

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

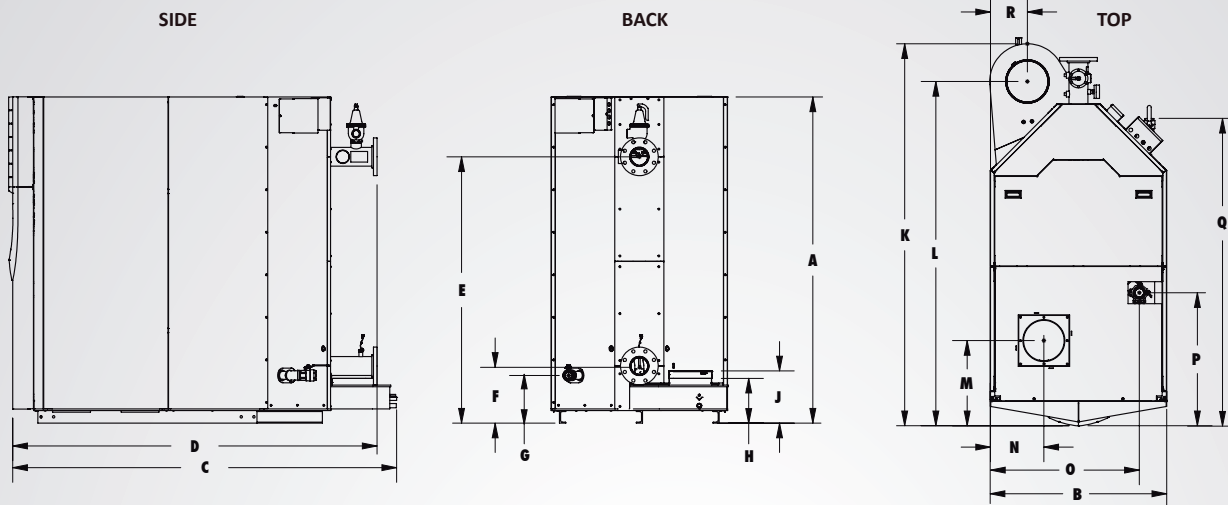


UP TO 96.2%
Thermal Efficiency



Heat, ventilation
& air conditioning





Crest Heating Boiler										Dimensions and Specifications																									
Model Number	Input MBH		Gross Thermal Output %	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.)							
	Min	Max																																	
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 Control
- 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

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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)



Heat, ventilation
& air conditioning

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