

EX SERIES



UP TO
97.9
%
THERMAL EFFICIENCY

HIGH EFFICIENCY CONDENSING BOILERS
COMMERCIAL



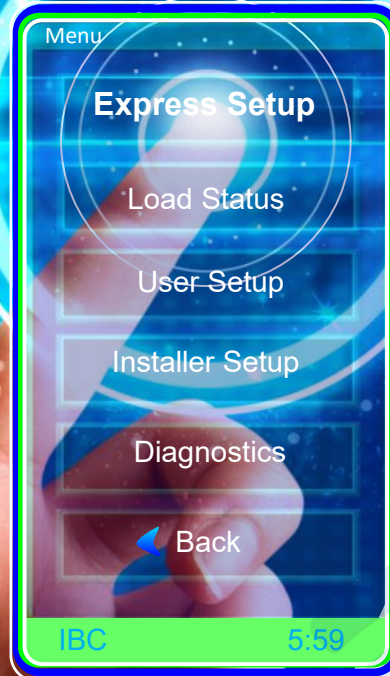
IBC[®]

IBC Control at your fingertips

All EX Boilers use our V-10 Touch Screen boiler control which features the latest in advance control technology and software.

Easy to setup and monitor with features like Express Setup, easier Diagnostics & Intuitive Alert System with plain English Warnings & Error Messages, no boiler has ever been easier to use.

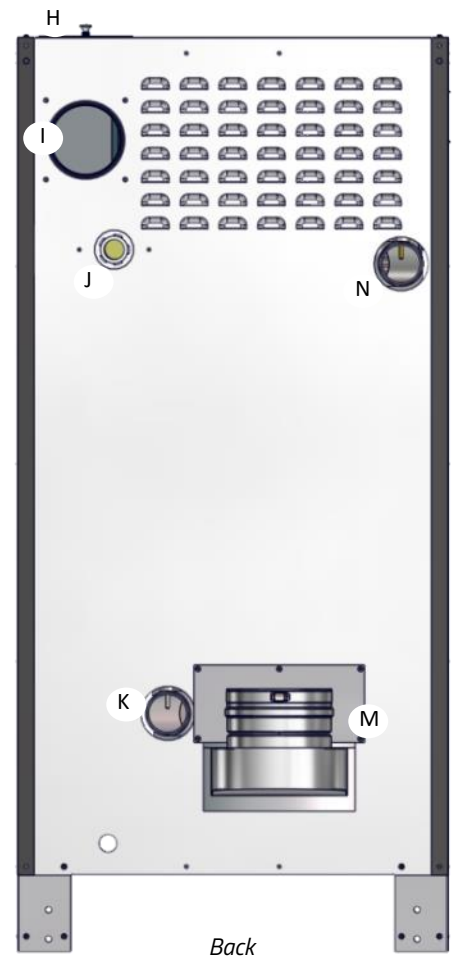
Login to the V-10 Portal for Remote access and enjoy **control on the go!**



REMOTE ACCESS

Interior

- A) Safety Ignition Module (SIM)
- B) Fan
- C) Heat Exchanger
- D) Pressure Sensor
- E) Fuel Mixer
- F) V-10 Controller
- G) Condensate trap
- H) Air Filter Compartment
- I) Combustion Air Intake Duct
- J) Gas Line
- K) Return water
- L) Condensate Drain Outlet
- M) Exhaust
- N) Supply Water



EX SERIES

Suitable for the following projects

- SCHOOLS
- HEALTHCARE FACILITIES
- BARN/FARM BUILDINGS
- SNOW MELT
- RECREATIONAL FACILITIES
- COMMERCIAL GARAGES
- OFFICE BUILDINGS
- FACTORIES / WAREHOUSING
- LARGE RESIDENCES / MULTI-FAMILY HOUSING
- APARTMENT BUILDINGS
- HOTELS



Choosing the right heating system is crucial to maximizing a building's energy savings and environmental impact. The EX Series of commercial high efficiency condensing boilers can help you do just that. 4 Models available: EX 400, EX 500, EX 700, EX 850

Features

Touchscreen Control

- Express setup - program your boiler in seconds with remote monitoring & diagnostics
- Precise burner modulation control
- Easy USB programmability
- Intuitive alert system with detailed error message
- Vast array of performance data for troubleshooting
- Load combining and zoning
- Multi-boiler communication for network applications up to 24 boilers without additional controls
- With 24 networked boilers turndown ratio is 240:1
- End switch, 0-10 VCD or 4-20mA control compatible
- Full BACnet capability included
- Primary pump and zone pump controller - up to 4 zones

Built-in Features

- Unparalleled build quality
- Turndown ratio of 10:1 means you have the power to heat the building in the coldest weather, yet reduce short cycling when the weather is mild
- MFZ Moisture management protocol
- Reverse flow detection
- Outdoor reset control of water temperature

