# Hydronic Air Handler Powered by Tankless Technology

### **RW1P/RW1T- Series**

 Nominal Heating Capacities: 40-100 kBTU [11.7-29.3 kW]









# Tankless Water Heater Models: RTG-64DVL indoor direct vent and RTG-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
- ---

### RTG-84DVL indoor direct vent and RTG-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

### RTGH-84DVL indoor direct vent and RTGH-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

### RTGH-90DVL indoor direct vent and RTGH-90XL outdoor

- Natural and LP models 11,000 180,000 BTU max.
- 9.0 gal./min at 35° F rise max., 7.5 gal./min. at 45° F rise

### RTG-95DVL indoor direct vent and RTG-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

### RTGH-95DVL indoor direct vent and RTGH-95XL outdoor

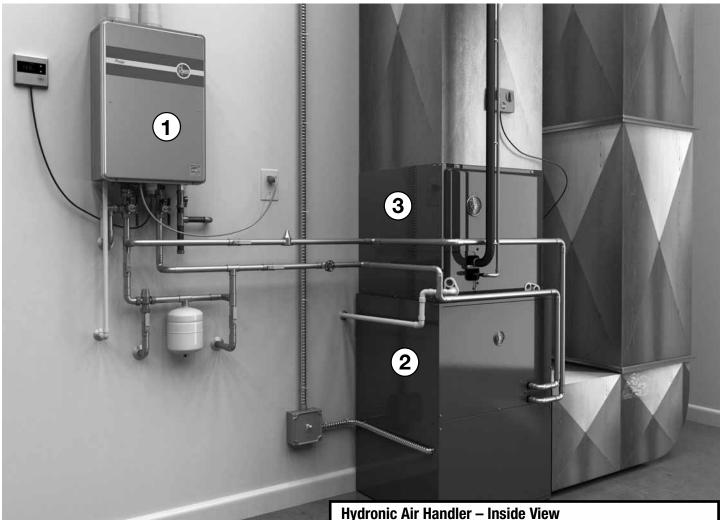
- Natural and LP models 11,000 199,900 BTU max.
- 9.5 gal./min at 35° F rise max., 8.4 gal./min. at 45° F rise



### **TABLE OF CONTENTS**

System Components	3
Model Features & Model Number Identification	4
General Data	5
Dimensional Data	6
Airflow Performance Data	7-8
Water Heater Performance Data	g
Tankless Water Heater-Mid Efficiency Tankless Series	10-11
Tankless Water Heater-Condensing Tankless Series	12-13
Accessories	14
Typical Piping	15
Limited Warranty	16

### **Home Heating & Water Heating Powered by Tankless Technology**



### **System Components**

### 1 Tankless Water Heater

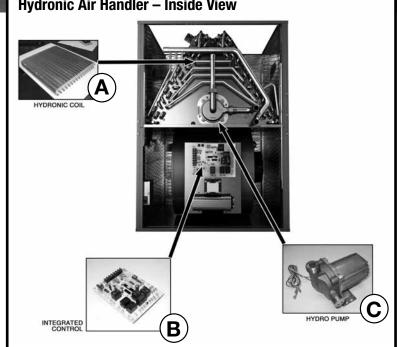
The Rheem tankless water heater serves two purposes in the hydronic system: it provides continuous hot water for use throughout the home. When a call for heat is made, the tankless water heater also acts as the heat-source for air handler, providing both hot water and heating for the home simultaneously.

### (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 Rheem 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

### **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<sup>TM</sup> cable available for high demand applications to connect two tankless units to operate as one

- 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
- Field convertible for vertical downflow, horizontal left hand, or right hand air supply.
- 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**

<u>R</u>	<u>w</u>	<u>1</u>	Ţ	<u>04</u>	<u>A</u>	24	<u>14</u>	<u>N</u>	<u>A</u>	<u>A</u>	* -
Brand	Product Category	Stages of Airflow	Motor Type	Nominal Capacity BTU/HR [kW]	Major Series	Max Cooling Airflow Tonnage	Width	Controls	Voltage	Minor Series**	Option Code
R =	W =	1 = Single	P = PSC	04 = 40,000 [11.7 kW]	A = First	24 = Up to 2 Ton	14 = 14"	C-Communicating	A -	A =	*TBD
Rheem	Hydronic	Stage	T = Constant	06 = 60,000 [17.6 kW]		36 = Up to 3 Ton	17 = 17.5"	N-Non-comm	1ph, 115/60	1st Design	
			Torque	08 = 80,000 [23.5 kW]		48 = 2.5 to 4 Ton	21 = 21"				
				10 = 100,000 [29.0 kW]		60 = 3 to 5 Ton	24 = 24.5"				

