

Hydronic Air Handler Powered by Tankless Technology





RHWB- Series

• Nominal Heating Capacities: 32-90 kBTU [9.38-26.39 kW]







†A.F.U.E. (Annual Fuel Utilization Efficiency) calculated in accordance with Department of Energy test procedures.



Tankless Water Heater Models:

RUTG-64DVL indoor direct vent and RUTG-64XL outdoor

- Natural and LP models 11,000 150,000 BTU max.
- 6.4 gal./min at 35° F rise max., 5.6 gal./min. at 45° F rise

RUTG-84DVL indoor direct vent and RUTG-84XL outdoor

- Natural and LP models 11,000 180,000 BTU max.
 8.4 gal./min at 35° F rise max., 6.7 gal./min. at 45° F rise

RUTGH-84DVL indoor direct vent and RUTGH-84XL outdoor• Natural and LP models – 11,000 - 157,000 BTU max.

- 8.4 gal./min at 35° F rise max., 6.6 gal./min. at 45° F rise

RUTG-95DVL indoor direct vent and RUTG-95XL outdoor

- Natural and LP models 11,000 199,900 BTU max.
- 9.5 gal./min at 35° F rise max., 7.4 gal./min. at 45° F rise

RUTGH-95DVL indoor direct vent and RUTGH-95XL outdoor

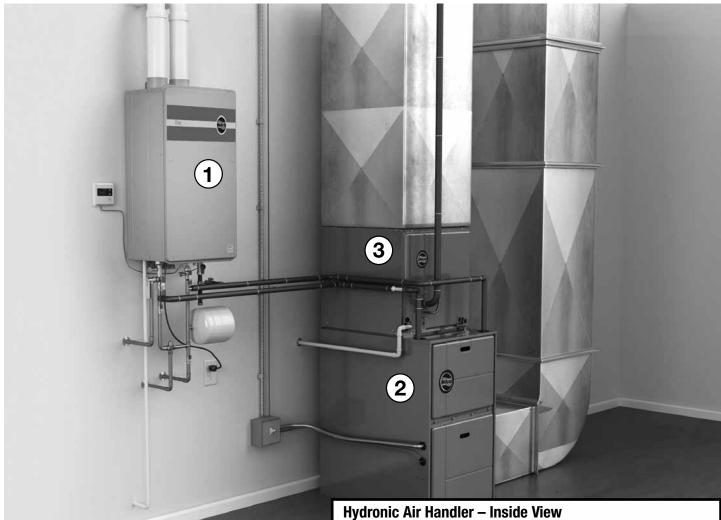
- Natural and LP models 11,000 199,900 BTU max.
- 9.5 gal./min at 35° F rise max., 8.4 gal./min. at 45° F rise

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Home Heating & Water Heating Powered by Tankless Technology



System Components

1 Tankless Water Heater

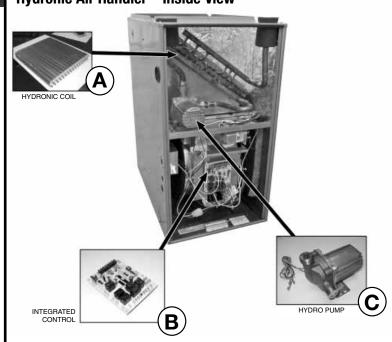
The Ruud tankless water heater serves two purposes in the hydronic system: it provides continuous hot water for use throughout the home. When a call for heat is made, the tankless water heater also acts as the heat-source for air handler, providing both hot water and heating for the home simultaneously.

(2) Hydronic Air Handler

The hydronic air handler features a hydronic heating coil in place of either electric heating elements or gas-fired heat exchangers. When in heating mode, the hydro pump circulates hot water between the tankless water heater and the hydronic coil.

(3) Cooling Coil

In cooling mode, the cooling coil operates the same as any other Ruud heating and cooling system.



Model Features

Features of the Hydronic Air Handler

- Low profile 34-inch design is lighter, easier to handle and leaves room for optional accessories
- Left or right side electric connections
- Integrated control board features diagnostics, manages all operational functions and provides hookups for humidifier and electronic air cleaner
- An insulated blower compartment makes it one of the quietest hydronic air handlers on the market today
- · Pre-paint galvanized steel cabinet

- Molded permanent filter(s)
- Transformer and control fuse protection
- Solid bottom is standard
- A variety of cooling coils and plenums designed to use with the Hydronic Air Handler are available as optional accessories for air conditioning models
- · Stainless steel water pump

Features of the Tankless Water Heater

- Industry best! Minimum flow rate of .26 GPM, minimum activation flow rate of .40 GPM
- ENERGY STAR® rated models available
- Next generation burner technology
- UMC-117 remote control and 10 ft. of thermostat wire is included
- EZ-Link[™] cable available for high demand applications to connect two tankless units to operate as one
- High-altitude capability up to 9,840 ft. elevation above sea level (no chip required)
- Intelligent electronic controls designed to increase energy efficiency and safety
- Self Diagnostic System

Hydronic Air Handler Model Identification

R	Н	W	В	-06'	W	М	Р	36	В
Brand	Application	Tuno	Design	Heating Output	Designation	Blower	Variations	Heat/Cool	Revision
Diallu	Application	Туре	Series	Inlet Water Temp = 150F [66°C]	Output BTU/HR [kW]	Size	variations	Designation	nevision
				04W	40,000 [11.7 kW]	M 11v7	D DOO	36 = 1100-1300 CFM [519-613.5 L/s]	
D Dund	H = Air Handler	W = Water	B =	06W	60,000 [17.6 kW]	M = 11x7 [279 x 178 mm]	P = PSC X = Eco	48 = 1500-1700 CFM	D Dov 1
R = Ruud		vv = vvaler	2nd Series	08W	80,000 [23.5 kW]	R = 11x10 [279 x 254 mm]	Tech™ (ECM)	[707.9-802.3 L/s]	B = Rev 1
				10W	90,000 [28.3 kW]	[213 \ 234]	(23141)	60 = 1900-2100 CFM [896.7-991.1 L/s]	

$\underline{\text{IMPORTANT}}\text{: BEFORE PURCHASING THIS APPLIANCE, READ IMPORTANT ENERGY COST AND EFFICIENCY INFORMATION AVAILABLE FROM YOUR RETAILER.}$

