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## Industriell processtyrning – Profiler – Del 5-2: Installation av fältbussar – Installationsprofiler för CPF 2 (CIP)

*Industrial communication networks –  
Profiles –  
Part 5-2: Installation of fieldbuses –  
Installation profiles for CPF 2*

Som svensk standard gäller europastandarden EN 61784-5-2:2012. Den svenska standarden innehåller den officiella engelska språkversionen av EN 61784-5-2:2012.

### Nationellt förord

Europastandarden EN 61784-5-2:2012

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **IEC 61784-5-2, Second edition, 2010 - Industrial communication networks - Profiles - Part 5-2: Installation of fieldbuses - Installation profiles for CPF 2**

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 61784-5-2, utgåva 1, 2009, gäller ej fr o m 2014-10-19.

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ICS 25.040.40; 35.100.40

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English version

**Industrial communication networks -  
Profiles -  
Part 5-2: Installation of fieldbuses -  
Installation profiles for CPF 2  
(IEC 61784-5-2:2010)**

Réseaux de communication industriels -  
Profils -  
Partie 5-2: Installation des bus de terrain -  
Profils d'installation pour CPF 2  
(CEI 61784-5-2:2010)

Industrielle Kommunikationsnetze -  
Profile -  
Teil 5-2: Felddbusinstallation -  
Installationsprofile für die  
Kommunikationsprofilfamilie 2  
(IEC 61784-5-2:2010)

This European Standard was approved by CENELEC on 2011-10-19. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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

**Management Centre: Avenue Marnix 17, B - 1000 Brussels**

## Foreword

The text of document 65C/601/FDIS, future edition 2 of IEC 61784-5-2, 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 61784-5-2:2012.

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 61784-5-2:2008.

EN 61784-5-2:2012 includes the following significant technical changes with respect to EN 61784-5-2:2008:

- updates pertaining to current installation practices;
- addition of new technology that has become recently available;
- errors have been corrected;
- improved alignment with EN 61918.

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 61784-5-2:2010 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 61158 series	NOTE	Harmonized as EN 61158 series.
IEC/TR 61158-1	NOTE	Harmonized as CLC/TR 61158-1.
IEC 62026-3	NOTE	Harmonized as EN 62026-3.

## 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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60096-2	1961	Radio-frequency cables - Part 2: Relevant cable specifications	-	-
IEC 60603-7-3	-	Connectors for electronic equipment - Part 7-3: Detail specification for 8-way, shielded, free and fixed connectors, for data transmission with frequencies up to 100 MHz	EN 60603-7-3	-
IEC 60947-5-2	2007	Low-voltage switchgear and controlgear - Part 5-2: Control circuit devices and switching elements - Proximity switches	EN 60947-5-2	2007
IEC 61156-5	-	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	-	-
IEC 61918	2010	Industrial communication networks - Installation of communication networks in industrial premises	-	-
ISO 11898-1	-	Road vehicles - Controller area network (CAN) - Part 1: Data link layer and physical signalling	-	-
ISO 11898-2	-	Road vehicles - Controller area network (CAN) - Part 2: High-speed medium access unit	-	-
ANSI/TIA/EIA 568- B.1	-	Commercial Building Telecommunications Cabling Standard - Part 1: General requirements	-	-