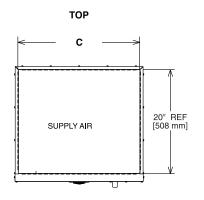
# $\underline{\text{IMPORTANT}}\text{: BEFORE PURCHASING THIS APPLIANCE, READ IMPORTANT ENERGY COST AND EFFICIENCY INFORMATION AVAILABLE FROM YOUR RETAILER.}$

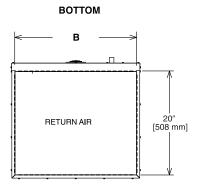
# General Data Eco Tech™ (ECM) Models U.S. and Canadian Models

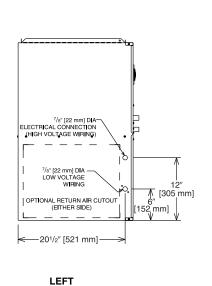
Hydronic	Air Handler Electrical Phys	ical Specifications - EcoTecl	n Models	
MODEL NUMBERS	RW1P04A2414NAA	RW1P06A3617NAA	RW1P08A4821NAA	RW1P10A6024NAA
Nominal Heating Capacity BTU/hr [kw]	40000 [11.7]	60000 [17.6]	80000 [23.4]	100000 [29.3]
Air Side Temperature Rise* °F [°C]	32-53 [17.6-29.2]	24-43 [13.2-23.7]	25-49 [13.8-27.0]	25-46 [13.8-25.3]
Rated Heating CFM [L/s]	800 [378]	1200 [566]	1625 [767]	1800 [850]
Cooling Range CFM [L/s]	600-800 [283-556]	800-1200 [283-612]	900-1625 [424-641]	1050-1850 [472-873]
Power Supply (V - HZ - PH)		115 -	60 -1	
Minimum Circuit Ampacity - Amps	5	10	10	11
Max Rating of Over Current Protective Device - Amps	15	15	15	15
Maximum Fuse or Circuit Breaker Size - Amps	15	15	15	15
Motor HP [W]	1/5 [93]	1/2 [373]	1/2 [373]	3/4 [559]
Blower (D x W) in [mm]	10 x 6 [254 x 152]	10 x 8 [254 x 203]	10 x 10 [254 x 254]	11 x 11 [279 x 279]
Blower Motor Type		PS	SC SC	•
Pump Type		Wet I	Rotor	
Pump Power Supply (V - HZ - PH)		115 -	60 -1	
Pump Motor RLA/LRA - Amps		1.	8	
Pump HP [W]		1/8	[.86]	
Pump Maximum Working Pressure psi [kPa]		125 [	[861]	
Max Working Temperature °F [°C]		160	[71]	
Water Connection Type		Copper	Studs	
Inlet Water Connection Diameter in [mm]		3/4	[19]	
Out Water Connection Diameter in [mm]		3/4	[19]	
Shipping Weight LBS [kg]	91 [41]	100 [45]	122 [55]	129 [58]