General Data—PSC Models

U.S. and Canadian Models

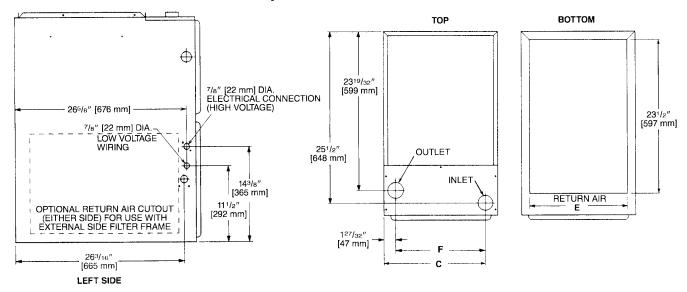
MODEL NUMBERS	RHWB-04WMP36B	RHWB-06WMP48B	RHWB-08WRP60B	RHWB-10WRP60B
Nominal Heating Capacity BTU/hr [W]	40000	60000	80000	100000
Air Side Temperature Rise* °F [°C]	45-75 [25-41.7]	40-70 [22.2-38.9]	35-65 [19.4-36.1]	35-65 [19.4-36.1]
Heating CFM [L/s] @ .8 WC [.19 kPa]	590 [278]	1000 [471]	1453 [685]	1818 [858]
Cooling CFM [L/s] @ .5 WC [.12 kPa]	1235 [582]	1622 [765]	1871 [883]	1973 [931]
Power Supply (V - HZ - PH)		115 -	60 -1	
Minimum Circuit Ampacity - Amps	10	11.4	14	14
Max Rating of Over Current Protective Device - Amps	18	20.5	25.2	25.2
Maximum Fuse or Circuit Breaker Size	15	20	25	25
Motor HP [W]	1/2 [373]	3/4 [559]	3/4 [559]	3/4 [559]
Blower (D x W) in [mm]	11 x 7 [279 x 178]	11 x 7 [279 x 178]	11 x 10 [279 x 254]	11 x 10 [279 x 254]
Blower Motor Type		PS	SC	
Pump Type		Wet	Rotor	
Pump Power Supply (V - HZ - PH)		115 -	60 -1	
Pump Motor RLA/LRA - Amps		1	.8	
Pump HP [W]		1,	/8	
Pump Maximum Working Pressure psi [kPa]		125	[861]	
Min/Max Working Temperature °F [°C]		160	[71]	
Water Connection Type		Coppe	r Studs	
Inlet Water Connection Diameter in [mm]		3/4	[19]	
Out Water Connection Diameter in [mm]		3/4	[19]	
Return Air Filter Size in [mm]	12 x 16 [3	305 x 406]	16 x 24 [4	406 x 609]
Standard High Velocity Filter Size (L X W X H) in [mm]		x 25 x 1 335 x 25]		x 25 x 1 335 x 25]
Shipping Weight LBS [kg]	107 [48.5]	118 [53.5]	137 [62.1]	145 [65.7]

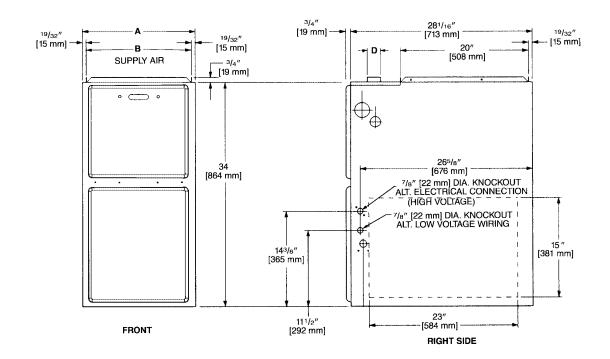
$\underline{\text{IMPORTANT}};$ Before purchasing this appliance, read important energy cost and efficiency information available from your retailer.

General Data—Eco Tech™ (ECM) Models U.S. and Canadian Models

MODEL NUMBERS	RHWB-04WMX36B	RHWB-06WMX48B	RHWB-08WRX60B	RHWB-10WRX60B
Nominal Heating Capacity BTU/hr [W]	40000	60000	80000	100000
Air Side Temperature Rise* °F [°C]	45-75 [25-41.7]	40-70 [22.2-38.9]	35-65 [19.4-36.1]	35-65 [19.4-36.1]
Heating CFM [L/s] @ .8 WC [.19 kPa]	578 [272]	1030 [485]	1502 [707]	1847 [870]
Cooling CFM [L/s] @ .5 WC [.12 kPa]	1180 [556]	1300 [612]	1645 [775]	1707 [804]
Power Supply (V - HZ - PH)		115 -	60 -1	•
Minimum Circuit Ampacity - Amps	10	12.9	12.9	12.9
Max Rating of Over Current Protective Device - Amps	18	23.2	23.2	23.2
Maximum Fuse or Circuit Breaker Size	15	20	20	20
Motor HP [W]	1/2 [373]	3/4 [559]	3/4 [559]	3/4 [559]
Blower (D x W) in [mm]	11 x 7 [279 x 178]	11 x 7 [279 x 178]	11 x 10 [279 x 254]	11 x 10 [279 x 254
Blower Motor Type		EcoTech /	ECM Type	
Pump Type		Wet	Rotor	
Pump Power Supply (V - HZ - PH)		115 -	60 -1	
Pump Motor RLA/LRA - Amps		1	.8	
Pump HP [W]		1,	/8	
Pump Maximum Working Pressure psi [kPa]		125	[861]	
Min/Max Working Temperature °F [°C]		160	[71]	
Water Connection Type		Coppe	r Studs	
Inlet Water Connection Diameter in [mm]		3/4	[19]	
Out Water Connection Diameter in [mm]		3/4	[19]	
Return Air Filter Size in [mm]	12 x 16 [3	305 x 406]	16 x 24 [4	106 x 609]
Standard High Velocity Filter Size (L X W X H) in [mm]		x 25 x 1 335 x 25]		x 25 x 1 35 x 25]
Shipping Weight LBS [kg]	116 [52.6]	126 [57.2]	146 [66.2]	153 [69.3]

Hydronic Air Handler Dimensions and Specifications





Dimensions and Clearance to Combustible Material (inches) [mm]

