

DIN EN 12828



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**Heating systems in buildings –
Design for water-based heating systems;
English version EN 12828:2012+A1:2014,
English translation of DIN EN 12828:2014-07**

Heizungsanlagen in Gebäuden –
Planung von Warmwasser-Heizungsanlagen;
Englische Fassung EN 12828:2012+A1:2014,
Englische Übersetzung von DIN EN 12828:2014-07

Systèmes de chauffage dans les bâtiments –
Conception des systèmes de chauffage à eau;
Version anglaise EN 12828:2012+A1:2014,
Traduction anglaise de DIN EN 12828:2014-07

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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 standard includes safety requirements in Subclause 4.6.

This document (EN 12828:2012+A1:2014) has been prepared by Technical Committee CEN/TC 228 “Heating systems and water based cooling systems in buildings” (Secretariat: DIN, Germany).

The responsible German body involved in its preparation was the *Normenausschuss Heiz- und Raumlufttechnik* (Heating and Ventilation Technology Standards Committee), Working Committee NA 041-01-58 AA *Heizungsanlagen in Gebäuden*.

For some of the measures laid down in this standard, stricter statutory provisions have been laid down in German laws such as the *Energieeinsparverordnung (EnEV)* (German Energy Saving Ordinance). These measures deal with central control (4.5.3), local control (4.5.5), timing control (4.5.6) and thermal insulation (4.8).

Although this European Standard also covers indirectly heated systems, in some European member countries additional requirements have been laid down by regional or supra-regional power utilities or organizations that must be met by substations and domestic systems directly or indirectly connected to hot-water district heating networks. In Germany DIN 4747-1 and AGFW-*Arbeitsblatt* FW 527 apply to hot-water district heating networks and AGFW-*Arbeitsblatt* FW 519 applies to steam-based systems.

This standard includes Amendment A1 approved by CEN on 12 January 2014.

The start and finish of text introduced or altered by amendment is indicated in the text by tags **A1** **A1**.

Amendments

This standard differs from DIN EN 12828:2013-04 as follows:

- a) the text of Subclause 4.6.2.3 “Safeguard against lack of water” has been replaced by new text.

Previous editions

DIN 4751: 1938-03, 1944-04, 1960-04

DIN 4806: 1953-09

DIN 4751-1: 1962-11, 1993-02, 1994-10

DIN 4751-2: 1964-06, 1968-09, 1993-02, 1994-10

DIN 4751-3: 1976-03, 1993-02

DIN 4751-4: 1980-09

DIN 4807-2: 1987-11, 1991-05

DIN EN 12828: 2003-06, 2013-04

National Annex NA (informative)

Bibliography

DIN 4747-1, *Heating plants for district heating — Part 1: Safety requirements for domestic substations, stations and domestic systems to be connected to hot-water district heating networks*

DIN EN 12831 Supplement 2, *Heating systems in buildings — Method for calculation of the design heat load — Supplement 2: Simplified method for calculation of the design heat load and the heat generator capacity*

AGFW-Arbeitsblatt FW 519, *Safety equipment for substations and domestic systems with an indirect connection to steam-based district heating networks*¹⁾

AGFW-Arbeitsblatt FW 527, *Overpressure protection of hot-water district heating networks with an indirect connection*¹⁾

VDI 4708 Part 1, *Pressure maintenance, venting, deaeration — Pressure maintenance*

1) Obtainable from: AGFW | *Der Energieeffizienzverband für Wärme, Kälte und KWK* e. V. Stresemannallee 28, D-60596 Frankfurt am Main

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English Version

Heating systems in buildings - Design for water-based heating systems

Systèmes de chauffage dans les bâtiments - Conception
des systèmes de chauffage à eau

Heizungsanlagen in Gebäuden - Planung von
Warmwasser-Heizungsanlagen

This European Standard was approved by CEN on 6 October 2012 and includes Amendment 1 approved by CEN on 12 January 2014.

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