DIN EN 16798-3

ICS 91.120.10; 91.140.30

Supersedes
DIN EN 13779:2007-09

Energy performance of buildings – Ventilation for buildings – Part 3: For non-residential buildings – Performance requirements for ventilation and room-conditioning systems (Modules M5-1, M5-4); English version EN 16798-3:2017, English translation of DIN EN 16798-3:2017-11

Energetische Bewertung von Gebäuden –
Lüftung von Gebäuden –
Teil 3: Lüftung von Nichtwohngebäuden – Leistungsanforderungen an Lüftungs- und Klimaanlagen und Raumkühlsysteme (Module M5-1, M5-4);
Englische Fassung EN 16798-3:2017,
Englische Übersetzung von DIN EN 16798-3:2017-11

Performance énergétique des bâtiments –
Ventilation les bâtiments –
Partie 3: Pour bâtiments non résidentiels – Exigences de performances pour les systèmes de ventilation et de climatisation (Modules M5-1, M5-4);
Version anglaise EN 16798-3:2017,
Traduction anglaise de DIN EN 16798-3:2017-11

Document comprises 57 pages

Translation by DIN-Sprachendienst.

In case of doubt, the German-language original shall be considered authoritative.

A comma is used as the decimal marker.

National foreword

This document (EN 16798-3:2017) has been prepared by Technical Committee CEN/TC 156 “Ventilation for buildings” (Secretariat: BSI, United Kingdom).

The responsible German body involved in its preparation was *DIN-Normenausschuss Heiz- und Raumlufttechnik sowie deren Sicherheit* (DIN Standards Committee Heating and Ventilation Technology and their Safety), Working Committee NA 041-02-50 AA “Fundamentals (Mirror Committee to CEN/TC 156 plus WG 1, 6, 8, 19, 20 and WG 23)”.

NA 041-02-50 AA is planning to develop a DIN SPEC supplementing this document.

In Germany, the Directive on the energy performance of buildings (2010/31/EU) of the European Parliament and the European Council is primarily implemented by national energy conservation law. National energy conservation law refers to dated national and European Standards and national prestandards that have been specified to be implemented in Germany.

In Germany, the application of this standard in connection with national energy conservation law is defined by provisions in this law.

Provisions of German energy conservation law cannot be systematically fully and identically implemented with the set of standards under the EPBD mandate M/480 and the therein referenced International and European Standards. When applying the standards of the mandate, accordance with German energy conservation law cannot be achieved, whether in terms of the procedure, the result, or assessment of the result.

Currently, the set of standards of the EPBD mandate M/480 is not applicable for the purposes of German energy conservation law, even if references to national regulations in the respective national annexes are taken into consideration.

Amendments

This standard differs from DIN EN 13779:2007-09 as follows:

a) the standard has been restructured to clarify designing and calculation aspects;

b) requirements for the use of filters have been updated;

c) requirements for heat recovery and leakages in this system have been updated;

d) it has been clearly coordinated with prEN 16798-1:2015; outdoor air volume flows have been shifted to prEN 16798-1:2015;

e) all requirements for air quality have been deleted; supply air quality has been included;

f) requirements for energy performance have been included;

g) definitions of systems have been updated;

h) SPF definitions and links to Regulation EU 327/2011 have been updated;

i) the document has been subdivided into a normative part containing all normative aspects and a supplementary technical report containing additional information and informative annexes;

j) this standard allows a normative national annex;

k) the standard has been updated to cover hourly/monthly/seasonal time-steps.

Previous editions

DIN 1946-2: 1960-04, 1983-01, 1994-01
DIN EN 13779: 2005-05, 2007-09

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 16798-3

August 2017

ICS 91.120.10; 91.140.30

Supersedes EN 13779:2007

English Version

Energy performance of buildings - Ventilation for buildings - Part 3: For non-residential buildings - Performance requirements for ventilation and room-conditioning systems (Modules M5-1, M5-4)

Performance énergétique des bâtiments - Ventilation des bâtiments - Partie 3: Pour bâtiments non résidentiels - Exigences de performances pour les systèmes de ventilation et de climatisation (Modules M5-1, M5-4)

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This European Standard was approved by CEN on 11 May 2017.

