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IEC 61784-5-8

Edition 2.0 2018-08

INTERNATIONAL STANDARD



Industrial communication networks – Profiles – Part 5-8: Installation of fieldbuses – Installation profiles for CPF 8

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

ICS 25.040.40; 35.100.40

ISBN 978-2-8322-5941-2

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CONTENTS

FOREWORD.....	6
INTRODUCTION.....	8
1 Scope.....	9
2 Normative references	9
3 Terms, definitions and abbreviated terms	9
4 CPF 8: Overview of installation profiles	9
5 Installation profile conventions	10
6 Conformance to installation profiles.....	10
Annex A (normative) CP 8/1 and CP 8/2 (CC-Link/V1 and CC-Link/V2) specific installation profile	12
A.1 Installation profile scope	12
A.2 Normative references.....	12
A.3 Installation profile terms, definitions, and abbreviated terms	12
A.3.1 Terms and definitions	12
A.3.2 Abbreviated terms	12
A.3.3 Conventions for installation profiles	12
A.4 Installation planning.....	12
A.4.1 General	12
A.4.2 Planning requirements.....	13
A.4.3 Network capabilities.....	13
A.4.4 Selection and use of cabling components	15
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.....	21
A.5.3 Connector installation	22
A.5.4 Terminator installation	22
A.5.5 Device installation	23
A.5.6 Coding and labelling	23
A.5.7 Earthing and bonding of equipment and devices and shield cabling.....	23
A.5.8 As-implemented cabling documentation.....	24
A.6 Installation verification and installation acceptance test	24
A.6.1 General	24
A.6.2 Installation verification.....	24
A.6.3 Installation acceptance test	25
A.7 Installation administration	25
A.8 Installation maintenance and installation troubleshooting.....	25
Annex B (normative) CP 8/3 (CC-Link/LT) 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.....	26

B.4.1	General	26
B.4.2	Planning requirements	27
B.4.3	Network capabilities	27
B.4.4	Selection and use of cabling components	30
B.4.5	Cabling planning documentation	37
B.4.6	Verification of cabling planning specification	37
B.5	Installation implementation	37
B.5.1	General requirements	37
B.5.2	Cable installation	37
B.5.3	Connector installation	38
B.5.4	Terminator installation	39
B.5.5	Device installation	39
B.5.6	Coding and labelling	39
B.5.7	Earthing and bonding of equipment and devices and shield cabling	39
B.5.8	As-implemented cabling documentation	40
B.6	Installation verification and installation acceptance test	40
B.6.1	General	40
B.6.2	Installation verification	40
B.6.3	Installation acceptance test	41
B.7	Installation administration	41
B.8	Installation maintenance and installation troubleshooting	41
Annex C (normative) CP 8/4 (CC-Link IE Controller Network) specific installation profile		42
C.1	Installation profile scope	42
C.2	Normative references	42
C.3	Installation profile terms, definitions, and abbreviated terms	42
C.3.1	Terms and definitions	42
C.3.2	Abbreviated terms	42
C.3.3	Conventions for installation profiles	42
C.4	Installation planning	42
C.4.1	General	42
C.4.2	Planning requirements	42
C.4.3	Network capabilities	43
C.4.4	Selection and use of cabling components	45
C.4.5	Cabling planning documentation	50
C.4.6	Verification of cabling planning specification	51
C.5	Installation implementation	51
C.5.1	General requirements	51
C.5.2	Cable installation	51
C.5.3	Connector installation	52
C.5.4	Terminator installation	53
C.5.5	Device installation	53
C.5.6	Coding and labelling	53
C.5.7	Earthing and bonding of equipment and devices and shield cabling	53
C.5.8	As-implemented cabling documentation	54
C.6	Installation verification and installation acceptance test	54
C.6.1	General	54
C.6.2	Installation verification	54
C.6.3	Installation acceptance test	55

