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ILNAS-EN IEC 61784-2-3:2023

Industrial networks - Profiles - Part 2-3: Additional real-time fieldbus profiles based on ISO/IEC/IEEE 8802-3 - CPF 3

Réseaux industriels - Profils - Partie 2-3: Profils de bus de terrain supplémentaires pour les réseaux en temps réel fondés sur l'ISO/IEC/IEEE 8802-3 - CPF 3

Industrielle Kommunikationsnetze - Profile - Teil 2-3: Zusätzliche Feldbusprofile für Echtzeitnetzwerke basierend auf ISO/IEC/IEEE 8802-3 -

05/2023

National Foreword

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN IEC 61784-2-3

May 2023

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Supersedes EN IEC 61784-2:2019 (partially)

English Version

Industrial networks - Profiles - Part 2-3: Additional real-time fieldbus profiles based on ISO/IEC/IEEE 8802-3 - CPF 3 (IEC 61784-2-3:2023)

Réseaux industriels - Profils - Partie 2-3: Profils de bus de terrain supplémentaires pour les réseaux en temps réel fondés sur l'ISO/IEC/IEEE 8802-3 - CPF 3
(IEC 61784-2-3:2023)

Industrielle Kommunikationsnetze - Profile - Teil 2-3: Zusätzliche Feldbusprofile für Echtzeitnetzwerke basierend auf ISO/IEC/IEEE 8802-3 - Kommunikationsprofilfamilie (CPF) 3
(IEC 61784-2-3:2023)

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European foreword

The text of document 65C/1209/FDIS, future edition 1 of IEC 61784-2-3, 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 61784-2-3:2023.

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) 2024-02-03
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2026-05-03

This document, together with other parts of the same series, partially supersedes EN IEC 61784-2:2019 and all of its amendments and corrigenda (if any).

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Endorsement notice

The text of the International Standard IEC 61784-2-3:2023 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 standard indicated:

IEC 61158-1	NOTE Approved as EN IEC 61158-1
IEC 61158-2	NOTE Approved as EN IEC 61158-2
IEC 61158-3-3	NOTE Approved as EN 61158-3-3
IEC 61158-4-3	NOTE Approved as EN IEC 61158-4-3
IEC 61158-5-3	NOTE Approved as EN 61158-5-3
IEC 61158-6-3	NOTE Approved as EN IEC 61158-6-3
IEC 61784-1 (series)	NOTE Approved as EN IEC 61784-1 (series)
IEC 61784-1-0	NOTE Approved as EN IEC 61784-1-0
IEC 61784-2 (series)	NOTE Approved as EN IEC 61784-2 (series)
IEC 61918	NOTE Approved as EN IEC 61918

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Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

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.

NOTE 1 Where 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.cencenelec.eu.

Publication	Year	Title	EN/HD	Year
IEC 61158	series	Industrial communication networks - Fieldbus specifications	EN IEC 61158	series
IEC 61158-5-10	2023	Industrial communication networks - Fieldbus specifications - Part 5-10: Application layer service definition - Type 10 elements	EN IEC 61158-5-10	2023
IEC 61158-6-10	2023	Industrial communication networks - Fieldbus specifications - Part 6-10: Application layer protocol specification - Type 10 elements	EN IEC 61158-6-10	2023
IEC 61784-1-3	2023	Industrial networks - Profiles - Part 1-3: Fieldbus profiles - Communication Profile Family 3	EN IEC 61784-1-3	2023
IEC 61784-2-0	2023	Industrial networks - Profiles - Part 2-0: Additional real-time fieldbus profiles based on ISO/IEC/IEEE 8802-3 - General concepts and terminology	EN IEC 61784-2-0	2023
IEC 61784-3-3	2021	Industrial communication networks - Profiles - Part 3-3: Functional safety fieldbuses - Additional specifications for CPF 3	EN IEC 61784-3-3	2021
IEC 61784-5-3	2018	Industrial communication networks - Profiles - Part 5-3: Installation of fieldbuses - Installation profiles for CPF 3	EN IEC 61784-5-3	2018
IEC 62439-2	2021	Industrial communication networks - High availability automation networks - Part 2: Media Redundancy Protocol (MRP)	EN IEC 62439-2	2022
ISO/IEC/IEEE 8802-3	--	Telecommunications and exchange between information technology systems - Requirements for local and metropolitan area networks - Standard for Ethernet	-	-

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ISO/IEC 9834-8	2014	Information technology - Procedures for the operation of object identifier registration authorities - Part 8: Generation of universally unique identifiers (UUIDs) and their use in object identifiers	-	-
ISO 15745-4/AMD1	2003/ 2006	Industrial automation systems and integration - Open systems application integration framework - Part 4: Reference description for Ethernet-based control systems - Amendment 1: PROFINET profiles	-	-
IEEE Std 802	2014	IEEE Standard for Local and metropolitan area networks: Overview and Architecture	-	-
IEEE Std 802.1AB	2016	IEEE Standard for Local and metropolitan area networks: Station and Media Access Control Connectivity Discovery	-	-
IEEE Std 802.1AS	2020	IEEE standard for Local and metropolitan area networks - Timing and Synchronization for Time-Sensitive Applications	-	-
IEEE 802.1CB	2017	IEEE Standard for Local and metropolitan area networks - Frame Replication and Elimination for Reliability	-	-
IEEE Std 802.1Q	2018	IEEE Standard for Local and metropolitan area networks - Media Access Control (MAC) Bridges and Bridged Networks	-	-
IEEE Std 802.3	2018	IEEE Standard for Ethernet	-	-
IEEE Std 802.11	2020	IEEE Standard for Information technology - Telecommunications and information exchange between systems - Local and metropolitan area networks - Specific requirements - Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) Specifications	-	-
IEEE Std 802.11n	2009	IEEE Standard for Information technology - Local and metropolitan area networks - Specific requirements - Part 11: Wireless LAN Medium Access Control (MAC)and Physical Layer (PHY) Specifications Amendment 5: Enhancements for Higher Throughput	-	-
IEEE Std 802.15.1	2005	IEEE Standard for Information technology - Telecommunications and information exchange between systems - Local and metropolitan area networks - Specific requirements. - Part 15.1: Wireless medium access control (MAC) and physical layer (PHY) specifications for wireless personal area networks (WPANs)	-	-
IETF RFC 768	1980	User Datagram Protocol	-	-
IETF RFC 791	1981	Internet Protocol	-	-
IETF RFC 792	1981	Internet Control Message Protocol	-	-
IETF RFC 793	1981	Transmission Control Protocol	-	-

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IETF RFC 826	1982	Ethernet Address Resolution Protocol: Or Converting Network Protocol Addresses to 48.bit Ethernet Address for Transmission on Ethernet Hardware	-	-
IETF RFC 1034	1987	Domain names - concepts and facilities	-	-
IETF RFC 1157	1990	Simple Network Management Protocol (SNMP)	-	-
IETF RFC 1213	1991	Management Information Base for Network Management of TCP/IP-based Internets: MIB-II	-	-
IETF RFC 2131	1997	Dynamic Host Configuration Protocol	-	-
IETF RFC 4836	2007	Definitions of Managed Objects for IEEE 802.3 Medium Attachment Units (MAUs)	-	-
The Open Group - Publication C706	-	Technical Standard DCE1.1: Remote Procedure Call	-	-
Metro Ethernet Forum – MEF 10.4	2018	Subscriber Ethernet Service Attributes	-	-

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