

LATTNER

Space Saver Electric Hot Water Boilers



Space Saver

- 7.5 to 240 KW Std
- 270 to 360 KW Tall
- 25 to 1229 MBH
- Section IV ASME up to 160 psi and 250° F



LATTNER

Safe • Sure • Simple

Introduction

The **Lattner Space Saver** - Electric hot water boiler is self-contained and UL Listed for closet and equipment room installation. It requires a minimum amount of floor space and is designed for extended life when used as the primary, supplemental, or standby hydronic heating source.

Standard Features

VESSEL CONSTRUCTION - Vertical ASME section IV, "H" stamped vessel, rated to 160 psi and 250° F. Registered with National Board.

ENCLOSURE - NEMA 1, ventilated control panel with hinged door, key lock and vessel enclosure with removable panels mounted on steel channel base. Heat resistant silicon acrylic enamel protects all surfaces to 180° F.

INSULATION - To minimize heat loss, vessel is insulated with four inches of one pound per cubic foot density fiberglass.

SAFETY PRESSURE RELIEF - ASME rated pressure relief valve.

HIGH LIMIT CUTOUT - Manual reset high temperature cutout provides protection in the event of an over temperature condition.

LOW WATER CUTOFF - Manual reset, probe-type cutout de-energizes boiler on low water condition. External test and manual reset pushbuttons provided to meet CSD-1.

CONTROLS - Fused control transformer with on/off switch and indicator lamp provides control power. Steps ranging from 1 to 8 depending on the size of the boiler.

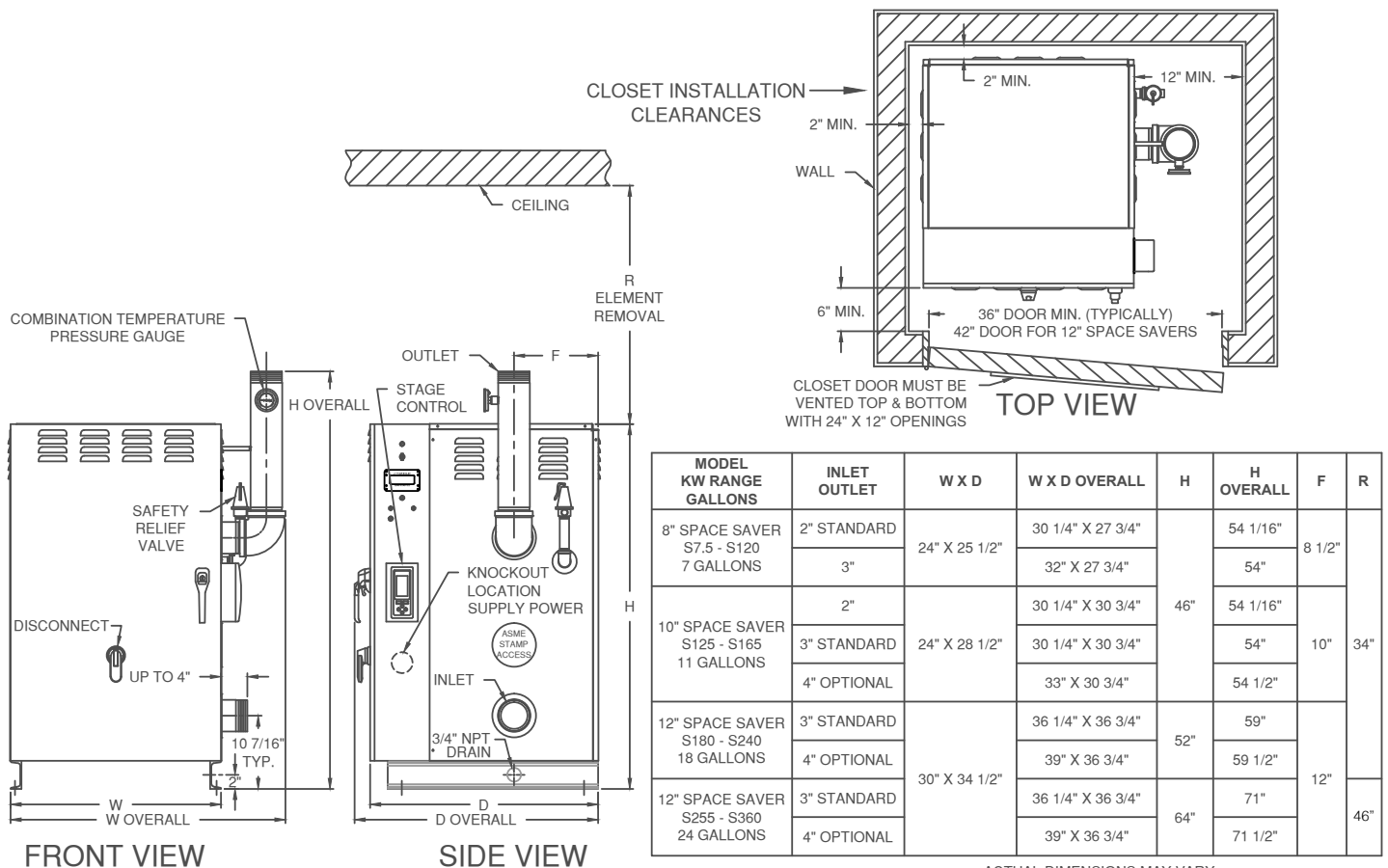
DRAIN VALVE - Provided for right side connection as standard, easily accessible from boiler front.

