# IEC 61784-5-8

Edition 3.0 2024-04

# INTERNATIONAL STANDARD

# NORME INTERNATIONALE

colour inside

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

## Réseaux industriels – Profils – Partie 5-8: Installation des bus de terrain – Profils d'installation pour la CPF 8



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

## Réseaux industriels – Profils – Partie 5-8: Installation des bus de terrain – Profils d'installation pour la CPF 8

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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# INDUSTRIAL NETWORKS – PROFILES –

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

## FOREWORD

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This document is to be used in conjunction with IEC 61918:2018, IEC 61918:2018/AMD1:2022 and IEC 61918:2018/AMD2:2024.

This third edition cancels and replaces the second edition published in 2018. This edition constitutes a technical revision.

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

a) Annex E and related references have been added.

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

| Draft | Report on voting |
|---|---|
| 65C/1280/FDIS | 65C/1295/RVD |

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

This document was drafted in accordance with the ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

A list of all parts of IEC 61784-5 series, published under the general title *Industrial 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 website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

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# INTRODUCTION

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

IEC 61918:2018, IEC 61918:2018/AMD1:2022 and IEC 61918:2018/AMD2:2024 provide 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 and IEC 61918:2018/AMD1:2022 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.

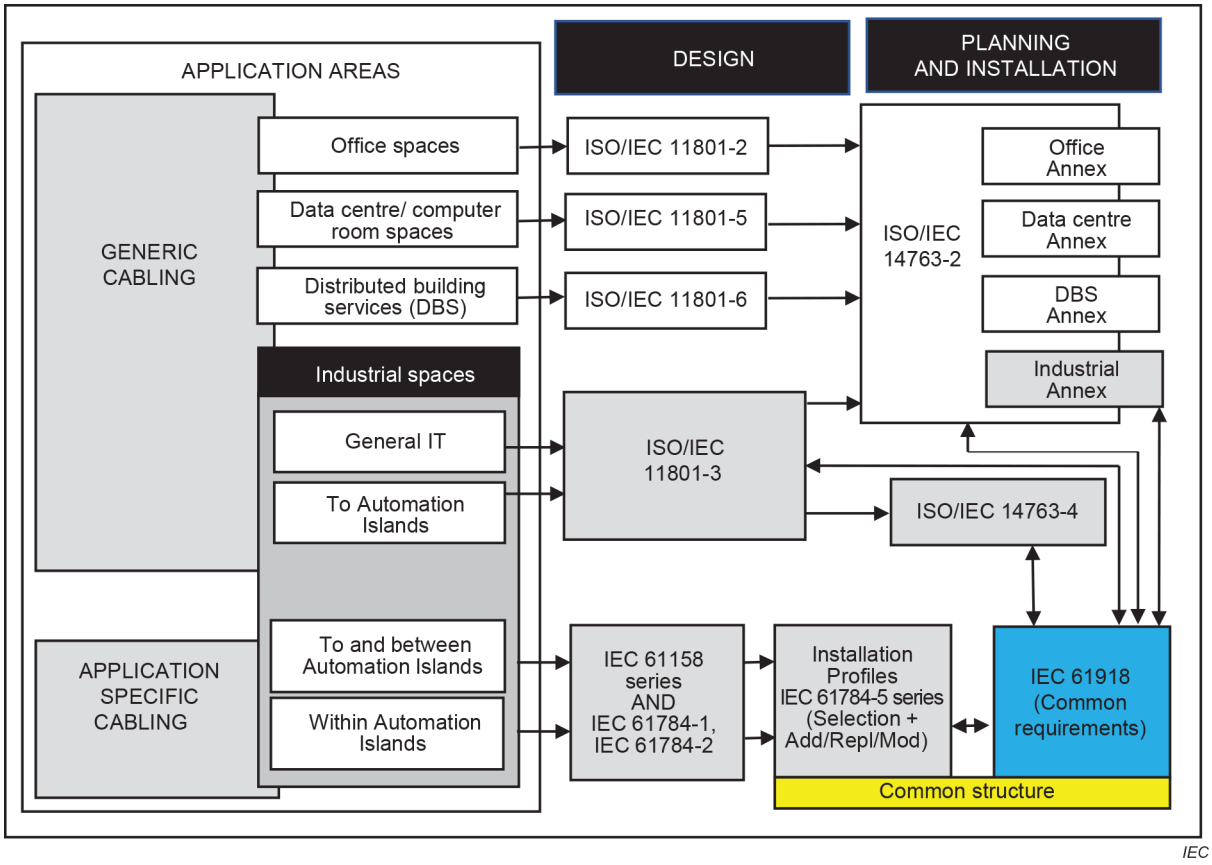



**Figure 1 – Standards relationships**

# INDUSTRIAL 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-Link™[1]).

The installation profiles are specified in the annexes. These annexes are read in conjunction with IEC 61918:2018, IEC 61918:2018/AMD1:2022 and IEC 61918:2018/AMD2:2024.

## 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[2], *Industrial communication networks – Installation of communication networks in industrial premises*
IEC 61918:2018/AMD1:2022
IEC 61918:2018/AMD2:2024

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

## 3 Terms, definitions and abbreviated terms

For the purposes of this document, the terms, definitions and abbreviated terms given in IEC 61918:2018, Clause 3 and IEC 61918:2018/AMD1:2022, Clause 3 apply.

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

- IEC Electropedia: available at https://www.electropedia.org/
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[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.

[2] The normative references of IEC 61918:2018, Clause 2, IEC 61918:2018/AMD1:2022, Clause 2 and IEC 61918:2018/AMD2:2024, Clause 2, apply.