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STN	**Priemyselné komunikačné siete Siete s vysokou pohotovosťou pre automatizáciu Časť 2: Protokol MRP (Media Redundancy Protocol)**	**STN EN 62439-2 18 4020**

Industrial communication networks - High availability automation networks - Part 2: Media Redundancy Protocol (MRP)

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 07/18

Obsahuje: EN 62439-2:2017, IEC 62439-2:2016

Oznámením tejto normy sa od 08.12.2021 ruší
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Industrial communication networks - High availability automation networks - Part 2: Media Redundancy Protocol (MRP) (IEC 62439-2:2016)

Réseaux de communication industriels - Réseaux d'automatisme à haute disponibilité - Partie 2: Protocole de redondance du support (MRP)
(IEC 62439-2:2016)

Industrielle Kommunikationsnetze: Hochverfügbare Automatisierungsnetze - Teil 2: Medienredundanz-Protokoll (MRP)
(IEC 62439-2:2016)

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Europäisches Komitee für Elektrotechnische Normung

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European foreword

The text of document 65C/583/FDIS, future edition 2 of IEC 62439-2, prepared by SC 65C "Industrial networks" of IEC/TC 65X "Industrial-process measurement, control and automation" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 62439-2:2017.

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)	2018-06-08
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2021-12-08

This document supersedes EN 62439-2:2010.

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Endorsement notice

The text of the International Standard IEC 62439-2:2016 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 61158-2:2007	NOTE	Harmonized as EN 61158-2:2008 [1] (not modified).
IEC 61158-5-10	NOTE	Harmonized as EN 61158-5-10.
IEC 61784-1:2007	NOTE	Harmonized as EN 61784-1:2008 [2] (not modified).
IEC 61784-2:2007	NOTE	Harmonized as EN 61784-2:2008 [3] (not modified).
IEC 62439-3	NOTE	Harmonized as EN 62439-3.
IEC 62439-4	NOTE	Harmonized as EN 62439-4.
IEC 62439-6	NOTE	Harmonized as EN 62439-6.

[1] Withdrawn publication, the active edition is EN 61158-2:2014 (IEC 61158-2:2014).

[2] Withdrawn publication, the active edition is EN 61784-1:2014 (IEC 61784-1:2014).

[3] Withdrawn publication, the active edition is EN 61784-2:2014 (IEC 61784-2:2014).

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.cenelec.eu.

Publication	Year	Title	EN/HD	Year
IEC 60050-191	-	International Electrotechnical Vocabulary - Chapter 191: Dependability and quality of service	-	-
IEC 61158-6-10	2014	Industrial communication networks - Fieldbus specifications - Part 6-10: Application layer protocol specification - Type 10 elements	EN 61158-6-10	2014
IEC 61784-1	-	Digital data communications for measurement and control -- Part 1: Profile sets for continuous and discrete manufacturing relative to fieldbus use in industrial control systems	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 62439-1	2010	Industrial communication networks - High availability automation networks -- Part 1: General concepts and calculation methods	EN 62439-1	2010
+ A1	2012		+A1	2012
ISO/IEC 10164-1	-	Information technology; Open Systems Interconnection; systems management: object management function	-	-
ISO/IEC/IEEE 8802-3	-	Standard for Ethernet	-	-
IEEE 802.1D	2004	IEEE Standard for local and metropolitan area networks - Media Access Control (MAC) Bridges	-	-
IEEE 802.1Q	2011	IEEE Standard for Local and metropolitan area networks - Media Access Control (MAC) Bridges and Virtual Bridged Local Area Networks	-	-

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INTERNATIONAL STANDARD

NORME INTERNATIONALE

colour inside

Industrial communication networks – High availability automation networks – Part 2: Media Redundancy Protocol (MRP)

Réseaux de communication industriels – Réseaux d'automatisme à haute disponibilité – Partie 2: Protocole de redondance du support (MRP)

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INDUSTRIAL COMMUNICATION NETWORKS – HIGH AVAILABILITY AUTOMATION NETWORKS –

Part 2: Media Redundancy Protocol (MRP)

FOREWORD

1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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International Standard IEC 62439-2 has been prepared by subcommittee 65C: Industrial networks, of IEC technical committee 65: Industrial-process measurement, control and automation.

This second edition cancels and replaces the first edition published in 2010. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

– adding a protocol extension to select the media redundancy manager automatically;
– adding a protocol to redundantly connect media redundancy protocol rings.

The text of this standard is based on the following documents:

FDIS	Report on voting
65C/834/FDIS	65C/841/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 ISO/IEC Directives, Part 2.

This International Standard is to be read in conjunction with IEC 62439-1.

A list of all parts of the IEC 62439 series, published under the general title *Industrial communication networks – High availability automation networks*, 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.

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