



engineered for life™

Your Comfort, Perfectly

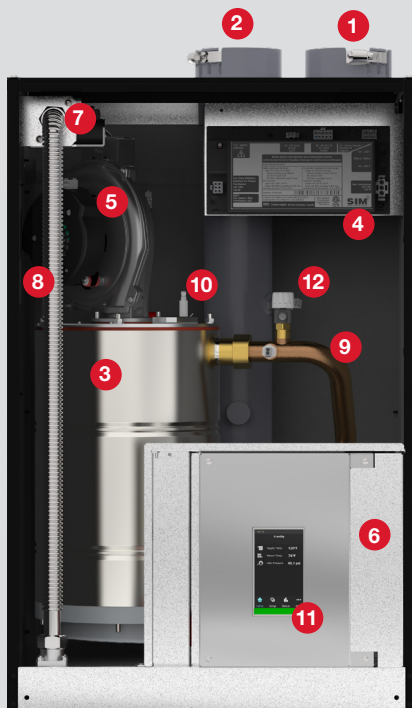
# controlled.

FT™ Series Super High Efficiency  
Condensing Gas Boilers

FULL COLOR LCD  
TOUCH SCREEN  
DISPLAY



*These products meet  
a stringent set of our  
internally defined  
sustainability standards.*



## Interior

- 1 Intake Duct
- 2 Exhaust Duct
- 3 Fire Tube Heat Exchanger
- 4 Ignition Module
- 5 Fan
- 6 Terminal Block Cover
- 7 Gas Valve
- 8 Gas Line
- 9 Supply Water Pipe
- 10 Ignitor
- 11 Full Color LCD Touch Screen
- 12 Low Water Cutoff

All FT™ Series Boilers include a full color LCD touch screen display featuring the latest in controls technology and software.

# High Performance, Efficiency and Value

for all your home heating and domestic hot water needs

## Full Color LCD Touch Screen Display:

- **Easy Setup & Maintenance:** Simplified calibration, diagnostics, maintenance and troubleshooting
- **4-Zone Pump Control with Load Pairing:** Controls zone pumps via touchscreen while assigning heating loads for precise, efficient comfort
- **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**
- **ENERGY STAR® certified**
- **Stainless Steel Fire Tube Heat Exchanger:** ASME-rated for safety, efficiently transfers heat from combustion gases to water
- **6.5:1 Turndown Ratio:** Increases boiler efficiency and life

## Built-In Features:

- **Moisture Free Zone (MFZ) Technology:** Protects components from corrosion
- **Outdoor Reset Control:** Adjusts water temperature with outdoor conditions
- **Reverse Flow Detection:** Detects and alerts if water is flowing in the wrong direction
- **Safety Certified:** CSA/UL approved with low water cutoff and high-limit protection
- Seamlessly connects with **Rheem indirect tanks** for consistent domestic hot water

## Easy to Install & Service:

- **2 Universal Shared Platform Parts (Fan & Gas Valve)** – Uses common parts across models, simplifying the diagnosis and servicing
- **Extended Venting Lengths:** Up to 200 ft (2") and 480 ft (3") options
- **Condensate System:** Draining system cleans as it heats
- PVC/CPVC/PP approved
- Fuel conversion kits included

## Warranty:

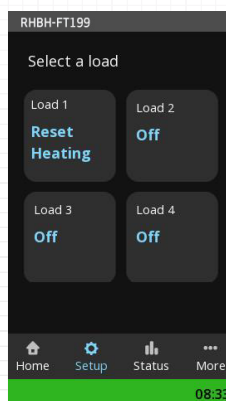
- **15-Year Heat Exchanger, 5-Year Parts, 1-Year Labor**