- CSA/UL approved low water cut-off and manual reset high limit
- CSD-1 Compliant
- Unmatched safety features

Superior Heat Exchanger

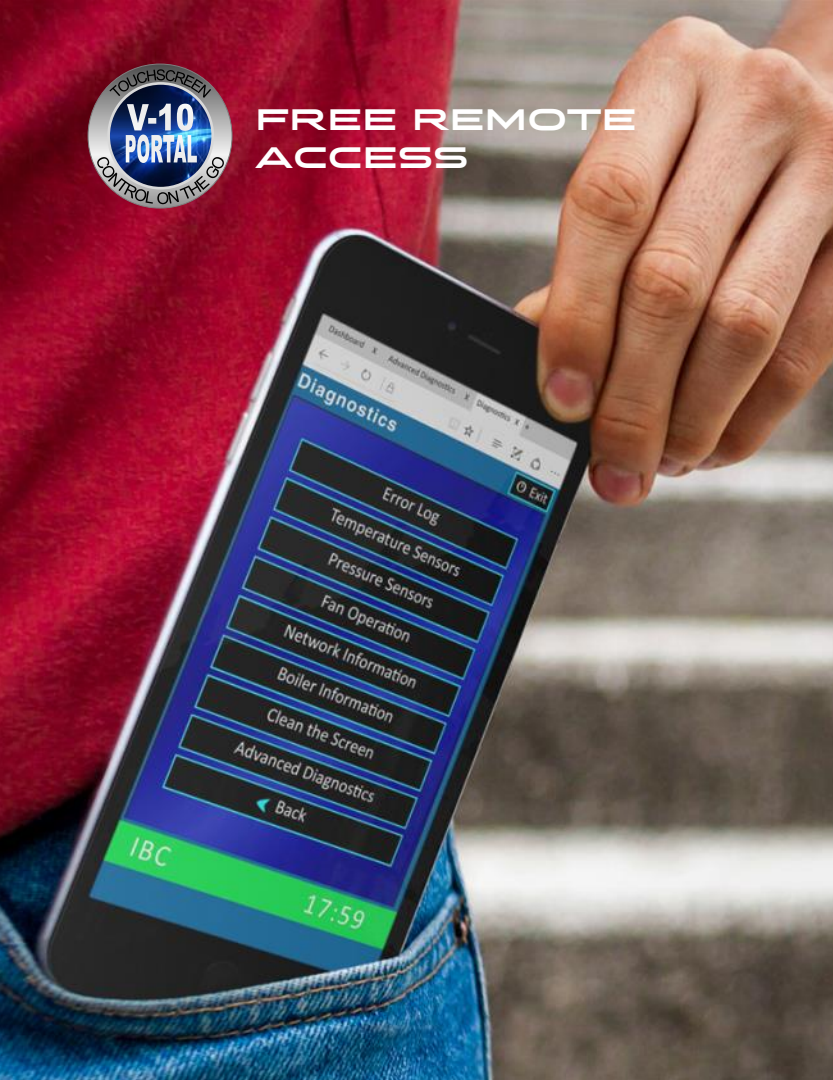
- The most advanced stainless steel fire tube boiler on the market today
- High grade 439 stainless steel construction
- Innovative saddle-bolt lit hardware
- Better thermal efficiency - up to 97%
- Condensed flue gasses clean vertical flue tubes while draining
- Custom water flow baffling to ensure even heat transfer and long life

Easy to Install & Service

- PVC/CPVC/PP/SS venting materials approved
- Direct vent lengths - up to 170' each side
- Available in either NG or LP factory set or field convertible
- Open access to heat exchanger and all internal components

