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## EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

### EN 50065-4-3

January 2003

ICS 31.160; 33 040.30

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

Transmission de signaux sur les réseaux électriques basse tension dans la bande de fréquences de 3 kHz à 148,5 kHz Partie 4-3: Filtres basse tension de découplage -Filtre de branchement Signalübertragung auf elektrischen Niederspannungsnetzen im Frequenzbereich 3 kHz bis 148,5 kHz Teil 4-3: Niederspannungs-Entkopplungsfilter -Eingangsfilter

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# CENELEC

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#### Foreword

This European Standard was prepared by SC 205A, Mains communicating systems, of Technical Committee CENELEC TC 205, Home and Building Electronic Systems (HBES).

The text of the draft was submitted to the Unique Acceptance Procedure and was approved by CENELEC as EN 50065-4-3 on 2001-09-01.

The following dates were fixed:

| - | latest date by which the EN has to be implemented<br>at national level by publication of an identical<br>national standard or by endorsement | (dop) | 2003-08-01 |
|---|--|-------|------------|
| - | latest date by which the national standards conflicting with the EN have to be withdrawn   | (dow) | 2004-08-01 |

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 7   | Equipment impedance  |
|          |  |

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#### 1 Scope

This standard applies to incoming filters used to control the coupling of signals between the utility area and the consumer area (see Figure 1).

The standard defines

- the minimum impedance in the relevant frequency band(s) at both Utility port and Consumer port,
- the minimum attenuation of unwanted signals transmitted from the utility side to the consumer side and vice versa,
- the transmission characteristics:
  - operating frequency domain for both utility side and consumer side,
  - attenuation between the utility side and the consumer side and vice versa,
  - impedance at the utility side and at the consumer side.

This standard applies to incoming filters designed for and used in single or multiphase installations.

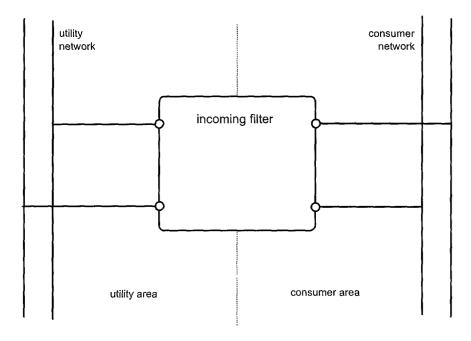


Figure 1 - The application of incoming filter

#### 2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

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



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