

RenewaBoiler Spec Sheet

Air-to-Water CO₂ Heat Pump for High-Temperature Radiant Heating

- 32/52/86 kBTU/hr heating @ 5°F ambient
- 175°F max supply temp
- -15°F min rated ambient temp
- Ideal for cast iron / baseboard radiators
- Monobloc design (no refrigerant lineset)
- Ultra-low GWP R744 (CO₂) refrigerant
- Remote monitoring via cellular / Wi-Fi



Specifications

		RB1-M (Medium)	RB1-L (Large)	RB1-XL (Extra Large)
Nominal Capacity (BTU/hr)		32,000	52,000	86,000
Seasonal COP - Climate Zone IV		3.0	3.0	2.9
Seasonal COP - Climate Zone V		2.6	2.6	2.5
COP @ Capacity* for Selected Conditions (°F ambient / LWT)				
Mild	45 / 105	3.5 @ 24,000 BTU	3.5 @ 39,000	3.5 @ 64,000
Moderate	25 / 125	2.7 @ 21,000	2.7 @ 35,000	2.7 @ 58,000
Cold	5 / 145	2.1 @ 27,000	2.0 @ 44,000	1.9 @ 72,000
Extreme	-15 / 165	1.7 @ 32,000	1.6 @ 52,000	1.6 @ 86,000
Dimensions (H x W x D, inches)		39 x 69 x 24	39 x 69 x 24	TBD
Weight		TBD		
Refrigerant / Charge		R744 (CO ₂) / 2kg, pre-charged at factory		
Max Operating Pressure		1,950 psig high side / 1,700 psig low side		
Water Connections		Flanged (circulator pump style)		
Recommended Flow Rate		2-3gpm	3.5-5gpm	6-9gpm
MCA / MOP		40A	70A	100A
Noise Level		TBD		

* Capacities shown are for optimal COP. Higher heating outputs (up to at least nominal capacity) are possible.

Targeted Release Date: January 2024

For more info, contact info@2040energy.com