COMMERCIAL ELECTRIC BOILER

LECTRUS™

15 - 150 KILOWATTS

MODULATING CONTROL

CASCADE UP TO 8 BOILERS

ASME RATED PRESSURE VESSEL

160 PSI WORKING PRESSURE

Lochinvar SMART SYSTEM™



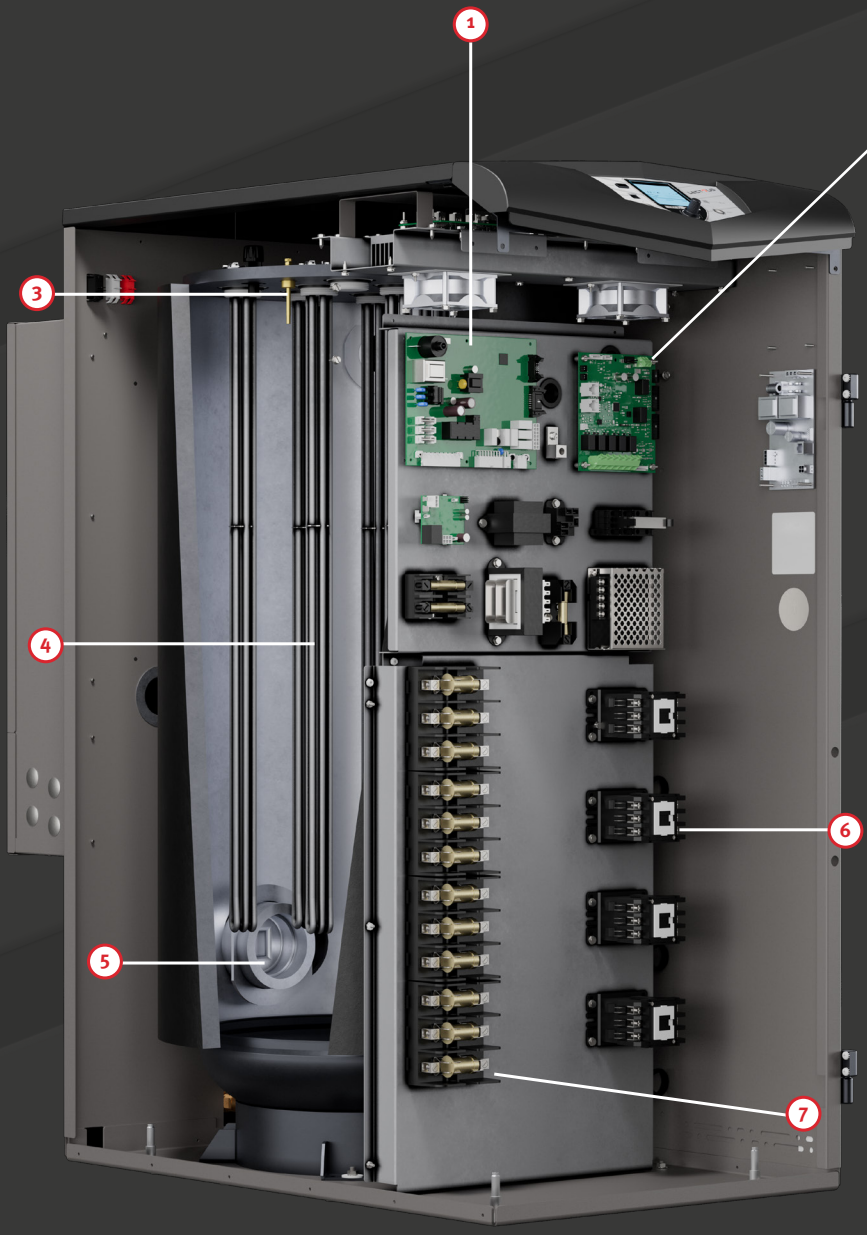
DESIGNED ★ ENGINEERED ★ ASSEMBLED USA

Lochinvar®

LECTRUS™

In 1986, Lochinvar® introduced the Power-Fin® boiler to a market looking for a more efficient hydronic heating solution. Almost four decades later, the market is looking again. LECTRUS™ commercial electric boilers bring yet another solution to Lochinvar's already diverse product portfolio. Whether your goal is decarbonization or creating a dual fuel heating system, LECTRUS can help accomplish those goals. Designed, engineered and assembled at Lochinvar's Lebanon, Tennessee headquarters; LECTRUS is not just another electric boiler. LECTRUS is an electric boiler built with the same expertise and quality that continues to recognize Lochinvar as an industry leader in commercial hydronic heating.

NO ONE BRINGS IT ALL TOGETHER LIKE LOCHINVAR



2 The LECTRUS' modulation control board rotates the operation of each element bank based on the average runtime of the bank, helping to ensure equal cycles across contactors but also equal runtime for all heating elements.

LECTRUS FEATURES

1 MAIN CONTROL BOARD

