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Datahallsutrymmen och tillhörande system – Del 4-3: Faktor för förnybar energi

*Information technology –
Data centre facilities and infrastructures –
Part 4-3: Renewable Energy Factor*

Som svensk standard gäller europastandarden EN 50600-4-3:2016. Den svenska standarden innehåller den officiella engelska språkversionen av EN 50600-4-3:2016.

ICS 35.020.00; 35.110.00; 35.160.00

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Postadress: Box 1284, 164 29 KISTA
Telefon: 08 - 444 14 00.
E-post: sek@elstandard.se. Internet: www.elstandard.se

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SEK Svensk Elstandard

Box 1284
164 29 Kista
Tel 08-444 14 00
www.elstandard.se

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English Version

**Information technology - Data centre facilities and infrastructures
- Part 4-3: Renewable Energy Factor**

Technologie de l'information - Installation et infrastructures
de centres de traitement de données - Partie 4-3 :
Coefficient d'énergie renouvelable

Informationstechnik - Einrichtungen und Infrastrukturen von
Rechenzentren - Teil 4-3: Anteil erneuerbarer Energien

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Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CENELEC member.

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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

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European foreword

This document (EN 50600-4-3:2016) has been prepared by CLC/TC 215 “Electrotechnical aspects of telecommunication equipment”.

The following dates are proposed:

- latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) [2017-07-10]
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) [2019-10-10]

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Regarding the various parts in the EN 50600 series, see the Introduction.

ANM – (sv anm) Uppgifter om andra, felaktiga datum har tidigare cirkulerat i CENELEC.

Introduction

The unrestricted access to internet-based information demanded by the information society has led to an exponential growth of both internet traffic and the volume of stored/retrieved data. Data centres are housing and supporting the information technology and network telecommunications equipment for data processing, data storage and data transport. They are required both by network operators (delivering those services to customer premises) and by enterprises within those customer premises.

Data centres need to provide modular, scalable and flexible facilities and infrastructures to easily accommodate the rapidly changing requirements of the market. In addition, energy consumption of data centres has become critical both from an environmental point of view (reduction of carbon footprint) and with respect to economic considerations (cost of energy) for the data centre operator.

The implementation of data centres varies in terms of:

- a) purpose (enterprise, co-location, co-hosting, or network operator facilities);
- b) security level;
- c) physical size;
- d) accommodation (mobile, temporary and permanent constructions).

The needs of data centres also vary in terms of availability of service, the provision of security and the objectives for energy efficiency. These needs and objectives influence the design of data centres in terms of building construction, power distribution, environmental control and physical security. Effective management and operational information is required to monitor achievement of the defined needs and objectives.

This series of European Standards specifies requirements and recommendations to support the various parties involved in the design, planning, procurement, integration, installation, operation and maintenance of facilities and infrastructures within data centres. These parties include:

- 1) owners, facility managers, ICT managers, project managers, main contractors;
- 2) architects, consultants, building designers and builders, system and installation designers;
- 3) facility and infrastructure integrators, suppliers of equipment;
- 4) installers, maintainers.

At the time of publication of this European Standard, the EN 50600 series will comprise the following standards and documents:

- EN 50600-1, *Information technology — Data centre facilities and infrastructures — Part 1: General concepts*;
- EN 50600-2-1, *Information technology — Data centre facilities and infrastructures — Part 2-1: Building construction*;
- EN 50600-2-2, *Information technology — Data centre facilities and infrastructures — Part 2-2: Power distribution*;
- EN 50600-2-3, *Information technology — Data centre facilities and infrastructures — Part 2-3: Environmental control*;
- EN 50600-2-4, *Information technology — Data centre facilities and infrastructures — Part 2-4: Telecommunications cabling infrastructure*;

- EN 50600-2-5, *Information technology — Data centre facilities and infrastructures — Part 2-5: Security systems;*
- EN 50600-3-1, *Information technology — Data centre facilities and infrastructures — Part 3-1: Management and operational information;*
- EN 50600-4-1, *Information technology — Data centre facilities and infrastructures — Part 4-1: Overview of and general requirements for key performance indicators;*
- EN 50600-4-2, *Information technology — Data centre facilities and infrastructures — Part 4-2: Power Usage Effectiveness;*
- EN 50600-4-3, *Information technology — Data centre facilities and infrastructures — Part 4-3: Renewable Energy Factor;*
- CLC/TR 50600-99-1, *Information technology — Data centre facilities and infrastructures — Part 99-1: Recommended practices for energy management.*