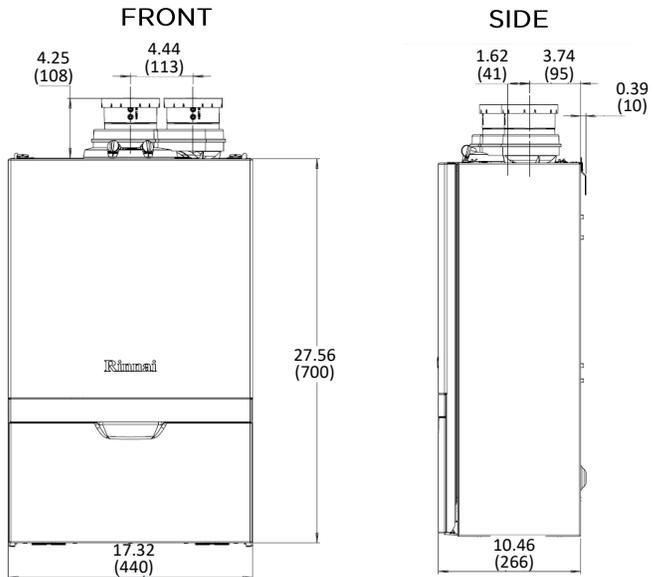


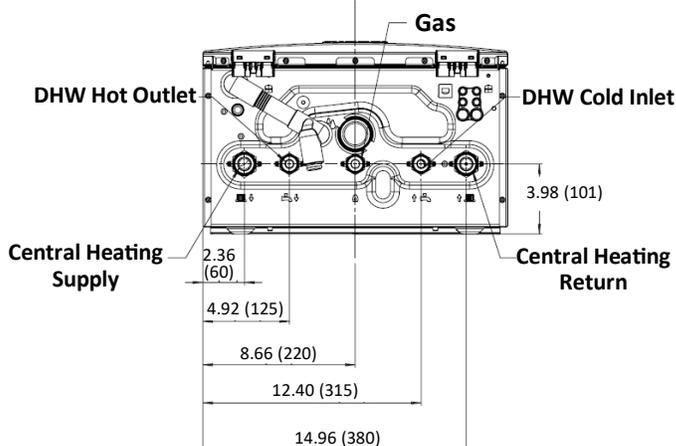


DIMENSIONS

Measurements: in. (mm)



BOTTOM



CONDENSING WALL-MOUNTED, GAS-FIRED COMBI BOILER (CENTRAL HEATING AND DOMESTIC HOT WATER)

| | |
|-------------------------------|---|
| Models | M060C, M090C, M120C, M160C |
| Appliance Type | Wall-Mounted, Gas-Fired Combi Boiler |
| Installation | Indoor |
| Gas Types | Natural Gas (or Propane with field conversion) |
| Standard Features | <ul style="list-style-type: none"> • Factory Installed Modulating Pump • Outdoor Reset Control System with Sensor • Priority DHW Standard • Built-in DHW Plate Heat Exchanger • Modulating Ceramic Burner • Stainless Steel Water Tube Condensing Heat Exchanger • Direct Vent Sealed Combustion • Approved for Room and Closet Installations |
| Included with Purchase | <ul style="list-style-type: none"> • Condensing Gas Boiler with Integrated Modulating Pump • Liquid Propane Field Conversion Kit • Wall Mounting Bracket • Pressure Relief Valve • Condensate Collector Kit • Outdoor Reset Sensor • Vent Top with Integrated 3 in. (80 mm) PP Adapters • 3 in. (80 mm) PP to 3" PVC Adapter (Qty 2) • 3 in. PVC to 2 in. PVC or 2 in. (60 mm) PP Adapter (Qty 2) • 3 in. X 5 in. Concentric Vent Adapter • NPT Adapters: <ul style="list-style-type: none"> – 1 in. for CH Systems (Qty 2) – 3/4 in. (Qty 3 total) <ul style="list-style-type: none"> ▪ (Qty 2) for DHW Systems ▪ (Qty 1) for Gas Supply Connection • Documentation: Installation and Operation Manual, User Manual, and ISCL (Installation, Service, and Commissioning Log) |
| Optional Accessories | Closely Spaced Tee/Manifold Kit, Flue Gas Temperature Sensor, Condensate Neutralizer, ScaleCutter, ScaleCutter Refill Cartridge, Boiler Toolkit, and Isolation Valve Kit |
| Venting Options | <ul style="list-style-type: none"> • Direct Vent (Concentric and Twin Pipe) • Room Air • Materials: Polypropylene, Stainless Steel, PVC, CPVC |