2 MODULATION CONTROL BOARD

3 LOW WATER CUT-OFF PROBE

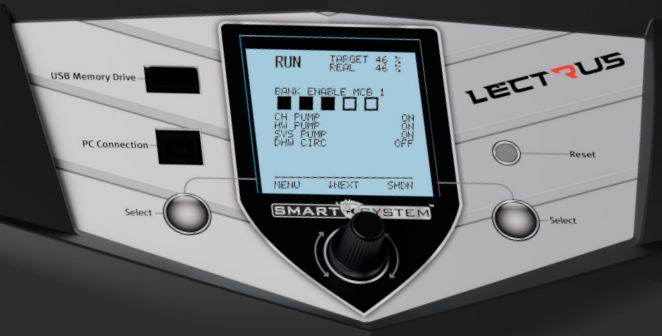
4 ROBUST INCOLOY SHEATHED 15kW HEATING ELEMENTS

5 3" NPT ASME INSPECTION OPENING

6 CONTACTORS

7 FUSE BLOCKS

LECTRUS features Lochinvar's popular SMART SYSTEM™ control platform. The same interface that Lochinvar boilers have used for years brings a familiar experience to customers; simplifying product set up and troubleshooting. Cascade up to eight LECTRUS boilers or use Front End Loading functionality with LECTRUS and other condensing or non-condensing Lochinvar boilers.





THE OPTION YOU NEED - IS STANDARD

Triac Board(s)
While other electric boilers require expensive upgrades or a different series altogether, LECTRUS features a fully modulating control as standard construction. Every LECTRUS boiler is built with a modulating element bank, which allows for precise temperature control, reduces contactor cycles and helps extend component life.

VESSEL ENGINEERING AND MANUFACTURING EXPERTISE

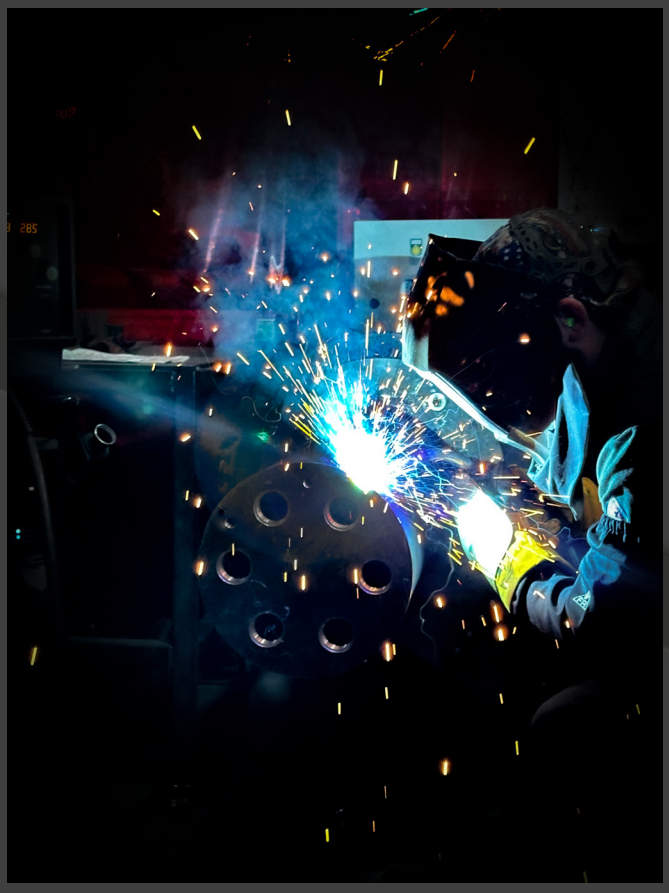
To date, Lochinvar has built over 410,000 ASME rated vessels and heat exchangers including:
· Custom Hi-Power electric water heaters from 120-2,500 gallons
· Custom storage tanks up to 5,000 gallons
· Power-Fin's copper heat exchanger
· CREST fire tube heat exchanger

