

**Redes de comunicación industrial. Perfiles. Parte 3: Fieldbus de seguridad funcional. Reglas generales y definiciones de perfil.**  
**(Ratificada por AENOR en octubre de 2016.)**

Redes de comunicación industrial. Perfiles. Parte 3: Fieldbus de seguridad funcional. Reglas generales y definiciones de perfil. (Ratificada por AENOR en octubre de 2016.)

*Industrial communication networks - Profiles - Part 3: Functional safety fieldbuses - General rules and profile definitions (Endorsed by AENOR in October of 2016.)*

*Réseaux de communication industriels - Profils - Partie 3: Bus de terrain de sécurité fonctionnelle - Règles générales et définitions de profils (Entérinée par l'AENOR en octobre 2016.)*

En cumplimiento del punto 11.2.5.4 de las Reglas Internas de CEN/CENELEC Parte 2, se ha otorgado el rango de documento normativo español UNE al documento normativo europeo EN 61784-3:2016 (Fecha de disponibilidad 2016-08-19)

Este documento está disponible en los idiomas oficiales de CEN/CENELEC/ETSI.

Este anuncio causará efecto a partir del primer día del mes siguiente al de su publicación en la revista AENOR.

La correspondiente versión oficial de este documento se encuentra disponible en la Asociación Española de Normalización (Génova 6 28004 MADRID, [www.une.org](http://www.une.org)).

*Esta versión corregida de la norma UNE-EN 61784-3:2016 incorpora las siguientes correcciones:*

Se adjunta la norma IEC 61784-3:2016 ya que en la versión anterior por error se incluía la norma IEC 61784-3-3:2016.

Las observaciones a este documento han de dirigirse a:

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Génova, 6  
28004 MADRID-España  
Tel.: 915 294 900  
[info@une.org](mailto:info@une.org)  
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**EUROPEAN STANDARD**  
**NORME EUROPÉENNE**  
**EUROPÄISCHE NORM**

**EN 61784-3**

August 2016

ICS 25.040.40; 35.100.05

Supersedes EN 61784-3:2010

English Version

**Industrial communication networks - Profiles -  
Part 3: Functional safety fieldbuses -  
General rules and profile definitions  
(IEC 61784-3:2016)**

Réseaux de communication industriels - Profils -  
Partie 3: Bus de terrain de sécurité fonctionnelle -  
Règles générales et définitions de profils  
(IEC 61784-3:2016)

Industrielle Kommunikationsnetze - Profile -  
Teil 3: Funktional sichere Übertragung bei Feldbussen -  
Allgemeine Regeln und Festlegungen für Profile  
(IEC 61784-3:2016)

This European Standard was approved by CENELEC on 2016-06-17. 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

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

## European foreword

The text of document 65C/840/FDIS, future edition 3 of IEC 61784-3, 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 61784-3:2016.

The following dates are fixed:

- latest date by which the document has to be implemented at (dop) 2017-03-17 national level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2019-06-17

This document supersedes EN 61784-3:2010.

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 61784-3:2016 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 60204-1	NOTE	Harmonized as EN 60204-1.
IEC 61131-2:2007	NOTE	Harmonized as EN 61131-2:2007 (not modified).
IEC 61131-6	NOTE	Harmonized as EN 61131-6.
IEC 61496	NOTE	Harmonized in EN 61496 series.
IEC 61496-1	NOTE	Harmonized as EN 61496-1.
IEC 61508-4:2010	NOTE	Harmonized as EN 61508-4:2010 (not modified).
IEC 61508-5:2010	NOTE	Harmonized as EN 61508-5:2010 (not modified).
IEC 61511	NOTE	Harmonized in EN 61511 series.
IEC 61800-5-2	NOTE	Harmonized as EN 61800-5-2.
IEC 62061:2005	NOTE	Harmonized as EN 62061:2005 (not modified).
IEC/TR 62685	NOTE	Harmonized as CLC/TR 62685.

ISO 10218-1	NOTE	Harmonized as EN ISO 10218-1.
ISO 12100	NOTE	Harmonized as EN ISO 12100.
ISO 13849	NOTE	Harmonized in EN ISO 13849 series.
ISO 13849-1:2015	NOTE	Harmonized as EN ISO 13849-1:2015 (not modified).

**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 1 When an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: [www.cenelec.eu](http://www.cenelec.eu).