									MINIMUM (CLEARANCE	
MODEL RHWB	A	В	С	D	E	F	LEFT Side	RIGHT SIDE	BACK	ТОР	FRONT
04WM	171/2 [445]	16 ¹¹ /32 [415]	155/8 [397]	3/4 [19] ID	15 [422]	13 ²⁵ /32 [350]	0	0	0	1 [25]	0*
06WM	171/2 [445]	1611/32 [415]	155/8 [397]	3/4 [19] ID	15 [422]	1325/32 [350]	0	0	0	1 [25]	0*
08WR	241/2 [622]	2311/32 [593]	22 ⁵ /8 [575]	3/4 [19] ID	22 [600]	2025/32 [528]	0	0	0	1 [25]	0*
10WR	241/2 [622]	2311/32 [593]	225/8 [575]	3/4 [19] ID	22 [600]	2025/32 [528]	0	0	0	1 [25]	0*

^{*}A service clearance of at least 24 inches [634mm] is recommended in front of all air handlers.

Hydronic Air Handler Airflow Performance—PSC Models

Model	Blower / Motor HP			CFM [I	_/s] Air Deliv	very Externa	I Static Pre	ssure Inches	s Water Colu	ımn [kPa]		
Model	Inches [mm]	Speed	0.1 [.02]	0.2 [.05]	0.3 [.07]	0.4 [.10]	0.5 [.12]	0.6 [.15]	0.7 [.17]	0.8 [.19]	0.9 [.22]	1.0 [.24]
		Low	794 [375]	775 [366]	749 [353]	719 [339]	686 [324]	655 [309]	621 [293]	590 [278]	534 [252]	473 [223]
RHWB-	11 x 7 [279 x 178] /	M-Lo	1036 [489]	1024 [483]	1002 [473]	977 [461]	922 [435]	896 [423]	865 [408]	826 [390]	761 [359]	689 [325]
04WMP36B	1/2 [373]	M-Hi	1202 [567]	1176 [555]	1160 [547]	1100 [519]	1073 [506]	1047 [494]	1008 [476]	969 [457]	926 [437]	890 [420]
	. []	High	1356 [640]	1336 [631]	1301 [614]	1266 [597]	1235 [583]	1202 [567]	1156 [546]	1093 [516]	1030 [486]	959 [453]
		Low	921 [435]	915 [432]	886 [418]	876 [413]	855 [404]	841 [397]	817 [386]	780 [368]	734 [346]	690 [326]
RHWB-	11 x 7	M-Lo	1189 [561]	1180 [557]	1179 [556]	1137 [537]	1131 [534]	1102 [520]	1072 [506]	1030 [486]	985 [465]	915 [432]
06WMP48B	[279 x 178] / 3/4 [559]	M-Hi	1335 [630]	1315 [621]	1306 [616]	1307 [617]	1277 [603]	1246 [588]	1210 [571]	1161 [548]	1090 [514]	1019 [481]
	5/ * [555]	High	1841 [869]	1795 [847]	1747 [824]	1681 [793]	1622 [765]	1560 [736]	1500 [708]	1420 [670]	1358 [641]	1288 [608]
		Low	1319 [623]	1307 [617]	1300 [614]	1240 [585]	1236 [583]	1210 [571]	1177 [555]	1149 [542]	1100 [519]	1032 [487]
RHWB-	11 x 10	M-Lo	1484 [700]	1480 [698]	1471 [694]	1463 [690]	1418 [669]	1385 [654]	1359 [641]	1314 [620]	1246 [588]	1166 [550]
08WRP60B	[279 x 254] / 3/4 [559]	M-Hi	1687 [796]	1676 [791]	1671 [789]	1611 [760]	1586 [749]	1553 [733]	1513 [714]	1453 [686]	1389 [656]	1284 [606]
	[]	High	1971 [930]	1974 [932]	1948 [919]	1929 [910]	1871 [883]	1806 [852]	1751 [826]	1699 [802]	1610 [760]	1511 [713]
		Low	1299 [613]	1294 [611]	1308 [617]	1279 [604]	1257 [593]	1231 [581]	1205 [569]	1165 [550]	1122 [530]	1053 [497]
RHWB-	11 x 10	M-Lo	1515 [715]	1519 [717]	1499 [707]	1487 [702]	1415 [668]	1418 [669]	1394 [658]	1348 [636]	1296 [612]	1221 [576]
10WRP60B	[279 x 254] / 3/4 [559]	M-Hi	1684 [795]	1695 [800]	1693 [799]	1663 [785]	1620 [765]	1586 [749]	1569 [740]	1514 [715]	1451 [685]	1365 [644]
	,	High	1954 [922]	1971 [930]	1974 [932]	1982 [935]	1973 [931]	1944 [917]	1917 [905]	1818 [858]	1775 [838]	1700 [802]

Note: Units tested without filters in place.

