

**ASSE International
Product (Seal) Listing Program**

**ASSE 1023-2020
Performance Requirements for Electrically Heated or Cooled Water Dispensers**

Manufacturer: _____

Contact Person: _____ **E-mail:** _____

Address: _____

Laboratory: _____ **Laboratory File Number:** _____

Model # Tested: _____

Model Size: _____

Additional models report applies to: _____

Additional Model Information (i.e. orientation, series, end connections, shut-off valves)

Date models received by laboratory: _____ **Date testing began:** _____

Date testing was completed _____

If models were damaged during shipment, describe damages:

Prototype or production sample? _____

Were all tests performed at the selected laboratory? Yes No

If offsite, identify location: _____

General information and instructions for the testing engineer:

The results within this report apply only to the models listed above.

There may be items for which the judgment of the test engineer will be involved. Should there be a question of compliance with that provision of the standard, a conference with the manufacturer should be arranged to enable a satisfactory solution of the question.

Should disagreement persist and compliance remain in question by the test agency, the agency shall, if the product is in compliance with all other requirements of the standard, file a complete report on the questionable items together with the test report, for evaluation by the ASSE Seal Control Board. The Seal Control Board will then review and rule on the question of compliance with the intent of the standard then involved.

Documentation of material compliance must be furnished by the manufacturer. The manufacturer shall furnish to the testing agency, a bill of material which clearly identifies the material of each part included in the product construction. This identification must include any standards which relate thereto.

Section I

1.0 General

1.1 Application

Does the device meet the application?

- Yes No Questionable

If no or questionable, explain _____

1.2 Scope and Purpose

1.2.1 Description

Does this device conform to this section?

- Yes No Questionable

If no or questionable, explain _____

1.2.2 Connections

Check all that apply for the pipe threads and other connections:

- Tapered pipe threads comply with ASME B1.20.1.
- Dry seal pipe threads comply with ASME B1.20.3.
- Compression connections comply with SAE J512.
- Soldered connections comply with ASME B16.18 or ASME B16.22.
- Push fit connections comply with ASSE 1061.
- Press connections comply with ASME B16.51.

1.2.3 Storage Tank Vent

For devices that heat water, is the storage tank continuously vented to the atmosphere?

- Yes No Questionable N/A

If no or questionable, explain _____

1.2.4 Dispensing Nozzle or Tip

Is the dispensing nozzle, or tip, threaded or serrated to accept a tube or pipe to convey water to any location other than that intended?

- Yes No Questionable

If yes or questionable, explain _____

1.2.5 Size Range

Size of the connections to the potable water supply: _____-inch (DN _____) nominal size

1.2.6 Temperature Range

For devices that heat water, what is the minimum temperature hot water can be dispensed at? _____°F (_____°C)

For devices that cool water, what is the maximum temperature cold water can be dispensed at? _____°F (_____°C)

1.2.7 Pressure Range

What static pressure range can the device operate at? _____ to _____ psi (_____ to _____ kPa)

1.2.8 Electrical Requirements

For devices that cool, or both cool and heat water, for dispensing, does the device comply with UL 399?

- Yes No Questionable N/A

If no or questionable, explain _____

For devices that only heat and dispense heated water, does the device comply with UL 499?

Yes No Questionable N/A

If no or questionable, explain _____

1.2.9 Carbonation backflow protection

Is there a connection to a carbonator?

Yes No Questionable

If questionable, explain _____

If yes, is potable water protected from dissolved CO₂ by way of a device compliant with ASSE 1022?

Yes No Questionable

If no or questionable, explain _____

1.2.10 Cooling Capacity

See Section 3.3.

1.2.11 Fittings

Are the dispenser fitting and all plumbed fittings compliant with ASME A112.18.1 / CSA B125.1?

Yes No Questionable

If no or questionable, explain _____

Section II

2.0 Test specimens

2.1 Samples Submitted

How many samples were submitted by the manufacturer for testing? _____

Section III

3.0 Performance Requirements and Compliance Testing

3.1 Abnormal Discharge and Minimum Water Temperature

Does the device include a water heater?

Yes No

If yes, proceed to Section 3.1.2.

If no, proceed to Section 3.2.

3.1.2 Procedure

4) After the heater is energized, what was the peak power consumption? _____ W

8) What was the temperature of each dispensing cycle?

Cycle 1: _____°F (_____°C)

Cycle 6: _____°F (_____°C)

Standby Period: _____ minutes

Standby Period: _____ minutes

Cycle 2: _____°F (_____°C)

Cycle 7: _____°F (_____°C)

Standby Period: _____ minutes

Standby Period: _____ minutes

Cycle 3: _____°F (_____°C)

Cycle 8: _____°F (_____°C)

Standby Period: _____ minutes

Standby Period: _____ minutes

Cycle 4: _____°F (_____°C)

Cycle 9: _____°F (_____°C)

Standby Period: _____ minutes

Standby Period: _____ minutes

Cycle 5: _____°F (_____°C)

Cycle 10: _____°F (_____°C)

Standby Period: _____ minutes

3.1.3 Criteria

Was there any leakage following any dispensing cycle?

Yes No Questionable

If yes or questionable, explain _____

Was there any leakage during the standby period between cycles?

Yes No Questionable

If yes or questionable, explain _____

Does the minimum temperature of the hot water dispensed comply with Section 1.2.6?

Yes No Questionable

If no or questionable, explain _____

Is the device in compliance with this section?

Yes No Questionable

If no or questionable, explain _____

3.2 Instant Capacity for Heated Water

Does the manufacturer make any claims of instant capacity?

Yes No

If yes, proceed to Section 3.2.2.