GAUGE - Combination temperature/pressure-indicating gauge is factory installed for front visibility.

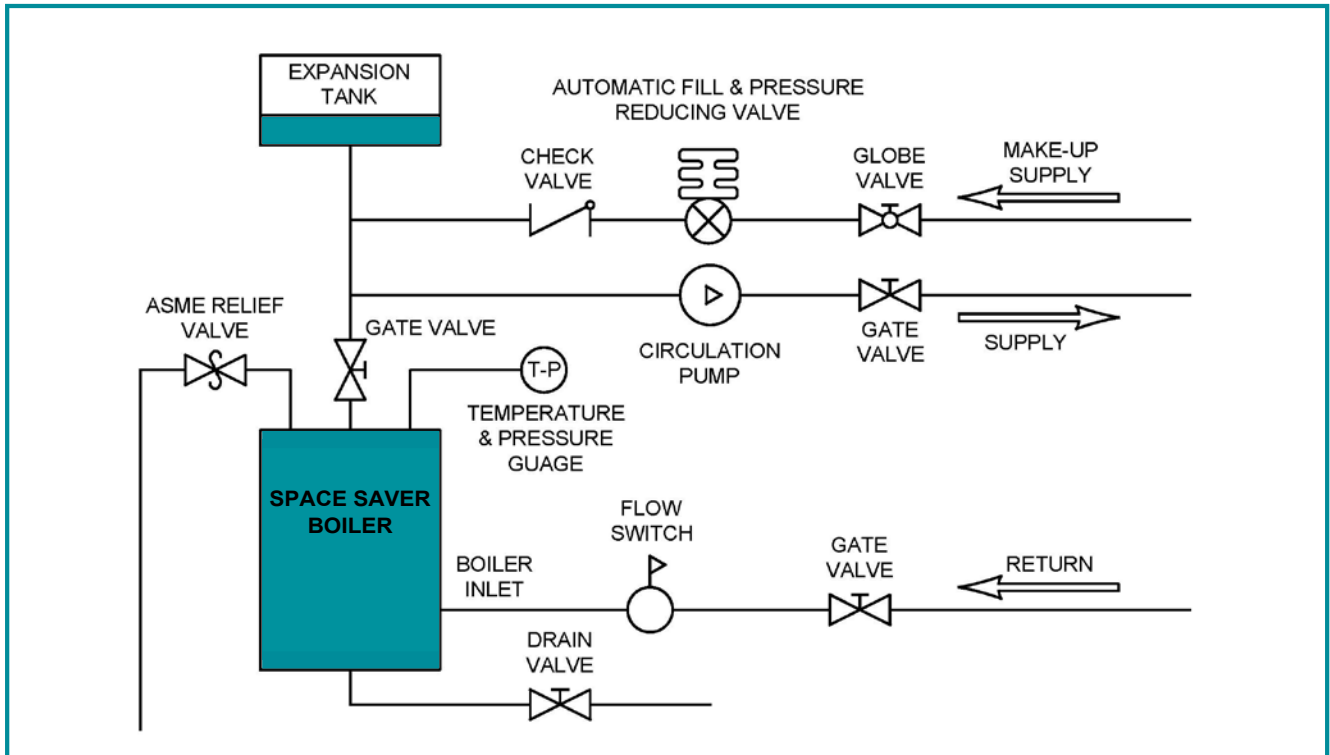
MAIN SUPPLY TERMINALS - Furnished on all boilers for copper conductors.

ELEMENT BUNDLE - Element bundle utilizes single bend incoloy elements widely spaced for maximum heat dissipation to reduce lime build-up between passes. Element terminals are double sealed with epoxy and silicone rubber to ensure long life. Elements are individually replaceable. Incoloy will withstand scaling and temperatures to approximately 1700° F.

UL LISTED - Under file No. E30432. Due to space limitations, some built-in features may not be available in combination with others; consult factory representative.