Hydronic Air Handler Airflow Performance—Eco Tech™ (ECM) Models

Nobel	Blower Size	Motor HP	Blower			CFM [L	/s] Air Delivery	External Static	Pressure Inch	CFM [L/s] Air Delivery External Static Pressure Inches Water Column [kPa]	ın [kPa]		
Mone	in [mm]	[Watt]	Speed	0.1 [.02]	0.2 [.05]	0.3 [.07]	0.4 [.10]	0.5 [.12]	0.6 [.15]	0.7 [.17]	0.8 [.19]	0.9 [.22	1.0 [.24]
			Low	960 [453]	891 [420]	836 [394]	781 [368]	731 [344]	682 [322]	630 [297]	578 [273]	540 [255]	460 [217]
RHWB-	11x7	1/0 [0/10]	Med-low	1178 [555]	1118 [527]	1068 [504]	1017 [479]	973 [459]	922 [435]	877 [414]	833 [393]	781 [369]	730 [345]
04WMX36B	[279 x 178]	1/2 [343]	Med-high	1323 [624]	1269 [598]	1222 [576]	1180 [556]	1130 [533]	1089 [514]	1051 [496]	1006 [475]	958 [452]	914 [431]
			High	1481 [698]	1431 [675]	1381 [651]	1333 [629]	1291 [609]	1250 [590]	1209 [571]	1168 [551]	1122 [530]	1085 [512]
			Low	1092 [515]	1037 [489]	992 [468]	938 [442]	896 [422]	849 [401]	790 [373]	739 [349]	[322] 689	633 [299]
RHWB-	11x7	2/4 [650]	Med-low	1360 [641]	1308 [617]	1264 [596]	1222 [576]	1174 [554]	1138 [537]	1095 [517]	1027 [485]	988 [466]	945 [446]
06WMX48B	[279 x 178]	0/4 [339]	Med-high	1462 [689]	1424 [672]	1378 [650]	1340 [632]	1300 [614]	1263 [596]	1223 [577]	1185 [559]	1147 [541]	1111 [524]
			High	[838]	1743 [822]	1716 [809]	1674 [790]	1698 [801]	1662 [784]	1624 [776]	1588 [749]	1525 [720]	1427 [673]
			Low	1533 [723]	1475 [696]	1412 [666]	1357 [640]	1287 [607]	1239 [585]	1185 [559]	1129 [533]	1069 [505]	1002 [473]
RHWB-	11x10	2/4 [650]	Med-low	1658 [782]	1604 [757]	1551 [731]	1500 [707]	1438 [679]	1392 [657]	1336 [631]	1277 [603]	1231 [581]	1174 [554]
08WRX60B	[279 x 254]	0/4 [009]	Med-high	1842 [869]	1782 [841]	1747 [824]	1701 [802]	1645 [776]	1601 [756]	1547 [730]	1502 [709]	1456 [687]	1401 [661]
			High	2131[1002]	2074 [978]	2030 [958]	1969 [929]	1929 [910]	1885 [890]	1833 [865]	1786 [843]	1744 [823]	1688 [797]
			Low	1598 [754]	1533 [723]	1471 [694]	1401 [661]	1344 [634]	1286 [607]	1221 [576]	1162 [548]	1099 [219]	1020 [481]
RHWB-	11x10	2/4 [650]	Med-low	1731 [816]	1674 [790]	1605 [757]	1546 [729]	1488 [702]	1435 [607]	1377 [650]	1320 [623]	1264 [597]	1206 [569]
10WRX60B	[279 x 254]	[600] t /0	Med-high	1943 [916]	1877 [885]	1822 [859]	1762 [831]	1707 [806]	1651 [779]	1609 [759]	1552 [732]	1498 [707]	1446 [682]
			High	2197 [1036]	2151 [1015]	2095 [988]	2047 [966]	1995 [942]	1949 [920]	1896 [895]	1847 [872]	1800 [850]	1745 [824]

Blower performance measured without filter in place.

Hydronic Air Handler with Tankless Water Heater Performance

						Cap	acity (BTU/HR)	[kW]	
						Entering W	ater Temperatu	re (°F) (°C)	
Air Handler Model	Tankless Model	Blower Speed	ESP (In. W.C.)	Heating Air Delivery (CFM) [L/s]	120 [49]	130 [54]	140 [60]	150* [65]	160 [71]
	RTG-64				26400 [7.74]	31800 [9.32]	35500 [10.40]	N/A	N/A
RHWB-04WMP36B	RTG-84		0.5		25700 [7.53]	30900 [9.06]	33900 [9.94]		44800 [13.13]
RHWB-04WMX36B	RTG-95	High	[124.5]	1235 [583]		31500 [9.23]	34600 [10.14]		
	RTGH-84		1		27700 [8.12]	30100 [8.82]	35400 [10.37]	40600 [11.90]	46000 [13.48]
	RTGH-95				25400 [7.44]	30200 [8.85]	32700 [9.58]		45400 [13.31]
	RTG-53				32600 [9.55]	39500 [11.58]	47500 [13.92]	N/A	N/A
	RTG-64							N/A	N/A
	RTG-66					46400 [13.60]	54700 [16.03]		
RHWB-06WMP48B	RTG-74	High	0.5	1622 [765]	37700 [11.05]	46200 [13.54]	54000 [15.83]		71300 [20.90]
RHWB-06WMX48B	RTG-84	9	[124.5]		40000 [11.72]	47800 [14.01]	52100 [15.27]	60300 [17.67]	68100 [19.96]
	RTG-95				. ,	45200 [13.25]	50900 [14.92]		66400 [19.46]
	RTGH-84					44300 [12.98]		55300 [16.21]	
	RTGH-95				33900 [9.94]	43300 [12.69]	53800 [15.77]	60600 [17.76]	69500 [20.37]
	RTG-53							·	N/A
	RTG-64				6 [749] 40300 [11.81] 49700 [14.57] 58800 [17.23] 71600 [20.98] 8	N/A			
		G-64 G-66 G-74 Med-High 0.5						<u> </u>	73600 [21.57]
RHWB-08WRP60B	RTG-66 VRP60B RTG-74 VRX60B RTG-84	Med-High	Med-High 0.5 158	1586 [749]					81600 [23.91]
RHWB-08WRX60B				.000 [0]	45800 [13.42]	53300 [15.62]	56900 [16.68]	66900 [19.61]	76000 [22.27]
	RTG-95				,	53100 [15.56]	60000 [17.58]		80700 [23.65]
	RTGH-84					54900 [16.09]		67500 [19.78]	
	RTGH-95					52700 [15.44]		65200 [19.11]	73100 [21.42]
	RTG-53				35500 [10.40]	44500 [13.04]	53300 [15.62]	N/A	N/A
	RTG-64					48000 [14.07]	53200 [15.59]	N/A	N/A
	RTG-66				,	57800 [16.94]	62100 [18.20]		83000 [24.32]
RHWB-10WRP60B	RTG-74	Med-High	0.5	1620 [765]	49300 [14.45]	59600 [17.47]	69500 [20.37]	79100 [23.18]	89700 [26.29]
RHWB-10WRX60B	RTG-84	g	[124.5]			51800 [15.18]	56900 [16.68]		75400 [22.10]
	RTG-95				. ,	58200 [17.06]	61000 [17.88]		79800 [23.39]
	RTGH-84							65400 [19.17]	
	RTGH-95				44600 [13.07]	52000 [15.24]	56500 [16.56]	65400 [19.17]	75500 [22.12]

CFM = Cubic Feet Per Minute ESP = External Static Pressure *Recommended Operating Point