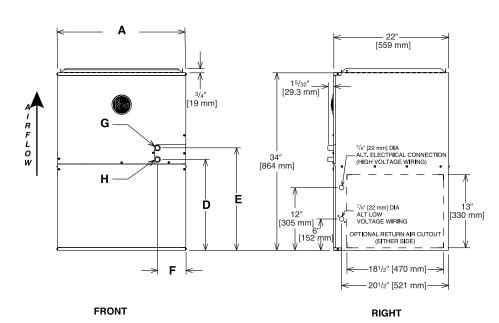
Hydronic	Air Handler Electrical Phys	ical Specifications - EcoTec	h Models							
MODEL NUMBERS	RW1T04A2414NAA	RW1T06A3617NAA	RW1T08A4821NAA	RW1T10A6024NAA						
Nominal Heating Capacity BTU/hr [kw]	40000 [11.7]	60000 [17.6]	80000 [23.4]	100000 [29.3]						
Air Side Temperature Rise* °F [°C]	32-53 [0-11.6]	24-43 [-4.4-6.1]	25-49 [-3.9-9.4]	25-46 [-3.9-7.8]						
Rated Heating CFM [L/s]	800 [378]	1200 [566]	1625 [767]	1800 [850]						
Cooling Range CFM [L/s]	600-800 [283-556]	800-1200 [283-612]	1000-1625 [472-775]	1200-1800 [612-804]						
Power Supply (V - HZ - PH)		115 -	60 -1							
Minimum Circuit Ampacity - Amps	8	10	12.9	12.9						
Max Rating of Over Current Protective Device - Amps	11.7	18	23.2	23.2						
Maximum Fuse or Circuit Breaker Size - Amps	10	15	20	20						
Motor HP [W]	1/3 [248]	1/2 [373]	3/4 [559]	3/4 [559]						
Blower (D x W) in [mm]	10 x 6 [254 x 152]	10 x 8 [254 x 203]	10 x 10 [254 x 254]	11 x 11 [279 x 279]						
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	[.86]							
Pump Maximum Working Pressure psi [kPa]		125	[861]							
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]							
Shipping Weight LBS [kg]	91 [41]	100 [45]	122 [55]	129 [58]						

### **Hydronic Air Handler Dimensions and Specifications**









ST-A1242-03-X0

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

MODEL	A	В	C	D	E	F
RW1*04A2414	14 [356]	13 [330]	13 [330]	16-13/16 [427]	19 [483]	3-3/8 [86]
RW1*06A3617	17-1/2 [445]	16-1/2 [419]	16-1/2 [419]	16-13/16 [427]	19 [483]	4/5/8 [117]
RW1*08A4821	21 [533]	20 [508]	20 [508]	16-13/16 [427]	19 [483]	4-7/16 [113]
RW1*10A6024	24-1/2 [622]	23-1/2 [597]	23-1/2 [597]	17-7/16 [443]	19-5/8 [498]	5-7/16 [138]

 $<sup>^{\</sup>star}\text{A}$  service clearance of at least 24 inches [634mm] is recommended in front of all air handlers.

# Hydronic Air Handler Airflow Performance—PSC Models

				HYDRONI	C AIR HANDLER	AIR FLOW PERF	DNIC AIR HANDLER AIR FLOW PERFORMANCE — PSC MODELS	C MODELS				
i de M	Blower Size	Motor HP	Blower			CFM [L/s] A	CFM [L/s] Air Delivery External Static Pressure Inches Water Column [kPa]	nal Static Pressu	e Inches Water C	olumn [kPa]		
Ianoiai	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]
			Low	642 [339]	612 [322]	591 [311]	524 [273]	1	1			1
RW1P		1 /5 [00]	Med-low	711 [377]	684 [362]	655 [346]	624 [329]	578 [303]	526 [274]	l	1	1
04A2414NAA	[254 × 152]	[06] 0/1	Med-high	890 [477]	853 [456]	821 [438]	786 [419]	744 [396]	694 [368]	633 [334]	549 [287]	1
			High	950 [510]	917 [492]	880 [471]	843 [451]	803 [428]	752 [400]	[398] 689	[998] 069	604 [318]
			Low	900 [482]	882 [472]	865 [463]	843 [451]	806 [430]	759 [404]	[364]	617 [325]	I
RW1P	10 × 8	1/0 [070]	Med-low	1135 [613]	1101 [594]	1073 [578]	1050 [566]	1012 [544]	960 [516]	889 [476]	801 [427]	700 [371]
06A3617NAA	[254 × 203]	[6/6] 7/1	Med-high	1260 [682]	1231 [666]	1199 [648]	1154 [623]	1113 [601]	1060 [571]	978 [526]	895 [479]	767 [408]
			High	1397 [758]	1363 [739]	1314 [712]	1268 [687]	1209 [654]	1148 [620]	1077 [581]	980 [527]	829 [443]
			Low	947 [508]	943 [506]	940 [504]	926 [497]	897 [481]	857 [458]	784 [418]	711 [377]	1
RW1P	10 × 10	1/0 [070]	Med-low	1200 [649]	1193 [645]	1183 [639]	1163 [628]	1137 [614]	1084 [584]	1025 [552]	917 [492]	769 [409]
08A4821NAA		[6/6] 7/1	Med-high	1493 [812]	1481 [805]	1452 [789]	1411 [766]	1365 [741]	1220 [660]	1124 [607]	957 [514]	1
			High	1865 [1018]	1810 [988]	1737 [947]	1671 [911]	1608 [876]	1533 [834]	1457 [792]	1292 [700]	1135 [613]
			Low	904 [484]	875 [468]	845 [452]	798 [426]	735 [391]	688 [364]	643 [339]	593 [312]	539 [282]
RW1P	11 × 11	2/4 [550]	Med-low	1189 [643]	1165 [629]	1114 [601]	1092 [589]	1057 [569]	1005 [541]	947 [508]	879 [471]	821 [438]
10A6024NAA		[600] <del>1</del> /0	Med-high	1326 [719]	1304 [707]	1286 [697]	1266 [686]	1244 [673]	1217 [658]	1189 [643]	1140 [616]	1060 [571]
			High	1970 [1077]	1951 [1066]	1937 [1058]	1926 [1052]	1895 [1035]	1865 [1018]	1759 [959]	1673 [912]	1624 [884]
Control of the contro	Blower porformance measured without filter in place	4: 40+1:+ +: 104+i.4	00010 0									

