



RUUD® TORIN™ COMMERCIAL AIR-TO-WATER HEAT PUMP

PERFORMANCE DATA SHEET

120K BTUH (35KW)

KEY FEATURES

- Low Ambient Performance (-13°F)
- Delivers Hot Water Up to 150°F
- Inverter Technology
- Low GWP Refrigerant: R-454B
- Indoor or Outdoor Rated
- Single-pass or Multipass Configurations
- Industry Leading Footprint Design
- BMS Compatible
- User Friendly Touchscreen Platform
- Energy Star Certified

Key Specification Table

Voltage	480 Volt/ 3 Phase / 60 Hz
Refrigerant	R454b
COP*	4.5
Type Compressor/Fan	Inverter / Axial
Max. Outlet Water Temperature	150 °F
Max. Operating Pressure, PSI	65
Water Connections	1" Copper
Approx. Shipping Weight, lbs	483
Size L x W x H	40" x 40" x 59"
Cabinet Construction	18 Gauge painted commercial steel outdoor specs

* DOE test standard, 80°F ambient with 63% humidity, inlet water temperature at 70°F, outlet water temperature at 120°F



Ruud® Torin™ Heat Pump (35kW Single Pass) RMHPHD120

Ambient Air Temp [F]	Ambient Air Humidity [%]	Entering Water Temp [F]	Leaving Water Temp [F]	Heating Capacity [Btu/hr]	Heating COP	GPM
-10	63	70	120	93,523	1.25	4.8
0	63	70	120	103,315	1.6	4.8
5	63	70	120	104,748	3.1	4.8
10	63	70	120	119,727	1.75	4.8
20	63	70	120	119,352	2.04	4.8
30	63	70	120	120,273	2.22	4.8
40	63	70	120	118,431	2.45	4.8
50	63	70	120	123,821	2.65	4.8
60	63	70	120	123,583	3.08	4.8
70	63	70	120	121,433	3.52	4.8
80	63	70	120	120,273	4.52	4.8
90	63	70	120	117,646	4.77	4.8
100	63	70	120	121,638	4.53	4.8

Notes: 1. This table uses DOE test conditions with 63% humidity, inlet water temperature at 70°F, outlet water temperature at 120° F. For additional sizing assistance, please contact our applications team >> [Application Consulting Request Form](#).
2. Values shown in the tables are based on these design flow rates. Actual flow rates will vary.



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Ruud® Torin™ Heat Pump (35kW Multi-Pass) RMHPHD120

Ambient Air Condition	Entering Water Temp [F]	Leaving Water Temp [F]	Heating Capacity [Btu/hr]	Heating COP	GPM
-10°F 64% RH	55	60	56,394	2.80	18.00
	60	75	69,528	2.61	18.00
	70	85	72,664	2.13	18.00
	80	95	85,934	2.43	18.00
	90	105	67,890	1.65	18.00
	100	115	81,607	1.91	18.00
	110	125	54,910	1.15	18.00
	120	135	69,891	1.27	18.00
5°F 64% RH	55	60	61,100	3.83	18.00
	60	70	86,746	3.48	18.00
	70	80	90,916	3.34	18.00
	80	90	99,253	3.28	18.00
	90	100	99,898	2.98	18.00
	100	110	107,626	2.89	18.00
	110	120	112,458	2.72	18.00
	120	135	118,972	2.63	18.00
15°F 64% RH	55	60	60,546	5.99	18.00
	60	70	90,028	4.70	18.00
	70	80	106,657	3.70	18.00
	80	90	105,572	3.43	18.00
	90	105	114,818	3.31	18.00
	100	115	115,287	3.03	18.00
	110	125	118,623	2.83	18.00
	120	135	117,797	2.58	18.00
25°F 64% RH	55	60	93,196	5.51	18.00
	60	70	106,880	4.32	18.00
	70	80	114,298	4.27	18.00
	80	90	115,800	3.98	18.00
	90	100	116,438	3.85	18.00
	100	110	118,729	3.71	18.00
	110	120	119,513	3.41	18.00
	120	135	122,965	3.13	18.00



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35°F 64% RH	50	60	78,836	6.43	18.00
	60	70	110,200	5.50	18.00
	70	80	122,850	4.91	18.00
	80	90	114,912	4.33	18.00
	90	100	118,412	4.12	18.00
	100	110	121,158	3.81	18.00
	110	125	123,944	3.55	18.00
	120	135	122,977	3.20	18.00
45°F 64% RH	50	65	112,126	7.82	18.00
	60	75	111,248	6.55	18.00
	70	85	110,471	5.53	18.00
	80	95	109,930	4.67	18.00
	90	105	109,134	4.05	18.00
	100	115	107,986	3.49	18.00
	110	125	107,133	3.08	18.00
	120	135	106,720	2.71	18.00
55°F 64% RH	50	65	122,221	7.20	18.00
	60	75	118,459	6.45	18.00
	70	85	116,768	5.70	18.00
	80	95	115,853	4.50	18.00
	90	105	114,628	3.98	18.00
	100	115	112,551	3.58	18.00
	110	125	112,372	3.14	18.00
	120	135	111,611	2.77	18.00
65°F 64% RH	50	65	129,388	7.47	18.00
	60	75	125,262	7.05	18.00
	70	85	115,642	5.71	18.00
	80	95	114,830	4.65	18.00
	90	105	114,250	4.02	18.00
	100	115	114,677	3.64	18.00
	110	125	114,840	3.09	18.00
	120	135	113,534	2.83	18.00



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Ambient Air Condition	Entering Water Temp [F]	Leaving Water Temp [F]	Heating Capacity [Btu/hr]	Heating COP	GPM
75°F 64% RH	50	65	128,638	9.60	18.00
	60	75	128,877	7.12	18.00
	70	85	120,449	5.70	18.00
	80	95	118,777	4.60	18.00
	90	105	119,016	3.95	18.00
	100	115	119,050	3.46	18.00
	110	125	118,162	3.10	18.00
	120	135	117,992	2.80	18.00
85°F 60% RH	50	65	134,165	9.50	18.00
	60	75	129,388	8.14	18.00
	70	85	128,262	7.79	18.00
	80	95	124,373	6.12	18.00
	90	105	120,210	4.98	18.00
	100	115	119,323	4.20	18.00
	110	125	118,162	3.75	18.00
	120	135	120,073	3.32	18.00
95°F 64% RH	50	65	160,082	9.70	18.00
	60	75	150,233	7.47	18.00
	70	85	135,231	7.10	18.00
	80	95	124,194	6.85	18.00
	90	105	122,530	6.32	18.00
	100	115	123,771	4.80	18.00
	110	125	120,140	4.10	18.00
	120	135	121,567	3.66	18.00

Notes: 1. All systems require adequate storage based on individual building demand. For additional sizing assistance please contact our applications team >> [Application Consulting Request Form](#).
2. This heat pump is UL certified (Cert #SA7930), NSF 372/61 certified (Cert #80287023), ENERGY STAR compliant. Title 24 / CEC listing pending..