

American National Standard

ASSE 1023-2020



Performance Requirements for
**Electrically Heated or
Cooled Water Dispensers**

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Foreword

This foreword shall not be considered a part of the standard; however, it is offered to provide background information.

ASSE standards are developed in the interest of consumer safety. ASSE International considers product performance standards to be of great value in the development of improved plumbing systems.

The working group that developed this standard was set up within the framework of the Product Standards Committee of ASSE International. Recognition is made of the time volunteered by members of this working group and of the support of manufacturers who also participated in meetings for this standard.

ASSE 1023 has historically covered residential hot water dispensers typically mounted at the kitchen sink. These devices are useful for quickly delivering hot drinking water for beverages. In office kitchens and break rooms, similar devices are connected to the potable water supply and heat, chill, or treat water. These products may be mounted, and they may also be free-standing or table-top units. This standard now covers these products where there was no similar standard in the past.

This standard does not imply ASSE International's endorsement of a product which conforms to these requirements.

Compliance with this standard does not imply acceptance by any code body.

It is recommended that these devices be installed consistent with local codes by qualified and trained professionals.

This standard was promulgated in accordance with the ASSE Procedures for Standards Development as approved by the American National Standards Institute (ANSI).

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Performance Requirements for Electrically Heated or Cooled Water Dispensers

Section I

1.0 General

1.1 Application

Water dispensers covered by this standard include an integral electrically powered heater or cooler.

Note: Example products that are covered by this standard include but are not limited to under-counter-mounted water dispensing systems, free-standing plumbed systems, free-standing bottled systems, and counter-top systems. These products are for both residential and commercial use.

1.2 Scope and Purpose

1.2.1 Description

Device shall consist of an accumulator vented to atmosphere when a heater is included, a thermal element or cooler, connection to an electrical outlet, and a dispensing fitting.

1.2.2 Connections

Pipe threads and other connections shall conform to the applicable standards.

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

1.2.3 Storage Tank Vent

For devices that heat water, the storage tank shall be continuously vented to the atmosphere.

1.2.4 Dispensing Nozzle or Tip

The dispensing nozzle, or tip, shall not be threaded or serrated to accept a tube or pipe to convey water to any location other than intended.

1.2.5 Size Range

Connections to the potable water supply shall not be smaller than ¼-inch (DN 6) nominal size.

1.2.6 Temperature Range

Devices that heat water shall be able to dispense hot water at a minimum temperature of 165 °F (73.9 °C).

Devices that cool water shall be able to dispense cold water at a maximum temperature of 50 °F (10 °C).