## CONTENTS

INTRODUCTION.....	9
1 Scope.....	10
2 Normative references .....	10
3 Terms, definitions and abbreviated terms .....	10
4 CPF 2: Overview of installation profiles .....	10
5 Installation profile conventions .....	11
6 Conformance to installation profiles.....	12
Annex A (normative) CP 2/1 (ControlNet™) specific installation profile .....	13
Annex B (normative) CP 2/2 (EtherNet/IP™) specific installation profile.....	65
Annex C (normative) CP 2/3 (DeviceNet™) specific installation profile.....	92
Annex D (informative) Additional information .....	149
Bibliography.....	153
Figure 1 – Standards relationships.....	9
Figure A.1 – Interconnection of CPF 2 networks .....	14
Figure A.2 – Overview of CPF 2/1 networks.....	15
Figure A.3 – Drop cable requirements.....	17
Figure A.4 – Placement of BNC/TNC plugs .....	17
Figure A.5 – Placement of terminators .....	18
Figure A.6 – Extending a network using repeaters .....	18
Figure A.7 – Extending a network using active star topology.....	19
Figure A.8 – Links.....	19
Figure A.9 – Extending the network beyond 99 nodes.....	20
Figure A.10 – Maximum allowable taps per segment.....	27
Figure A.11 – Example of repeaters in star configuration .....	29
Figure A.12 – Repeater in parallel.....	30
Figure A.13 – Repeater in combination series and parallel.....	30
Figure A.14 – Ring repeater.....	31
Figure A.15 – Installing bulkheads .....	32
Figure A.16 – Coaxial BNC and TNC terminators .....	33
Figure A.17 – Terminator placement in a segment .....	33
Figure A.18 – Redundant network icons.....	36
Figure A.19 – Redundant coax media .....	36
Figure A.20 – Redundant fibre media.....	36
Figure A.21 – Repeater in series versus length difference for coax media.....	37
Figure A.22 – Repeater in series versus length difference for fibre media .....	38
Figure A.23 – Example of redundant coax network with repeaters.....	38
Figure A.24 – Example of improper redundant node connection.....	38
Figure A.25 – Example tool kit for installing BNC connectors .....	42
Figure A.26 – Calibration of coaxial stripper.....	43

Figure A.27 – Coax PVC strip length detail .....	43
Figure A.28 – Memory cartridge and blade.....	44
Figure A.29 – Cable position.....	44
Figure A.30 – Locking the cable.....	45
Figure A.31 – Stripping the cable.....	45
Figure A.32 – Install the crimp ferrule .....	46
Figure A.33 – Cable preparation for PVC type cables .....	46
Figure A.34 – Cable preparation for FEP type cables.....	46
Figure A.35 – Strip guides .....	47
Figure A.36 – Using the flare tool.....	47
Figure A.37 – Expanding the shields.....	48
Figure A.38 – Install the centre pin .....	48
Figure A.39 – Crimping the centre pin.....	48
Figure A.40 – Installing the connector body .....	49
Figure A.41 – Installing the ferrule .....	49
Figure A.42 – Crimp tool.....	49
Figure A.43 – Sealed IP67 cable.....	50
Figure A.44 – Terminator placement .....	51
Figure A.45 – Mounting the taps .....	52
Figure A.46 – Mounting the tap assembly using the universal mounting bracket .....	52
Figure A.47 – Mounting the tap using tie wraps or screws.....	53
Figure A.48 – Redundant network icons.....	53
Figure A.49 – Network test tool.....	56
Figure A.50 – Shorting the cable to test for continuity .....	56
Figure A.51 – Testing fibre segments.....	59
Figure A.52 – Multi-fibre backbone cable housing .....	60
Figure A.53 – Repeater adapter module.....	61
Figure A.54 – Short and medium distance fibre module LEDs .....	63
Figure A.55 – Long and extra long repeater module LEDs .....	63
Figure B.1 – Interconnection of CPF 2 networks .....	66
Figure B.2 – Peer to peer connections .....	68
Figure B.3 – Mated connections.....	70
Figure B.4 – The 8-way modular sealed jack & plug (plastic housing) .....	75
Figure B.5 – The 8-way modular sealed jack & plug (metal housing).....	75
Figure B.6 – M12-4 connectors .....	76
Figure B.7 – Simplex LC connector.....	76
Figure B.8 – Duplex LC connector .....	77
Figure B.9 – IP65/IP67 sealed duplex LC connector .....	77
Figure B.10 – M12-4 to 8-way modular bulkhead .....	79
Figure B.11 – The 8-way modular sealed jack & plug (plastic housing) .....	85
Figure B.12 – The 8-way modular sealed jack & plug (metal housing).....	85
Figure B.13 – M12-4 connectors .....	85
Figure B.14 – Earthing of cable shield .....	87