CEN 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. 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 CEN 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 CEN 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 STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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European foreword

This document (EN 16798-3:2017) has been prepared by Technical Committee CEN/TC 156 “Ventilation for buildings”, the secretariat of which is held by BSI.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by February 2018, and conflicting national standards shall be withdrawn at the latest by February 2018.

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

This standard has been produced to meet the requirements of Directive 2010/31/EU 19 May 2010 on the energy performance of buildings (recast), referred to as “recast EPDB”.

This document supersedes EN 13779:2007, which was produced to meet the requirements of Directive 2002/91/EC 16 December 2002 on energy performance of buildings referred to as “EPBD”.

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

For the convenience of Standards users CEN/TC 156, together with responsible Working Group Conveners, have prepared a simple table below relating, where appropriate, the relationship between the ‘EPBD’ and ‘recast EPBD’ standard numbers prepared by Technical Committee CEN/TC 156 “Ventilation for buildings”.

EPBD EN Number	Recast EPBD EN Number	Title
EN 15251	EN 16798-1	Energy performance of buildings – Ventilation for buildings - Part 1: Indoor environmental input parameters for design and assessment of energy performance of buildings addressing indoor air quality, thermal environment, lighting and acoustics (Module M1-6)
N/A	CEN/TR 16798-2	Energy performance of buildings – Ventilation for buildings - Part 2: Interpretation of the requirements in EN 16798-1 — Indoor environmental input parameters for design and assessment of energy performance of buildings addressing indoor air quality, thermal environment, lighting and acoustics (Module M1-6)
EN 13779	EN 16798-3	Energy performance of buildings – Ventilation for buildings - Part 3: For non-residential buildings – Performance requirements for ventilation and room-conditioning systems (Modules M5-1, M5-4)
N/A	CEN/TR 16798-4	Energy performance of buildings – Ventilation for buildings - Part 4: Interpretation of the requirements in EN 16798-3 — For non-residential buildings – Performance requirements for ventilation and room-conditioning systems(Modules M5-1, M5-4)

EN 15241	EN 16798-5-1	Energy performance of buildings — Ventilation for buildings – Part 5-1: Calculation methods for energy requirements of ventilation and air conditioning systems (Modules M5-6, M5-8, M6-5, M6-8, M7-5, M7-8) — Method 1: Distribution and generation
EN 15241	EN 16798-5-2	Energy performance of buildings – Ventilation for buildings - Part 5-2: Calculation methods for energy requirements of ventilation systems (Modules M5-6.2, M5-8.2) - Method 2: Distribution and generation
N/A	CEN/TR 16798-6	Energy performance of buildings - Ventilation for buildings – Part 6: Interpretation of the requirements in EN 16798-5-1 and EN 16798-5-2 — Calculation methods for energy requirements of ventilation and air conditioning systems (Modules M5-6, M5-8, M 6-5, M6-8 , M7-5, M7-8)
EN 15242	EN 16798-7	Energy performance of buildings - Ventilation for buildings - Part 7: Calculation methods for the determination of air flow rates in buildings including infiltration (Module M5-5)
N/A	CEN/TR 16798-8	Energy performance of buildings – Ventilation for buildings – Part 8: Interpretation of the requirements in EN 16798-7 — Calculation methods for the determination of air flow rates in buildings including infiltration – (Module M5-5)
EN 15243	EN 16798-9	Energy performance of buildings – Ventilation for buildings - Part 9: Calculation methods for energy requirements of cooling systems (Modules M4-1, M4-4, M4-9) - General
N/A	CEN/TR 16798-10	Energy performance of buildings – Ventilation for buildings – Part 10: Interpretation of the requirements in EN 16798-9 — Calculation methods for energy requirements of cooling systems (Module M4-1,M4-4, M4-9) – General
EN 15243	EN 16798-13	Energy performance of buildings – Ventilation for buildings - Part 13: - Calculation of cooling systems (Module M4-8) – Generation
EN 15243	CEN/TR 16798-14	Energy performance of buildings – Ventilation for buildings - Part 14: Interpretation of the requirements in EN 16798-13 — Calculation of cooling systems (Module M4-8) – Generation
N/A	EN 16798-15	Energy performance of buildings – Ventilation for buildings – Part 15: Calculation of cooling systems (Module M4-7) – Storage
N/A	CEN/TR 16798-16	Energy performance of buildings – Ventilation for buildings – Part 16: Interpretation of the requirements in EN 16798-15 — Calculation of cooling systems (Module M4-7) – Storage