
Signalizacija po nizkonapetostnih električnih napeljavah v frekvenčnem območju od 3 kHz do 148,5 kHz - 4-3. del: Nizkonapetostni ločilni filtri - Vhodni filter

Signalling on low-voltage electrical installations in the frequency range 3 kHz to 148,5 kHz - Part 4-3: Low voltage decoupling filter - Incoming filter

iTeh STANDARD PREVIEW

Transmission de signaux sur les réseaux électriques basse tension dans la bande de fréquences de 3 kHz à 148,5 kHz - Partie 4-3: Filtrés de découplage basse tension - Filtre de branchement

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Ta slovenski standard je istoveten z: prEN 50065-4-3

ICS:

31.160	Električni filtri	Electric filters
33.040.30	Komutacijski in signalizacijski sistem	Switching and signalling systems

oSIST prEN 50065-4-3:2021

en,fr,de

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

DRAFT
prEN 50065-4-3

April 2021

ICS

Will supersede EN 50065-4-3:2003 and all of its amendments and corrigenda (if any)

English Version

Signalling on low-voltage electrical installations in the frequency range 3 kHz to 148,5 kHz - Part 4-3: Low voltage decoupling filter - Incoming filter

To be completed

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This draft European Standard is submitted to CENELEC members for enquiry.
Deadline for CENELEC: 2021-07-16.

It has been drawn up by CLC/TC 205A.

If this draft becomes a European Standard, 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.

This draft European Standard was established by CENELEC 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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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

prEN 50065-4-3:2021 (E)

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19 European foreword

20 This document (prEN 50065-4-3:2021) has been prepared by WG 12 “Filters” of CLC/TC 205A “Mains
21 communicating systems”.

22 This document is currently submitted to the Enquiry.

23 The following dates are proposed:

- latest date by which the existence of this document has to be announced at national level (doa) dor + 6 months
- latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) dor + 12 months
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) dor + 36 months (to be confirmed or modified when voting)

24 This document will supersede EN 50065-4-3:2003 and all of its amendments and corrigenda (if any).

25 This document has been prepared under a mandate given to CENELEC by the European Commission
26 and the European Free Trade Association.

27 EN 50065 consists of the following parts, under the general title: Signalling on low-voltage electrical
28 installations in the frequency range 3 kHz to 148,5 kHz

29 Part 1: General requirements, frequency bands and electromagnetic disturbances

30 Part 2-1: Immunity requirements for mains communications equipment and systems operating
31 in the range of frequencies 95 kHz to 148,5 kHz and intended for use in residential, commercial and
32 light industrial environments

33 Part 2-2: Immunity requirements for mains communications equipment and systems operating
34 in the range of frequencies 95 kHz to 148,5 kHz and intended for use in industrial environments

35 Part 2-3: Immunity requirements for mains communications equipment and systems operating
36 in the range of frequencies 3 kHz to 95 kHz and intended for use by electricity suppliers and
37 distributors

38 Part 4-1: Low voltage decoupling filters – Generic specification

39 Part 4-2: Low voltage decoupling filters – Safety requirements

40 Part 4-3: Low voltage decoupling filters – Incoming filter

41 Part 4-4: Low voltage decoupling filters – Impedance filter

42 Part 4-5: Low voltage decoupling filters – Segmentation filter

43 Part 4-6: Low voltage decoupling filters – Phase coupler

44 Part 4-7: Portable low voltage decoupling filters – Safety requirements

45 Part 7: Equipment impedance

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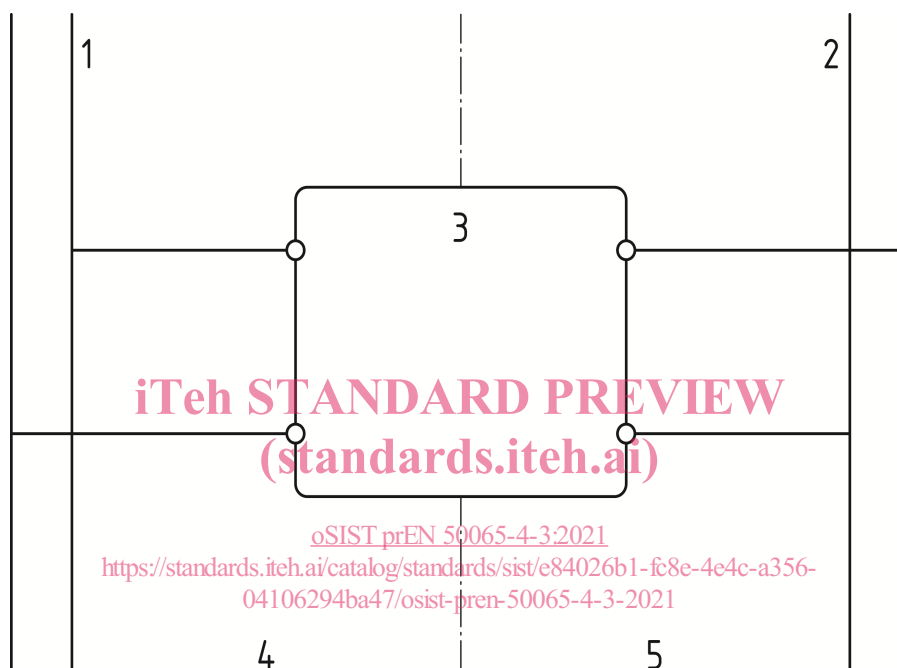
46 **1 Scope**

