



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

PERFORMANCE DATA SHEET

68K BTUH (20KW)

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	360
Size L x W x H	40" x 40" x 43"
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 (20kW Single Pass) RMHPHD68

Ambient Air Temp [F]	Ambient Air Humidity [%]	Entering Water Temp [F]	Leaving Water Temp [F]	Heating Capacity [Btu/hr]	Heating COP	GPM
-10	63	59	100	50,839	1.61	2.8
0	63	60	110	50,156	1.74	2.8
5	63	52	133	70,628	1.97	2.8
10	63	59	110	71,993	2.03	2.8
20	63	58	110	74,723	2.14	2.8
30	63	70	120	68,035	2.24	2.7
40	63	70	120	70,458	2.94	2.7
50	63	70	120	70,424	3.57	2.7
60	63	70	120	69,366	3.56	2.7
70	63	70	120	70,526	4.37	2.7
80	63	70	120	70,219	4.9	2.7
90	63	70	120	69,298	4.77	2.7
100	63	70	120	68,888	4.8	2.7

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 (20kW Multi-Pass) RMHPHD68

Ambient Air Condition	Entering Water Temp [F]	Leaving Water Temp [F]	Heating Capacity [Btu/hr]	Heating COP	GPM
-10°F 64% RH	55	60	43,947	1.98	12.00
	60	70	54,915	2.17	12.00
	70	80	50,678	1.86	12.00
	80	90	60,189	1.88	12.00
	90	100	44,314	1.42	12.00
	100	110	48,323	1.78	12.00
	110	120	38,650	1.43	12.00
	120	130	47,384	1.51	12.00
5°F 64% RH	55	60	59,790	2.42	12.00
	60	70	66,848	2.35	12.00
	70	80	61,816	2.14	12.00
	80	90	66,525	1.98	12.00
	90	100	54,700	2.16	12.00
	100	110	56,875	1.97	12.00
	110	120	52,836	1.73	12.00
	120	130	49,617	1.64	12.00
15°F 64% RH	55	60	65,301	3.33	12.00
	60	75	59,266	2.23	12.00
	70	80	67,817	2.18	12.00
	80	90	44,432	2.07	12.00
	90	100	72,482	1.99	12.00
	100	110	79,785	2.48	12.00
	110	120	44,675	1.70	12.00
	120	135	46,810	1.49	12.00
25°F 64% RH	55	60	57,780	3.43	12.00
	60	70	71,369	2.84	12.00
	70	80	70,055	2.19	12.00
	80	90	76,473	2.23	12.00
	90	100	49,704	1.71	12.00
	100	110	77,116	2.64	12.00
	110	125	55,527	1.85	12.00
	120	135	55,596	1.83	12.00



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Ambient Air Condition	Entering Water Temp [F]	Leaving Water Temp [F]	Heating Capacity [Btu/hr]	Heating COP	GPM
35°F 64% RH	50	65	75,125	4.09	12.00
	60	75	74,390	3.69	12.00
	70	85	73,770	3.34	12.00
	80	95	73,220	3.04	12.00
	90	105	72,710	2.77	12.00
	100	115	72,240	2.53	12.00
	110	125	71,745	2.31	12.00
	125	140	54,610	2.07	12.00
45°F 64% RH	50	60	56,944	5.05	12.00
	60	75	87,712	3.72	12.00
	70	80	78,431	2.54	12.00
	80	90	68,338	2.02	12.00
	90	100	80,903	2.80	12.00
	100	115	93,771	2.85	12.00
	110	125	92,079	2.56	12.00
	125	140	89,526	2.71	12.00
55°F 64% RH	50	65	91,410	5.35	12.00
	60	75	92,060	4.61	12.00
	70	85	94,581	4.01	12.00
	80	95	93,590	3.59	12.00
	90	105	92,603	3.24	12.00
	100	115	91,580	2.93	12.00
	110	125	90,534	2.66	12.00
	125	140	68,801	2.43	12.00
65°F 64% RH	50	65	91,955	6.70	12.00
	60	80	117,772	5.20	12.00
	70	90	116,863	4.70	12.00
	80	100	116,040	4.20	12.00
	90	105	96,067	4.21	12.00
	100	115	96,050	3.74	12.00
	110	125	93,662	3.30	12.00
	125	140	91,518	2.70	12.00



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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	92,140	9.06	12.00
	60	80	125,587	6.10	12.00
	70	85	108,435	5.90	12.00
	80	95	92,742	5.80	12.00
	90	105	80,695	5.30	12.00
	100	115	80,308	4.50	12.00
	110	125	79,613	4.10	12.00
	125	140	74,386	3.19	12.00
85°F 60% RH	50	65	94,990	9.08	12.00
	60	75	93,300	8.13	12.00
	70	85	91,620	6.80	12.00
	80	95	87,960	5.29	12.00
	90	105	94,880	4.87	12.00
	100	115	92,990	4.29	12.00
	110	125	90,985	3.79	12.00
	125	140	87,880	3.18	12.00
95°F 64% RH	50	65	102,267	7.94	12.00
	60	75	98,602	6.15	12.00
	70	85	95,417	4.86	12.00
	80	95	102,419	6.22	12.00
	90	100	54,450	5.61	12.00
	100	110	60,695	2.91	12.00
	110	125	99,013	3.21	12.00
	125	130	37,727	3.19	12.00

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.