



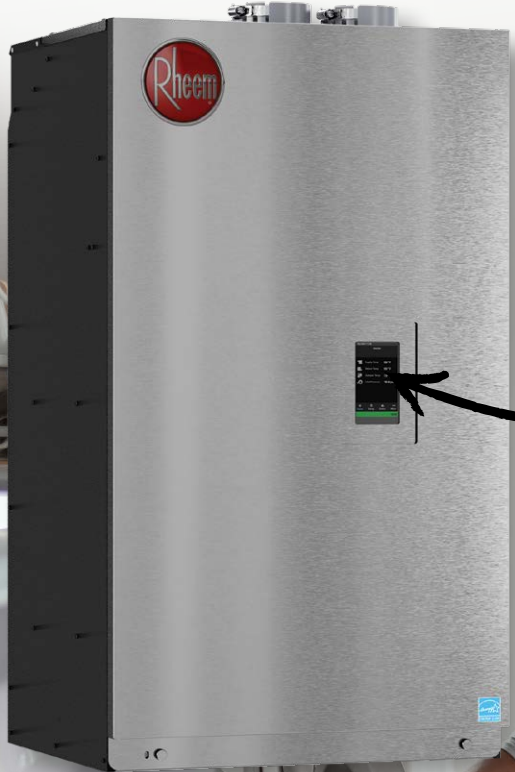
Boilers

Your Comfort, Perfectly

controlled.

FT™ Series Super High Efficiency
Condensing Combi Boilers

*FULL COLOR INTUITIVE
TOUCHSCREEN DISPLAY*



Reliable High Performance Combi Boilers

For All Your Home Heating & Domestic Hot Water Needs

Rheem® FT™ Series Combi Boilers deliver high efficiency performance with 95% AFUE, a 15,000–58,300 BTU/hr range, and a 10:1 turndown ratio. Featuring a 2-in-1 design for space and water heating, cascading capability, and an intuitive touchscreen with 4-zone control, they are ideal for residential new construction and retrofit applications.

Intuitive Touchscreen Display Controls:

- **Easy Setup & Maintenance:** Simplifies setup, diagnostics, maintenance and troubleshooting
- **4-Zone Control:** Manages up to four heating zones with individual temperature settings, no external controllers needed
- **System Monitoring:** Real-time operational data
- **Color-Coded Alerts:** Quick visual status notifications
- **Historical Error Logs:** Access to data for troubleshooting
- **USB Port:** Enables fast backups and software updates
- **Cascade Capability:** Control up to four boilers seamlessly

Maximum Performance:

- **95% AFUE:** Super High Efficiency for lower operating costs
- **ENERGY STAR® Certified**
- **Stainless Steel Fire Tube Heat Exchanger:** ASME rated for safety and quality; efficiently transfers heat from combustion gases to water
- **10:1 Turndown Ratio:** Increases boiler efficiency and life

Built-In Features:

- **Factory Installed Boiler Pump:** Saves installation time and costs

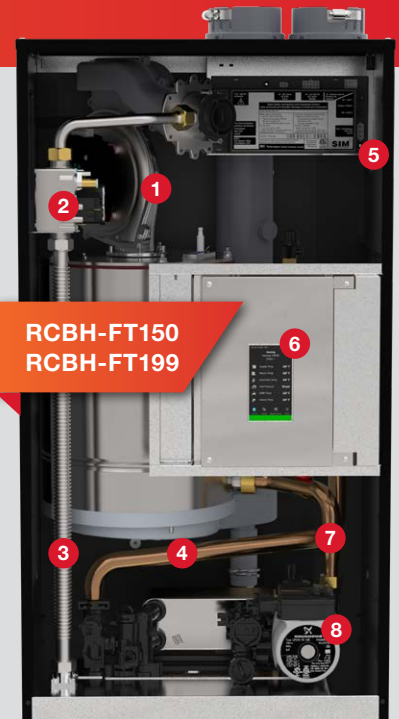
- **Combi Block:** Efficiently manages both space heating and domestic hot water production in one compact unit
- **Brazed Plate Heat Exchanger:** Transfers heat from the boiler to domestic hot water within the combi block
- **Moisture Free Zone (MFZ) Technology:** Protects components from corrosion
- **Outdoor Reset Control:** Adjusts water temperature with outdoor conditions
- **Safety Certified:** CSA/UL approved with **low water cutoff** and **high-limit protection**

Easy to Install & Service:

- **4 Universal Shared Platform Parts:** (Fan, gas valve, integrated pump and diverting valve) Simplifies diagnosis and servicing
- **Modular Design:** Combi block components can be easily replaced
- **Extended Venting Lengths:** Up to 50 ft (2") and 170 ft (3") options
- **Condensate System:** Draining system cleans as it heats
- **PVC/CPVC/PP** approved venting materials

Warranty

- **15-Year Heat Exchanger, 5-Year Parts, 1-Year Labor**



RCBH-FT150
RCBH-FT199

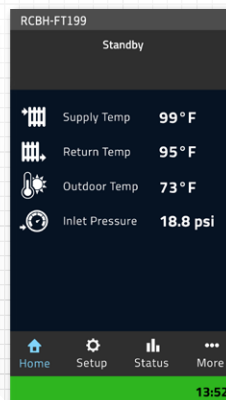
INTERIOR VIEW

- 1 Fan
- 2 Gas Valve
- 3 Fire Tube Heat Exchanger
- 4 Supply Water Pipe
- 5 Safety Ignition Module (SIM+)
- 6 Full Color Intuitive Touchscreen
- 7 Return Water Pipe
- 8 Domestic Hot Water Heat Exchanger & Pump

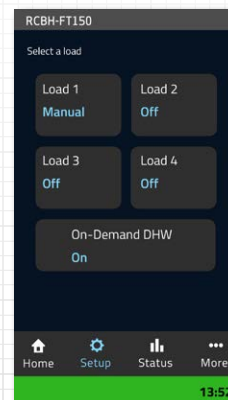


Control at Your Finger Tips

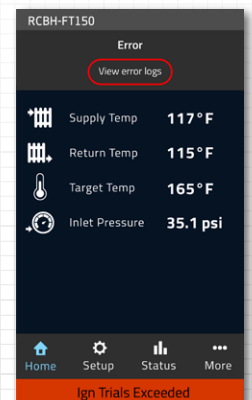
All Rheem® FT™ Series Boilers include a full color intuitive touchscreen display featuring the latest in controls technology and software.



