HIGH EFFICIENCY COMMERCIAL BOILERS

CREST®
CONDENSING BOILER

SMART TOUCH™

CON·X·US® REMOTE CONNECT

MODBUS AND BACnet MSTP PROTOCOL

CASCADING SEQUENCER WITH CASCADE REDUNDANCY

12 INPUTS FROM 750,000 TO 6.0 MILLION BTU/HR

UP TO 25:1 TURNDOWN RATIO

DIRECT-VENTING UP TO 100 FEET USING PVC, CPVC, POLYPROPYLENE OR STAINLESS STEEL

FLEXIBLE FLOW RATES UP TO 600 GPM

FRONT END LOADING CAPABILITY



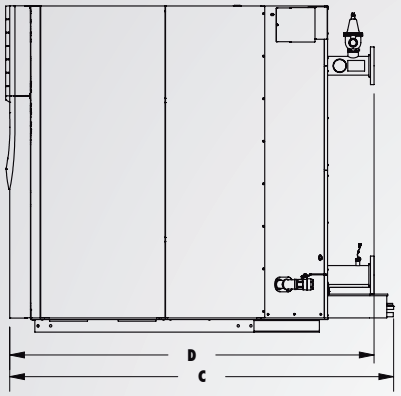
UP TO 96.2%
Thermal Efficiency

Cosielsa

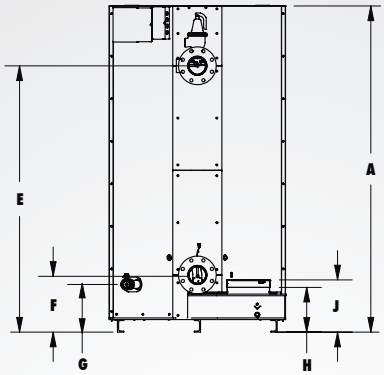
Lochinvar®
High Efficiency Water Heaters, Boilers and Pool Heaters

