

# IBC Control At Your Fingertips

All CX<sup>™</sup> Combi Boilers use our intuitive V-10 Touch Screen boiler controller featuring the latest in advance control technology and software.

Easy to set up and monitor. Features include: Express Setup, Load Combining and Zoning, Real-Time Monitoring of DHW Temperature, Diagnostics & Intuitive Alert System with plain English Warnings & Error Messages. Cascade up to 4 units. No boiler has ever been easier to use!





### Interior

- A) Fan
- B) Gas Valve
- C) Boiler Heat Exchanger
- D) Supply Water Pipe
- E) Safety Ignition Module (SIM+)
- F) Controller
- G) Return Water Pipe
- H) DHW Heat Exchanger & Pump

### Easy To Use Boiler Control







Load Settings



Network Settings



Error Screen





A Unique Balance of

Performance, Efficiency and Value

for all your home heating and DHW needs

Intuitive V-10 Control The Latest In Advanced **Control Technology** 

**Full Boiler Capacity** Available for DHW and Space **Heating Performance** 

All Models Feature **Common Parts** for Easy Servicing

#### NEW V-10 CONTROL INTERFACE

Express Setup – Program your boiler in seconds

- Remote Monitoring & Diagnostics
- Easy USB programmability
- Instant Visibility Built-in warnings on the controller
- Real-time monitoring of DHW temperature
- Intuitive Alert System with detailed error messages
- Visible flame current data for troubleshooting
- Load combining
- Cascade up to 4 units

#### MAXIMUM PERFORMANCE

- 95% A.F.U.E. Reduce operating costs and heat your home faster
- Full boiler capacity available for both DHW and space heating
- State-of-the-art, ASME, 439 grade, SS firetube HX
- Brazed plate HX for DHW production
- Turndown ratio 10:1 means you have the power to heat your home during the coldest weather, yet reduce short cycling when the weather is mild
- North American built. All CX<sup>™</sup> models are designed, engineered and assembled in Canada

#### MORE BUILT-IN FEATURES

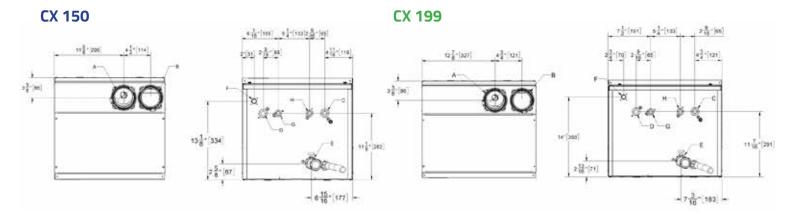
- Built-in 4 zone pump or valve control
  - Primary pump control = 5 pumps total
  - Eliminates the need for external zone control
- Built-in factory wired primary pump
- Built-in combi block for DHW supply and ease of service from front of unit
- MFZ Technology: Patented moisture management system. Protects and ensures long life for all boiler components
- Built-in outdoor reset control of water temperature
- Built-in CSA/UL approved low water cut-off and manual reset high limit

#### EASY TO INSTALL AND SERVICE

- Universal parts. With only one fan and one controller, servicing all CX<sup>™</sup> models just got a lot easier.
- All combi block components can be easily replaced individually
- PVC/CPVC/PPs approved
- Vent lengths up to 50 ft. with 2" and 170 ft. with 3"
- Easy to inspect HX featuring a condensate draining system that cleans as it heats



## **Dimensions**



12" (for condensate trap and piping)

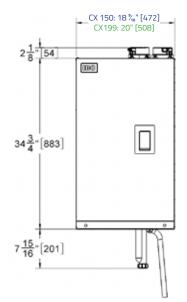
IPING CONNECTIONS				
	Description	CX 150	CX 199	
Α	Flue Outlet	3" PVC/CPVC or PPs (80mm)		
В	Combustion Air Inlet	3" PVC/CPVC or PPs (80mm)		
С	Return Water Inlet (Tepid)	1" NPT-M		
D	Supply Water Outlet (Hot)	1" NPT-M		
Е	Condensate Outlet	3/4" Hose		
F	Gas Inlet	1/2" NPT-F		
G	DHW Outlet (Hot Water)	3/4" NPT-M		
Н	DHW Inlet (Cold Water)	3/4" NPT-M		
Н	DHW Inlet (Cold Water)	3/4" NPT-M		