Figure B.15 – Open shield example .....	87
Figure C.1 – Interconnection of CPF 2 networks .....	93
Figure C.2 – Connection to generic cabling.....	94
Figure C.3 – DeviceNet cable system uses a trunk/drop line topology.....	96
Figure C.4 – Measuring the trunk length .....	98
Figure C.5 – Measuring the trunk and drop length.....	98
Figure C.6 – Measuring drop cable in a network with multiports .....	99
Figure C.7 – Removable device using open-style connectors .....	99
Figure C.8 – Fixed connection using open-style connector.....	100
Figure C.9 – Open-style connector pin out.....	100
Figure C.10 – Open-style connector pin out 10 position .....	100
Figure C.11 – Power supply sizing example .....	104
Figure C.12 – Current limit for thick cable for one power supply.....	105
Figure C.13 – Current for thick cable and two power supplies .....	106
Figure C.14 – Worst case scenario .....	107
Figure C.15 – Example using the lookup method .....	107
Figure C.16 – One power supply end connected .....	109
Figure C.17 – Segmenting power in the power bus .....	110
Figure C.18 – Segmenting the power bus using power taps .....	110
Figure C.19 – Thick cable construction .....	121
Figure C.20 – Mid cable construction .....	121
Figure C.21 – Thin cable construction.....	122
Figure C.22 – Flat cable construction.....	122
Figure C.23 – Cable preparation .....	123
Figure C.24 – Connector assembly .....	123
Figure C.25 – Micro connector pin assignment.....	123
Figure C.26 – Mini connector pin assignment.....	124
Figure C.27 – Preparation of cable end.....	124
Figure C.28 – Shrink wrap installation.....	125
Figure C.29 – Wire preparation .....	125
Figure C.30 – Open-style connector (female).....	125
Figure C.31 – Open-style (male plug) .....	125
Figure C.32 – Flat cable.....	126
Figure C.33 – Aligning the cable .....	127
Figure C.34 – Closing the assembly.....	127
Figure C.35 – Proper orientation of cable.....	127
Figure C.36 – Locking the assembly .....	127
Figure C.37 – Driving the IDC contacts in to the cable .....	128
Figure C.38 – End cap placement .....	128
Figure C.39 – End cap seated.....	129
Figure C.40 – End cap installation alternate side of cable .....	129
Figure C.41 – Flat cable IDC connectors.....	130
Figure C.42 – Installing the connectors .....	130



Figure C.43 – Cable wiring to open-style terminals .....	131
Figure C.44 – Auxiliary power cable profile .....	131
Figure C.45 – Pin out auxiliary power connectors.....	132
Figure C.46– Power supply cable length versus wire size .....	133
Figure C.47 – Sealed terminator .....	135
Figure C.48 – Open-style terminator .....	135
Figure C.49 – Open-style IDC terminator .....	136
Figure C.50 – Sealed terminator IDC cable .....	136
Figure C.51 – Direct connection to the trunk .....	137
Figure C.52 – Wiring of open-style connector.....	137
Figure C.53 – Wiring of open-style 10-position connector .....	137
Figure C.54 – Diagnostic temporary connections .....	138
Figure C.55 – Thick cable preterminated cables (cord sets) .....	139
Figure C.56 – Thin cable preterminated cables (cord sets).....	139
Table A.1 – Basic network characteristics for copper cabling not based on Ethernet (ISO/IEC 8802-3).....	20
Table A.2 – Allowable fibre lengths .....	21
Table A.3 – Power budgets for ControlNet fibre networks .....	21
Table A.4 – RG6 coaxial electrical properties.....	22
Table A.5 – RG6 coaxial physical parameters .....	23
Table A.6 – Cable type selection.....	23
Table A.7 – Information relevant to optical fibre cables .....	24
Table A.8 – Copper connectors for ControlNet .....	25
Table A.9 – Fibre connectors for fieldbus systems .....	26
Table A.10 – Relationship between FOC and fibre types (CP 2/1).....	26
Table A.11 – Separation from other circuits inside enclosures .....	35
Table A.12 – Parameters for Coaxial RG6 Cables.....	40
Table A.13 – Bend radius for coaxial cables outside conduit.....	40
Table A.14 – Parameters for silica optical fibre cables .....	41
Table A.15 – Parameters for hard clad silica optical fibre.....	41
Table A.16 – Test matrix for BNC/TNC connectors.....	56
Table A.17 – Wave length and fibre types .....	59
Table A.18 – LED status table.....	61
Table A.19 – Repeater adapter and module diagnostic .....	61
Table A.20 – Repeater adapter indicator diagnostic .....	62
Table A.21 – Repeater module indicator .....	62
Table A.22 – Short and medium distance troubleshooting chart .....	63
Table A.23 – Long and extra long troubleshooting chart.....	64
Table B.1 – Network characteristics for balanced cabling based on Ethernet .....	68
Table B.2 – Network characteristics for optical fibre cabling.....	69
Table B.3 – Fibre lengths for 1 mm POF A4a.2 POF 0.5 NA .....	69
Table B.4 – Fibre lengths for 1 mm POF A4d POF 0.3 NA .....	70
Table B.5 – Information relevant to copper cable: fixed cables.....	71

