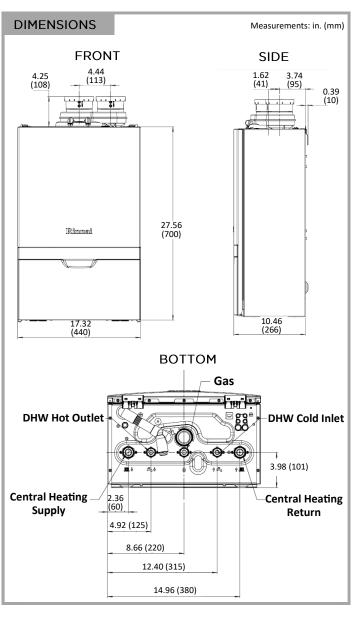


M060C, M090C, M120C, M160C

M-SERIES CONDENSING COMBI BOILER SPECIFICATIONS





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	 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	Condensing Gas Boiler with Integrated Modulating Pump			

Included with Purchase

- 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:
 - 1 in. for CH Systems (Qty 2)
 - 3/4 in. (Qty 3 total)
 - (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

- 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,		M060C	M090C, M120C,
		M160C		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,	M060C	M090C, M120C,
		M160C		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

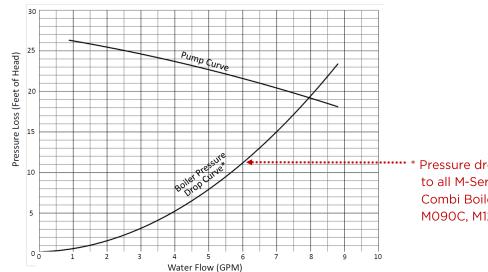
TECHNICAL SPECIFICATIONS							
Model		M060C	M090C	M120C	M160C		
Dimensions	Unit	17 in. x 28 in. x 10 in. (439 mm x 699 mm x 264 mm)					
(w, h, d)	Shipping	12 in. x 23 in. x 31.5 in. (305 mm x 585 mm x 800 mm)					
M/-!	Unit	77 lb. (35 kg)	7 lb. (35 kg) 84 lb. (38 kg)				
Weight	Shipping	88 lb. (40 kg)	95 lb. (43 kg)				
Ignition System		Direct Electronic Ignition					
Heat Exchanger M	laterial	Stainless Steel					
Heat Exchanger Su	ırface Area	7.3 sq ft 11.8 sq ft					
Gas	Min	NG: 17,000 LP: 31,500			00		
Consumption	Max (CH)	60,000	90,000	120,000	160,000		
(Btu/h)	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	СН	(Min - Max) 68° F - 185° F (20° C - 85° C)					
Setting	DHW		(Min - Max) 104° F - 149° F (40° C - 65° C)				
Water	СН	1 Gal. (3.8 L)	1.4 Gal. (5.2 L)	1.4 Gal. (5.2 L)	1.4 Gal. (5.2 L)		
Content	DHW	.05 Gal. (.2 L)	.08 Gal. (.3 L)	.08 Gal. (.3 L)	.08 Gal. (.3 L)		
	СН	Minimum: 19 PSI (131 kPa) Maximum: 45 PSI (310 kPa)			kPa)		
Water Supply	DHW	Maximum: 150 PSI (1,034 kPa)					
Pressure	PRV	375 MBH (110 kWh)					
	PRV Rating	30 PSI (207 kPa)					
Pump Model		UPER 15-78					
Sound Level		46 dB 54 dB					
	Normal CH	155 W	177 W	164 W	191 W		
Electrical	DHW	185 W	191 W	191 W	191 W		
Data	Standby	3.5 W					
	Max Current	1.97 Amps (maximum)					
	Fuse	5 Amps					
Gas Supply	Natural Gas	3.0 in 10.5 in. W.C. (7.5 - 26 mbar)					
Pressure ¹	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		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		
Maximum Input Rate AFUE							
DHW Flow Rate 70°F ΔT ²		95.0%					
DHW Flow Rate 70°F Δ1 DHW Minimum Activation		2.6 GPM (9.8 LPM) 4.2 GPM (15.9 LPM) 0.4 GPM (1.5 LPM)					
ENERGY STAR® Certification		Yes. Recognized as the Most Efficient of ENERGY STAR® 2018					

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

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PRESSURE DROP AND WATER FLOW CURVE

Certifications



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

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).