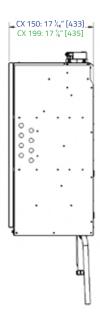
CLEARANCE FROM BOILER CABINET			
Surface	Min. Distance From Combustible Surfaces	Recommended Distance For Installation and Service	
Front	2"	24"	
Rear Flue Connection	0"	0"	
Left Side	0"	4" (allow access to water connections)	
Right Side	1"	4" (allow access to water connections)	
Тор	2"	6" (for vent connection)	

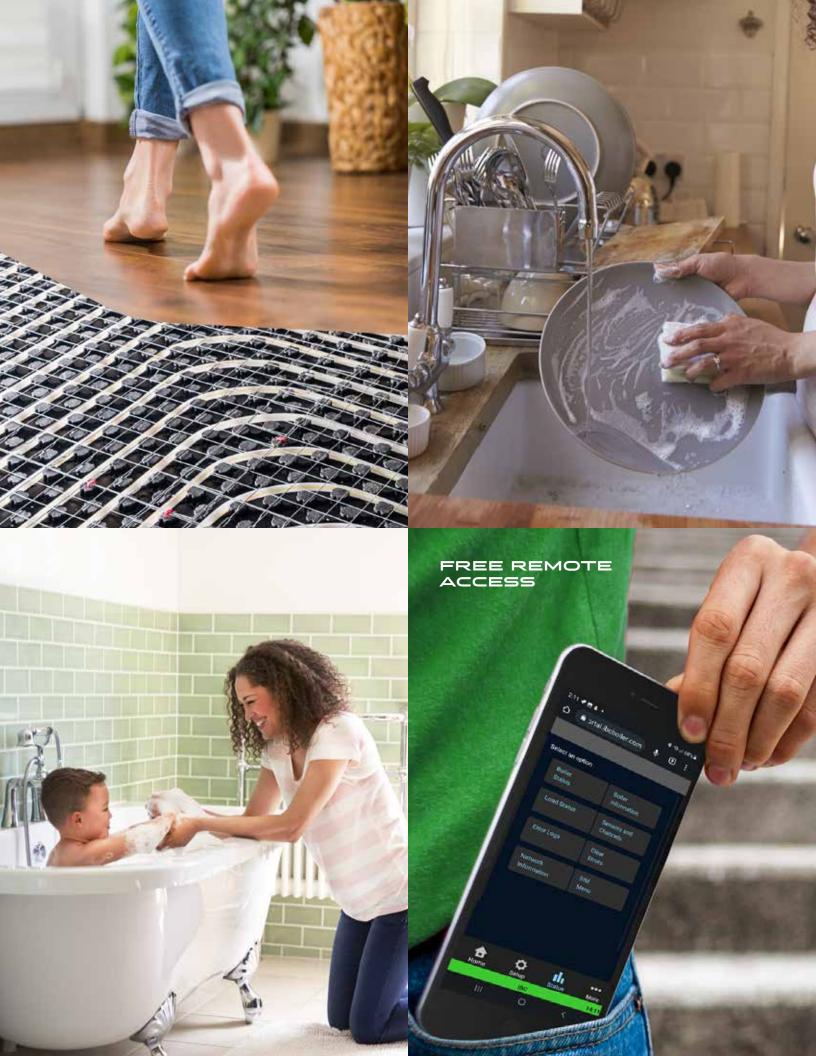
0"