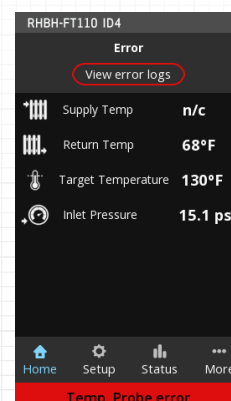
# Boiler Control at Your Finger Tips



Home Screen

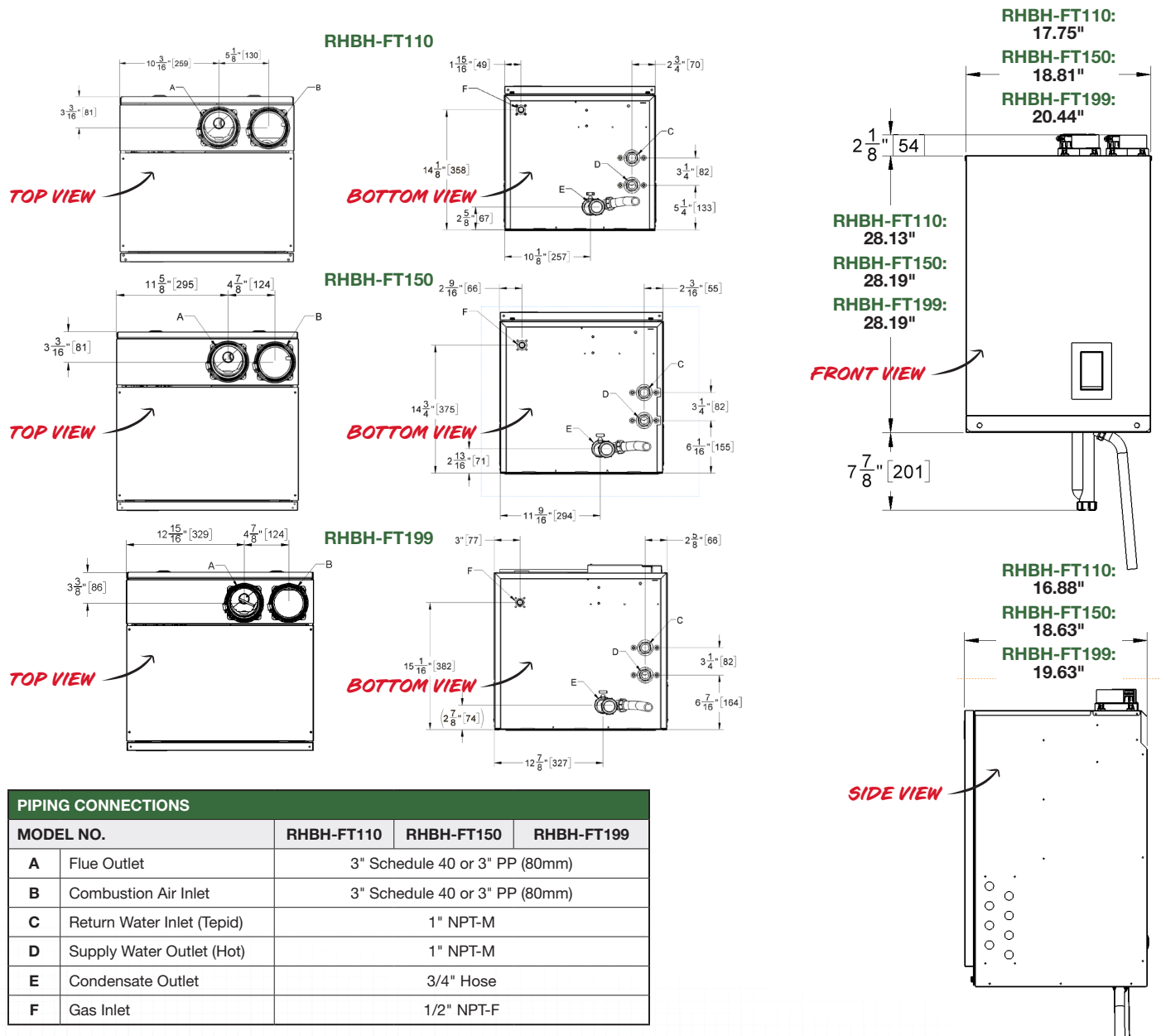


Load Settings



Error Screen

# Dimensions



PIPING CONNECTIONS				
MODEL NO.		RHBH-FT110	RHBH-FT150	RHBH-FT199
A	Flue Outlet	3" Schedule 40 or 3" PP (80mm)		
B	Combustion Air Inlet	3" Schedule 40 or 3" 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		

VENTING	MAXIMUM EQUIVALENT LENGTHS		
SCHED. 40; RIGID PP	RHBH-FT110	RHBH-FT150	RHBH-FT199
2"	100'	50'	Not Permitted
3"	240'	170'	100'
90° Vent Elbow	Equivalent to 8'		
90° Long Sweep Elbow	Equivalent to 5'		
45° Elbow	Equivalent to 3'		
PP 87-90° Elbows	Equivalent to 8'		
2" Stainless Steel Sidewall Terminal - Exhaust Vent (P-256)	Exhaust: Equivalent to 20' Intake: Equivalent to 0'	Not Permitted	
3" Stainless Steel Sidewall Terminal - Exhaust Vent (P-257)	Exhaust: Equivalent to 20' Intake: Equivalent to 0'		
Flexible PP 3" Flexible	45' (max.) Lineal x 1.2 = Equiv.		30' (max.) Lineal x 3.33 = Equiv.

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)



# Technical Information

## SPECIFICATIONS

MODEL NO.	RHBH-FT110	RHBH-FT150	RHBH-FT199
CSA Input (NG or Propane) – MBH	16.9-110	23-150	30.6-199
CSA Input (NG or Propane) – kW	5-32.2	6.7-44	8.8-58.3
CSA Output (NG or Propane) – MBH	16.2-101.5	22-138.5	29.2-183.7
CSA Output (NG or Propane) – kW	4.74-29.8	6.5-40.6	8.6-53.8
AFUE	95%	95%	95%
Min. Gas Supply Pressure (NG or Propane) – inch w.c.	4	4	4
Max. Gas Supply Pressure (NG or Propane) – inch w.c.	14	14	14
Ambient Temperature – Low (°F/°C)	32/0	32/0	32/0
Ambient Temperature – High (°F/°C)	122/50	122/50	122/50
Max. Relative Humidity (Non-Condensing)	90%	90%	90%
Min. Water Temperature (°F/°C)	34/1	34/1	34/1
Max. Water Temperature – (Electronic High Limit) (°F/°C)	190/88	190/88	190/88
Max. ΔT – Supply/Return (Electronic Fence) (°F/°C)	40/22	40/22	40/22
Max. Water Temperature Lockout Limit (°F/°C)	201/94	201/94	201/94
Power (120Vac/60Hz) at Full Fire – watts (w/o pumps)	90	79	90
Weight (Empty) – lbs/kg	67/30.4	78/35.4	88/39.9
Pressure Vessel Water Content – USG/Liters	1.88/7.12	2.7/10.56	3.51/13.29
Max. Boiler Flow Rate – USgpm	14	19	25
Min. Boiler Flow Rate – USgpm	2	3	4
Max. Operating Water Pressure – psig	50	50	50
Min. Operating Water Pressure – psig	8	8	8
Relief Valve Pressure – psig	30	30	30
Approved Installation Altitude – ASL	0-12,000'	0-12,000'	0-12,000'
Ultra Low NOx	Meets 14 ng/J NOx requirements – SCAQMD Rule 1146.2 compliant		

## 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, Rheem reserves the right to make changes without notice.*



**QUALIFIES  
FOR TAX  
CREDITS**

**Rheem** **100**  
YEARS STRONG