CREST® BOILER DIMENSIONS AND SPECIFICATIONS

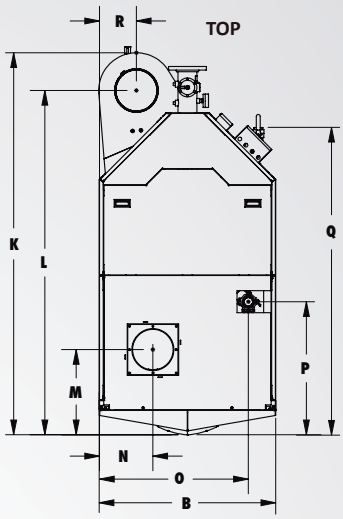
SIDE



BACK



TOP



Crest Heating Boiler

Dimensions and Specifications

Model Number	Input MBH Min	Input MBH Max	Thermal %	Gross Output MBH	Net Rating MBH	Turn down	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P	Q	R	Gas Conn.	Water Inlet/ Outlet	Air Intake	Vent Size	Oper. Weight (with water)	Ship. Weight (lbs.)
FB*0751	50	750	96.2%	722	627	15:1	78"	30"	55-1/2"	57-5/8"	66-1/8"	11-7/8"	11-3/8"	11-1/4"	12-1/2"	55"	51"	13"	8-3/4"	26-3/4"	23-3/4"	49-1/2"	7-3/8"	1-1/4"	3"	6"	6"	1,768	1,560
FB*1001	50	1,000	96.2%	962	837	20:1	78"	30"	56-1/2"	57-5/8"	66-1/8"	11-7/8"	11-3/8"	11-1/4"	12-1/2"	56"	51"	13"	8-3/4"	26-3/4"	23-1/8"	49-1/2"	6-1/2"	1-1/4"	3"	6"	6"	1,838	1,596
FB*1251	63	1,250	96.2%	1,203	1,046	20:1	78"	30"	56-1/2"	57-3/4"	66-1/8"	11-7/8"	11-3/8"	11-1/4"	12-1/2"	56"	51-3/8"	13"	8-3/4"	26-3/4"	21-5/8"	49-1/2"	6-1/2"	1-1/4"	3"	6"	8"	1,975	1,648
FB*1501	60	1,500	96.2%	1,443	1,255	25:1	78"	30"	67-3/4"	68"	65-3/8"	12-3/8"	11-3/8"	11-1/4"	12-1/2"	67-1/4"	62-3/8"	15-7/8"	9"	26-7/8"	27-7/8"	59-1/4"	5-1/8"	1-1/2"	4"	8"	8"	2,307	1,961
FB*1751	70	1,750	96.2%	1,684	1,464	25:1	78"	30"	66-1/4"	68"	65-3/8"	12-3/8"	11-3/8"	11-1/4"	12-1/2"	65-3/4"	61-1/2"	15-7/8"	9"	27"	27-1/8"	58-3/4"	5-1/8"	1-1/2"	4"	8"	8"	2,458	2,017
FB*2001	80	1,999	96.2%	1,924	1,673	25:1	78"	30"	66-1/2"	68"	65-3/8"	12-3/8"	11-3/8"	11-1/4"	12-1/2"	66"	61-1/2"	15-7/8"	9"	27"	26-3/4"	58-3/4"	5-1/8"	1-1/2"	4"	8"	8"	2,570	2,087
FB*2501	125	2,500	96%	2,400	2,087	20:1	77-3/4"	35"	83-3/4"	83-3/4"	63-3/4"	13-1/2"	11-1/4"	10-1/2"	12-1/4"	83-1/4"	76-1/4"	19-3/4"	9-1/4"	28-3/4"	32"	71"	7-1/4"	2"	4"	8"	9"	3,600	2,577
FB*3001	150	3,000	96%	2,880	2,504	20:1	77-3/4"	35"	83-3/4"	83-3/4"	63-3/4"	13-1/2"	11-1/4"	10-1/2"	12-1/4"	83-1/4"	76-1/4"	19-3/4"	9-1/4"	28-3/4"	32"	71"	7-1/4"	2"	4"	10"	10"	3,900	2,881
FB*3501	175	3,500	96%	3,360	2,921	20:1	77-3/4"	42"	91-1/2"	86-3/4"	63-1/2"	13-1/4"	11-1/2"	10-3/4"	12-1/2"	91"	82"	20-1/4"	12-3/4"	35-1/2"	31-3/4"	73-1/4"	8-3/4"	2"	4"	10"	10"	4,600	3,218
FB*4001	333	3,999	96%	3,840	3,339	12:1	77-3/4"	45-1/2"	103-1/2"	99"	63-1/2"	13-3/4"	11-1/2"	10-3/4"	12-1/2"	103"	94"	24-3/4"	13-1/2"	39-1/2"	42-1/4"	85-1/4"	10-1/2"	2-1/2"	4"	12"	12"	5,200	3,805
FB*5001	500	4,999	96%	4,800	4,173	10:1	77-3/4"	46-1/2"	102-1/4"	99-1/2"	63-1/2"	15"	11-1/2"	10-3/4"	12-1/2"	101-3/4"	92-1/2"	22"	14"	39-3/4"	39-1/2"	84"	9"	2-1/2"	6"	12"	14"	5,900	4,101
FB*6001	600	6,000	96%	5,760	5,008	10:1	77-3/4"	50"	102-3/4"	99-3/4"	63-1/4"	14-3/4"	11-1/2"	10-3/4"	12-1/2"	102-1/2"	93-1/4"	20"	15-3/4"	43-1/2"	36-1/2"	83-3/4"	9-1/4"	2-1/2"	6"	14"	14"	6,900	4,711

Notes: *Insert "N" for natural gas, "L" for LP gas models and "D" for dual fuel.Indoor installation only. Information subject to change without notice. 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. The ratings have been determined under the provisions governing forced draft burners. The Net AHRI water ratings shown are based on a piping and pickup allowance of 1.15.

Smart Touch ™ Features

CON·X·US Remote Connect
SMART TOUCH Touchscreen Operating Control
Full-Color 8" Touchscreen LCD Display
Built-in Cascading Sequencer for up to 8 Boilers
- > Built-in Redundancy
- > Cascade Multiple Sized Boilers
- > Lead/Lag Cascade
- > Efficiency Optimized Cascade

Front-End Loading Capability with Copper-Fin II® and Power-Fin® Boilers
Building Management System Integration with 0-10 VDC Input
BACnet MSTP Communications
Modbus Communication
Outdoor Reset Control with Outdoor Air Sensor
Password Security
Domestic Hot Water Prioritization
- > DHW tank piped with priority in the boiler loop
- > DHW tank piped as a zone in the system with the pumps controlled by the Smart System
- > DHW Modulation Limiting
- > Separately Adjustable SH/DHW Switching Times