Bottom

VENTING	MAXIMUM EQUIVALENT LENGTHS		
Sched. 40; Rigid PPs	CX 150	CX 199	
2"	50' (max.)	Not Permitted	
3"	170' (max.)	100' (max.)	
90° Vent Elbow	Allow 8' for each 90° elbow		
90° Long Sweep Elbow	Allow 5' for each 90° elbow		
45° Elbow	Allow 3' for ea	Allow 3' for each 45° elbow	
PPs 87-90° Elbows	Allow 8' for each 87-90° elbow		
2" SS Sidewall Terminal	Not Permitted	Not Permitted	
3" SS Sidewall Terminal - Exhaust Vent	Allow 20'		
3" SS Sidewall Terminal - Air Intake	No Allowance Required		
Flexible PPs 3" Flexible	Limited to 45' (max.)	Limited to 30' (max.)	









## **Technical Information**





SPECIFICATIONS	CX 150	CX 199
CSA Input (Nat. Gas or Propane) - MBH	15-150	20-199
CSA Input (Nat. Gas or Propane) - kW	4.4-44	5.9-58.3
CSA Output - MBH	14.3-138.5	19.1-183.7
CSA Output - kW	4.2-40.6	5.6-53.8
DHW - CSA Input (Nat. Gas or Propane) - MBH	15-150	20-199
DHW - CSA Input (Nat. Gas or Propane) - kW	4.4-44	5.9-58.3
A.F.U.E.	95%	95%
Min. Gas Supply Pressure (Nat. Gas or Propane) - Inch w.c.	4	4
Max. Gas Supply Pressure (Nat. Gas or Propane) - Inch w.c.	14	14
Ambient Temperature - Low	32°F/0°C	32°F/0°C
Ambient Temperature - High	122°F/50°C	122°F/50°C
Max. Relative Humidity (Non-Condensing)	90%	90%
Min. Water Temperature	34°F/1°C	34°F/1°C
Max. Water Temperature (Electronic Hi-Limit)	190°F/88°C	190°F/88°C
Max. ΔT - Supply/Return (Electronic Fence)	40°F/22.2°C	40°F/22.2°C
Max. Water Temperature Lockout Limit	201°F/94°C	201°F/94°C
Power Use (120 Vac/60 Hz) @ Full Fire - Watts (with pump)	94.8	106.9
Weight (Empty) - lbs/Kg	100/45.4	113/51.3
Pressure Vessel Water Content - USG/Liters	2.79/10.56	3.51/13.29
Max. Boiler Flow Rate - US gpm	19	25
Min. Boiler Flow Rate - US gpm	3	4
Max. Boiler Operating Water Pressure* - psig	50	50
Min. Boiler Water Pressure - psig	8	8
Max. DHW Water Pressure - psig	150	150
Min. DHW Water Pressure - psig	40	40
Relief Valve Pressure (Supplied) - psig	30	30
Approved Installation Altitude - ASL	0-12,000′	0-12,000'
Venting 2"	50′	N/A
Venting 3"	170′	100′



CX 150 - DELIVERY RATE				
Temp. Rise	GPM	'		
50	5.5			
55	5.0	CX 199 - DELI	CX 199 - DELIVERY RATE	
60	4.6	Temp. Rise	GPM	
65	4.2	65	5.6	
70	3.9	70	5.2	
75	3.7	75	4.9	
80	3.5	80	4.6	
85	3.2	85	4.3	
90	3.1	90	4.1	
100	2.8	100	3.7	
110	2.5	110	3.3	
120	2.3	120	3.1	
130	2.1	130	2.8	
140	2.0	140	2.6	

### Accessories







FLOOR STAND Part No. P-267

PARTS KIT Part No. P-1632

CONDENSATE TANK Part No. 180-048



Choosing this product instead of a minimum efficiency alternative offsets  ${\rm CO_2}$  emissions equivalent to planting this number of trees over the product's lifetime. The  ${\rm CO_2}$  Impact Score is internally calculated using a proprietary point system based on a typical product lifetime and does not denote a third party certification/seal.

See website for further information.









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