

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Household electric instantaneous water heaters – Methods for measuring the performance –
Part 2-1: Multifunctional electric instantaneous water heaters**

**Chauffe-eau instantanés électrodomestiques – Méthodes de mesure de l'aptitude à la fonction –
Partie 2-1: Chauffe-eau instantanés électriques multifonctions**



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CONTENTS

FOREWORD.....	4
1 Scope.....	6
2 Normative references	6
3 Terms and definitions	6
4 General test conditions.....	8
4.3 General conditions	8
4.4 Test setup.....	8
4.101 Symbols and units	8
4.102 Time constants (measuring time).....	9
4.103 Test setup	9
4.103.1 Measurement setup.....	9
4.103.2 Setpoints	9
4.103.3 Measurement of flow pressure and flow rate.....	9
4.103.4 Temperature measurement.....	9
5 Energy efficiency	10
6 Performance tests	10
6.1 Determination of classification factor CF	10
6.1.1 General	10
6.1.2 Definition of a reference instantaneous water heater	10
6.1.3 Calculation method of nominal energy consumption.....	11
6.1.4 Determination of energy demand of the sample	11
6.1.5 Definition of classes H and E.....	11
6.2 Determination of flow rates	11
6.2.1 General	11
6.2.2 E class water heater	11
6.2.3 H class water heater.....	12
6.2.4 Determination of the flow rate as a function of the pressure difference	13
6.3 Pressure difference on activation of the heating capacity	13
6.3.1 General	13
6.3.2 E class water heater	13
6.3.3 H class water heater.....	13
6.4 Behaviour at switch-on of the appliance.....	14
6.4.1 General	14
6.4.2 E class water heater	14
6.4.3 H class water heater.....	15
6.5 Behaviour following the change of the flow rate	15
6.5.1 General	15
6.5.2 E class water heater	15
6.5.3 H class water heater.....	16
6.6 Behaviour following interruption of the flow	17
6.6.1 General	17
6.6.2 E class water heater	17
6.6.3 H class water heater.....	18
6.7 Behaviour at constant temperature setting	19
6.7.1 General	19
6.7.2 E class water heater	19

6.7.3	H class water heater	19
6.8	Behaviour following the change of the temperature selector setting	19
6.8.1	General	19
6.8.2	Electronically controlled appliances	19
6.8.3	H class water heater	20
6.9	Behaviour at voltage limits	20
6.10	Additional tests for electronic instantaneous water heaters	21
6.10.1	General	21
6.10.2	Behaviour of the outlet temperature at decreasing water inlet temperature	21
6.10.3	Behaviour of the outlet temperature at changing water inlet temperature	22
Annex A (normative)	Load pattern	23
Annex B (normative)	Test setup	24
Bibliography	29
Figure B.101	– Single point (vented)	24
Figure B.102	– Multi point (unvented)	25
Figure B.103	– Test setup	26
Figure B.104	– Damping device (Detail 4)	27
Figure B.105	– Water connection part (Detail 5)	27
Figure B.106	– Water connection part (Detail 6)	28
Table 101	– Symbols and units	8
Table 102	– Nominal values for E class water heater	12
Table 103	– Nominal values for H class water heater	12
Table 104	– Flow pressure and flow rate for multi point appliances	13
Table 105	– Flow pressure and flow rate for single point appliances	13
Table 106	– Pressure difference and flow rate	13
Table 107	– Pressure difference and flow rate	14
Table 108	– Behaviour at switch on of the appliance at different temperature selector settings	15
Table 109	– Behaviour at switch on of the appliance at different settings	15
Table 110	– Behaviour following the change of the flow rate at different temperature selector settings	16
Table 111	– Behaviour following the change of the flow rate at different settings	17
Table 112	– Behaviour following interruption of the flow	18
Table 113	– Behaviour following interruption of the flow	18
Table 114	– Behaviour at constant temperature setting	19
Table 115	– Behaviour following the change of the temperature selector setting at a flow rate of 50%	20
Table 116	– Behaviour following the change of the temperature selector setting at a flow rate of 100%	20
Table 117	– Behaviour at voltage limits	21
Table 118	– Behaviour of the outlet temperature at decreasing water inlet temperature	22
Table 119	– Behaviour of the outlet temperature following the increase of the water inlet temperature	22

INTERNATIONAL ELECTROTECHNICAL COMMISSION

**HOUSEHOLD ELECTRIC INSTANTANEOUS WATER HEATERS –
METHODS FOR MEASURING THE PERFORMANCE –****Part 2-1: Multifunctional electric instantaneous water heaters**

FOREWORD

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International Standard IEC 63159-2-1 has been prepared by subcommittee 59C: Electrical heating appliances for household and similar purposes, of IEC technical committee 59: Performance of household and similar electrical appliances.

The text of this International Standard is based on the following documents:

Draft	Report on voting
59C/268/FDIS	59C/272/RVD

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/standardsdev/publications.

This International Standard is to be used in conjunction with IEC 63159-1:2021.

This standard supplements or modifies the corresponding clauses in IEC 63159-1. When a particular subclause of IEC 63159-1 is not mentioned in this standard, that subclause is applicable as far as reasonable. Where this standard states "addition", "modification" or "replacement", the relevant requirements, test specifications or explanatory matter in IEC 63159-1 should be adapted accordingly.

Subclauses or figures that are additional to those in IEC 63159-1 are numbered starting from 101. Additional annexes are lettered AA, BB, etc.

A list of all the parts in the IEC 63159 series, published under the general title *Household electric instantaneous water heaters – Methods for measuring the performance*, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

- reconfirmed,
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- replaced by a revised edition, or
- amended.

HOUSEHOLD ELECTRIC INSTANTANEOUS WATER HEATERS – METHODS FOR MEASURING THE PERFORMANCE –

Part 2-1: Multifunctional electric instantaneous water heaters

1 Scope

This clause of IEC 63159-1:2021 is applicable with the following exception:

Addition:

This document applies to electrical instantaneous water heaters designed to operate as multifunctional appliances with an electric rated power > 2 kW.

This document specifies tests for the assessment of the performance.

2 Normative references

This clause of IEC 63159-1:2021 is applicable with the following exception:

Addition:

IEC 63159-1:2021, *Household electric instantaneous water heaters – Methods for measuring the performance – Part 1: General aspects*

3 Terms and definitions

This clause of IEC 63159-1 is applicable with the following exceptions:

Addition:

3.101

setpoint value

changeable value that is allocated to the appliance or the individual components thereof

3.102

pressure drop on activation of the heating capacity

pressure drop in the instantaneous water heater, at which the heating capacity is, and remains, activated

3.103

90 % method

stop point of the measurement when 90% of value is reached

Note 1 to entry: Usually, a physical value reaches a final (average) value in an asymptotic manner. To reach a valid measurement result, a stop point of the measurement has to be defined. The measurement is stopped when the value finally reaches 90 % of the difference between the (average) starting value and the (average) final value.

3.104

10 %/90 % method

range between the start and stop points