SVENSK STANDARD SS-EN 61784-5-3

Fastställd	Utgåva	Sida	Ansvarig kommitté
2012-06-13	2	1 (1+110)	SEK TK 65

Industriell processtyrning – Profiler – Del 5-3: Installation av fältbussar – Installationsprofiler för CPF 3 (Profibus & Profinet)

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

Som svensk standard gäller europastandarden EN 61784-5-3:2012. Den svenska standarden innehåller den officiella engelska språkversionen av EN 61784-5-3:2012.

Nationellt förord

Europastandarden EN 61784-5-3:2012

består av:

– **europastandardens ikraftsättningsdokument,** utarbetat inom CENELEC

– **IEC 61784-5-3, Second edition, 2010 - Industrial communication networks - Profiles - Part 5-3: Installation of fieldbuses - Installation profiles for CPF 3**

utarbetad inom International Electrotechnical Commission, IEC.

Standarden ska användas tillsammans med IEC 61918, second edition (2010) och de gemensamma europeiska ändringar (common modifications) till IEC 61918, first edition, 2007 som återges i SS-EN 61918, utgåva 1, 2009. Dessa gemensamma ändringar återfinns i en nationell bilaga NA sist i denna standard.

Tidigare fastställd svensk standard SS-EN 61784-5-3, utgåva 1, 2009, gäller ej fr o m 2014-10-19.

ICS 25.040.40; 35.100.40

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 61784-5-3

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ICS 25.040.40; 35.100.40

Supersedes EN 61784-5-3:2008

English version

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

(IEC 61784-5-3:2010)

Réseaux de communication industriels - Profils - Partie 5-3: Installation des bus de terrain - Profils d'installation pour CPF 3 (CEI 61784-5-3:2010)

Industrielle Kommunikationsnetze - Profile - Teil 5-3: Feldbusinstallation - Installationsprofile für die Kommunikationsprofilfamilie 3 (IEC 61784-5-3:2010)

CENELEC

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

Management Centre: Avenue Marnix 17, B - 1000 Brussels

Ref. No. EN 61784-5-3:2012 E

SEK Svensk Elstandard

Foreword

The text of document 65C/602/FDIS, future edition 2 of IEC 61784-5-3, 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 61784-5-3:2012.

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)	2012-10-20
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2014-10-19

This document supersedes EN 61784-5-3:2008.

EN 61784-5-3:2012 includes an addition concerning transmission performance measurement (see C.6.3.2.1.2).

This standard is to be used in conjunction with IEC 61918, second edition (2010-07), together with the European Common Modification published with EN 61918:2008.

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

Endorsement notice

The text of the International Standard IEC 61784-5-3:2010 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 referenced documents are indispensable for the application 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 When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

Publication	Year	Title	EN/HD	Year
-	-	Electrical apparatus for potentially explosive atmospheres - Intrinsic safety 'i'	EN 50020	-
IEC 60079-0 + corr. December	2007 2010	Explosive atmospheres - Part 0: Equipment - General requirements	EN 60079-0	2009
IEC 60079-11 + corr. December	2006 2006	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"	EN 60079-11	2007
IEC 60079-27	2008	Explosive atmospheres - Part 27: Fieldbus intrinsically safe concept (FISCO)	EN 60079-27	2008
IEC 60512-6-3	-	Connectors for electronic equipment - Tests and measurements - Part 6-3: Dynamic stress tests - Test 6c: Shock	EN 60512-6-3	-
IEC 60512-6-4	-	Connectors for electronic equipment - Tests and measurements - Part 6-4: Dynamic stress tests - Test 6d: Vibration (sinusoidal)	EN 60512-6-4	-
IEC 60793-2-10	2007	Optical fibres - Part 2-10: Product specifications - Sectional specification for category A1 multimode fibres	EN 60793-2-10[1)]	2007
IEC 60793-2-50	2008	Optical fibres - Part 2-50: Product specifications - Sectional specification for class B single-mode fibres	EN 60793-2-50	2008
IEC 61000-4-2	2008	Electromagnetic compatibility (EMC) - Part 4-2: Testing and measurement techniques - Electrostatic discharge immunity test	EN 61000-4-2	2009
IEC 61076-2-107	2010	Connectors for electronic equipment - Product requirements - Part 2-107: Detail specification for circular hybrid connectors M12 with electrical and fibre-optic contacts with screw-locking	EN 61076-2-107	2010
IEC 61156-5 + corr. May + corr. February	2009 2009 2010	Multicore and symmetrical pair/quad cables for digital communications - Part 5: Symmetrical pair/quad cables with transmission characteristics up to 1 000 MHz - Horizontal floor wiring - Sectional specification	-	-

[1)] EN 60793-2-10 is superseded by EN 60793-2-10:2011, which is based on IEC 60793-2-10:2011.