Leveraging engineering and manufacturing expertise makes Lochinvar uniquely qualified to construct the heart of LECTRUS boilers.

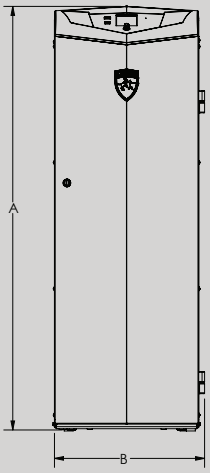


ASME CONSTRUCTION ON EVERY MODEL

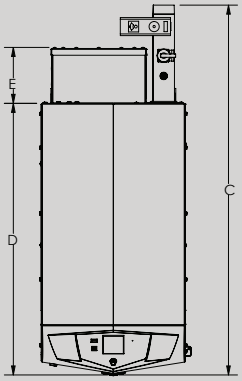
The LECTRUS boiler features two vessel sizes; 17 gallon vessel for 15-90kw and 32 gallon vessel for 105-150kw models.



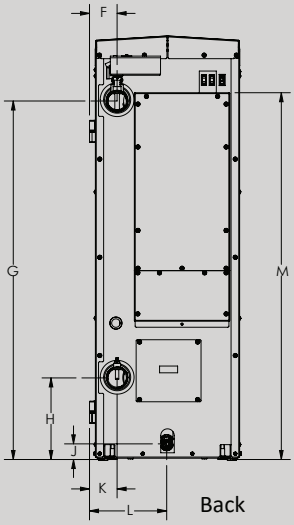
LECTRUS ELECTRIC HEATING BOILER DIMENSIONS & SPECIFICATIONS



Front



Top



Back

Voltage Schedule	
A - 240V	1PH
K - 208V	3PH
X - 480V	3PH
N - 600V	3PH

FOR EASE IN ORDERING BY MODEL NUMBER

KEB 0090 - K

MODEL | WATTAGE | VOLTAGE

LECTRUS HEATING BOILER DIMENSIONS AND SPECIFICATIONS

Model Number	Input KW Min KW	Input KW Max KW	Max Flow Rate	Water Volume (Gal)	A	B	C	D	E	F	G	H	J	K	L	M	Water Conn.	Ship Wt. (lbs.)
KEB0015-0090	15	90	105	17	47″	16-3/4″	41″	30-1/4″	6-1/4″	3-1/4″	39-3/4″	9″	1-3/4″	3-1/4″	8-1/2″	40-3/4″	2″ NPT	367
KEB0105-0150	105	150	105	32	47″	21-3/4″	45-1/4″	35-1/2″	6-1/4″	3-1/4″	39-3/4″	9″	2-1/4″	4-1/4″	11-1/4″	41-1/4″	2″ NPT	488

*Information is subject to change without notice. Dimensions are in inches. Dimensions shown are with standard 10kA SCCR construction. *Lochinvar should be consulted before selecting a boiler for installations having unusual piping and pickup requirements, such as intermittent system operation, extensive piping systems, etc.