Maximum Equivalent Vent Lengths

Twin Pipe and Room Air:

| Vent Sizes | 2 in. PVC and 2 in. (60 mm) PP | | 3 in. PVC and 3 in. (80 mm) PP | |
|--------------|--------------------------------|---------------------|--------------------------------|---------------------|
| Boiler Model | M060C | M090C, M120C, M160C | M060C | M090C, M120C, M160C |
| Vent Lengths | 60 ft (18 m) | 30 ft (9 m) | 150 ft (46 m) | 140 ft (43 m) |

Concentric:

| Vent Sizes | 2 in. X 4 in. | | 3 in. X 5 in. | |
|--------------|---------------|---------------------|---------------|---------------------|
| Boiler Model | M060C | M090C, M120C, M160C | M060C | M090C, M120C, M160C |
| Vent Lengths | 60 ft (18 m) | 30 ft (9 m) | 150 ft (46 m) | 140 ft (43 m) |

45° elbow equivalent to 3 ft (1 m). 90° elbow equivalent to 6 ft (2 m).



CERTIFIED TO ANSI Z21.13 — CSA 4.9

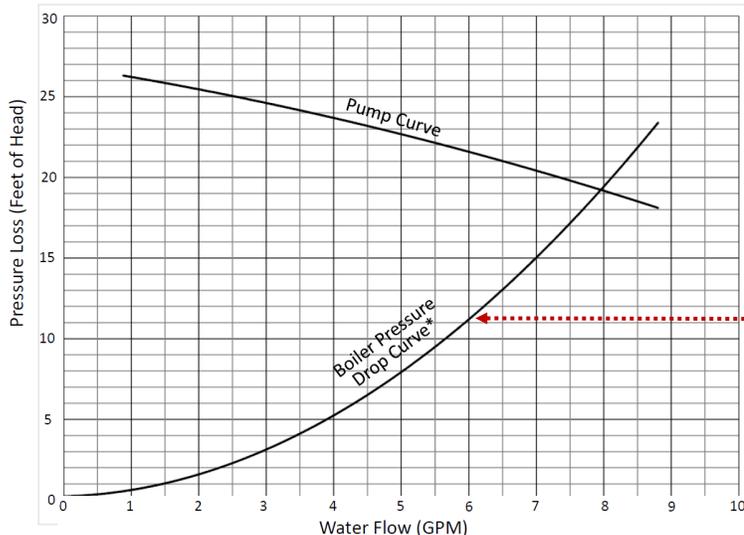
TECHNICAL SPECIFICATIONS

| Model | | M060C | M090C | M120C | M160C |
|---|-------------|---|--------------------|-----------------------|-------------------|
| Dimensions (w, h, d) | Unit | 17 in. x 28 in. x 10 in. (439 mm x 699 mm x 264 mm) | | | |
| | Shipping | 12 in. x 23 in. x 31.5 in. (305 mm x 585 mm x 800 mm) | | | |
| Weight | Unit | 77 lb. (35 kg) | 84 lb. (38 kg) | | |
| | Shipping | 88 lb. (40 kg) | 95 lb. (43 kg) | | |
| Ignition System | | Direct Electronic Ignition | | | |
| Heat Exchanger Material | | Stainless Steel | | | |
| Heat Exchanger Surface Area | | 7.3 sq ft | 11.8 sq ft | | |
| Gas Consumption (Btu/h) | Min | NG: 17,000 LP: 31,500 | | NG: 23,500 LP: 73,500 | |
| | Max (CH) | 60,000 | 90,000 | 120,000 | 160,000 |
| | Max (DHW) | 103,000 | 160,000 | | |
| Heating Capacity | | 57 MBH (17 kWh) | 84 MBH (25 kWh) | 112 MBH (33 kWh) | 148 MBH (43 kWh) |
| Temperature Setting | CH | (Min - Max) 68° F - 185° F (20° C - 85° C) | | | |
| | DHW | (Min - Max) 104° F - 149° F (40° C - 65° C) | | | |
| Water Content | CH | 1 Gal. (3.8 L) | 1.4 Gal. (5.2 L) | 1.4 Gal. (5.2 L) | 1.4 Gal. (5.2 L) |
| | DHW | .05 Gal. (.2 L) | .08 Gal. (.3 L) | .08 Gal. (.3 L) | .08 Gal. (.3 L) |
| Water Supply Pressure | CH | Minimum: 19 PSI (131 kPa) Maximum: 45 PSI (310 kPa) | | | |
| | DHW | Maximum: 150 PSI (1,034 kPa) | | | |
| | PRV | 375 MBH (110 kWh) | | | |
| | PRV Rating | 30 PSI (207 kPa) | | | |
| Pump Model | | UPER 15-78 | | | |
| Sound Level | | 46 dB | 54 dB | | |
| Electrical Data | Normal CH | 155 W | 177 W | 164 W | 191 W |
