

STANDARD INFORMATION

Standard: UL 174

Standard ID: Household Electric Storage Tank Water Heaters [UL 174:2004 Ed.11+R:01Nov2024]

Previous Standard ID: Household Electric Storage Tank Water Heaters [UL 174:2004 Ed.11+R:12Oct2023]

EFFECTIVE DATE OF NEW/REVISED REQUIREMENTS

Effective Date: **November 1, 2026**

IMPACT, OVERVIEW, AND ACTION REQUIRED

Impact Statement: Per our accreditation, Intertek is required to review reports against the standard revisions to confirm compliance. Once compliance is confirmed, the standard reference in the report is updated to show continued compliance to the technical requirements of the standard. Reports not updated to this version by the effective date above will be withdrawn.

This standard contains Functional Safety requirements.

Overview of Changes:

- Remote Operation Functionality
- Electronic User Interface

Specific details of new/revise requirements are found in table below

Note: If the listing references a Canadian standard, per the Canadian Electrical Code (CSA C22.2#0) Section titled Language of markings, Caution and Warning Markings shall be in English and French.

Current Listings Not Active? – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records. We will do this at no charge as long as Intertek is notified in writing prior to the review of your reports.



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CLAUSE	VERDICT	COMMENT
		<i>Additions to existing requirements are <u>underlined</u> and deletions are shown lined-out below.</i>
23	Info	Temperature-Regulating Controls <i>New clause added;</i>
23.2		A temperature-regulating thermostat or any electronic user interface (which allows user to adjust water temperature setpoint) shall be inherently designed to prevent adjustment to a water temperature exceeding 77°C (171°F) and have no displayed setpoint water temperature setting more than 77°C (171°F) <i>New clause added;</i> A water heater user interface shall be evaluated as an integral part of the temperature regulating control required by 23.1 (i.e. control evaluated to UL 60730-1 and relevant Part 2 requirements, if applicable, as a Class B Control Function for adjustment and indication of desired temperature setpoint). Exception: An electronic user interface may be evaluated to UL 60730-1 and relevant Part 2 requirements, if applicable, and as a Class A Control if and only if all of the following functions are evaluated while subjected to the test condition specified in 29.1:
23.2A		a) Immediate visual indication of desired setpoint at the User Interface with any user adjustment of setpoint; this is function Class A. b) Prevention of adjustment of setpoint more than $\pm 5.6^{\circ}\text{C}$ ($\pm 10^{\circ}\text{F}$) from the current setpoint by one user action (example: such as one button press); this is function Class A. c) Electronic User Interface shall not permit setpoint value to be selected higher than 77°C (171°F); this is function Class A. d) Maximum number of setpoint adjustments completed by one user action (e.g. such as one button press) shall be rate limited to five or fewer adjustments to increase setpoint within a time span of 1 min; this is function Class A. Following this, any further requests shall be ignored until 15 min. has elapsed since the last request; this is function Class A.



CLAUSE	VERDICT	COMMENT
Supplement SB	Info	SAFETY OF SMART ENABLED HOUSEHOLD ELECTRIC STORAGE TANK WATER HEATERS
SB2	Info	General <i>New clause added;</i> A control on the water heater shall be manually adjusted to the setting for smart enabled and/or remote operation in order for the water heater to be operated in this mode (i.e. utilizing a mobile app). The adjustment means shall be physically provided on the water heater and the method shall be illustrated in user operating instructions provided with the appliance.
SB2.19		Exception No. 1: If the smart enabled and/or remote operation mode is restricted to a maximum water heater temperature setpoint equal to or less than 51.7°C (125°F), a manual adjustment setting means physically located on the water heater as described in SB2.19 is at the option of the manufacturer. Exception No. 2: If the smart enabled and/or remote operation mode is required to be activated with information visually accessible to the user on the water heater (i.e. access code, QR code, pairing code, etc.) a manual adjustment setting means physically located on the water heater as described in SB2.19 is at the option of the manufacturer.
SB5	Info	Markings and Instructions <i>New clause added;</i>
SB5.6		The method of setting the water heater to smart enabled and/or remote operation shall be illustrated in the user operating instructions provided with the appliance.