

Signalling on low-voltage electrical installations in the frequency range 3 kHz to 148,5 kHz Part 4-6: Low voltage decoupling filters - Phase coupler

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 50065-4-6:2023 sisaldab Euroopa standardi EN 50065-4-6:2023 ingliskeelset teksti.	This Estonian standard EVS-EN 50065-4-6:2023 consists of the English text of the European standard EN 50065-4-6:2023.
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English Version

Signalling on low-voltage electrical installations in the frequency
range 3 kHz to 148,5 kHz Part 4-6: Low voltage decoupling
filters - Phase coupler

Transmission de signaux sur les réseaux électriques basse
tension dans la bande de fréquences de 3 kHz à 148,5 kHz
- Partie 4-6: Filtres de découplage basse tension - Coupleur
de phase

Signalübertragung auf elektrischen Niederspannungsnetzen
im Frequenzbereich 3 kHz bis 148,5 kHz Teil 4-6:
Niederspannungs-Entkopplungsfilter - Phasenkoppler

This European Standard was approved by CENELEC on 2022-10-03. 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.

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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

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European foreword

This document (EN 50065-4-6:2023) has been prepared by WG 12 “Filters” of CLC/TC 219 “Mains communicating systems”.

The following dates are fixed:

- latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2023-09-24
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2026-03-24

This document supersedes EN 50065-4-6:2004 and all of its amendments and corrigenda (if any).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC shall not be held responsible for identifying any or all such patent rights.

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

Part 1: General requirements, frequency bands and electromagnetic disturbances

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

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

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

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

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

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

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

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

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

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

Part 7: Equipment impedance

This document has been prepared under a Standardization Request given to CENELEC by the European Commission and the European Free Trade Association.

Any feedback and questions on this document should be directed to the users' national committee. A complete listing of these bodies can be found on the CENELEC website.

1 Scope

This document applies to phase couplers in a mains communication system intended for utility networks or household and similar fixed installation including residential, commercial and light industrial buildings.

Phase couplers are used to control the coupling of communication signals between phases or sections of a mains communication system.

This document defines

- the requirements to ensure a minimum coupling between the phases or sections of a mains communication system, and
- the requirements to ensure no change on the safety of the electrical installation.

2 Normative references

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.

EN 50065-1, *Signalling on low-voltage electrical installations in the frequency range 3 kHz to 148,5 kHz - Part 1: General requirements, frequency bands and electromagnetic disturbances*

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

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

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

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

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

3 Definitions

For the purposes of this document, the terms and definitions given in EN 50065-1, EN 50065-4-1 and the following apply.

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

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <https://www.electropedia.org/>