Inlet Air at 72°F [22°C]

Capacities are based on a piping arrangement with a total equivalent length of 100 ft [30m]. Entering water temperatures must not exceed 160°F [71°C]

Sample Hydronic Air Handler Performance

		SA	MPLE HYDI	RONIC AIR	HANDLER PERFO	RMANCE			
	WATER INLET TEMP (°F) [°C]	WATER OUTLET TEMP (°F) [°C]	WATER LB/HR	FLOW GPM	AIR INLET TEMP (°F) [°C]	AIR OUTLET TEMP (°F) [°C]	AIR CFM [L/s]	CAPACITY (BTU/HR) [kW]	AIR TEMP RISE (°F) [°C]
	120 [49]	110 [43]	[kg/hr]			106 [41]		20900 [6.13]	30 [17]
DUNATE O MANAGOOD	130 [54]	117 [47]	00004			113 [45]		25800 [7.56]	37 [21]
RHWB-04WMP36B RHWB-04WMX36B	140 [60]	125 [52]	2000/ [907]	4	68 [20]	122 [50]	646 [305]	29800 [8.73]	43 [24]
THING OHVIVIXOOD	150 [66]	132 [56]	[307]			130 [54]		35000 [10.26]	50 [28]
	160 [71]	140 [60]				137 [58]		40000 [11.72]	57 [32]
	120 [49]	100 [38]				105 [41]		38200 [11.20]	31 [17]
DUMP OCHMADAOD	130 [54]	108 [42]	0000/			109 [43]		44900 [13.16]	37 [21]
RHWB-06WMP48B RHWB-06WMX48B	140 [60]	115 [46]	2000/ [907]	4	68 [20]	116 [47]	1000 [472]	50600 [14.83]	42 [23]
THING CONNIX IOD	150 [66]	120 [49]	[001]			126 [52]		60000 [17.58]	49 [27]
	160 [71]	126 [52]				129 [54]		67100 [19.67]	55 [31]
	120 [49]	97 [36]				103 [39]		45500 [13.33]	26 [14]
DUMD OOMDDCOD	130 [54]	103 [39]	0000/		00 1001	108 [42]		53700 [15.74]	31 [17]
RHWB-08WRP60B RHWB-08WRX60B	140 [60]	109 [43]	2000/ [907]	4	68 [20]	113 [45]	1450 [684]	62500 [18.32]	36 [20]
THIND CONTINCED	150 [66]	114 [46]	[001]			120 [49]		71800 [21.04]	42 [23]
	160 [71]	120 [49]				123 [51]		80500 [23.59]	47 [26]
	120 [49]	96 [36]				100 [38]		47200 [13.83]	27 [15]
DUMB 10MDDC0D	130 [54]	101 [38]	2000/			110 [43]		57800 [16.94]	33 [18]
RHWB-10WRP60B RHWB-10WRX60B	140 [60]	106 [41]	2000/ [907]	4	68 [20]	112 [44]	1800 [850]	66900 [19.61]	38 [21]
1	150 [66]	111 [44]	[001]			119 [48]		77000 [22.57]	44 [24]
	160 [71]	106 [46]				124 [51]		86800 [25.44]	50 [28]

CFM = Cubic Feet Per Minute

Performance is based on the following assumptions:
1) an estimated 100 ft. [30m] equivalent length of 0.75-inch piping
2) 0.50" [13] w.c. of external air static.

Ruud Ultra™ RUTGH is a series of high efficiency condensing tankless gas water heaters designed for continuous hot water

Efficiency

- 94% energy efficient with stainless steel condensing heat exchanger
- Intelligent electronic controls designed to increase energy efficiency and safety
- Third party efficiency listed by AHRI

Performance

- Industry First! 0.26 GPM minimum flow rate, 0.40 GPM minimum activation flow rate
- RUTGH-95 for 3 bathroom homes*-9.5 gal./min. at 35°F rise max., 8.4 gal./min. at 45°F rise SCAQMD rule 1146.2 compliant
- RUTGH-84 for 2-3 bathroom homes*-8.4 gal./min. at 35°F rise max., 6.6 gal./min. at 45°F rise

Compact Size

• Compact space saving design - about the size of a medicine cabinet

Self-Diagnostic System

- Self-diagnostic system for easy installation and service.
- · Digital display shows temperature setting and maintenance codes

Technology

- Two-pipe direct vent system designed for PVC pipe, see instructions for details
- Hot start programming helps minimize fluctuation in water temperature, referred to as "cold water sandwich," during periods of frequent on/off operation
- Built-in electric blower
- Exclusive! Guardian overheat film wrap (OFW)
- EZ-Link cable available for higher demand applications to connect two tankless units to operate as one
- Manifold up to six units with an optional MIC-6 manifold control board
- Manifold up to 20 units with the optional MIC-185 plus the MICS-180 manifold control assembly

High Altitude Compliant

• High-altitude capability - up to 9,840 ft. elevation above sea level

Plus...

- Up to 38 ft. of 3" PVC Pipe or 5 ft. of 2" PVC Pipe, see instructions for details
- Digital remote control and 10 ft. of thermostat wire included
- Supplied with a 120 volt power cord (indoor models only)
- Freeze protection to -30°F
- EZ- Spec[™] Sizing Software advanced online tool that takes the guess work out of sizing tankless applications - available at www.ruud.com/tankless

Warranty

 12-Year on heat exchanger, 5-year on parts and 1-year on labor

See Residential Warranty Certificate for complete information

Commercial Applications

The RUTGH Condensing Tankless Series can be upgraded for high-temperature commercial use.

• Temperature range is 85°F to 185°F

RUTGH-95 Upgrade Kits

RTG20240A for RUTGH-95DVLN RTG20240B for RUTGH-95DVLP RTG20240C for RUTGH-95XLN RTG20240D for RUTGH-95XLP

RUTGH-84 Upgrade Kits

RTG20241A for RUTGH-84DVLN RTG20241B for RUTGH-84DVLP RTG20241C for RUTGH-84XLN RTG20241D for RUTGH-84XLP

Note: These upgrade kits are not compatible with previous models. See the 2012 Tankless Parts Catalog for a complete listing.

^{*} Based on simultaneous showers using 2.5 gallons per minute. Flow rates vary depending on temperature of cold water supply.