Table B.6 – Information relevant to copper cable: cords.....	71
Table B.7 – TCL limits for unshielded twisted-pair cabling .....	72
Table B.8 – ELTCTL limits for unshielded twisted-pair cabling .....	72
Table B.9 – Coupling attenuation limits for screened twisted-pair cabling.....	72
Table B.10 – Information relevant to optical fibre cables .....	73
Table B.11 – Connectors for balanced cabling CPs based on Ethernet .....	74
Table B.12 – Industrial EtherNet/IP 8-way modular connector parameters .....	74
Table B.13 – Industrial EtherNet/IP M12-4 D-coding connector parameters .....	75
Table B.14 – Optical fibre connecting hardware .....	76
Table B.15 – Relationship between FOC and fibre types (CP2/2).....	77
Table B.16 – Connector insertion loss.....	77
Table B.17 – Parameters for balanced cables .....	84
Table B.18 – Parameters for silica optical fibre cables .....	84
Table B.19 – Parameters for POF optical fibre cables .....	84
Table C.1 – Basic network characteristics for copper cabling not based on Ethernet (ISO/IEC-8802-3).....	96
Table C.2 – Cable trunk and drop lengths for CP 2/3 .....	97
Table C.3 – Summary of available current for trunk cables (CP 2/3).....	101
Table C.4 – Permissible current for thin cable drop lines of various lengths .....	101
Table C.5 – Power supply specification for DeviceNet.....	102
Table C.6 – Power supply tolerance stack up for DeviceNet.....	102
Table C.7 – Current versus cable length for one power supply thick cable .....	105
Table C.8 – Current versus length for two power supplies .....	106
Table C.9 – Definition of equation variables .....	108
Table C.10 – Information relevant to copper cable: fixed cables.....	111
Table C.11 – Information relevant to copper cable: cords.....	111
Table C.12 – DeviceNet cables and connector support cross reference .....	111
Table C.13 – DeviceNet cable profiles .....	112
Table C.14 – Copper connectors for non-Ethernet based fieldbus .....	115
Table C.15 – Additional connectors for CP 2/3 (DeviceNet) .....	115
Table C.16 – Parameters for balanced cables.....	120
Table C.17 – Wire colour code and function.....	126
Table C.18 – Auxiliary power cable colour code .....	131
Table C.19 – Network power supply requirements.....	132
Table C.20 – Auxillary power supply requirements .....	133
Table C.21 – Signal wire verification .....	142
Table C.22 – Shield to earth .....	142
Table C.23 – Connector pin out .....	144

## 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 61918:2010 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 61918:2010 for the benefit of the persons representing the roles in the fieldbus installation process as defined in IEC 61918:2010 (planner, installer, verification personnel, validation personnel, maintenance personnel, administration personnel). By reading the installation profile in conjunction with IEC 61918:2010, 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 (e.g. IEC 61784-5-2 for CPF 2), allows readers to work with standards of a convenient size.