If no, proceed to Section 3.3.

3.2.2 Procedure

Trial 1:

What was the supply water temperature? _____°F (_____°C)

What was the static water pressure? _____ psi (_____ kPa)

What was the device's heater temperature set to? _____°F (_____°C) or set to _____

What was the flow rate? _____ gpm (_____ L/s)

After the water temperature as measured at T2 fell below 165°F, what was the volume of water dispensed? _____ gal (_____ L)

Trial 2:

What was the supply water temperature? _____°F (_____°C)

What was the static water pressure? _____ psi (_____ kPa)

What was the device's heater temperature set to? _____°F (_____°C) or set to _____

What was the flow rate? _____ gpm (_____ L/s)
After the water temperature as measured at T2 fell below 165°F, what was the volume of water dispensed? _____ gal (_____ L)

Trial 3:

What was the supply water temperature? _____ °F (_____ °C)
What was the static water pressure? _____ psi (_____ kPa)
What was the device's heater temperature set to? _____ °F (_____ °C) or set to _____
What was the flow rate? _____ gpm (_____ L/s)
After the water temperature as measured at T2 fell below 165°F, what was the volume of water dispensed? _____ gal (_____ L)

3.2.3 Criteria

What was the average volume of water dispensed? _____ gal (_____ L)
What is the manufacturer's claimed instant capacity for temperatures greater than or equal to 165°F (73.9°C)? _____ gal (_____ L)
Is the device in compliance with this section?

Yes No Questionable

If no or questionable, explain _____

3.3 Continuous Capacity

3.3.1 Purpose

Did the manufacturer make a claim for continuous capacity?

Yes No

If yes, proceed to Section 3.3.2.

If no, proceed to Section 3.4.

3.3.2 Procedure

Does the device cool water?

Yes No

Does the device heat water?

Yes No

For devices that cool water, were the procedures for the Capacity Test for Ratings in ASHRAE 18 followed?

Yes No Questionable N/A

If no or questionable, explain _____

If yes, attach detailed report to ASHRAE 18 to confirm compliance, or request additional test report from ASSE.

For devices that heat water, were the procedures for the Hot-Water-Dispenser Capacity Test in ASHRAE 18 followed?

Yes No Questionable N/A

If no or questionable, explain _____

If yes, attach detailed report to ASHRAE 18 to confirm compliance, or request additional test report from ASSE.

3.3.3 Criteria

What was the resulting capacity from the test? _____ gal (_____ L)

Is the device in compliance with this section?

- Yes No Questionable

If no or questionable, explain _____

3.4 Contaminant Reduction

Does the device include an integral means of contaminant reduction, and is it considered a drinking water treatment device?

- Yes No

If compliance is known, state the certification bodies and certificate/file numbers as appropriate: _____

Section IV

4.0 Detailed Requirements

4.1 Materials

4.1.2 Lead Content

What is the lead content, by mass, of the solder and fluxes in contact with potable water? _____%

Is the device intended to convey or dispense water for human consumption through drinking or cooking?

- Yes No Questionable

If questionable, explain _____

If yes, what is the weighted average lead content of the fittings and device when evaluated in accordance with the test method specified in NSF/ANSI 372? _____%

4.1.3 Material Safety

For devices with contaminant reduction capabilities, does the material safety comply with the applicable standards listing in Section 3.4?

- Yes No Questionable

If no or questionable, explain _____

4.2 Installation and Maintenance Instructions

4.2.1

Were instructions for installing, adjusting, and maintaining the device included with each device?

- Yes No Questionable

If no or questionable, explain: _____

4.2.2

Check all those that were found on the installation instructions:

- Inlet connection size.
- Maximum working pressure.
- For heated water, the instant capacity.
- When applicable, the continuous capacity for cooled or heated water.

4.2.3

Do the instructions indicate that the device shall be installed in such a manner for replacement and repair?

Yes No Questionable

If no or questionable, explain: _____

4.2.4

For devices dispensing hot water, do the installation instructions provide a warning that the device can create a scald hazard?

Yes No Questionable

If no or questionable, explain: _____

4.2.5

Do the instructions state that the dispenser shall be installed in compliance with the appropriate local codes including both plumbing and electrical?

Yes No Questionable

If no or questionable, explain: _____

4.2.6

Does the device include a reverse osmosis subassembly and drain connection?

Yes No

If yes, do the installation instructions provide instructions to install an air gap device to the drain connection or a discharge to an indirect receptor through an air gap?

Yes No Questionable

If no or questionable, explain: _____

4.3 Installation Dimensions

Does the outlet and surrounding geometry of the dispensing fitting comply with the air gap requirements of ASME A112.1.2 or IAPMO PS 65?

Yes No Questionable

If no or questionable, explain: _____

4.4 Identification and Markings

4.4.1

Does the device have the following marked on the label?

Manufacturer's name, trademark, or other mark or, in the case of private labeling, the name, trademark, or other mark of the customer for whom the product was manufactured;

Model number

4.4.2

Do the labels comply with UL 969 for permanence and other markings requirements as required by the applicable electric standards?

Yes No Questionable

If no or questionable, explain: _____

LISTED LABORATORY: _____

ADDRESS: _____

PHONE: _____ FAX: _____

TEST ENGINEER(S): _____

If applicable:

OUTSOURCED LABORATORY: _____

ADDRESS: _____

PHONE: _____ FAX: _____

TEST ENGINEER(S): _____

Scope of outsourced testing: _____

We certify that the evaluations are based on our best judgments and that the test data recorded is an accurate record of the performance of the device on test.

Signature of the official of the listed laboratory: _____

Signature

Title of the official: _____ Date: _____