Blower performance measured without filter in place.

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

				HYDRONIC AIR	IC AIR HANDLER AIR FLOW PERFORMANCE — ECHO TECH MODELS	LOW PERFORM	ANCE — ECHO 1	TECH MODELS				
- CP	Blower Size	Motor HP	Blower			CFM [L/s] Ai	r Delivery Exter	nal Static Pressu	CFM [L/s] Air Delivery External Static Pressure Inches Water Column [kPa]	Column [kPa]		
	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]
			Low	686 [324]	634 [299]	582 [275]	530 [250]	Ι		I		
!			Med-low	723 [341]	688 [325]	617 [291]	567 [268]	512 [242]	459 [217]	1	1	I
RW1T 04A2414NAA	10 × 6 [254 × 152]	1/3 [248]	Med	748 [353]	697 [329]	648 [306]	597 [282]	548 [259]	491 [232]	445 [210]		I
			Med-high	922 [435]	885 [418]	849 [401]	811 [383]	775 [366]	733 [346]	695 [328]	644 [304]	645 [304]
			High	940 [444]	917 [433]	875 [413]	838 [392]	799 [377]	760 [359]	716 [338]	673 [318]	628 [296]
			Low	646 [305]	582 [275]	517 [244]	436 [206]	1	l	1	1	I
			Med-low	984 [464]	937 [442]	894 [422]	846 [399]	798 [377]	757 [357]	710 [335]	l	I
RW1T 06A3617NAA	10 × 8 [254 × 203]	1/2 [373]	Med	1037 [489]	995 [470]	953 [450]	910 [429]	868 [410]	821 [387]	781 [369]	737 [348]	I
			Med-high	1161 [548]	1020 [481]	1078 [509]	1040 [491]	999 [471]	963 [454]	920 [434]	873 [412]	753 [355]
			High	1397 [659]	1354 [639]	1321 [623]	1279 [604]	1238 [584]	1193 [563]	1157 [546]	1068 [504]	956 [451]
			Low	815 [385]	765 [361]	715 [337]	665 [314]	614 [290]	558 [263]	514 [243]		1
i			Med-low	1284 [606]	1233 [582]	1178 [556]	1129 [533]	1070 [505]	999 [471]	927 [437]	876 [413]	823 [388]
RW1   08A4821NAA	10 × 10 [254 × 254]	3/4 [559]	Med	1419 [670]	1373 [648]	1323 [624]	1282 [605]	1228 [580]	1180 [557]	1129 [533]	1054 [497]	981 [463]
			Med-high	1485 [701]	1452 [685]	1418 [669]	1386 [654]	1346 [635]	1313 [620]	1272 [600]	1222 [577]	1195 [564]
			High	1745 [824]	1722 [813]	1692 [799]	1664 [785]	1630 [769]	1599 [755]	1566 [739]	1504 [710]	1356 [640]
			Low	1044 [493]	953 [450]	867 [409]	[362] 767	667 [315]	579 [273]	501 [236]		
i	:		Med-low	1010 [477]	970 [458]	936 [442]	902 [426]	867 [409]	832 [393]	[228] 862	766 [362]	725 [342]
RW1   10A6024NAA	11 × 11 [279 × 279]	3/4 [559]	Med	1247 [589]	1183 [558]	1121 [529]	1064 [502]	999 [471]	933 [440]	864 [408]	[978] 797	735 [347]
			Med-high	1834 [866]	1768 [834]	1697 [801]	1639 [774]	1585 [748]	1539 [726]	1478 [698]	1427 [673]	1370 [647]
			High	2008 [948]	1956 [923]	1905 [899]	1844 [870]	1802 [850]	1750 [826]	1698 [801]	1655 [781]	1604 [757]