C.7	Installation administration	55
C.8	Installation maintenance and installation troubleshooting	56
Annex D	(normative) CP 8/5 (CC-Link IE Field Network) specific installation profile	57
D.1	Installation profile scope	57
D.2	Normative references	57
D.3	Installation profile terms, definitions, and abbreviated terms	57
D.3.1	Terms and definitions	57
D.3.2	Abbreviated terms	57
D.3.3	Conventions for installation profiles	57
D.4	Installation planning	57
D.4.1	General	57
D.4.2	Planning requirements	57
D.4.3	Network capabilities	58
D.4.4	Selection and use of cabling components	59
D.4.5	Cabling planning documentation	64
D.4.6	Verification of cabling planning specification	65
D.5	Installation implementation	65
D.5.1	General requirements	65
D.5.2	Cable installation	65
D.5.3	Connector installation	66
D.5.4	Terminator installation	66
D.5.5	Device installation	67
D.5.6	Coding and labelling	67
D.5.7	Earthing and bonding of equipment and devices and shield cabling	67
D.5.8	As-implemented cabling documentation	68
D.6	Installation verification and installation acceptance test	68
D.6.1	General	68
D.6.2	Installation verification	68
D.6.3	Installation acceptance test	69
D.7	Installation administration	69
D.8	Installation maintenance and installation troubleshooting	69
Bibliography	70
Figure 1	– Standards relationships	8
Figure A.1	– Pass-through connector configuration	14
Figure A.2	– Bus t-branch topology	14
Figure A.3	– Wiring	17
Figure B.1	– Powered network topology	28
Figure B.2	– Bus t-branch topology	28
Figure B.3	– Flat cable cross section – with key	31
Figure B.4	– Flat cable cross section – without key	31
Figure B.5	– Flat cable polarity marking	31
Figure B.6	– Wiring	32
Figure B.7	– Flat cable connector and terminal cover	33
Table A.1	– Basic network characteristics for balanced cabling not based on Ethernet	15
Table A.2	– Bus t-branch network characteristics	15

Table A.3 – Information relevant to copper cable: fixed cables.....	16
Table A.4 – Connectors for copper cabling CPs not based on Ethernet.....	17
Table A.5 – Parameters for balanced cables.....	21
Table A.6 – Cable conductor assignments.....	22
Table B.1 – Basic network characteristics for balanced cabling not based on Ethernet.....	29
Table B.2 – CP 8/3 additional topology length limits.....	29
Table B.3 – Information relevant to copper cable: cords.....	31
Table B.4 – Connectors for copper cabling CPs not based on Ethernet.....	34
Table B.5 – Parameters for balanced cables.....	37
Table B.6 – Flat cable conductor assignments.....	38
Table C.1 – Network characteristics for balanced cabling based on Ethernet.....	44
Table C.2 – Network characteristics for optical fibre cabling.....	44
Table C.3 – Information relevant to copper cable: fixed cables.....	45
Table C.4 – Information relevant to optical fibre cables.....	46
Table C.5– Connectors for balanced cabling CPs based on Ethernet.....	46
Table C.6 – Optical fibre connecting hardware.....	47
Table C.7 – Relationship between FOC and fibre types (CP 8/4).....	47
Table C.8 – Parameters for balanced cables.....	51
Table C.9 – Parameters for silica optical fibre cables.....	51
Table D.1 – Network characteristics for balanced cabling based on Ethernet.....	59
Table D.2 – Information relevant to copper cable: fixed cables.....	60
Table D.3 – Connectors for balanced cabling CPs based on Ethernet.....	61
Table D.4 – Parameters for balanced cables.....	65

INTERNATIONAL ELECTROTECHNICAL COMMISSION

INDUSTRIAL COMMUNICATION NETWORKS – PROFILES –

Part 5-8: Installation of fieldbuses – Installation profiles for CPF 8

FOREWORD

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International Standard IEC 61784-5-8 has been prepared by subcommittee 65C: Industrial networks, of IEC technical committee 65: Industrial-process measurement, control and automation.

This second edition cancels and replaces the first edition published in 2013. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) The reference to ISO/IEC 24702 has been replaced with reference to the new ISO/IEC 11801-3;
- b) Annex C has been extended to cover the balanced cabling based on Ethernet that is applicable to CP8/4. Table C.1, Table C.3, Table C.5 and Table C.8 are added;

- c) Annex D has been extended to cover the M12-8 X-coding connector use that is applicable to CP/8/5. Table D.3 is revised.