HOME SCREEN



LOAD SETTINGS



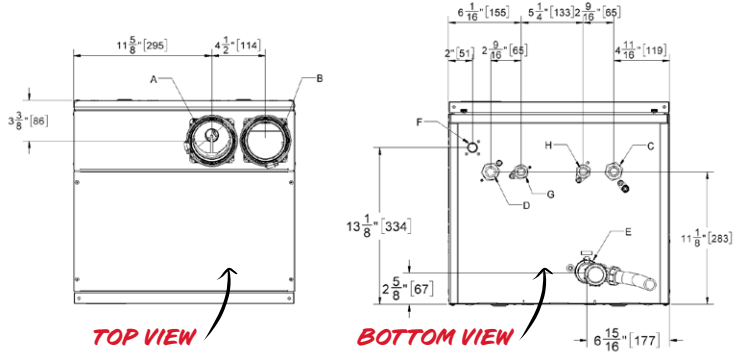
ERROR SCREEN

Dimensions & Specifications

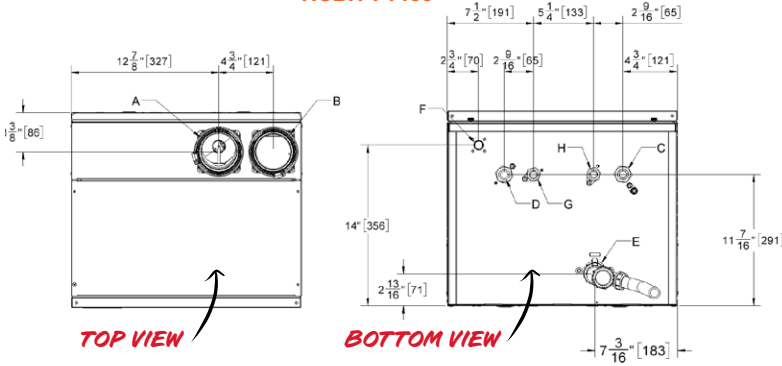
DIMENSIONS



RCBH-FT150

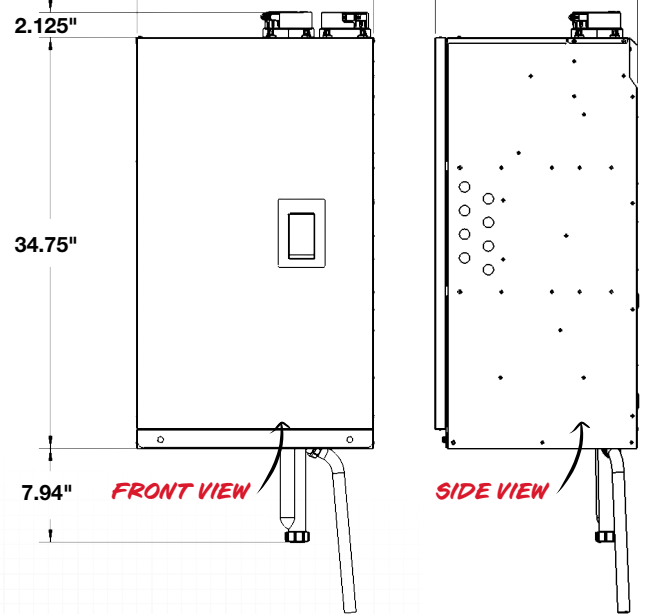


RCBH-FT199



RCBH-FT150:
 18.56"
RCBH-FT199:
 20"

RCBH-FT150:
 17.06"
RCBH-FT199:
 17.125"



SPECIFICATIONS

| PIPING CONNECTIONS | | |
|--------------------|----------------------------|--------------------------|
| MODEL NO. | RCBH-FT150 | RCBH-FT199 |
| A | Flue Outlet | 3" PVC/CPVC or PP (80mm) |
| B | Combustion Air Inlet | 3" PVC/CPVC or PP (80mm) |
| C | Return Water Inlet (Tepid) | 1" NPT-M |
| D | Supply Water Outlet (Hot) | 1" NPT-M |
| E | Condensate Outlet | 3/4" Hose |
| F | Gas Inlet | 1/2" NPT-F |
| G | DHW Outlet (Hot Water) | 3/4" NPT-M |
| H | 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 acces to water connections) |
| Right Side | 1" | 4" (allow acces to" water connections) |
| Top | 2" | 6" (for vent connection) |
| Bottom | 0" (clearance for pipes) | 12" (for condensate trap and piping) |

| VENTING | MAXIMUM EQUIVALENT LENGTHS | |
|---|---|-----------------------|
| | RCBH-FT150 | RCBH-FT199 |
| SCHED. 40; RIGID PP | | |
| 2" | 50' (max.) | Not Permitted |
| 3" | 170' (max.) | 100' (max.) |
| 90° Vent Elbow | Each 90° elbow is equivalent to 8 feet | |
| 90° Long Sweep Elbow | Each 90° elbow is equivalent to 5 feet | |
| 45° Elbow | Each 45° elbow is equivalent to 3 feet | |
| PP 87-90° Elbows | Each 87-90° elbow is equivalent to 8 feet | |
| 2" Stainless Steel Sidewall Terminal | Not Permitted | Not Permitted |
| 3" Stainless Steel Sidewall Terminal - Exhaust Vent | Allow 20' | |
| 3" Stainless Steel Sidewall Terminal - Air Intake | No Allowance Required | |
| Flexible PP 3" Flexible | Limited to 45' (max.) | Limited to 30' (max.) |

Technical Information



**95%
AFUE**

| MODEL NO. | RCBH-FT150 | RCBH-FT199 |
|--|---|-------------|
| 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 |
| AFUE | 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 (w/ 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 |
| DHW Delivery at 70°F/39°C Temperature Rise - US gpm | 4.1 | 5.5 |
| 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' |
| Ultra Low NOx | Meets 14 ng/J NOx requirements - SCAQMD Rule 1146.2 compliant | |

| TEMP. RISE | DELIVERY RATE | |
|------------|----------------|---------------|
| | RCBH-FT150 GPM | RCBH-FT99 GPM |
| 50 | 5.5 | — |
| 55 | 5.0 | — |
| 60 | 4.6 | — |
| 65 | 4.2 | 5.6 |
| 70 | 4.1 | 5.5 |
| 75 | 3.7 | 4.9 |
| 80 | 3.5 | 4.6 |
| 85 | 3.2 | 4.3 |
| 90 | 3.1 | 4.1 |
| 100 | 2.8 | 3.7 |
| 110 | 2.5 | 3.3 |
| 120 | 2.3 | 3.1 |
| 130 | 2.1 | 2.8 |
| 140 | 2.0 | 2.6 |

Accessories



P-267 Floor Stand



P-1632 Parts Kit



**SCAN TO
LEARN MORE**

or visit Rheem.com/Boilers

CONTACT US

**Customer Service,
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866.339.2388



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