RUTGH-DV

Indoor Direct Vent Model 11,000-199,900 Btu/h Natural and LP Gas



RUTGH-X

Outdoor Model 11,000-199,900 Btu/h Natural and LP Gas



Ruud Ultra™ RUTGH-95 Specifications for 3 Bathroom Homes

r																		
	DESCF	RIPTION			FEA	TURES			ROUG	HING	IN DIM	ENSION	IS (SHC	OWN IN IN	CHES)	ı	ENERGY IN	IFO.
	MODEL	GAS INPUT		TEMP.	MIN, FLOW/ ACTIVATION	GPM @ 77° RISE	GPM @ 45° RISE	MAX.	CONNE					VENT	SHIP, WEIGHT	ENERGY	% OF THERM.	D.O.E. ANN. OP. COST
	NUMBER	BTU/H	TYPE	RANGE	GPM	MAX.	MAX.	GPM	WATER	GAS	HEIGHT	WIDTH	DEPTH	DIAM.	(LBS.)	FACTOR	EFFICIENCY	NAT/LP
	RUTGH-95DVLN [†]	11,000- 199,900	Indoor Direct Vent	85° to 140° F	0.26/0.40	4.9	8.4	9.5	3/4	3/4	27-1/2	18-1/2	9-3/4	2" or 3" PVC 2-Pipe	82	.94	94%	\$194/326
	RUTGH-95XLN [†]	11,000- 199,900	Outdoor	85° to 140° F	0.26/0.40	4.9	8.4	9.5	3/4	3/4	27-1/2	18-1/2	9-3/4	N/A	82	.94	94%	\$194/326

Ruud Ultra™ RUTGH-84 Specifications for 2-3 Bathroom Homes

DESCR	RIPTION			FEA	TURES			ROUG	HING	IN DIM	ENSION	IS (SHC	OWN IN IN	CHES)	E	ENERGY IN	IFO.
MODEL	GAS INPUT		TEMP.	MIN. FLOW/ ACTIVATION	GPM @ 77° RISE	GPM @ 45° RISE	MAX.	CONNE	CTION				VENT	SHIP. WEIGHT	ENERGY	% OF THERM.	D.O.E. ANN. OP. COST
NUMBER	BTU/H	TYPE	RANGE	GPM	MAX.	MAX.	GPM	WATER	GAS	HEIGHT	WIDTH	DEPTH	DIAM.	(LBS.)	FACTOR	EFFICIENCY	NAT/LP
RUTGH-84DVLN	11,000- 157,000	Indoor Direct Vent	85° to 140° F	0.26/0.40	3.9	6.6	8.4	3/4	3/4	27-1/2	18-1/2	9-3/4	2" or 3" PVC 2-Pipe	82	.94	94%	\$194/326
RUTGH-84XLN	11,000- 157,000	Outdoor	85° to 140° F	0.26/0.40	3.9	6.6	8.4	3/4	3/4	27-1/2	18-1/2	9-3/4	N/A	82	.92	94%	\$194/326

Energy Factor and Average Annual Operating Costs based on D.O.E. (Department of Energy) test procedures. D.O.E. national average fuel rate natural gas \$1.218/therm; LP \$1.87/gallon.

All models are available in Natural Gas and Propane (LP). For Propane replace the N with P when ordering.

† All models listed here meet or exceed SCQAMD 1146.2.

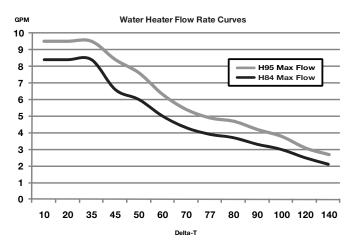
- Factory set maximum temperature is 120° F. See Use and Care Manual for setting.
- Consult factory for information on sizing the application.
- Add a "C" to the model number when ordering Canadian models. Outdoor models are only for seasonal use in Canada. Please contact Ruud Canada Ltd. for details.

Vent Termination Kits are required for Direct Vent models. Contact your distributor for details.

Proper gas pressure must be ensured to supply tankless gas water heaters – up to 199,900 Btu/h for RUTGH-95 models, up to 157,000 Btu/h for RUTGH-84 models. (Consult your gas supplier)

			Te	mpera	iture R	ise (°	F)		
Model Number	35°	45°	50°	60°	70°	77°	80°	90°	100°
RUTGH-95 Water Flow (GPM)	9.5	8.4	7.6	6.3	5.4	4.9	4.7	4.2	3.8
RUTGH-84 Water Flow (GPM)	8.4	6.6	6.0	5.0	4.3	3.9	3.7	3.3	3.0

Above estimates are for sizing purposes only.



Parts and Accessories

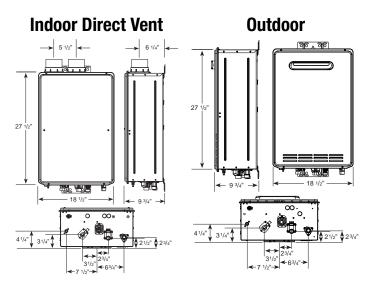
Venting & terminations – 2" or 3" PVC, recess boxes, pipe covers, extra remote controls, EZ-Link, manifolds and cables, service valve kits, service parts, flush kits

For more information on Tankless parts and accessories, see the Parts and Accessories catalog or call 866-720-2076.

Maximum Vent Length (intake/outlet):

Number of 90° Elbows	Maximum Length of 2" Straight Pipe	Maximum Length of 3" Straight Pipe
0 or 1	5.0 ft. (1.5 m)	38.0 ft. (11.6 m)
2	3.5 ft. (1.0 m)	36.5 ft. (11.1 m)
3	2.0 ft. (0.6 m)	35.0 ft. (10.6 m)
4	Not Available	33.5 ft. (10.2 m)
5	Not Available	32.0 ft. (9.8 m)
6	Not Available	30.5 ft. (9.3 m)

(ULCs636 pipe must be used for Canada.)



