



Ruud® FT™ Series Ultra High Efficiency Condensing Combi Boiler

Key Features

- Intuitive touchscreen display – Controls setup, maintenance and troubleshooting
- 4-Zone control – Manages up to 4 heating zones with individual temperature settings, no external controllers needed
- Factory Installed Boiler Pump – Saves installation time and costs
- 95% AFUE and ENERGY STAR® certified for super high efficiency
- Durable design – ASME-rated 439 stainless steel fire tube heat exchanger
- Dual functionality – Delivers both space heating and domestic hot water
- Combi block manages flow between space heating and domestic hot water
- Brazed plate heat exchanger – Transfers heat from the boiler to domestic hot water within the combi block
- 4 universal shared platform parts – fan, gas valve, diverting valve, integrated pump are shared across multiple models for streamlined maintenance

- Cascade capability – Connect up to 4 units for increased capacity
- 10:1 turndown ratio delivers precise heating control
- Extended venting lengths up to 50 feet (2") and 170 feet (3")
- Flexible venting materials – Compatible with PVC, CPVC, and PP
- Outdoor reset control automatically adjusts water temperature based on outdoor conditions
- Moisture-Free Zone (MFZ) Technology protects components from corrosion
- Advanced safety features – CSA/UL approved low water cutoff and manual reset high limit

Warranty

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



RUCBH-FT150
RUCBH-FT199



Specifications

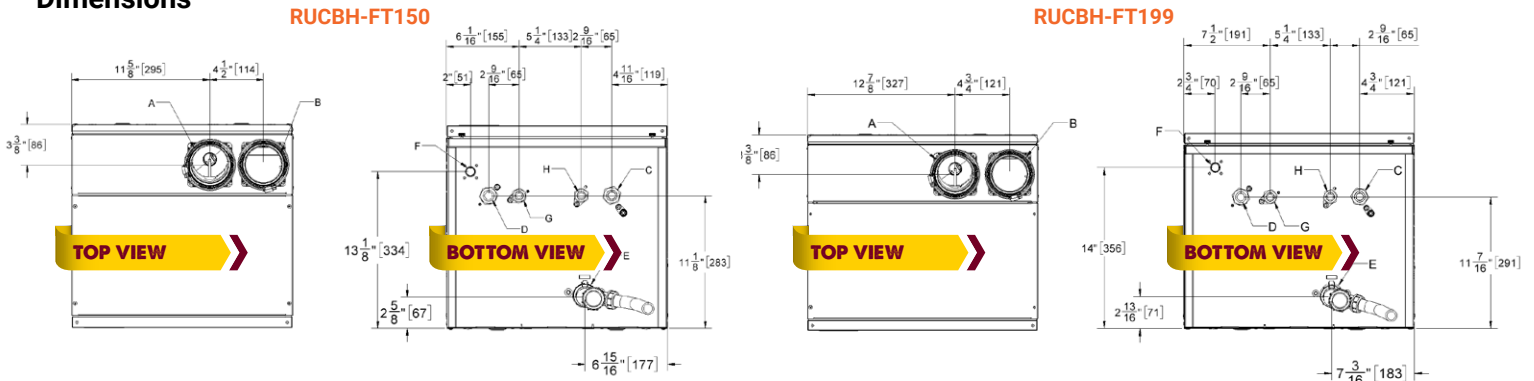
| MODEL NO. | RUCBH-FT150 | RUCBH-FT199 |
|--|---|-------------|
| CSA Input (Nat. Gas or Propane) - MBH | 15-150 | 20-199 |
| CSA Input (Nat. Gas or Propane) - kW | 4.4-44 | 5.9-58.3 |
| CSA Output - MBH | 14.3-138.5 | 19.1-183.7 |
| CSA Output - kW | 4.2-40.6 | 5.6-53.8 |
| DHW - CSA Input (Nat. Gas 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-FT Combi Boilers



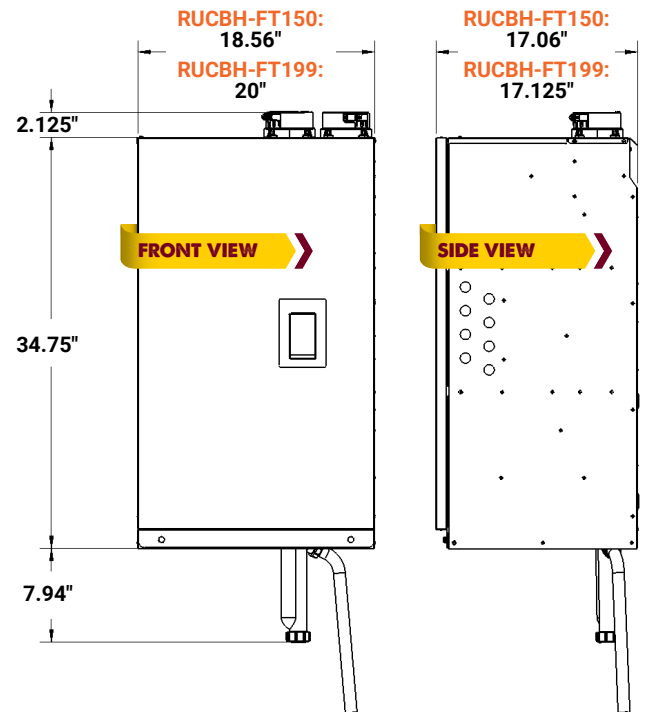
Dimensions



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 | |

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



Accessories

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

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