Publication	Year	Title	EN/HD	Year
IEC 61508	Series	Functional safety of electrical/electronic/programmable electronic safety-related systems	EN 61508	Series
IEC 61754-24-11	-	Fibre optic interconnecting devices and passive components - Fibre optic connector interfaces - Part 24-11: Type SC-RJ connectors with protective housings based on IEC 61076-3-117	EN 61754-24-11	-
IEC 61918	2010	Industrial communication networks - Installation of communication networks in industrial premises	-	-
ANSI TIA/EIA-485-A	-	Electrical Characteristics of Generators and Receivers for Use in Balanced Digital Multipoint Systems	-	-

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INTRODUCTION

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

IEC 61918:2010 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/TR 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.

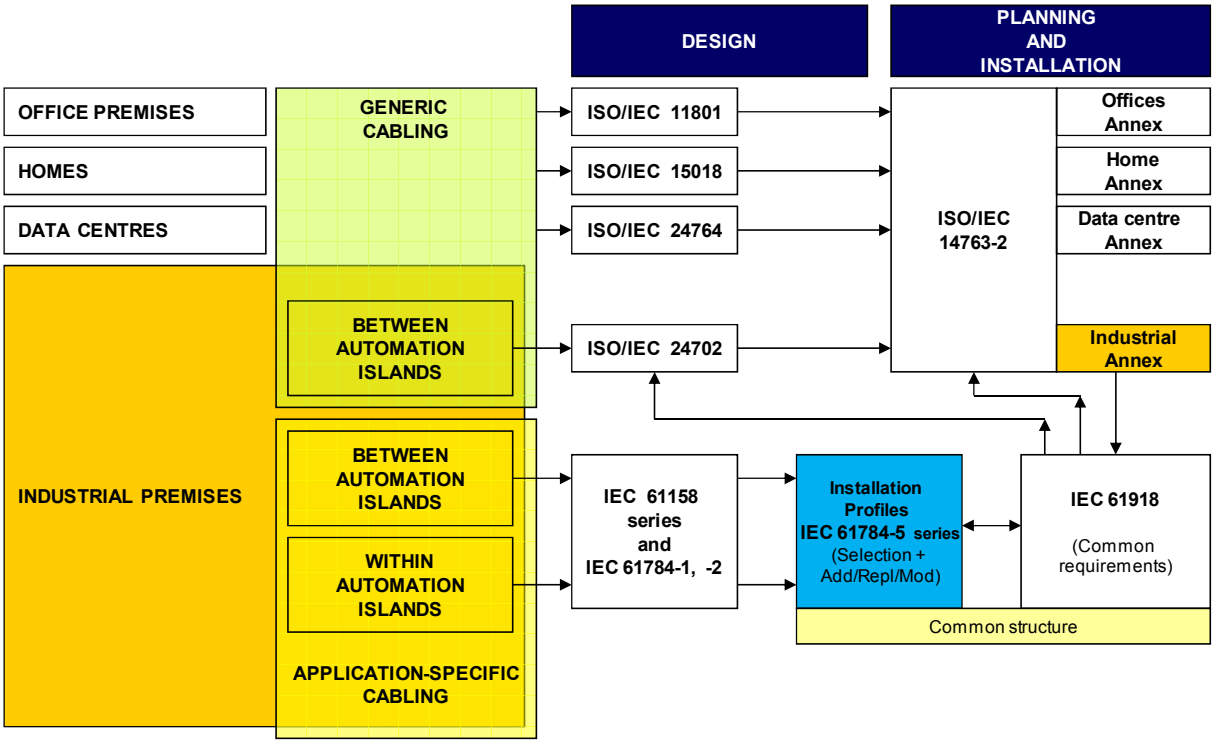

Figure 1 – Standards relationships

INDUSTRIAL COMMUNICATION NETWORKS – PROFILES –

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

1 Scope

This part of IEC 61784 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 61918:2010.

2 Normative references

The following referenced documents are indispensable for the application 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 61918:2010, *Industrial communication networks – Installation of communication networks in industrial premises*

The normative references of IEC 61918:2010, Clause 2, apply. For profile specific normative references, see Clause(s) A.2, B.2 and C.2.

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[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 International Standard 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.