Blower performance measured without filter in place.

### **Hydronic Air Handler with Tankless Water Heater Performance**

AIR HANDLER	WATE	R TEMPERA	TURE	WATER Flow rate	BLOWER	EXTERNAL STATIC PRESSURE	AIR FLOW	AIF	RTEMPERATI	JRE	HEAT Capacity
MODEL	INLET	OUTLET	DELTA	(CDM)	SPEED	(IN W.C.)	(CEM) [1 /e]	INLET	OUTLET	DELTA	(BTU/HR)
		(°F) [°C]		(GPM)		(IN. W.C.)	(CFM) [L/s]		(°F) [°C]		` [kW] ´
	120 [49]	109 [43]	11 [6]	5.0					102 [39]	31 [29]	26914 [8]
	130 [54]	116 [47]	14 [7]	4.6					108 [42.1]	36 [26]	31488 [9]
RW1*04A	140 [60]	122 [50]	18 [10]	4.0	High	0.54	800 [378]	68 [20]	113 [44.7]	41 [23]	35628 [10]
	150 [66]	129 [54]	21 [12]	3.8					119 [48.3]	47 [20]	40593 [12]
	160 [71]	132 [56]	28 [15]	3.3					120 [48.9]	53 [19]	45454 [13]
	120 [49]	96 [36]	24 [13]	4.0					104 [40.2]	36 [28]	47040 [14]
	130 [54]	101 [38]	29 [16]	3.8					110 [43.3]	42 [25]	54300 [16]
RW1*06A	140 [60]	105 [41]	35 [21]	3.3	High	0.59	1200 [566]	68 [20]	112 [44.7]	44 [23]	57598 [17]
	150 [66]	115 [46]	35 [20]	3.4					114 [45.4]	46 [23]	59348 [17]
	160 [71]	121 [49]	39 [22]	3.3					118 [47.6]	50 [20]	64398 [19]
	120 [49]	100 [38]	10 [11]	4.8					95 [35.1]	27 [33]	47766 [14]
	130 [54]	103 [39]	27 [15]	4.2					100 [37.6]	32 [30]	55703 [16]
RW1*08A	140 [60]	105 [41]	35 [21]	3.6	High	0.5	1625 [767]	68 [20]	104 [39.7]	36 [28]	62341 [18]
	150 [66]	108 [42]	42 [24]	3.5					110 [43.5]	42 [25]	74147 [22]
	160 [71]	106 [41]	54 [30]	3.0					114 [45.6]	46 [22]	80997 [24]
	120 [49]	93 [34]	27 [15]	4.6					100 [37.8]	32 [30]	62308 [18]
	130 [54]	98 [37]	32 [17]	4.2					103 [39.3]	35 [29]	67635 [20]
RW1*10A	140 [60]	101 [38]	39 [22]	3.6	High	0.5	1800 [850]	68 [20]	104 [40]	36 [28]	69936 [20]
	150 [66]	103 [40]	47 [26]	3.6					111 [44]	43 [24]	84130 [25]
	160 [71]	101 [38]	59 [33]	3.3					118[47.9]	50 [20]	97514 [29]