Ruud RUTG is a series of ultra low NOx, mid-efficiency tankless gas water heaters designed for continuous hot water

Efficiency

- 82% energy efficient with stainless steel condensing heat exchanger
- Intelligent electronic controls designed to increase energy efficiency and safety
- Third party efficiency listed by AHRI

Performance

- Industry First! 0.26 GPM minimum flow rate, 0.40 GPM minimum activation flow rate
- RUTG-95 for 3 bathroom homes*–
 9.5 gal./min. at 35°F rise max.,
 8.4 gal./min. at 45°F rise
- RUTG-84 for 2-3 bathroom homes*–
 8.4 gal./min. at 35°F rise max.,
 6.6 gal./min. at 45°F rise
- RUTG-64 for 1-2 bathroom homes*–
 6.4 gal./min. at 35°F rise max.,
 5.6 gal./min. at 45°F rise

Self-Diagnostic System

- Self-diagnostic system for easy installation and service
- Digital display shows temperature setting and maintenance codes

Technology

- 3"/5" concentric vent system with Integrated condensate collector
- Hot start programming helps minimize fluctuation in water temperature, referred to as "cold water sandwich", during periods of frequent on/off operation
- Connects to Metal Fab. Inc., 3"/5" concentric venting without an adapter
- Built-in electric blower
- Exclusive! Guardian overheat film wrap (OFW)
- EZ-Link cable available for higher demand applications to connect two tankless units to operate as one
- Manifold up to six units with an optional MIC-6 manifold control board
- Manifold up to 20 units with the optional MIC-185 plus the MICS-180 manifold control assembly

Low Emissions

 Environmentally friendly Ultra Low NOx burner meets SCAQMD rule 1146.2 requirements

High Altitude Compliant

 High-altitude capability – up to 9,840 ft. elevation above sea level

Plus...

- Digital remote control and 10 ft. of thermostat wire included
- Supplied with a 120 volt power cord (indoor models only)
- Freeze protection to -30°F
- EZ- Spec[™] Sizing Software advanced online tool that takes the guess work out of sizing tankless applications – available at www.ruud.com/tankless

Warranty

 12-Year on heat exchanger, 5-year on parts and 1-year on labor

See Residential Warranty Certificate for complete information

Commercial Applications

RUTG Tankless Series can be upgraded for highvolume commercial use

• Temperature range is 85°F to 185°F

RUTG-95 Upgrade Kits

RTG20236A for RUTG-95DVLN RTG20236B for RUTG-95DVLP RTG20236C for RUTG-95XLN

RTG20236D for RUTG-95XLP

RUTG-84 Upgrade Kits

RTG20237A for RUTG-84DVLN RTG20237B for RUTG-84DVLP RTG20237C for RUTG-84XLN RTG20237D for RUTG-84XLP

Note: These upgrade kits are not compatible with previous models. See the 2012 Tankless Parts Catalog for a complete listing.

^{*} Based on simultaneous showers using 2.5 gallons per minute. Flow rates vary depending on temperature of cold water supply.



RUTG-DVL

Indoor Direct Vent Model 11,000-199,900 Btu/h Natural and LP Gas



RUTG-XL

Outdoor Model 11,000-199,900 Btu/h Natural and LP Gas















LEED Points = 2

Specifications

DESC	RIPTION		FEATURES			ROUGHING IN DIMENSIONS (SHOWN IN INCHES)					ENERGY INFO.						
MODEL NUMBER	GAS INPUT BTU/H	TYPE	TEMP. RANGE	MIN. FLOW/ ACTIVATION GPM	GPM @ 77° RISE MAX.	GPM @ 45° RISE MAX.	MAX. GPM	CONNE	CTION GAS	HEIGHT	WIDTH	DEPTH	VENT DIAM.	SHIP. WEIGHT (LBS.)	ENERGY FACTOR	% OF THERM. EFFICIENCY	D.O.E. ANN. OP. COST NAT/LP
RTG-95 ULTRA	RTG-95 ULTRA LOW NOX SERIES FOR 3 BATHROOM HOMES																
RUTG-95DVLN	11,000- 199,900	Indoor Direct Vent	85° to 140° F*	0.26/0.40	4.3	7.4	9.5	3/4	3/4	25-5/8	13-7/8	9-7/8	3 by 5 CONCENTRIC	54	.82	82%	\$223/374
RUTG-95XLN	11,000- 199,900	Outdoor	85° to 140° F*	0.26/0.40	4,3	7.4	9.5	3/4	3/4	23-5/8	13-7/8	8-7/8	N/A	54	.82	82%	\$223/374
RTG-84 ULTRA	RTG-84 ULTRA LOW NOX SERIES FOR 2-3 BATHROOM HOMES																
RUTG-84DVLN	11,000- 180,000	Indoor Direct Vent	85° to 140° F	0.26/0.40	3.9	6.7	8.4	3/4	3/4	25-5/8	13-7/8	9-7/8	3 by 5	54	.82	82%	\$223/374
RUTG-84XLN	11,000- 180,000	Outdoor	85° to 140° F	0.26/0.40	3.9	6.7	8.4	3/4	3/4	23-5/8	13-7/8	8-7/8	N/A	54	.82	82%	\$223/374
RTG-64 ULTRA LOW NOX SERIES FOR 1-2 BATHROOM HOMES																	
RUTG-64DVLN	11,000 - 150,000	Indoor Direct Vent	85° to 140° F	0.26/0.40	3.3	5.6	6.4	3/4	3/4	25-5/8	13-7/8	9-7/8	3 by 5	54	.82	82%	\$223/374
RUTG-64XLN	11,000 - 150,000	Outdoor	85° to 140° F	0.26/0.40	3.3	5.6	6.4	3/4	3/4	23-5/8	13-7/8	8-7/8	N/A	54	.82	82%	\$223/374

Energy Factor and Average Annual Operating Costs based on D.O.E. (Department of Energy) test procedures. D.O.E. national average fuel rate natural gas \$1.218/therm; LP \$1.87/gallon.

All models are available in Natural Gas and Propane (LP). For Propane replace the N with P when ordering.

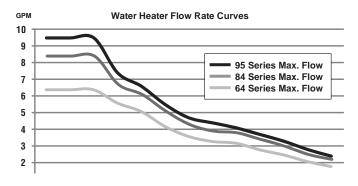
- SCQAMD rule 1146.2 compliant.
- Factory set maximum temperature is 120° F. See Use and Care Manual for setting.
- Consult factory for information on sizing the application.
- Add a "C" to the model number when ordering Canadian models. Outdoor models are only for seasonal use in Canada. Please contact Ruud Canada Ltd. for details.

