IEC 62999

Edition 1.1 2021-10
CONSOLIDATED VERSION

INTERNATIONAL STANDARD

NORME INTERNATIONALE

colour inside

Electric room heating – Underfloor heating – Performance characteristics – Definitions, method of testing, sizing and formula symbols

Chauffage électrique de locaux – Chauffage par le sol – Caractéristiques de performance – Définitions, méthode d'essai, calibrage et symboles de formule

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IEC 62999 edition 1.1 contains the first edition (2016-02) [documents 59C/193/CDV and 59C/207/RVC] and its amendment 1 (2021-10) [documents 59C/250/CDV and 59C/197/RVC].

In this Redline version, a vertical line in the margin shows where the technical content is modified by amendment 1. Additions are in green text, deletions are in strikethrough red text. A separate Final version with all changes accepted is available in this publication.

International Standard IEC 62999 has been prepared by subcommittee 59C: Heating appliances, of IEC technical committee 59: Performance of household and similar electrical appliances.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

The committee has decided that the contents of the base publication and its amendment will remain unchanged until the stability date indicated on the IEC web site under webstore.iec.ch in the data related to the specific publication. At this date, the publication will be

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ELECTRIC ROOM HEATING – UNDERFLOOR HEATING – PERFORMANCE CHARACTERISTICS – DEFINITIONS, METHOD OF TESTING, SIZING AND FORMULA SYMBOLS

1 Scope

This International Standard applies to electrical underfloor heating of dwellings and all other buildings whose use corresponds to dwellings or is at least similar, having a maximum load bearing in use of 4 kN/m^2.

This Standard defines the main characteristics of electrical underfloor heating and establishes the method of testing of these characteristics as information for the user.

This Standard does not deal with:

– installation and safety requirements.

Annexes D and E are added for information purposes about performance testing according to the European Commission Regulation (EU) 2015/1188.

2 Normative references

IEC 60335-2-96, *Household and similar electrical appliances – Safety – Part 2-96: Particular requirements for flexible sheet heating elements for room heating*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1
electrical underfloor heating system
electrical underfloor heating, switching, control and regulation appliances and electrical installation

3.1.1
underfloor heating
in situ flooring constructed as an electrical underfloor heating system

Note 1 to entry: It is generally laid on a dry, level, load-bearing substructure.

3.1.2
underfloor direct heating
underfloor direct heating, by which the heat generated from electrical energy is transferred with the least possible time lag to the room to be heated mainly via the surface of the floor

Note 1 to entry: There is no restriction on the amount of time electrical energy can be converted into heat.

3.1.3
underfloor warming
underfloor warming increases comfort by means of pleasant warmth on the feet

Note 1 to entry: It is not necessary to calculate the heat load of the room, and the insulating layers as the underfloor warming are not considered when calculating the heat load of the room.