CFM = Cubic Feet Per Minute ESP = External Static Pressure \*Recommended Operating Point Inlet Air at 68°F [20°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]



### Rheem Prestige™ RTGH is a series of high-efficiency condensing tankless gas water heaters designed for continuous hot water

### **Efficiency**

- Up to .94 EF 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
- SCAQMD rule 1146.2 compliant
- RTGH-95 for 3 bathroom homes\*-9.5 gal./min. at 35°F rise max., 8.4 gal./min. at 45°F rise
- RTGH-90 for 2-3 bathroom homes\*-9.0 gal./min. at 35°F rise max., 7.5 gal./min. at 45°F rise
- RTGH-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 (up to 38 ft. of 3" PVC pipe or 5 ft. of 2" PVC pipe). See instructions for details
- · Hot-start programming helps minimize fluctuation in water temperature, referred to as "cold water sandwich effect," during periods of frequent on/off operation
- Built-in electric blower
- Exclusive! Guardian OFW™ overheat film wrap
- 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
- 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

- 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
- · Required manual gas isolation valve included
- EZ- Spec™ Sizing Software advanced online tool that takes the guess work out of sizing tankless applications - available at www.rheem.com/tankless

### Warrantv

• 12-Year heat exchanger - residential, 5-year heat exchanger - commercial, 5-year parts and 1-year labor See Warranty Certificate for complete information

### **Commercial Applications**

The RTGH Condensing Tankless Series can be upgraded for hightemperature commercial use.

• Temperature range is 85°F to 185°F

### **RTGH-95 Upgrade Kits**

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

### RTGH-90 Upgrade Kits

RTG20244A for RTGH-90DVLN RTG20244B for RTGH-90DVLP RTG20244C for RTGH-90XLN RTG20244D for RTGH-90XLP

### RTGH-84 Upgrade Kits

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

Note: These upgrade kits are not compatible with previous models. See the Tankless Parts and Accessories 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.



RTGH-DVL

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



RTGH-XL

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















### Rheem Prestige™ Specifications

DESC	RIPTION			FEATU	JRES			ROUG	HING	IN DIM	ENSION	IS (SHO	WN IN IN	CHES)	E	ENERGY IN	IFO.
MODEL	GAS INPUT		TEMP.	MIN. FLOW/ ACTIVATION	GPM @ 77° RISE	GPM @ 45° RISE	MAX.	CONNEC	TION				VENT	SHIP. WEIGHT	ENERGY	RECOVERY	EST. YEARLY ENERGY COST
NUMBER	BTU/H	TYPE	RANGE	GPM	MAX.	MAX.	GPM	WATER	GAS	HEIGHT	WIDTH	DEPTH	DIAM.	(LBS.)	FACTOR	EFFICIENCY	NAT/LP
Rheem Pre	estige™	RTGH-	95 for	3 Bathro	om Ho	omes											
RTGH-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%	\$174/421
RTGH-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%	\$174/421
Rheem Pre	stige™	RTGH-	90 for	2-3 Bath	room	Homes	5										
RTGH-90DVLN	11,000- 180,000	Indoor Direct Vent	85° to 140° F	0.26/0.40	4.4	7.5	9.0	3/4	3/4	27-1/2	18-1/2	9-3/4	2" or 3" PVC 2-Pipe	82	.93	93%	\$176/425
RTGH-90XLN	11,000- 180,000	Outdoor	85° to 140° F	0.26/0.40	4.4	7.5	9.0	3/4	3/4	27-1/2	18-1/2	9-3/4	N/A	82	.93	93%	\$176/425
Rheem Pre	estige™	RTGH-	84 for	2-3 Bath	room	Homes	5										
RTGH-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	.92	92%	\$178/430
RTGH-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	92%	\$178/430

Estimated energy cost based on a national average fuel cost of \$1.09/therm for natural gas and \$2.41/gallon for LP. Energy factor determined by the U.S. Department of Energy (DOE) test procedures.