SMART SYSTEM FEATURES

› SMART SYSTEM Digital Operating Control
  Multi-Color Graphic LCD Display w/Navigation Dial
  Triac Control Board(s) - Triode for Alternating Current
› Loch-N-Link® USB Port for Easy Programming
› Cascading Sequencer with Built-in Redundancy
  Selectable Cascade Type: Lead Lag/Efficiency Optimization
  Multiple Size Boilers
  Front-End Loading
› Temperature Input w/Independent Outdoor Reset Curve
› Three-Pump Control
  System Pump with Parameter for Continuous Operation
  Boiler Pump with Variable-Speed Control
  Domestic Hot Water Boiler Pump
› Building Management System Integration
  0-10 VDC Input to Control Modulation or Setpoint
  0-10 VDC Input from Variable-Speed System Pump
  0-10 VDC Modulation Rate Output Signal
  0-10 VDC Enable/Disable Signal
› Programmable System Efficiency Optimizers
  Space Heating Night Setback
  DHW Night Setback
  Ramp Delay
  Boost Time and Temperature
› High-Voltage Terminal Strip
  Pump Contacts for 3 Pumps
› Low-Voltage Terminal Strip
  Flow Switch Contacts
  Alarm Contacts
  Runtime Contacts
  Heat Thermostat Contact
  Tank Thermostat Contacts
  System Sensor Contacts
  DHW Sensor Contacts
  Cascade Contacts
  0-10 VDC BMS Contacts
  0-10 VDC Boiler Rate Output Contacts
  0-10 VDC Boiler Pump Speed Contacts
  0-10 VDC System Pump Speed Contacts
  ModBus Contacts
  Time Clock
  Data Logging Last 10 Lockouts
  Space Heat Run Hours
  Domestic Hot Water Run Hours

Model Number	Rating MBH	Rating kW	Elements Qty	Elements kW	Number of : Steps@ kW	FLA 240V	FLA 208V	FLA 480V	FLA 600V
KEB0015-*	51	15	1	15	1@15	66	44	19	15
KEB0030-*	102	30	2	15	2@15	132	88	38	30
KEB0045-*	153	45	3	15	3@15	N/A	131	57	46
KEB0060-*	204	60	4	15	4@15	N/A	175	76	61
KEB0075-*	256	75	5	15	5@15	N/A	219	95	76
KEB0090-*	307	90	6	15	3@30	N/A	263	114	91
KEB0105-*	358	105	7	15	3@30, 1@15	N/A	307**	133	106
KEB0120-*	409	120	8	15	4@30	N/A	351**	152	122
KEB0135-*	460	135	9	15	4@30,1@15	N/A	394**	171	137
KEB0150-*	511	150	10	15	5@30	N/A	438**	190	152

Features dual electrical feeds to a single distribution block**

STANDARD FEATURES

› ASME-Certified, Steel Pressure Vessel
  10-Year Vessel Waranty *(See Warranty for Details)*
  160 psi Working Pressure
  50 psi Relief Valve
  Fully Welded Design
› Smart System Control
› 1 - Year Waranty on Parts *(See Warranty for Details)*
› Other Features
  On/Off Switch
  High Limit with Manual Reset
  Automatic Reset High Limit
  Manual Reset Low Water Cutoff
  Temperature and Pressure Gauge
  Custom Maintenance Reminder with Contact Info
  Password Security
  Customizable Freeze Protection Parameters
  10 kA SCCR

OPTIONAL EQUIPMENT

Integrated dual-energy utility control *(field mounted)*
Wireless Outdoor Temperature Sensor
ModBus Communication
BACnet IP/MSTP
Alarm Bell
200 kA SCCR

CODES AND REGISTRATIONS

ASME Certified, “H” Stamp/National Board
CSD-1
Canadian Registration Number (CRN)

For technical information call 800-722-2101. Lochinvar, LLC reserves the right to make product changes or improvements without prior notice.

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