| | DHW | 185 W | 191 W | 191 W | 191 W |
| | Standby | 3.5 W | | | |
| | Max Current | 1.97 Amps (maximum) | | | |
| | Fuse | 5 Amps | | | |
| Gas Supply Pressure ¹ | Natural Gas | 3.0 in. - 10.5 in. W.C. (7.5 - 26 mbar) | | | |
| | Propane | 8.0 in. - 13.5 in. W.C. (19.9 - 33.6 mbar) | | | |
| Electric Voltage | | AC 120 V, 60 Hz. | | | |
| Electric Voltage Controls | | 24 V | | | |
| Circuit Breaker Rating | | 15 A (Recommended) | | | |
| Turndown Ratio (TDR) | | 3.5:1 / 1.9:1 | 3.8:1 / 1.2:1 | 5.1:1 / 1.6:1 | 6.8:1 / 2.2:1 |
| Available Pressure Drop at Maximum Input Rate | | 20.5 ft at 3.2 GPM | 16 ft at 4.8 GPM | 9.2 ft at 6.3 GPM | 2.8 ft at 7.5 GPM |
| AFUE | | 95.0% | | | |
| DHW Flow Rate 70°F ΔT ² | | 2.6 GPM (9.8 LPM) | 4.2 GPM (15.9 LPM) | | |
| DHW Minimum Activation | | 0.4 GPM (1.5 LPM) | | | |
| ENERGY STAR® Certification | | Yes | | | |
| Certifications | | ANSI Z21.13, CSA 4.9 | | | |

¹ The maximum gas supply pressure must not exceed the value specified by the manufacturer.

² Minimum flow may vary slightly depending on the temperature setting and the inlet water temperature. Minimum activation flow is 0.4 GPM (1.5 L/min).

PRESSURE DROP AND WATER FLOW CURVE



* Pressure drop curve applies to all M-Series Condensing Combi Boilers (M060C, M090C, M120C and M160C).

FEATURES

Faster, Easier Installation

- Compact & lightweight design
- Convenient mounting bracket
- NPT threads for connection points
- More flexible venting options
- Simplified parameters for commissioning and setup

Clearances

- Top: 2 in. (51 mm)*
- Bottom: 12 in. (305 mm)
- Front: 6 in. (152 mm)**
- Back: 0 in.
- Sides: 2 in. (51 mm)
- Vent: 0 in.
- * 0 in. from vent components. 6 in. (152 mm) for closet installations.
- ** Clearance for servicing is 24 in. (610 mm) in front of boiler.

Warranty

Residential:

- Heat Exchanger: 12 Years
- All Other Parts/Components: 2 Years
- Labor: 1 Year

Commercial:

- Heat Exchanger: 5 Years
- All Other Parts/Components: 2 Years
- Labor: 1 Year

Important

- If the boiler is to be installed in a system that has multiple zones, a Closely Spaced Tee/Manifold Kit is recommended to be installed.
- If the pressure drop in the loop/system is greater than the available head pressure from the boiler circulator, a Closely Spaced Tee/Manifold Kit must be used.

DHW = Domestic Hot Water
CH = Central Heating
PRV = Pressure Relief Valve