47 This document applies to incoming filters used to control the coupling of signals between the utility
 48 area and the consumer area, as illustrated in Figure 1.

49 The document defines:

- 50 — the minimum impedance in the relevant frequency band(s) at both utility port and consumer port,
- 51 — the minimum attenuation of unwanted signals transmitted from the utility side to the consumer
 52 side and vice versa.

53 This document applies to incoming filters designed for single or multiphase installations.



54

55 **Figure 1 — The application of incoming filter**

56 **2 Normative references**

57 The following documents are referred to in the text in such a way that some or all of their content
 58 constitutes requirements of this document. For dated references, only the edition cited applies. For
 59 undated references, the latest edition of the referenced document (including any amendments)
 60 applies.

61 EN 50065-2-1, *Signalling on low-voltage electrical installations in the frequency range 3 kHz to 148,5*
 62 *kHz - Part 2-1: Immunity requirements for mains communications equipment and systems operating in*
 63 *the range of frequencies 95 kHz to 148,5 kHz and intended for use in residential, commercial and light*
 64 *industrial environments*

65 EN 50065-2-2, *Signalling on low-voltage electrical installations in the frequency range 3 kHz to 148,5*
 66 *kHz - Part 2-2: Immunity requirements for mains communications equipment and systems operating in*
 67 *the range of frequencies 95 kHz to 148,5 kHz and intended for use in industrial environments*

68 EN 50065-2-3, *Signalling on low-voltage electrical installations in the frequency range 3 kHz to 148,5*
 69 *kHz - Part 2-3: Immunity requirements for mains communications equipment and systems operating in*
 70 *the range of frequencies 3 kHz to 95 kHz and intended for use by electricity suppliers and distributors*

71 EN 50065-4-1:2001, *Signalling on low-voltage electrical installations in the frequency range 3 kHz to*
72 *148,5 kHz - Part 4-1: Low voltage decoupling filters - Generic specification*

73 EN 50065-4-2, *Signalling on low-voltage electrical installations in the frequency range 3 kHz to 148,5*
74 *kHz and 1,6 MHz to 30 MHz - Part 4-2: Low voltage decoupling filters - Safety requirements*

75 EN 50065-4-7, *Signalling on low-voltage electrical installations in the frequency range 3 kHz to 148,5*
76 *kHz and 1,6 MHz to 30 MHz - Part 4-7: Portable low voltage decoupling filters - Safety requirements*

77 **3 Terms and definitions**

78 No terms and definitions are listed in this document.

79 ISO and IEC maintain terminological databases for use in standardization at the following addresses:

80 — ISO Online browsing platform: available at <https://www.iso.org/obp>

81 — IEC Electropedia: available at <http://www.electropedia.org/>

82 **4 Classification**

83 **4.1 General**

84 NOTE The selection of the filter are expected to be made according to the local regulations.

85 If there are no local regulations, Type 1 shall be used.

86 **4.2 Type 1**

87 Satisfies both the utility and the consumer impedance requirements.

88 **4.3 Type 2**

89 Satisfies only the utility impedance requirements.

90 **4.4 Type 3**

91 Satisfies only the consumer impedance requirements.

92 **5 Incoming filter electrical characteristics**

93 **5.1 General**

94 The filter shall meet the requirements given in EN 50065-4-1.

95 **5.2 Immunity for EMC**

96 The filter shall meet the immunity requirements specified in:

97 — EN 50065-2-1 for the consumer side in residential, commercial and light industrial environments-

98 — EN 50065-2-2 for the consumer side in industrial environments-

99 — EN 50065-2-3 for the utility side.