



Lochinvar®

FTXL FIRE TUBE CONDENSING BOILER

Submittal Sheet

FTX-Sub-03

FTXL FIRE TUBE COMMERCIAL BOILERS

Job Name: _____ Model No. _____

Location: _____ Type Gas: _____

Engineer: _____ Equipment Tag(s): _____

Agent/Wholesaler: _____

Contractor: _____

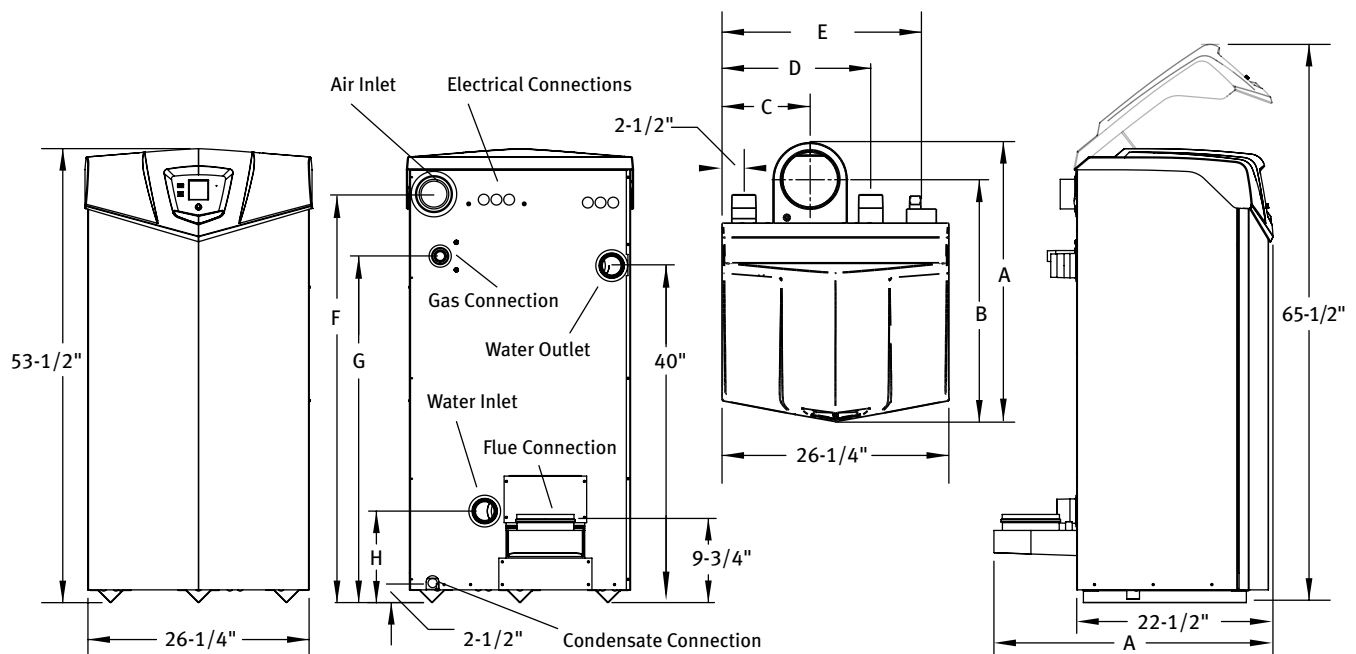
NOTES:

FOR EASE IN ORDERING
BY MODEL NUMBER

FTX	850	N	M13
FTXL Boiler	850,000 Btu/ Hr Input	Natural Gas	Firing Control

This model is:

- FTXL Fire Tube boiler
- 850,000 Btu/hr
- Natural gas
- M13 Firing Controls



FTXL Boiler										Dimensions and Specifications												
Model No.	Input Min MBH	Input Max MBH	Thermal Eff.	Gross Output MBH	NET AHRI Rating MBH	Turn down	Flow (GPM) Min	Flow (GPM) Max	HEX Water Volume	A	B	C	D	E	F	G	H	Water Conn.	Vent Size	Air Intake	Gas Conn.	Ship Wt. (lbs.)
FTX400(N,L)	40.0	399.9	98.0%	392	341	10:1	10	105	13	30-1/2"	27-1/2"	10-1/4"	17"	23-1/4"	46-1/4"	39-1/2"	10-3/4"	2"	4"	4"	1"	435
FTX500(N,L)	50.0	500.0	97.7%	489	425	10:1	15	105	12	30-1/2"	27-1/2"	10-1/4"	17"	23-1/4"	46-1/4"	39-1/2"	10-3/4"	2"	4"	4"	1"	460
FTX600(N,L)	85.0	600.0	97.5%	585	509	7:1	15	105	12	30-1/2"	27-1/2"	10-1/4"	17"	23-1/4"	46-1/4"	39-1/2"	10-3/4"	2"	4"	4"	1"	470
FTX725(N,L)	103.5	725.0	97.2%	705	613	7:1	20	150	17	33"	28-1/2"	10-1/2"	17-1/2"	23-1/2"	48-1/2"	41-1/4"	11"	2-1/2"	6"	4"	1"	510
FTX850(N,L)	121.5	850.0	97.0%	825	717	7:1	25	150	16	33"	28-1/2"	10-1/2"	17-1/2"	23-1/2"	48-1/2"	41-1/4"	11"	2-1/2"	6"	4"	1"	535

*Information subject to change without notice. Dimensions are in inches. Select "N" or "L" for Natural or LP gas. *The Net AHRI Water Ratings shown are based on a piping and pickup allowance of 1.15. *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.