Vent Termination Kits are required for Direct Vent models. Contact your distributor for details.

Proper gas pressure must be ensured to supply tankless gas water heaters – up to 199,900 Btu/h for RUTG-95 models, up to 180,000 Btu/h for RUTG-84 models and up to 150,000 Btu/h for RUTG-64 models. (Consult your gas supplier)

	Temperature Rise (° F)								
Model Number	35°	45°	50°	60°	70°	77°	80°	90°	100°
RUTG-95 Water Flow (GPM)	9.5	7.4	6.6	5.5	4.7	4.3	4.1	3.7	3.3
RUTG-84 Water Flow (GPM)	8.4	6.7	6.1	5.1	4.3	3.9	3.8	3.4	3.0
RUTG-64 Water Flow (GPM)	6.4	5.6	5.1	4.2	3.6	3.3	3.2	2.8	2.5

Above estimates are for sizing purposes only.



Parts and Accessories

Venting & terminations, recess boxes, pipe covers, extra remote controls, EZ-Link, manifolds and cables, service valve kits, service parts, flush kits

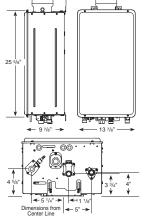
For more information on Tankless parts and accessories, see the Parts and Accessories catalog or call 866-720-2076.

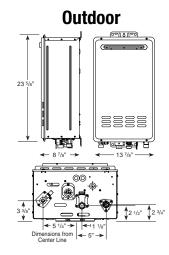
Maximum Vent Length (intake/outlet):

Number of 90° Elbows	Maximum Length of Straight Pipe
1	39.0 ft. (12.0 m)
2	37.5 ft. (11.5 m)
3	36 ft. (11 m)
4	34.5 ft. (10.5 m)
5	33.0 ft. (10.0 m)
6	31.5 ft. (9.5 m)

(Manufacturer approved venting required)

Indoor Direct Vent





ACCESSORIES

RETURN AIR PLENUM: RXGR-C17B

RXGR-C24B

EXTERNAL BOTTOM FILTER RACK: RXGF-CB EXTERNAL SIDE FILTER RACK: RXGF-CA

FILTER RACK FILTER SIZES* INCHES [mm]						
MODEL	RXGF-CB (BOTTOM)	RXGF-CA (SIDE)				
RHWB-04WMAES	15 ³ / ₄ x 25 [400 x 635]	15 ³ / ₄ x 25 [400 x 635]				
RHWB-06WGAES	15 ³ / ₄ x 25 [400 x 635]	15 ³ / ₄ x 25 [400 x 635]				
RHWB-08WRAJS	22 ³ / ₄ x 25 [578 x 635]	15 ³ / ₄ x 25 [400 x 635]				
RHWB-10WRAJS	22 ³ / ₄ x 25 [578 x 635]	15 ³ / ₄ x 25 [400 x 635]				

^{*}Filter racks are shipped without filters.

Filters shipped with hydronic air handler may be used or a suitable

PLENUM DATA FOR "INDOOR COOLING" COILS

Plenum adapters are required in some instances for use on applications when plenum and hydronic air handler size do not match. See Indoor Coil Specification Sheet for Details.

AIR HANDLER WIDTH In. [mm]	PLENUM WIDTH In. [mm]	PLENUM ADAPTER	COIL Plenum
17 ¹ / ₂ [445]	16 ¹ / ₄ [413]	RXAA-C185	RXAL-B16BU
171/2 [445]	201/4 [514]	RXAA-C173	RXAL-B20BU
171/2 [445]	215/8 [549]	RXAA-C187	RXAL-B21BU
171/2 [445]	251/4 [641]	RXAA-C174	RXAL-B25BU
241/2 [622]	251/4 [641]	RXAA-C177	RXAL-B25BU
24 ¹ / ₂ [622]	21 ⁵ /8 [549]	RXAA-C187	RXAL-B21BU

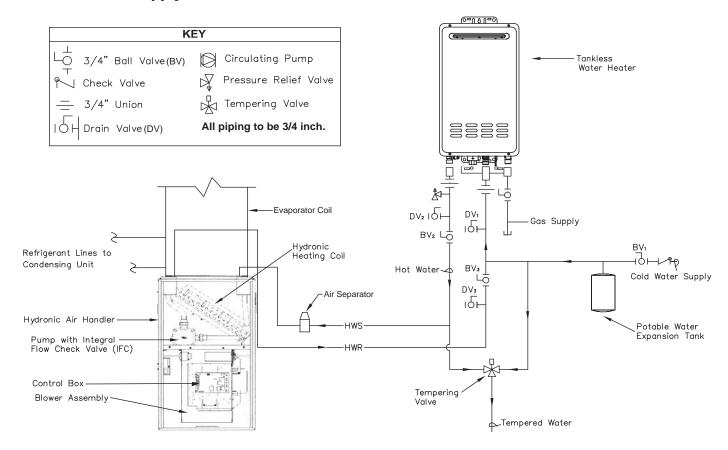
[] Designates Metric Conversions

TANKLESS WATER HEATER ACCESSORIES

Visit RuudTankless.com for a current listing of Ruud Tankless accessories.

^{1&}quot; [25.4 mm] filter.

Typical Piping Arrangement for Direct Space Heating and Domestic Water Supply with Tankless



GENERAL TERMS OF LIMITED WARRANTY*

Ruud will furnish a replacement for any part of this product which fails in normal use and service within the applicable period stated, in accordance with the terms of the limited warranty.

*For complete details of the Limited and Conditional Warranties, including applicable terms and conditions, contact your local contractor or the Manufacturer for a copy of the product warranty certificate.

Labor*	One (1) Year
Air Handler Heat Exchanger/Coil*	
Any Other Part*	Five (5) Years



In keeping with its policy of continuous progress and product improvement, Ruud reserves the right to make changes without notice.

Ruud Heating, Cooling & Water Heating • P.O. Box 17010 Fort Smith, Arkansas 72917 • www.ruud.com Ruud Canada • 125 Edgeware Road, Unit 1 Brampton, Ontario • L6Y 0P5