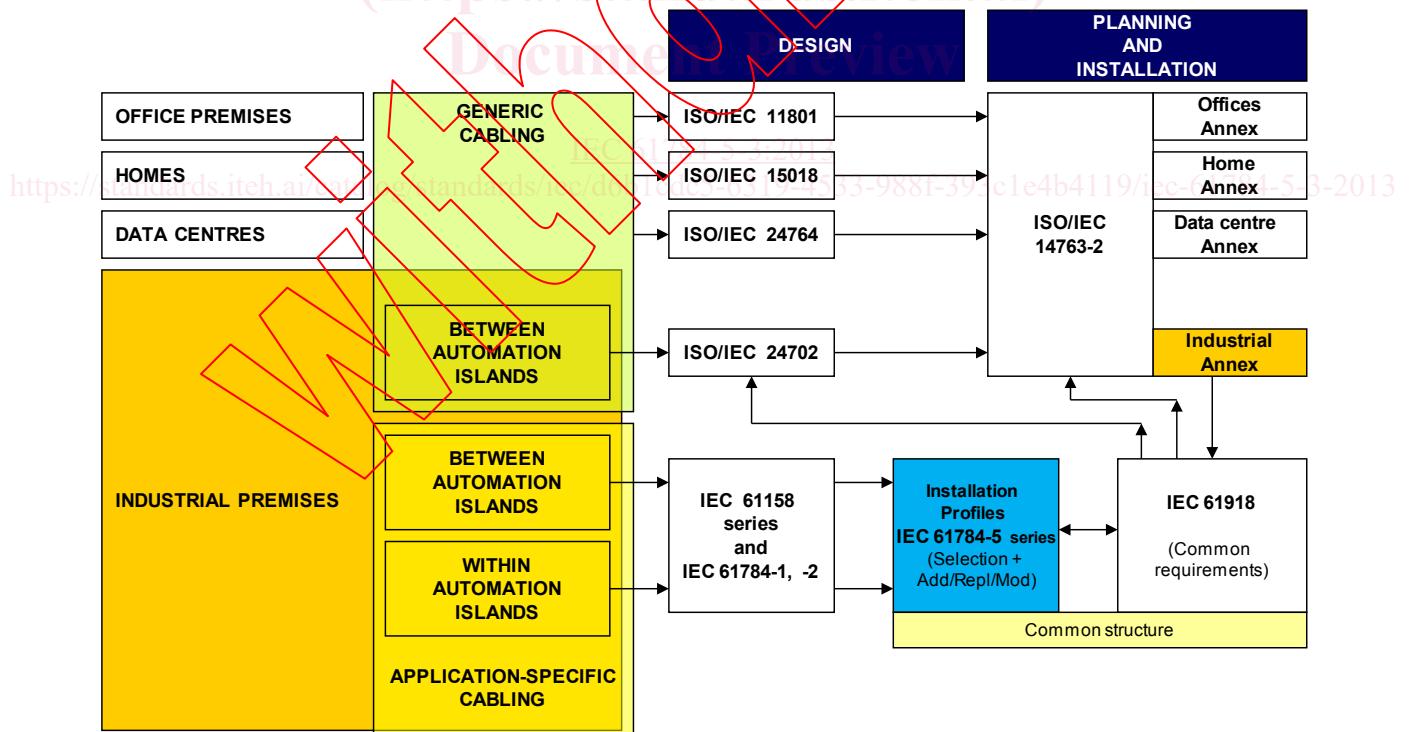


Figure 1 – Standards relationships

INDUSTRIAL COMMUNICATION NETWORKS – PROFILES –

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

1 Scope

This part of IEC 61784-5 specifies the installation profiles for CPF 3 (PROFIBUS/PROFINET)¹.

The installation profiles are specified in the annexes. These annexes are read in conjunction with IEC 61918:2013.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 61918:2013, *Industrial communication networks – Installation of communication networks in industrial premises* (<https://standards.iteh.ai>)

The normative references of IEC 61918:2013, Clause 2, apply. For profile specific normative references, see Clause(s) A.2, B.2 and C.2.

3 Terms, definitions and abbreviated terms

For the purposes of this document, the terms, definitions and abbreviated terms of IEC 61918:2013, Clause 3, apply. For profile specific terms, definitions and abbreviated terms see Clause(s) A.3, B.3 and C.3.

4 CPF 3: Overview of installation profiles

CPF 3 consists of six communication profiles as specified in IEC 61784-1 and IEC 61784-2.

The installation requirements for CP 3/1 (PROFIBUS with physical layer according to RS 485, RS 485-IS, and fibre) are specified in Annex A.

The installation requirements for CP 3/2 (PROFIBUS with physical layer according to MBP, MBP-IS, MBP-LP) are specified in Annex B.

The installation requirements for CP 3/3, CP 3/4, CP 3/5, and CP 3/6 (PROFINET) are specified in Annex C.

¹ PROFIBUS and PROFINET are trade names of the non-profit organization PROFIBUS Nutzerorganisation e.V. (PNO). This information is given for the convenience of users of this document and does not constitute an endorsement by IEC of the trade names holder or any of its products. Compliance to this profile does not require use of the trade names. Use of the trade names PROFIBUS and PROFINET requires permission of the trade name holder.

5 Installation profile conventions

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

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

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

The annex heading letter represents the installation profile assigned in Clause 4. The annex (sub)clause numbering following the annex letter shall represent the corresponding (sub)clause numbering of IEC 61918.

EXAMPLE “Subclause B.4.4” in IEC 61784-5-3 means that CP 3/2 specifies the subclause 4.4 of IEC 61918.

All main clauses of IEC 61918 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 “*modification*”) or “*(Sub)clause is not applicable*”, then (sub)clause x becomes valid as declared and all the other corresponding IEC 61918 (sub)clauses apply.

6 Conformance to installation profiles

Each installation profile within this standard includes part of IEC 61918:2013. It may also include defined additional specifications.

A statement of compliance to an installation profile of this standard shall be stated² as either

Compliance to IEC 61784-5-3:2013³ for CP 3/m <name> or
 Compliance to IEC 61784-5-3 (Ed.2.0) for CP 3/m <name>

where the name within the angle brackets <> is optional and the angle brackets are not to be included. The m within CP 3/m shall be replaced by the profile number 1 to 6.

² In accordance with ISO/IEC Directives.

³ The date should not be used when the edition number is used.

NOTE The name can be the name of the profile, for example PROFIBUS or PROFINET.

If the name is a trade name then the permission of the trade name holder shall be required.

Product standards shall not include any conformity assessment aspects (including quality management provisions), neither normative nor informative, other than provisions for product testing (evaluation and examination).