Low Water Flow Safety Control & Indication
Inlet & Outlet Temperature Readout
Freeze Protection
Service Reminder
Time Clock
Data Logging
- > Hours Running, Space Heating
- > Hours Running, Domestic Hot Water
- > Hours Running, Modulation Rate
- > Ignition Attempts
- > Last 10 Lockouts

Programmable System Efficiency Optimizers
- > Night Setback
- > Anti-Cycling
- > Outdoor Air Reset Curve
- > Ramp Delay
- > Boost Temperature & Time
- > Modulation Factor Contro

Three Pump Control
- > System Pump
- > Boiler Pump
- > Domestic Hot Water Pump

High-Voltage Terminal Strip
- > 120 VAC / 60 Hertz / 1 Phase Power Supply (FB 0751-2001)
- > 208 VAC/ 60 Hertz/ 3 Phase Power Supply (FB 2501-3501)
- > 480 VAC/60 Hertz/3 Phase Power Supply (FB 4001-6001)

System Pump, Boiler Pump and DHW Pump Power
Low-Voltage Terminal Strip
- > 24 VAC Auxiliary Device Relay
- > Auxiliary Proving Switch Contacts
- > Alarm on Any Failure Contacts
- > Runtime Contacts
- > DHW Thermostat Contacts
- > Unit Enable/Disable Contacts
- > System Sensor Contacts
- > DHW Tank Sensor Contacts
- > Outdoor Air Sensor Contacts
- > Cascade Contacts
- > 0-10 VDC BMS External Control Contact
- > 0-10 VDC Variable Speed Boiler Pump Control Contact

Optional Equipment

Alarm Bell
BMS Gateway - BACnet IP or LonWorks
Wireless Outdoor Temperature Sensor
Condensate Neutralization Kit
Common Vent Kits Damper
Motorized Isolation Valve
Variable Speed Boiler Pump
Electrical Options (Shipped Loose):

FB 0751-2001
- > 208V/1Ø/60Hz → 120V/1Ø/60Hz
- > 480V/1Ø/60Hz → 120V/1Ø/60Hz
- > 600V/1Ø/60Hz → 120V/1Ø/60Hz

FB 2501-3501
- > 480V/3Ø/60Hz → 208V/3Ø/60Hz
- > 600V/3Ø/60Hz → 208V/3Ø/60Hz

FB 4001-6001
- > 600V/3Ø/60Hz → 480V/3Ø/60Hz

*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. *The ratings have been determined under the provisions governing forced draft burners.

Codes & Registrations

ASME Certified, "H" Stamp / National Board
California Code Compliant
CSD1 / Factory Mutual / GE Gap Compliant
Canadian Registration Number (CRN)
South Coast Air Quality Management District Qualified (FB 0751-2001)

Standard Features

Up to 96.2% Thermal Efficiency
Proof of Closure Valve (6001)
Modulating Burner with up to 25:1 Turndown
Direct-Spark Ignition
Low NOx Operation
Sealed Combustion
Air Inlet Filter w/Replacement Reminder Low Gas Pressure Operation
Vertical and Horizontal Direct Venting
- > Direct Vent up to 100 Feet
- > PVC, CPVC, Polypropylene or AL29-4C (FB 0751-3501)
- > AL29-4C (FB 0751-6001)

ASME "H" Stamped Heat Exchanger
316L Stainless Steel Fire Tubes
160 psi Working Pressure
On/Off Switch
Adjustable High Limit with Manual Reset
Low Water Cutoff with Manual Reset & Test
High & Low Gas Pressure Switches w/Manual Reset
Low Air Pressure Switches
Condensate Trap w/Blocked Drain Switch
Drain Valve
System Sensor
Outdoor Air Sensor
Inlet & Outlet Temperature Sensors
High-Voltage Terminal Strip
Low-Voltage Terminal Strip
Downstream Gas Test Cocks
50 psi ASME Relief Valve
Temperature & Pressure Gauge
Zero Clearances to Combustible Materials
High Altitude Models Available
10-Year Limited Warranty (See Warranty for Details)
1-Year Warranty on Parts (See Warranty for Details)

Cosielsa
Grupo Cosielsa S.A. de C.V.
Calle 2 #111, Parque Industrial Jurica
Querétaro ,Qro. México C.P. 76127
+52 (442)1531900
ventas@cosielsa.com
www.cosielsa.com