

# 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**

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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](http://www.iec.ch/members_experts/refdocs). The main document types developed by IEC are described in greater detail at [www.iec.ch/standardsdev/publications](http://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](http://webstore.iec.ch) in the data related to the specific document. At this date, the document will be

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# 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