



SLOVENSKI STANDARD SIST EN IEC 60939-3:2024

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Pasivni filtri za dušenje elektromagnetnega motenja - 3. del: Enote pasivnih filtrov, za katere varnostni preskusi ustrezajo (IEC 60939-3:2024)

Passive filter units for electromagnetic interference suppression - Part 3: Passive filter units for which safety tests are appropriate (IEC 60939-3:2024)

Passive Filter für die Unterdrückung von elektromagnetischen Störungen - Teil 3: Filter, für die Sicherheitsprüfungen vorgeschrieben sind (IEC 60939-3:2024)

Filtres passifs d'antiparasitage - Partie 3: Filtres passifs pour lesquels des essais de sécurité sont appropriés (IEC 60939-3:2024)

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English Version

**Passive filter units for electromagnetic interference suppression -
Part 3: Passive filter units for which safety tests are appropriate
(IEC 60939-3:2024)**

Filtres passifs d'antiparasitage - Partie 3: Filtres passifs
pour lesquels des essais de sécurité sont appropriés
(IEC 60939-3:2024)

Passive Filter für die Unterdrückung von
elektromagnetischen Störungen - Teil 3: Filter, für die
Sicherheitsprüfungen vorgeschrieben sind
(IEC 60939-3:2024)

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EN IEC 60939-3:2024 (E)**European foreword**

The text of document 40/3102/FDIS, future edition 2 of IEC 60939-3, prepared by IEC/TC 40 "Capacitors and resistors for electronic equipment" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 60939-3:2024.

The following dates are fixed:

- latest date by which the document has to be implemented at national (dop) 2024-12-18 level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting with the (dow) 2027-03-18 document have to be withdrawn

This document supersedes EN 60939-3:2015 and all of its amendments and corrigenda (if any).

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Endorsement notice

The text of the International Standard IEC 60939-3:2024 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 60068-2-13 NOTE Approved as EN IEC 60068-2-13

IEC 60068-2-27 NOTE Approved as EN 60068-2-27

IEC 60085 NOTE Approved as EN 60085

IEC 60294 NOTE Approved as EN 60294

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IEC 61112 NOTE Approved as EN 61112

IEC 61140 NOTE Approved as EN 61140

IEC 62109-1 NOTE Approved as EN 62109-1

ISO 80000-1 NOTE Approved as EN ISO 80000-1

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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60060-1	2010	High-voltage test techniques - Part 1: General definitions and test requirements	EN 60060-1	2010
IEC 60062	2016	Marking codes for resistors and capacitors	EN 60062	2016
IEC 60068-1	2013	Environmental testing - Part 1: General and guidance	EN 60068-1	2014
IEC 60068-2-1	2007	Environmental testing - Part 2-1: Tests - Test A: Cold	EN 60068-2-1	2007
IEC 60068-2-2	2007	Environmental testing - Part 2-2: Tests - Test B: Dry heat	EN 60068-2-2	2007
IEC 60068-2-6	2007	Environmental testing - Part 2-6: Tests - Test Fc: Vibration (sinusoidal)	EN 60068-2-6	2008
IEC 60068-2-14	2023	Environmental testing - Part 2-14: Tests - Test N: Change of temperature	EN IEC 60068-2-14	2023
IEC 60068-2-17	2023	Environmental testing - Part 2-17: Tests - Test Q: Sealing	EN IEC 60068-2-17	2023
IEC 60068-2-20	2021	Environmental testing - Part 2-20: Tests - Test Ta and Tb: Test methods for solderability and resistance to soldering heat of devices with leads	EN IEC 60068-2-20	2021
IEC 60068-2-21	2021	Environmental testing - Part 2-21: Tests - Test U: Robustness of terminations and integral mounting devices	EN IEC 60068-2-21	2021
IEC 60068-2-30	2005	Environmental testing - Part 2-30: Tests - Test Db: Damp heat, cyclic (12 h + 12 h cycle)	EN 60068-2-30	2005
IEC 60068-2-45	1980	Basic environmental testing procedures - Part 2-45: Tests - Test XA and guidance: Immersion in cleaning solvents	EN 60068-2-45	1992
IEC 60068-2-78	2012	Environmental testing - Part 2-78: Tests - Test Cab: Damp heat, steady state	EN 60068-2-78	2013

EN IEC 60939-3:2024 (E)

IEC 60384-14	2023	Fixed capacitors for use in electronic equipment - Part 14: Sectional specification - Fixed capacitors for electromagnetic interference suppression and connection to the supply mains	EN IEC 60384-14	2023
IEC 60664-1	2020	Insulation coordination for equipment within low-voltage supply systems - Part 1: Principles, requirements and tests	EN IEC 60664-1	2020
IEC 60695-11-5	2016	Fire hazard testing - Part 11-5: Test flames - Needle-flame test method - Apparatus, confirmatory test arrangement and guidance	EN 60695-11-5	2017
IEC 60695-11-10	2013	Fire hazard testing - Part 11-10: Test flames - 50 W horizontal and vertical flame test methods	EN 60695-11-10	2013
IEC 60938-1	2021	Fixed inductors for electromagnetic interference suppression - Part 1: Generic specification	EN IEC 60938-1	2021
IEC 60938-2	2021	Fixed inductors for electromagnetic interference suppression - Part 2: Sectional specification on power line chokes	EN IEC 60938-2	2021
IEC 60940	2015	Guidance information on the application of capacitors, resistors, inductors and complete filter units for electromagnetic interference suppression	EN 60940	2015
CISPR 17	2011	Methods of measurement of the suppression characteristics of passive EMC filtering devices	EN 55017	2011

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INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Passive filter units for electromagnetic interference suppression –
Part 3: Passive filter units for which safety tests are appropriate**

**Filtres passifs d'antiparasitage –
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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**PASSIVE FILTER UNITS FOR ELECTROMAGNETIC
INTERFERENCE SUPPRESSION –****Part 3: Passive filter units for which safety tests are appropriate**

FOREWORD

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IEC 60939-3 has been prepared by of IEC technical committee 40: Capacitors and resistors for electronic equipment. It is an International Standard.

This second edition cancels and replaces the first edition published in 2015, Corrigendum 1:2016 and Corrigendum 2:2018. This edition constitutes a technical revision.

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

- a) Separated clauses for safety and performance tests;
- b) Added note for use of multiple X capacitors bridging basic insulation in 3 phase filters;
- c) Characteristics and conditions to substitute X and Y capacitors are now described in a separate Subclause 4.1;