SLOVENSKI STANDARD
SIST-TS CLC/TS 50707:2020

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Pralni in pralno-sušilni stroji za gospodinjsko in podobno uporabo - Metoda za ugotavljanje temperature v perilu

Clothes washing machines and washer-dryers for household and similar use - Method for the determination of temperature inside the laundry load

Waschmaschinen und Waschtrockner für den Hausgebrauch und ähnlichen Gebrauch - Methode zur Bestimmung der Temperatur in der Wäschebeladung

Ta slovenski standard je istoveten z: **CLC/TS 50707:2020**

ICS:

97.060	Aparati za nego perila	Laundry appliances

SIST-TS CLC/TS 50707:2020 **en**

TECHNICAL SPECIFICATION

SPÉCIFICATION TECHNIQUE

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CLC/TS 50707

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ICS 97.060

English Version

Clothes washing machines and washer-dryers for household and similar use - Method for the determination of temperature inside the laundry load

To be completed

Waschmaschinen und Waschtrockner für den Hausgebrauch und ähnlichen Gebrauch - Methode zur Bestimmung der Temperatur in der Wäschebeladung

This Technical Specification was approved by CENELEC on 2020-04-13.

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European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

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Contents

Page

European foreword

This document (CLC/TS 50707:2020) has been prepared by CLC/TC 59X, "Performance of household and similar electrical appliances".

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

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

Introduction

This document has been prepared by CLC/TC 59X, "Performance of household and similar electrical appliances".

1 Scope

This document provides a measurement and evaluation method for the determination of the representative maximum temperature reached inside the base load during the washing cycle of a washing machine or washer-dryer.

The mean maximum temperature within the base load is measured with three temperature sensors, which are attached to towels and/or pillowcases placed in different, representative locations inside the drum.

This document does not provide a method for measuring a temperature for the evaluation of hygiene performance.

2 Normative References

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 60456:2016/A11:—[1], *Clothes washing machines for household use — Methods for measuring the performance*

EN IEC 62512:—[2], *Electric clothes washer-dryers for household use — Methods for measuring the performance*

3 Terms, definitions and symbols

3.1 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at http://www.electropedia.org/

3.2 Symbols

i	test run
k	data logger number
m	total number of data loggers
$\vartheta_{\max,z}$	total average maximum temperature for each treatment z (z = *full*, ½, ¼)
$\vartheta_{\max,z,i}$	average maximum temperature for the test run i with treatment z (z = *full*, ½, ¼)
$\vartheta_{\max,z,i,k}$	maximum temperature for the data logger k (k = 1, 2, 3) for test run i (i = 1, 2, 3, 4) for the treatment z (z = *full*, ½, ¼)

[1] Under preparation. Stage at the time of publication: EN 60456:2016/prAA:2019.
[2] Under preparation. Stage at the time of publication: prEN IEC 62512:2019.

x the x'th value out of the list of sorted temperatures is the maximum temperature $\vartheta_{\max,z,i,k}$

z treatment

4 Test conditions, materials, equipment and instrumentation

The temperature inside the base load shall be measured with data loggers with the following specifications:

— Temperature range: at least (0 to 85) °C

NOTE 1 For tests involving continuous wash & dry programmes the device might need to withstand temperatures in excess of 120 °C.

— Accuracy: ≤ 0,5 °C at 0 °C to 60 °C ; ≤ 2 °C above 60 °C

— Resolution: ≤ 0,2 °C

— Response time TC (10 to 90 %) in water: ≤ 2 min

— TC (10 % to 90 %) is the time it takes for the sensor to traverse between 10 % and 90 % of its final value. Response time can also be expressed as a TC 63 % value. The 63 % figure is the time for the sensor to reach 63 % of its final value. TC (10 % to 90 %) and the TC 63 % value are of approximately the same magnitude for a given sensor.

— Sampling rate: ≤ 10 s

— Max mass: 30 g

— Dimensions: max 35 mm in each dimension

NOTE 2 Dimensions have been chosen to minimize mechanical impact on the base load. It is intended that the addition of temperature loggers to the base load should not have a significant influence on the washing performance.

— Water protection class: IP67

5 Preparation for testing

5.1 Preparation of equipment

5.1.1 General

Data loggers shall be prepared for data acquisition according to the supplier's instructions.

5.1.2 Attaching a data logger to a towel or a pillowcase

A data logger shall be attached to a base load item in the following way:

1. Place the data logger in the centre of a towel or pillowcase as pictured in Figure 1 and 2.
2. Fasten the towel or pillowcase around the data logger as pictured in Figure 3, 4 and 5. The fastening of the data logger shall ensure that the data logger does not loosen during the test.

Figure 1 — Placing the data logger in the centre of a towel according to step 1

Figure 2 — Placing the data logger in the centre of a pillowcase according to step 1

Figure 3 — Fasten the towel around the data logger according to step 2