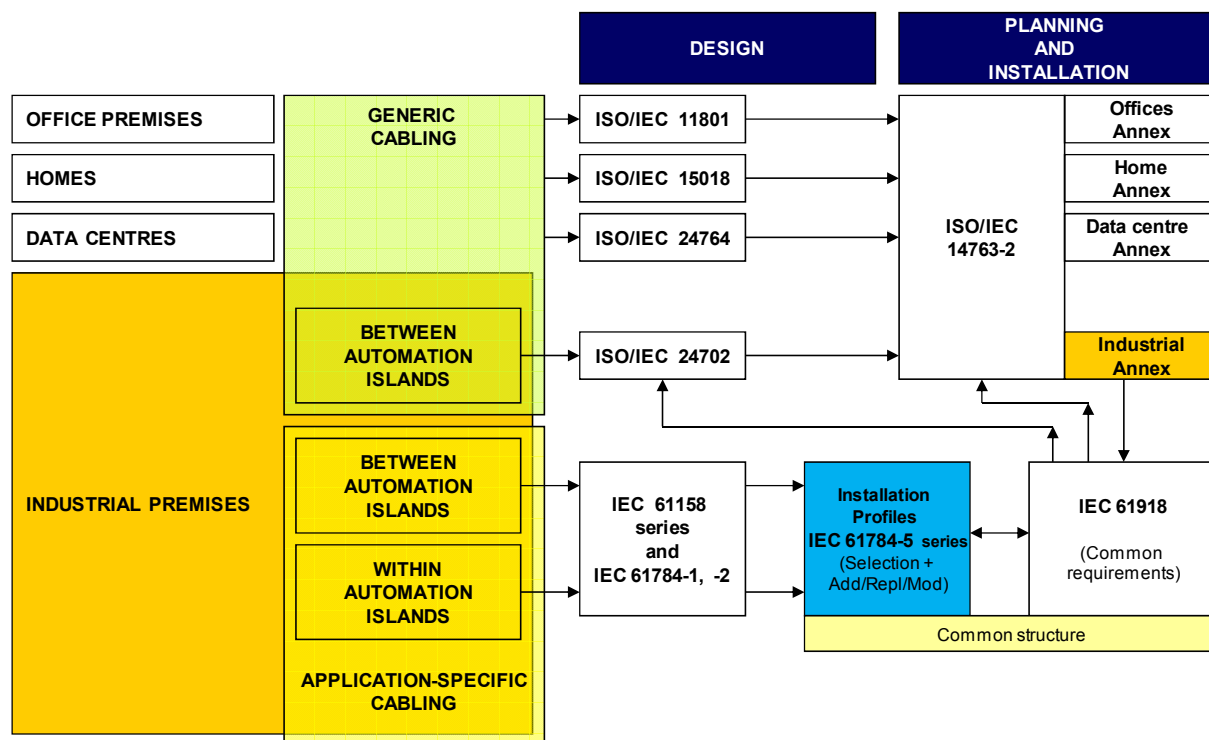


Figure 1 – Standards relationships

## **INDUSTRIAL COMMUNICATION NETWORKS – PROFILES –**

### **Part 5-2: Installation of fieldbuses – Installation profiles for CPF 2**

#### **1 Scope**

This part of IEC 61784 specifies the installation profiles for CPF 2 (CIP™<sup>1</sup>).

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 Clauses A.2, B.2, and C.2.

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<sup>1</sup> CIP™ (Common Industrial Protocol) is a trade name of Open DeviceNet Vendor Association, Inc. This information is given for the convenience of users of this International Standard and does not constitute an endorsement by IEC of the trademark holder or any of its products. Compliance to this standard does not require use of the trade name CIP™. Use of the trade name CIP™ requires permission of Open DeviceNet Vendor Association, Inc.