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61000-6-7	-	Electromagnetic compatibility (EMC) - Part 6-7: Generic standards - Immunity requirements for equipment intended to perform functions in a safety-related system (functional safety) in industrial locations	EN 61000-6-7	-
IEC 61010-2-201	2013	Safety requirements for electrical equipment for measurement, control and laboratory use -	EN 61010-2-201	2013
-	-	Part 2-201: Particular requirements for control equipment	+ AC	2013
IEC 61158	series	Industrial communication networks - Fieldbus specifications	EN 61158	series
IEC 61326-3-1	-	Electrical equipment for measurement, control and laboratory use - EMC requirements - Part 3-1: Immunity requirements for safety-related systems and for equipment intended to perform safety-related functions (functional safety) - General industrial applications	EN 61326-3-1	-
IEC 61326-3-2	-	Electrical equipment for measurement, control and laboratory use - EMC requirements - Part 3-2: Immunity requirements for safety-related systems and for equipment intended to perform safety-related functions (functional safety) - Industrial applications with specified electromagnetic environment	EN 61326-3-2	-
IEC 61508	series	Functional safety of electrical/electronic/programmable electronic safety-related systems	EN 61508	series

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61508-1	2010	Functional safety of electrical/electronic/programmable electronic safety-related systems - Part 1: General requirements	EN 61508-1	2010
IEC 61508-2	-	Functional safety of electrical/electronic/programmable electronic safety-related systems - Part 2: Requirements for electrical/electronic/programmable electronic safety-related systems	EN 61508-2	-
IEC 61784-1	-	Industrial communication networks - Profiles - Part 1: Fieldbus profiles	EN 61784-1	-
IEC 61784-2	-	Industrial communication networks - Profiles - Part 2: Additional fieldbus profiles for real-time networks based on ISO/IEC 8802-3	EN 61784-2	-
IEC 61784-3-1	-	Industrial communication networks - Profiles - Part 3-1: Functional safety fieldbuses - Additional specifications for CPF 1	EN 61784-3-1	-
IEC 61784-3-2	-	Industrial communication networks - Profiles - Part 3-2: Functional safety fieldbuses - Additional specifications for CPF 2	EN 61784-3-2	-
IEC 61784-3-3	-	Industrial communication networks - Profiles - Part 3-3: Functional safety fieldbuses - Additional specifications for CPF 3	EN 61784-3-3	-
IEC 61784-3-6	-	Industrial communication networks - Profiles - Part 3-6: Functional safety fieldbuses - Additional specifications for CPF 6	EN 61784-3-6	-
IEC 61784-3-8	-	Industrial communication networks - Profiles - Part 3-8: Functional safety fieldbuses - Additional specifications for CPF 8	EN 61784-3-8	-
IEC 61784-3-12	-	Industrial communication networks - Profiles - Part 3-12: Functional safety fieldbuses - Additional specifications for CPF 12	EN 61784-3-12	-
IEC 61784-3-13	-	Industrial communication networks - Profiles - Part 3-13: Functional safety fieldbuses - Additional specifications for CPF 13	EN 61784-3-13	-
IEC 61784-3-14	-	Industrial communication networks - Profiles - Part 3-14: Functional safety fieldbuses - Additional specifications for CPF 14	EN 61784-3-14	-

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61784-3-17	- <sup>1)</sup>	Industrial communication networks - Profiles - Part 3-17: Functional safety fieldbuses - Additional specifications for CPF 17	-	-
IEC 61784-3-18	-	Industrial communication networks - Profiles - Part 3-18: Functionnal safety fieldbuses - Additional specifications for CPF 18	EN 61784-3-18	-
IEC 61784-5	series	Industrial communication networks - Profiles - Part 5: Installation of fieldbuses	EN 61784-5	series
IEC 61918 (mod)	2013	Industrial communication networks - Installation of communication networks in industrial premises	EN 61918	2013
-	-		+ AC	2014
IEC 62443	series	Industrial communication networks - Network and system security	EN 62443	series

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1) To be published.



# INTERNATIONAL STANDARD

## NORME INTERNATIONALE



**Industrial communication networks – Profiles –  
Part 3: Functional safety fieldbuses – General rules and profile definitions**

**Réseaux de communication industriels – Profils –  
Partie 3: Bus de terrain de sécurité fonctionnelle – Règles générales et  
définitions de profils**



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IEC Central Office  
3, rue de Varembé  
CH-1211 Geneva 20  
Switzerland

Tel.: +41 22 919 02 11  
Fax: +41 22 919 03 00  
[info@iec.ch](mailto:info@iec.ch)  
[www.iec.ch](http://www.iec.ch)

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