

Commodore Submittal Sheet						
Model						
CB 299W						
CB 399W						
CB 470W						
CB 500W						

# Commodore Water Tube Commercial Boilers

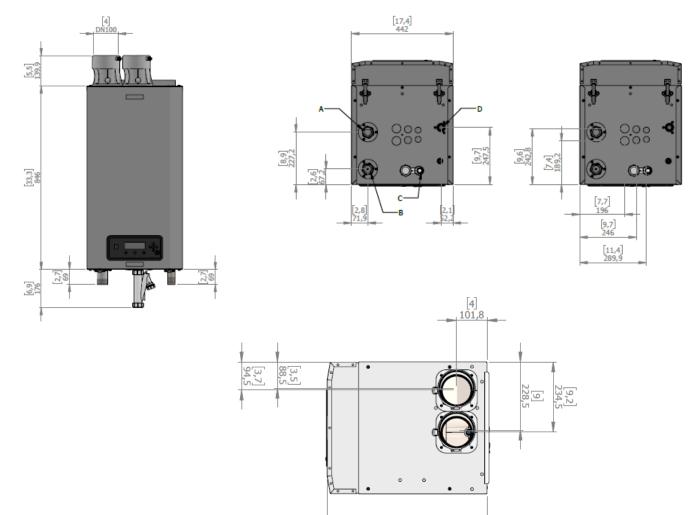
Job Name: Date:

Location: Model No.:

Engineer: Gas Type:

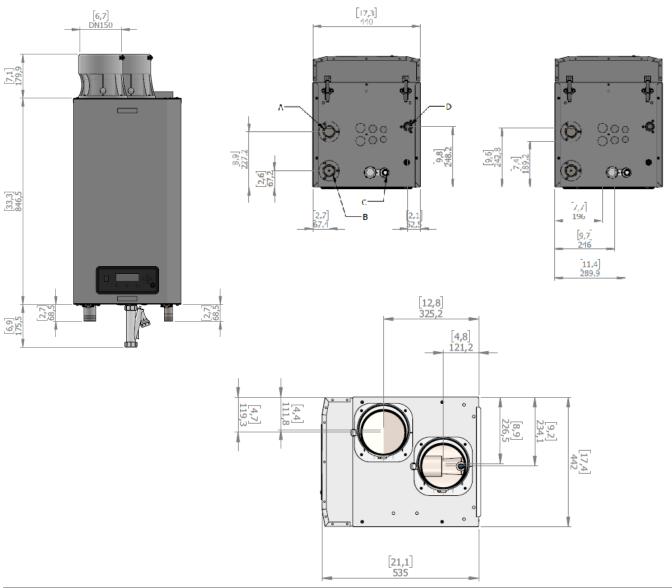
Wholesaler: Contractor:

# CB 299/399 Dimensions



21,1 535

# CB 470/500 Dimensions



				Dimensions an	d Specifications				
Product Selection	Model Number	S/R Water Vic. Conn.	Gas Conn. NPT	Vent Conn.	Vent Length	Height	Width	Depth	Weight lbs
	CB 299W	1-1/2"	1"	4"	200'	33-1/3"	17-1/3"	21-1/5"	174
	CB 399W	1-1/2"	1"	4"	121'	33-1/3"	17-1/3"	21-1/5"	183
	CB 470W	1-1/2"	1"	6"	200'	33-1/3"	17-1/3"	21-1/5"	187
	CB 500W	1-1/2"	1"	6"	200'	33-1/3"	17-1/3"	21-1/5"	187
Commodore Water Tube Commerical Boiler Performance Data									
Product Selection	Model Number	Input,	Output,		Maximum Supply	Net AHRI Rating Wa-		!	Combustion
		Min	Max	MBH	Temp., F	ter, MBH		Efficiency, %	Efficiency. %
	CB 299W	46	299	289	194	238	95.1%	-	-
	CB 399W	72	399	381	194	329	-	95.5%	95.4%
	CB 470W	83	470	453	194	394	-	95.6%	95.1%
	CB 500W	83	500	475	194	413	-	95.1%	94.5%

### Standard Features and Equipment

- ✓ Fold out panel with boiler control and display
- ✓ Graphic LCD display with easy to use controls
- ✓ On/Off Power Switch
- ✓ Laptop computer connection
- ✓ Supply and Return water temperature sensors
- ✓ Integrated pressure sensor
- ✓ Flue gas temperature sensor
- ✓ Burner door temperature sensor
- ✓ Rear wall thermal fuse
- ✓ Integrated flue gas check valve (non-return valve)
- ✓ Full stainless steel heat exchanger
- ✓ Premix burner
- ✓ Internal automatic air vent with drain connection
- ✓ Integrated low water cutoff
- ✓ Condensate trap
- ✓ External ignition transformer connection



## **Boiler and External Controls**

- ✓ Large backlit LCD with full text information programming and errors
- ✓ Modbus connection standard
- ✓ 0-10 VDC remote flow temperature set point control
- ✓ 0-10 VDC remote boiler power output
- ✓ Bacnet module for remote access available

#### Cabinet

- Removable stainless steel side panels for easy access
- ✓ Compact design with small footprint
- ✓ Light weight design for wall hung applications (187lbs)
- ✓ Narrow width of 17.4 inches

## **Data Logging**

- ✓ Real time and date clock
- ✓ Days of operation
- ✓ Successful ignition attempts
- ✓ Ignition failures
- ✓ Flame failures
- ✓ Up to 48 readable lockout errors
- ✓ Hours since last service
- √ Hours until next service
- ✓ Total days of boiler operation

### **Low Voltage Connections**

- Outdoor temperature sensor
- System temperature sensor
- ✓ DHW temperature sensor
- ✓ Modbus
- Cascade connection
- On/Off thermostat or OpenTherm
- 0-10V VDC input
- ✓ Flow switch DHW
- ✓ PWM pump control
- ✓ External low water cut off
- Gas pressure switch
- Universal safety contact set 1 & 2

# **High Voltage Connections**

- ✓ Boiler pump
- System pump
- ✓ DHW pump
- DHW twv (3-way valve)
- Alarm

#### **Additional Features**

- Two level frost protection
- Short cycle protection
- ✓ Adjustable minimum & maximum power
- Temperature boost function
- ✓ Multiple levels of security
- ✓ PWM control for variable speed pumps
- ✓ Domestic hot water priority time control
- Selectable priority for domestic hot water or heating

#### Cascade

- ✓ Integrated cascade control
- ✓ Cascade control of up to 16 boilers
- ✓ Remote operation and heat demand indication from each boiler
- ✓ Four cascade power program modes
- Boiler sequencing and rotation control
- ✓ Following boilers fully operational on failure of lead boiler

#### Accessories

External flow temperature sensor
Indirect tank temperature sensor
PC software+interface cable for programming boiler
BACNET module
Propane conversion kit
Air filter kit
Gas pressure kit
0-10V Modulating circulator signal converter
1 Circulator relay kit
2 Circulators relay kit
3 Circulators relay kit
ASME CSD-1 kit option 1
(Flow switch + manual reset high limit)
ASME CSD-1 kit option 2
(Option 1 + high + low gas pressure switches)
Low water cutoff
Fixed speed high efficiency circulator
Fixed speed standard efficiency circulator
Variable speed high efficiency circulator
75 psi relief valve 3/4"
85 psi relief valve 3/4"
Neutralizer 400MBH - 7000MBH
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