



FULL COLOR INTUITIVE
TOUCHSCREEN DISPLAY



FT™ Series Super High Efficiency
Condensing Combi Boilers

**YOUR COMFORT,
PERFECTLY CONTROLLED**

DELIVERING
DURABILITY

RELY ON





Interior

- 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



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

FT™ Series Boilers deliver high performance and feature an intuitive touchscreen display with 4-zone temperature control. They're ideal for larger homes that require maximum control and suitable for both new construction and retrofit applications.

High Performance, Efficiency and Value

for all your home heating and domestic hot water needs

Intuitive Touchscreen Display Controls:

- **Easy Setup & Maintenance:** Simplified calibration, diagnostics, and troubleshooting
- **4-Zone Temperature 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 Data Logs:** Access past performance insights
- **USB Port:** Enables fast updates and software installs
- **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, it transfers heat from combustion gases to water with maximum efficiency
- **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 the diagnosis and servicing

• **Modular Design:** Combi block components easily replaced individually

• **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

Warranty

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

Control at Your Finger Tips



Home Screen



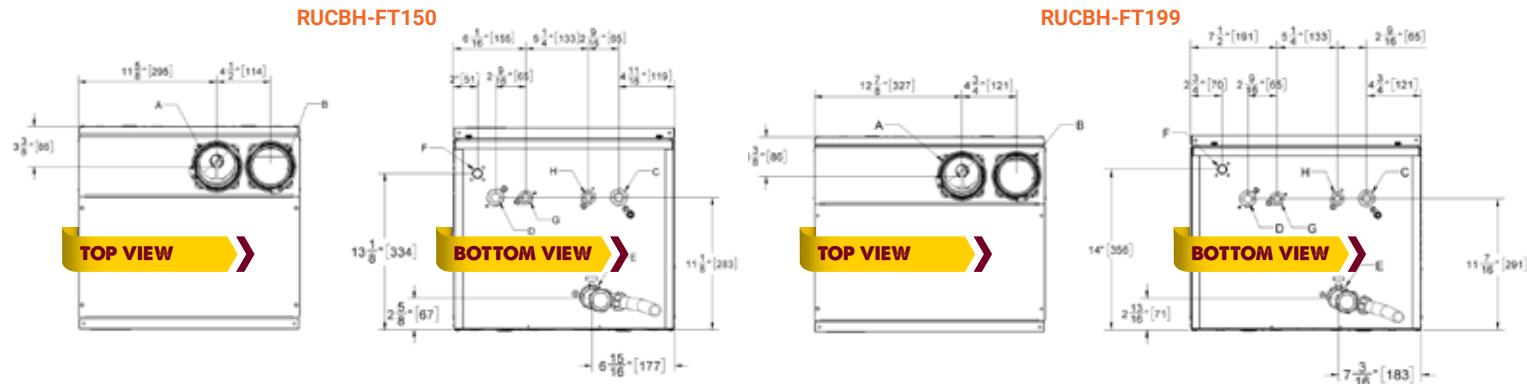
Load Settings



Error Screen

Dimensions

DIMENSIONS

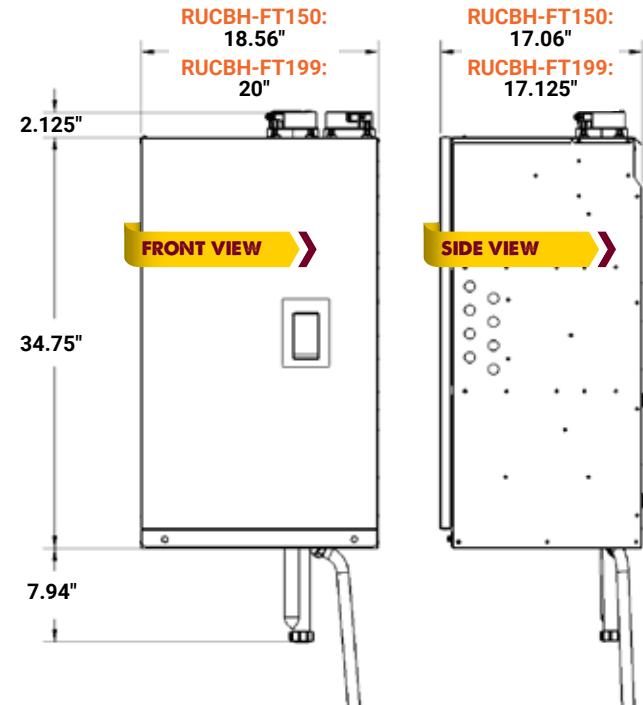


SPECIFICATIONS

| PIPING CONNECTIONS | | |
|------------------------------|--------------------------|-------------|
| MODEL NO. | RUCBH-FT150 | RUCBH-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 | |

| 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) |
| Top | 2" | 6" (for vent connection) |
| Bottom | 0" (clearance for pipes) | 12" (for condensate trap and piping) |

| VENTING | MAXIMUM EQUIVALENT LENGTHS | |
|---|---|-----------------------|
| SCHED. 40; RIGID PP | RUCBH-FT150 | RUCBH-FT199 |
| 2" | 50' (max.) | Not Permitted |
| 3" | 170' (max.) | 150' (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

SPECIFICATIONS

| MODEL NO. | RUCBH-FT150 | RUCBH-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 | |

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

| RUCBH-FT199 - DELIVERY RATE | |
|-----------------------------|-----|
| TEMP. RISE | GPM |
| 65 | 5.6 |
| 70 | 5.5 |
| 75 | 4.9 |
| 80 | 4.6 |
| 85 | 4.3 |
| 90 | 4.1 |
| 100 | 3.7 |
| 110 | 3.3 |
| 120 | 3.1 |
| 130 | 2.8 |
| 140 | 2.6 |

ACCESSORIES

| FLOOR STAND | PARTS KIT |
|---|--|
| Part No. P-267  | Part No. P-1632  |

CONTACT US

Customer Service, Warranty and Parts 800.621.5622 **Technical Service** 833-212-9276

Plumber Support Group 866.339.2388

In keeping with its policy of continuous progress and product improvement, Ruud reserves the right to make changes without notice.

QUALIFIES
FOR TAX
CREDITS



RELY ON