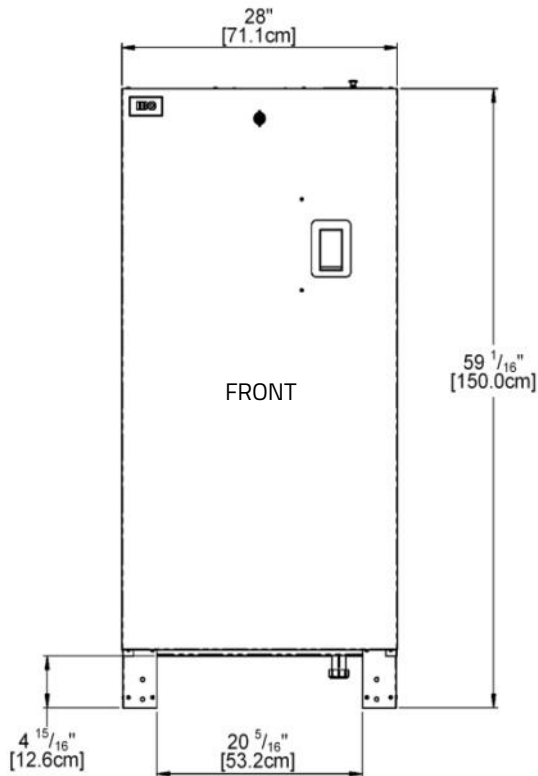


FREE REMOTE ACCESS



EX SERIES

Dimensions

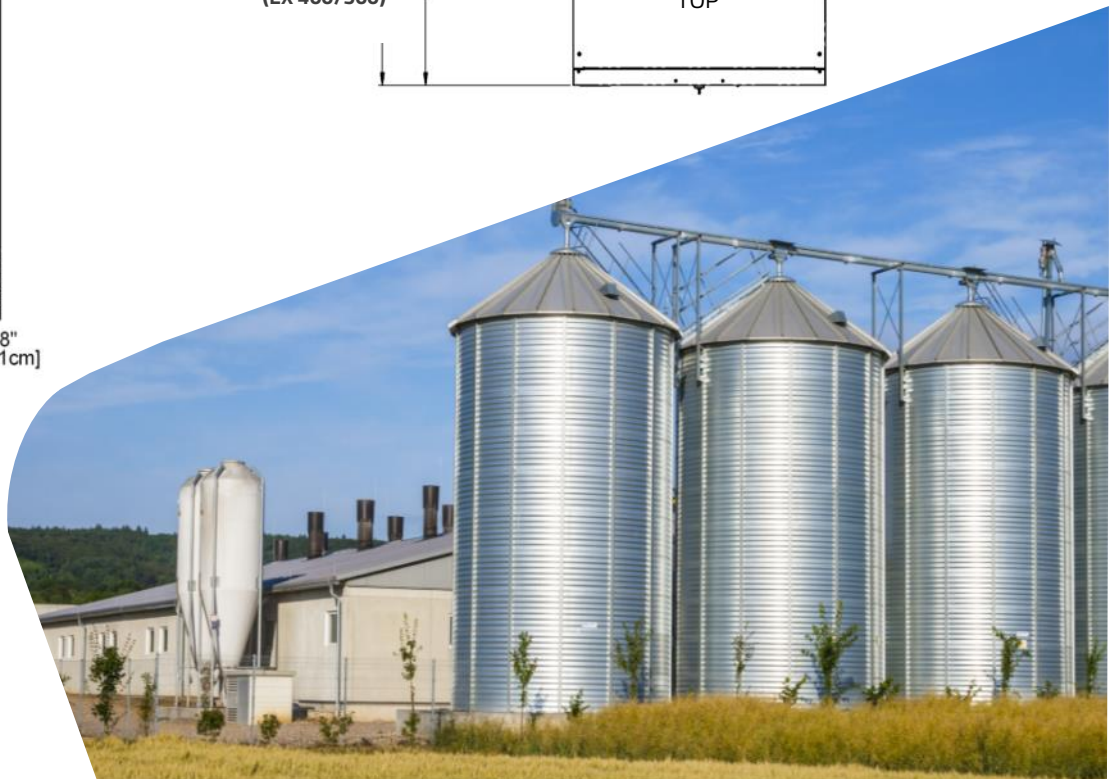
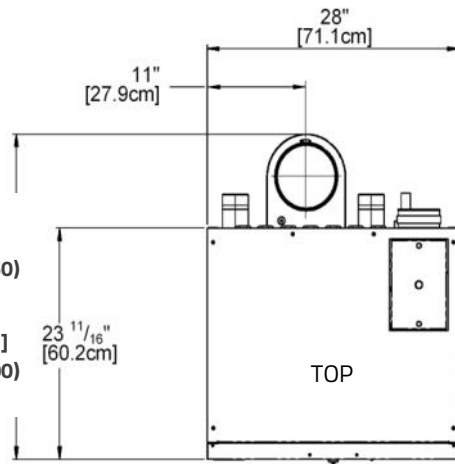
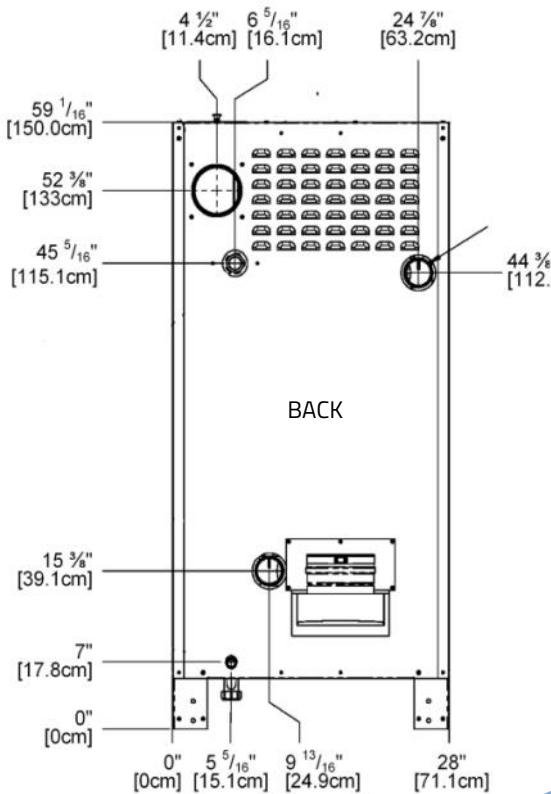


