Irish Standard
I.S. EN 61784-5-11:2013

Industrial communication networks - Profiles -- Part 5-11: Installation of fieldbuses - Installation profiles for CPF 11

I.S. EN 61784-5-11:2013

Incorporating amendments/corrigenda/National Annexes issued since publication:

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 61784-5-11

December 2013

ICS 25.040.40; 35.100.40

Supersedes EN 61784-5-11:2012

English version

Industrial communication networks - Profiles - Part 5-11: Installation of fieldbuses - Installation profiles for CPF 11

(IEC 61784-5-11:2013)

Réseaux de communication industriels - Profils - Partie 5-11: Installation des bus de terrain - Profils d'installation pour CPF 11 (CEI 61784-5-11:2013)

Industrielle Kommunikationsnetze - Profile - Teil 5-11: Feldbusinstallation - Installationsprofile für die Kommunikationsprofilfamilie 11 (IEC 61784-5-11:2013)

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

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Ref. No. EN 61784-5-11:2013 E

Foreword

The text of document 65C/738/FDIS, future edition 3 of IEC 61784-5-11, 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 61784-5-11:2013.

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)	2014-07-22
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2016-10-22

This document supersedes EN 61784-5-11:2012.

EN 61784-5-11:2013 includes the following significant technical changes with respect to EN 61784-5-11:2012:

– addition of a new Annex C (normative).

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

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Endorsement notice

The text of the International Standard IEC 61784-5-11:2013 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, 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.

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

Annex ZA of EN 61918:2013 applies, except as follows:

Publication	Year	Title	EN/HD	Year

Addition to Annex ZA of EN 61918:2013:

IEC 61918	2013	Industrial communication networks - Installation of communication networks in industrial premises	EN 61918	2013

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IEC 61784-5-11

Edition 3.0 2013-09

INTERNATIONAL STANDARD

NORME INTERNATIONALE

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Industrial communication networks – Profiles – Part 5-11: Installation of fieldbuses – Installation profiles for CPF 11

Réseaux de communication industriels – Profils – Partie 5-11: Installation des bus de terrain – Profils d'installation pour CPF 11

IEC 61784-5-11:2013

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IEC 61784-5-11

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INTERNATIONAL STANDARD

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Industrial communication networks – Profiles – Part 5-11: Installation of fieldbuses – Installation profiles for CPF 11

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CONTENTS

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INDUSTRIAL COMMUNICATION NETWORKS – PROFILES –

Part 5-11: Installation of fieldbuses – Installation profiles for CPF 11

FOREWORD

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International Standard IEC 61784-5-11 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 the following technical changes with respect to the previous edition:

– Addition of a new Annex C (normative).

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 communications 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.

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 61784-5-11 for CPF 11), allows readers to work with standards of a convenient size.

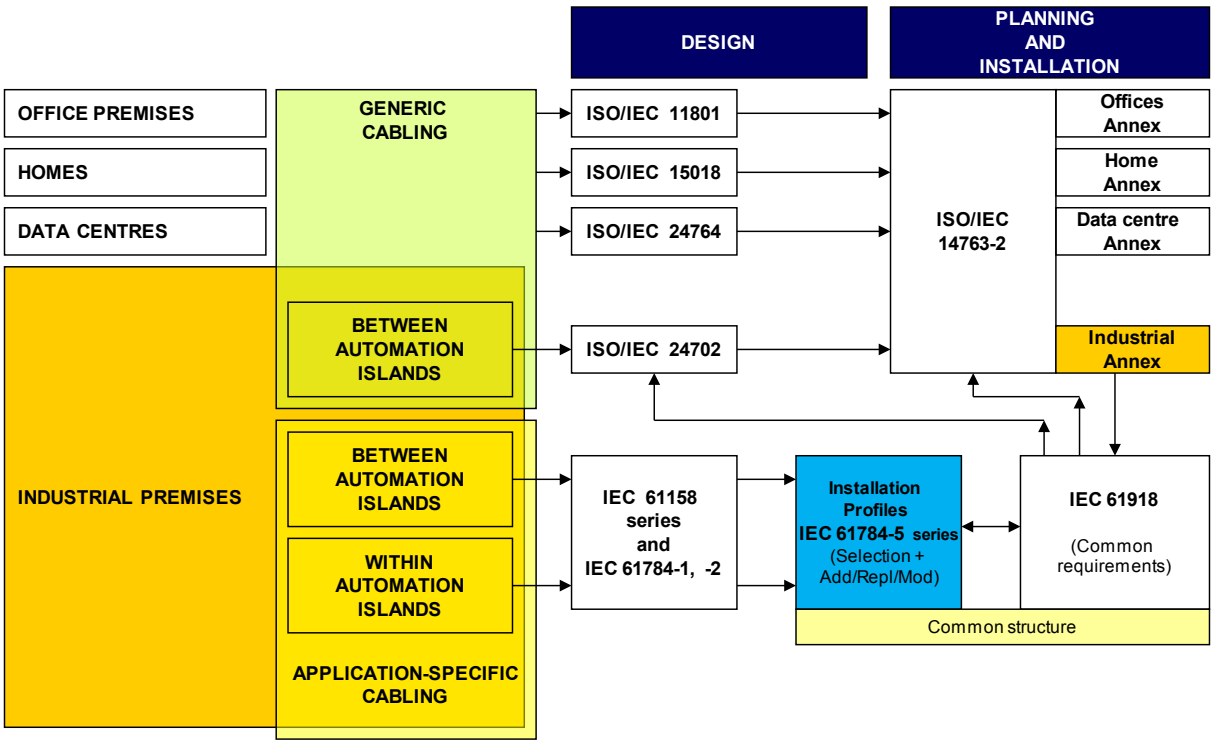

Figure 1 – Standards relationships

INDUSTRIAL COMMUNICATION NETWORKS – PROFILES –

Part 5-11: Installation of fieldbuses – Installation profiles for CPF 11

1 Scope

This part of IEC 61784-5 specifies the installation profiles for CPF 11 (TCnet[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*

The normative references of IEC 61918:2013, Clause 2, apply. For profile specific normative references see Clause A.2.

3 Terms, definitions and abbreviated terms

For the purposes of this document, the terms, definitions and abbreviated terms given in IEC 61918:2013, Clause 3, apply.

4 CPF 11: Overview of installation profiles

CPF 11 consists of three communication profiles as specified in IEC 61784-2.

The installation requirements for CP 11/1 (TCnet-star) are specified in Annex A.

The installation requirements for CP 11/2 (TCnet-loop 100) are specified in Annex B.

The installation requirements for CP 11/3 (TCnet-loop 1G) are specified in Annex C

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.

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1 In Japan, TCnet is the trade name of TOSHIBA corporation. 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 does not require use of the trade name. Use of the trade name requires permission of the trade name holder.