Typical Boiler Piping Diagram



Capacities & Amps

KW	MBH	Vessel Diameter Inches	Vessel Capacity Gallons	Steps	Circuits	AMPs (600/3)	AMPs (480/3)	AMPs (240/3)	AMPs (208/3)	AMPs (240/1)	Approx Operating Weight (Lbs)	Approx Shipping Weight (Lbs)
7.5	26	8	7	1	1	7.2	9.0	18.0		31.3	538	480
15.0	51	8	7	1	1	14.4	18.0	36.1	41.6	62.5	548	490
22.5	77	8	7	1	1	21.7	27.1	54.1		93.8	558	500
30.0	102	8	7	1	1	28.9	36.1	72.2	83.3	125.0	558	500
37.5	128	8	7	2	2	36.1	45.1	90.2		156.3	568	510
45	154	8	7	2	2	43.3	54.1	108.3	124.9	187.5	588	530
52.5	179	8	7	2	2	50.5	63.1	126.3		218.8	598	540
60	205	8	7	2	2	57.7	72.2	144.3	166.5	250.0	598	550
75	256	8	7	3	3	72.2	90.2	180.4	208.2	312.5	628	570
90	307	8	7	3	3	86.6	108.3	216.5	249.8	375.0	658	600
105	358	8	7	4	4	101.0	126.3	252.6	291.5	437.5	708	650
120	410	8	7	4	4	115.5	144.3	288.7	333.1	500.0	708	650
135	461	10	11	4	5	129.9	162.4	324.8	374.7		851	760
150	512	10	11	4	5	144.3	180.4	360.8	416.4		851	760
165	563	10	11	4	6	158.8	198.5	396.9	458.0		891	800
180	614	12	18	4	6	173.2	216.5	433.0	499.6		1099	950
195	666	12	18	4	7	187.6	234.5	469.1	541.3		1149	1000
210	717	12	18	4	7	202.1	252.6	505.2	582.9		1269	1120
225	768	12	18	8	8	216.5	270.6	541.3	624.5		1349	1200
240	819	12	18	8	8	230.9	288.7	577.4	666.2		1449	1300
270	922	12	24	8	12	259.8	324.8	649.5	749.5		1550	1350
292.5	998	12	24	8	13	281.5	352.0				1650	1450
315	1075	12	24	8	14	303.1	379.0				1700	1500
337.5	1152	12	24	8	15	324.8	406.0				1750	1550
360	1229	12	24	8	16	346.4	433.0				1800	1600

Steps and circuits based on 480 3 PH Power
Boilers over 4 steps include progressive sequencer

Standard controls are DIGITAL PID CONTROLLER
For additional capacity, see Lattner Cabinet Series

Sample Specifications

1. Furnish and install UL listed LATTNER Space Saver electric boiler(s) with capacity and voltage as scheduled, equipment with replaceable incoloy element(s) mounted on a single standard ASA flange.

2. Heating element(s) to be single bend, 75 W/in² not exceeding .425" diameter. Elements to be widely spaced for maximum heat dissipation and individually replaceable from flange for servicing.

3. All control components to be prewired and functionally tested. Components to include: Heavy-duty adjustable controller(s) to maintain water temperature; spring reinforced fuse blocks with Class J or K fuses per 48 ampere circuit; disconnecting break magnetic contacts UL Listed for 200,000 cycles; fuse control transformer; on/off control switch with pilot light indication; indicator lamps for each control stop and safety circuit; properly sized lugs for incoming conductors with electrical knockouts located on right side of control panel; ASME rate pressure relief valve; manual reset probe-type low water cutoff; temperature and pressure gauge; high temperature limit with manual reset, air eliminator; and factory mounted drain valve.

4. Pressure vessel to be constructed per ASME Section IV, designed for 160 psi and 250° F, registered with the National Board. Data reports are to be provided. Vessel to be insulated for minimum heat loss with a 4" fiberglass blanket rated at 1 pound per cubic foot density and mounted on a 4" steel channel base.

5. Unit to include cabinet style ventilated steel enclosure with prewired, ventilated control panel. All surfaces to be corrosion protected with non-oxidizing silicon acrylic enamel heat resistant to 180° F.

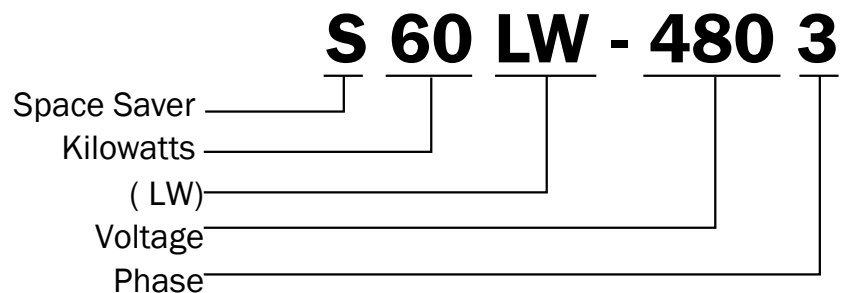
Optional Features – Select as Required

- Interlocking Disconnect
- Manual Load Limiter/Energy Saver
- Outdoor Air Reset (Electronically adjusts discharge set-point inversely with changes in outside temperature)
- Ammeter (1 or 3 phase, please indicate)
- Voltmeter
- KWH Energy Meter
- Demand Power Limiter
- 7 Day Program Clock
- Ground Fault Monitor System
- Audible alarm for fault annunciation
- Interlocking Flow Switch
- Building Management Interface packages
- NSF approved liner with stainless steel fittings

HOW TO ORDER

- Model Number
- KW
- Volts / Phase
- Operating Temperature
- Maximum Operating Pressure
- GPM
- BTU
- Inlet and Outlet size (if not using Lattner standard)
- Optional Features

Model Designation



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