CONNECTIONS

Connection	EX 400 / EX 500	EX 700 / EX 850
Flue Outlet	4" Schedule 40	6" Schedule 40
Combustion Air Inlet	4" Schedule 40	4" Schedule 40
Water Outlet	2" NPT-M	2 1/2" NPT-M
Water Inlet	2" NPT-M	2 1/2" NPT-M
Knock-outs (8)	1/2"	1/2"
Gas Inlet	1" NPT-F	1" NPT-F
Condensate Outlet	3/4" Hose	3/4" Hose

CLEARANCE FROM BOILER CABINET

Surface	Distance from combustible surfaces	Recommended distance for installation and service
Front	2"	30"
Rear flue connection	2"	24"
Left side	1"	2"
Right side	1"	4"
Top	6"	12" (required for filter replacement)
Bottom	0"	0



EX SERIES

Technical Information



VENTING	MAXIMUM EQUIVALENT LENGTH	
Sched.40; Rigid PPs	EX 400 / EX 500	EX 700 / EX 850
4"	170' (each side)	N/A
6"	N/A	120' (each side)
90° Vent Elbow	allow 5' equivalent	allow 5' equivalent
45° Elbow	allow 3' equivalent	allow 3' equivalent
PPs 87-90° Elbows	use 5' equivalent	use 5' equivalent

SPECIFICATIONS	* EX 400	* EX 500	EX 700	EX 850
CSA Input (Natural Gas or Propane) - MBH	40 - 399	50 - 500	70 - 700	85 - 850
CSA Input (Natural Gas or Propane) - kW	11.7 - 117	14.6 - 146.5	20.5 - 205	24.9 - 249
CSA Output (Natural Gas or Propane) - MBH	388	485	679	824.50
CSA Output (Natural Gas or Propane) - kW	114	142	199	241.60
Thermal Efficiency	97.9%	97.5%	97.0%	97.0%
Min Gas Supply Pressure (Nat. Gas or Propane) - inch w.c.	4	4	4	4
Max Gas Supply Pressure (Nat. Gas or Propane) - inch w.c.	14	14	14	14
Ambient Temperature - Low (F/C)	32° / 0°	32° / 0°	32° / 0°	32° / 0°
Ambient Temperature - High (F/C)	122° / 50°	122° / 50°	122° / 50°	122° / 50°
Max relative humidity (non-condensing)	90%	90%	90%	90%
Min water Temperature (F/C)	34° / 1°	34° / 1°	34° / 1°	34° / 1°
Max water Temperature - (electronic high limit) (F/C)	190° / 88°	190° / 88°	190° / 88°	190° / 88°
Max. ΔT - supply/return (electronic fence) (F/C)	80° / 44°	80° / 44°	80° / 44°	80° / 44°
Max. Water Temperature Lockout Limit (F/C)	201° / 94°	201° / 94°	201° / 94°	201° / 94°
Power (120Vac/60Hz) @ full fire - watts (without pumps)	150	210	195	228
Weight (empty) - lbs/Kg	414 / 188	441 / 200	486 / 202	510 / 231
Heating Surface Area ft ² / m ²	55.3 / 5.14	72.9 / 6.77	84.6 / 7.86	99.88 / 9.28
Pressure Vessel water content - USG/Liters	13.5 / 51	12.3 / 46.7	17.5 / 66.3	16.5 / 62.3
Max boiler flow rate - USgpm	100	100	100	100
Min boiler flow rate - USgpm	10	15	18	21
Max Operating Water Pressure - psig *	160	160	160	160
Min Operating Water Pressure - psig	8	8	8	8
Relief valve pressure - psig	50	50	50	50
Approved installation altitude (Ft)	12,000	12,000	12,000	12,000
Max equivalent vent length (each side)	170'	170'	120'	120'

Available in either NG or LP factory set or field convertible



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Toll Free: 1-844-HEAT IBC / 1-844-432-8422

All information contained in this brochure is subject to change without notice. Due to clerical error, regulation change or product development please confirm all information with IBC.

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