

Subpart 63.25—Requirements for Specific Types of Automatic Auxiliary Boilers**§ 63.25-1 Small automatic auxiliary boilers.**

Small automatic auxiliary boilers defined as having heat-input ratings of 400,000 Btu/hr. or less (117 kilowatts or less) must also meet the following requirements.

(a) Small automatic auxiliary boilers must be equipped with a visual indicator which indicates when the low water cutoff has activated.

(b) A prepurge period of a sufficient duration to ensure at least four changes of air in the combustion chamber and stack, but not less than 15 seconds must be provided. Ignition must occur only before or simultaneously with the opening of the fuel oil valve.

[CGD 88-057, 55 FR 24238, June 15, 1990, and amended by USCG-2003-16630, 73 FR 65191, Oct. 31, 2008]

§ 63.25-3 Electric hot water supply boilers.

(a) Electric hot water supply boilers that have a capacity not greater than 454 liters (120 U.S. gallons), a heat input rate not greater than 200,000 Btu/hr. (58.6 kilowatts), meet the requirements of UL 174 or UL 1453 (both incorporated by reference, see 46 CFR 63.05-1), and are protected by the relief device(s) required in 46 CFR 53.05-2 do not have to meet any other requirements of this section except the periodic testing required by paragraph (j) of this section. Electric hot water supply boilers that meet the requirements of UL 174 may have temperature-pressure relief valves that meet the requirements of ANSI/AGA Z21.22 (incorporated by reference, see 46 CFR 63.05-1) in lieu of 46 CFR subpart 53.05.

(b) Each hot water supply boiler must be constructed in accordance with the applicable requirements of part 52 or part 53 of this chapter.

(c) Branch circuit conductors for hot water supply boilers which have a capacity not greater than 454 liters (120 U.S. gallons) must have a current carrying capacity of not less than 125 percent of the current rating of the appliance. Branch circuit conductors for hot water supply boilers with capacities of

more than 454 liters (120 U.S. gallons) must have a current carrying capacity of not less than 100 percent of the current rating of the appliance. Wiring materials and methods must comply with part 111, subpart 111.60 of this chapter. A hot water supply boiler having a current rating of more than 48 amperes and employing resistance type heating elements must have the heating elements on subdivided circuits. Each subdivided load, except for an electric hot water supply boiler employing a resistance type immersion electric heating element, must not exceed 48 amperes, and it must be protected at not more than 60 amperes. An electric hot water supply boiler employing a resistance type immersion electric heating element may be subdivided into circuits not exceeding 120 amperes and protected at not more than 150 amperes. Overcurrent protection devices must comply with part 111, subpart 111.50 of this chapter.

(d) Heating elements must be insulated electrically from the water being heated, guarded against mechanical injury and contact with outside objects, and securely supported. Consideration must be given to sagging, opening, and other adverse conditions of the elements resulting from continuous heating, and flexion of supports and wiring due to alternate heating and cooling. Wrap-around elements must be secured in a manner which prevents loosening.

(e) Iron and steel parts must be protected against corrosion by enameling, galvanizing, or plating. Iron and steel storage tanks having a wall thickness less than 6.4mm (¼-inch) must have the inside surface protected against corrosion.

(f) Each heating element must have a temperature regulating device. The device must limit the water from obtaining a temperature greater than 90 °C (194 °F). If the control has a marked off position, the control must disconnect the heating element from all ungrounded conductors, and it must not respond to temperature when placed in the off position.

(g) An independent temperature limiting device must prevent the water in the upper 25 percent of the tank from attaining a temperature higher than 99 °C (210 °F). This device must require