

Engineering Submittal Exalt 199 Combi



Exalt 199 Combi Features

- Light weight construction for wall mounting
- Approved for zero clearance to combustibles
- Secondary heat exchanger for endless hot water
- 3" PVC, CPVC, PP, or AL29-4C venting up to 100 equivalent feet
- Up to 12 year limited warranty on heat exchanger
- Up to 6 year limited warranty on parts, except igniter
- Up to 3 year limited labor allowance

Approvals

- 95% AFUE Efficiency
- ENERGY STAR Qualified
- ANSI Z21.13 and CSA 4.9 Boiler Standards Compliance
- ASME Boiler Certification – ASME "H" Stamp

Stainless Steel Fire Tube Heat Exchanger

- 439 Stainless Steel heat exchanger construction for corrosion resistance
- High water content provides stable temperature control
- Self cleaning flue ways reduce maintenance
- Suitable for use with propylene glycol up to 50% concentration

CTRLMax Control System

- Graphical display with 5 navigation buttons
- EZ Setup allows quick and easy boiler settings adjustment
- Flexible configuration of 2 circulator outputs for custom applications
- Outdoor temperature reset to maximize efficiency
- Accepts two space heating call inputs with independent outdoor reset curves
- Domestic hot water priority with optional time-out
- 0-10 VDC Modulation input
- Modbus building management system (BMS) interface, LonWorks® and BACnet® interface optional
- Adjustable warm weather shutdown
- Adjustable boiler freeze protection
- Logging function records sensor readings for system optimization and troubleshooting
- Describes lockouts in plain English and suggests solutions while storing last 8 errors

Standard Equipment

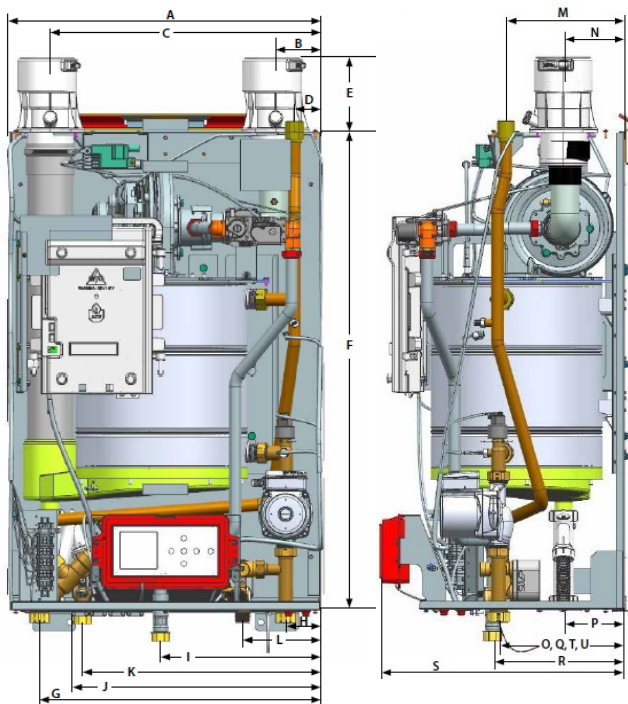
- Stainless steel premix burner
- Direct spark ignition with variable speed blower
- Full modulation with turndown ratio of 8:1
- Automatic air vent
- ASME 30 PSI pressure relief valve
- Temperature and Pressure gauge
- System water Inhibitor
- Outdoor temperature sensor
- 3-Way diverting valve prepiped and prewired
- 3 Speed circulator prepiped and prewired
- Automatic low water cutoff feature with early warning
- High temperature manual reset limit safety control
- Terminal block for circulator output
- Low voltage terminal strip with removable jumpers for manual or automatic reset limits
- Swing out control for easy access and servicing
- Polypropylene condensate pan and internal flue pipe
- 3 in 1 Universal vent adapter directly accepts PVC, Polypropylene, Stainless steel connections with test ports

Project / Location: _____ Date: _____

Consulting Engineer / Architect: _____

Mechanical Contractor: _____

Boiler Dimensions



| Letter | Connection | Dimension in[mm] |
|--------|---|---------------------|
| A | Boiler Width | 21 5/8" [550] |
| B | 3" Combustion Air Inlet | 3 3/8" [85] |
| C | 3" Vent Outlet | 18 5/8" [475] |
| D | 3/4" NPSC Relief Valve | 3" [76] |
| E | Vent / Combustion Air Connection Height | 5 1/8" [130] |
| F | Boiler Height | 32 5/8" [830] |
| G | 1" NPT Boiler Supply | 19 5/8" [500] |
| H | 1" NPT Boiler Return | 2 3/4" [70] |
| I | 3/4" NPT Gas Connection | 11" [280] |
| J | Condensate Drain | 15 1/4" [390] |
| K | 3/4" NPT DHW Outlet | 16 5/8" [425] |
| L | 3/4" NPT DHW Inlet | 5 3/4" [145] |
| M | 3/4" NPSC Relief Valve | 8 5/8" [220] |
| N | 3" Combustion Air Inlet & 3" Vent Outlet | 4 5/8" [117] |
| O | 1" NPT Boiler Return | 9 1/8" [230] |
| P | Condensate Drain | 4 5/8" [117] |
| Q | 1" NPT Boiler Supply | 9 1/8" [230] |
| R | 3/4" NPT Gas Connection | 9 1/2" [240] |
| S | Boiler Depth | 17 1/8" [435] |
| T | 3/4" NPT DHW Inlet | 9 1/8" [230] |
| U | 3/4" NPT DHW Outlet | 9 1/8" [230] |

Boiler Performance

| | |
|-------------------------------|----------------------|
| Exalt Model | Combi 199 |
| Fuel | Natural Propane |
| Input Modulation (MBH) | 24.875-199 |
| AFUE | 95% |
| DOE Heating Capacity (MBH) | 184 |
| Net AHRI (MBH) | 159 |
| Boiler Water Volume (gal) | 4 |
| Power | 120/1/60 FLA: 10A |
| Shipping Weight (Lbs) | 143 |

Water Heater Performance

| | |
|---------------------------|-----------|
| Exalt Model | Combi 199 |
| DHW Output (70°F Rise) | 5.3 gpm |
| DHW Output (75°F Rise) | 4.9 gpm |
| DHW Output (80°F Rise) | 4.6 gpm |

Exalt Combi Pump Curve