CON-X-US® REMOTE CONNECT CAPABLE
 CASCADING SEQUENCER
 LOCH-N-LINK™ USB DRIVE SETUP
 5 INPUTS FROM 399,999 TO 850,000 BTU/HR
 UP TO 10:1 TURNDOWN RATIO
 COMMON VENT AND PVC DIRECT-VENTING
 FLOW RATES FROM 10 TO 150 GPM
 SMALL 6.2 SQ. FT. FOOTPRINT
 4 PUMP CONTROL
 WIRELESS OUTDOOR SENSOR CAPABLE



Smart System Features

- › **Smart System Digital Operating Control**
Multi-Color Graphic LCD Display w/Navigation Dial
- › **Loch-N-Link™ USB Thumb Drive Port for Easy Programming**
- › **Cascading Sequencer with Built-in Redundancy**
Selectable Cascade Type:
Lead Lag/Efficiency Optimization
Multiple Size Boilers
Front-End Loading
- › **3 Reset Temperatures Inputs w/Independent Outdoor Reset Curves for Each**
Outdoor Sensor
- › **Four-Pump Control**
System Pump with Parameter for Continuous Operation
Boiler Pump with Variable-Speed Control
Domestic Hot Water Boiler Pump
Domestic Hot Water Recirculation Pump Control with Sensor
- › **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
Anti-Cycling
Ramp Delay
Boost Time and Temperature
- › **High-Voltage Terminal Strip**
120 VAC/60 Hertz/1 Phase
Pump Contacts for 3 Pumps
- › **Low-Voltage Terminal Strip**
Building Recirculation Pump Start/Stop
Building Recirculation Return Temp Sensor
Contacts
Proving Switch Contacts
Flow Switch Contacts
Alarm Contacts

- Runtime Contacts
3 Space Heat Thermostat Contacts
Tank Thermostat Contacts
System Sensor Contacts
Tank 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**
Ignition Attempts
Last 10 Lockouts
Space Heat Run Hours
Domestic Hot Water Run Hours

Standard Features

- › **97%-98% Thermal Efficiency**
- › **Modulating Burner with up to 10:1 Turndown**
Direct Spark Ignition
Low NOx Operation
Sealed Combustion
Low Gas Pressure Operation
- › **Stainless Steel Fire-Tube Heat Exchanger**
ASME-Certified, "H" Stamped
160 psi Working Pressure
50 psi Relief Valve
Combustion Analyzer Test Port
Fully Welded Design
- › **Vertical and Horizontal Direct Vent**
Direct Vent up to 100 feet
PVC, CPVC, Polypropylene or AL29-4C
Factory Supplied Sidewall Vent Termination
- › **Smart System Control**
- › **Other Features**
On/Off Switch
Adjustable High Limit with Manual Reset
Automatic Reset High Limit

- Manual Reset Low Water Cutoff
Flue Temperature Sensor
Low Air Pressure Switch
Temperature and Pressure Gauge
Condensate Trap
Zero Service Clearances
10-Year Limited Warranty
Low Water Cutoff
Custom Maintenance Reminder with Contact Info
Password Security
Customizable Freeze Protection Parameters

Optional Equipment

- Alarm Bell
- BACnet MSTP Communications Kit
- BMS Gateway to BACnet or LonMark
- Common Vent Kit
- Concentric Vent Kit (FTX400-FTX600)
- Condensate Neutralization Kit
- Constant-Speed Boiler Circulator
- CON-X-US Remote Connectivity
- Flow Switch
- High and Low Gas Pressure Switches w/Manual Reset (FTX500-FTX850)
- ModBus Communication
- Motorized Isolation Valve
- Multi-Temperature Loop Control
- SMART SYSTEM PC Software
- Variable-Speed Boiler Circulator
- Wireless Outdoor Temperature Sensor
- 30 psi ASME Relief Valve
- 75 psi ASME Relief Valve
- 100 psi ASME Relief Valve
- 125 psi ASME Relief Valve
- 150 psi ASME Relief Valve
- › **Firing Controls**
M9 - Standard Construction
M13 - CSD-1/FM/GE Gap (FTX500-FTX850)



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