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 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 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 61918:2018 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 61918:2018 for the benefit of the persons representing the roles in the fieldbus installation process as defined in IEC 61918:2018 (planner, installer, verification personnel, validation personnel, maintenance personnel, administration personnel). By reading the installation profile in conjunction with IEC 61918:2018, 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 61784-5-8 for CPF 8), allows readers to work with standards of a convenient size.

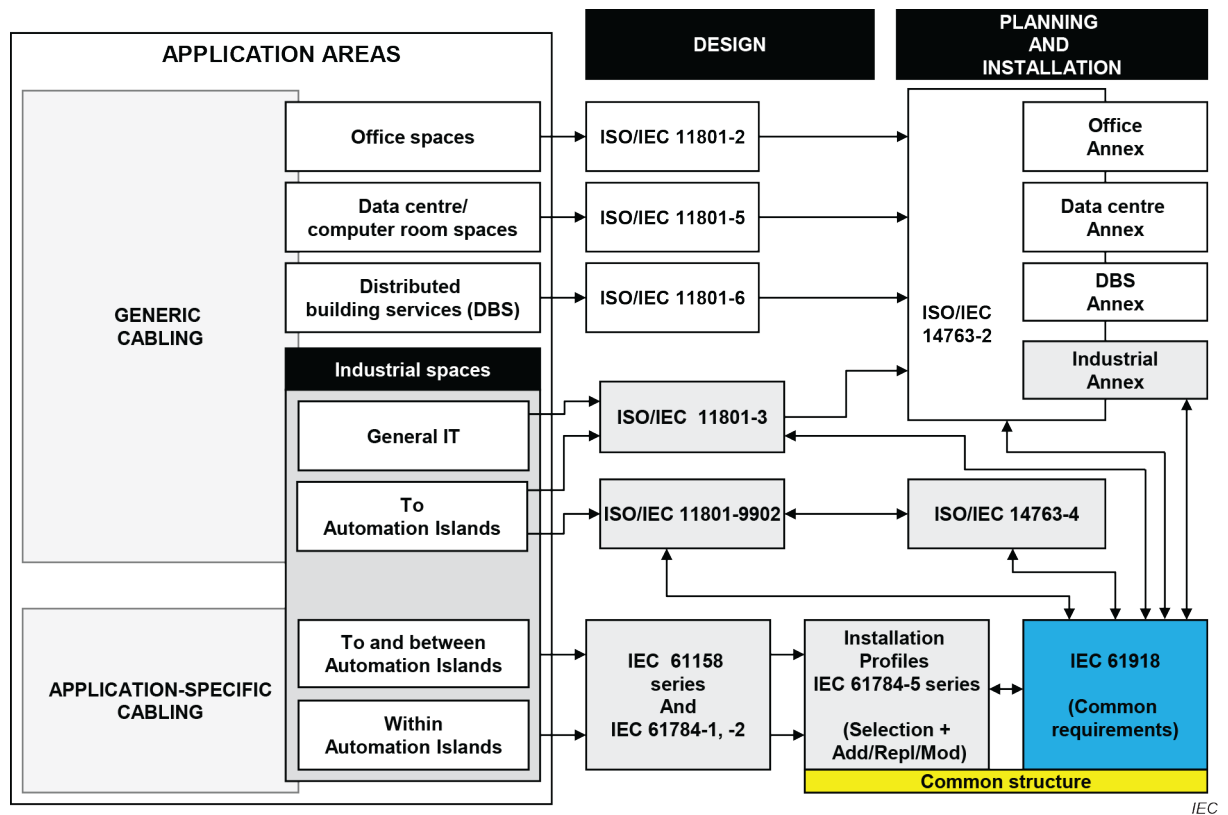


Figure 1 – Standards relationships

INDUSTRIAL COMMUNICATION NETWORKS – PROFILES –

Part 5-8: Installation of fieldbuses – Installation profiles for CPF 8

1 Scope

This part of IEC 61784-5 specifies the installation profiles for CPF 8 (CC-Link¹).

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

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 61918:2018, *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, B.2, C.2 and D.2 respectively.

¹ CC-Link, CC-Link/LT and CC-Link IE are trade names of Mitsubishi Electric Co., control of trade name use is given to CCLink Partner Association. This information is given for the convenience of users of this document 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. Use of the trade name requires permission of the trade name holder.