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

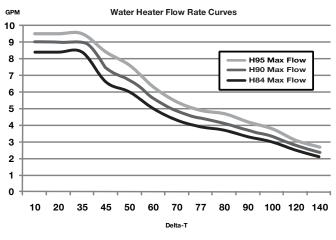
- SCAQMD 1146.2 compliant.
- Factory set maximum temperature is 120° F. See Use and Care Manual for setting.
- Consult factory for information on sizing the application.
- Add a "C" to the model number when ordering Canadian models. Outdoor models are only for seasonal use in Canada. Please contact Rheem 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 RTGH-95 models, up to 180,000 Btu/h for RTGH-90 models, up to 157,000 Btu/h for RTGH-84 models. (Consult your gas supplier)

			Tem	erature	Rise (	° <b>F</b> )			
Model Number	35°	45°	50°	60°	70°	77°	80°	90°	100°
RTGH-95 Water Flow (GPM)	9.5	8.4	7.6	6.3	5.4	4.9	4.7	4.2	3.8
RTGH-90 Water Flow (GPM)	9.0	7.5	6.8	5.6	4.8	4.4	4.2	3.8	3.4
RTGH-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.



## 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)

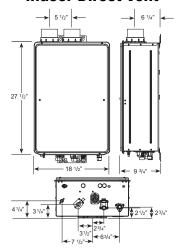
(ULC-S636 pipe must be used for Canada.)

### **Parts and Accessories**

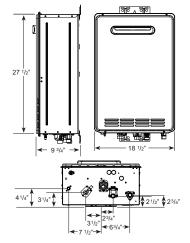
Venting & terminations – 2" or 3" PVC, recess boxes, pipe covers, extra remote controls, EZ-Link $^{\text{TM}}$  cable, manifolds and cables, service valve kits, service parts and flush kits.

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

### **Indoor Direct Vent**



### Outdoor





# Rheem RTG is a series of ultra low NOx, mid-efficiency tankless gas water heaters designed for continuous hot water

### **Efficiency**

- .82 EF with all-copper 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
- RTG-95 for 3 bathroom homes\*–
  9.5 gal./min. at 35°F rise max.,
  7.4 gal./min. at 45°F rise
- RTG-84 for 2-3 bathroom homes\*–
  8.4 gal./min. at 35°F rise max.,
  6.7 gal./min. at 45°F rise
- RTG-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 OFW™ overheat film wrap
- EZ-Link<sup>™</sup> 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
- Required manual gas isolation valve included
- EZ- Spec<sup>™</sup> Sizing Software advanced online tool that takes the guess work out of sizing tankless applications – available at www.rheem.com/tankless

### Warranty

12-Year heat exchanger – residential,
 5-year heat exchanger – commercial,
 5-year parts and 1-year labor
 See Warranty Certificate for complete information

### **Commercial Applications**

The RTG Tankless Series can be upgraded for high-temperature commercial and hydronic use.

• Temperature range is 85°F to 185°F

### **RTG-95 Upgrade Kits**

RTG20236A for RTG-95DVLN RTG20236B for RTG-95DVLP RTG20236C for RTG-95XLN RTG20236D for RTG-95XLP

### **RTG-84 Upgrade Kits**

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

Note: These upgrade kits are not compatible with previous models. See the latest Tankless Parts and Accessories 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.



**RTG-DVL** 

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



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



### **Specifications**

DESCI	RIPTION			FEA	TURES			ROUG	HING	IN DIM	ENSION	IS (SHC	WN IN IN	CHES)	E	ENERGY IN	NFO.
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	HEIGHT	WIDTH	DEPTH	VENT DIAM.	SHIP. WEIGHT (LBS.)	ENERGY FACTOR	RECOVERY EFFICIENCY	D.O.E. ANN. OP. COST NAT/LP
RTG-95 ULTRA	LOW NOx	SERIES F	OR 3 BA	THROOM H	OMES												
RTG-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	84%	\$199/482
RTG-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	83%	\$199/482
RTG-84 ULTRA	LOW NOx	SERIES F	OR 2-3 E	BATHROOM	HOMES												
RTG-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	84%	\$199/482
RTG-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	83%	\$199/482
RTG-64 ULTRA	LOW NOx	SERIES F	OR 1-2 E	BATHROOM	HOMES												
RTG-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 CONCENTRIC	54	.82	84%	\$199/482
RTG-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	83%	\$199/482

Energy Factor and Average Annual Operating Costs based on 2013 D.O.E. (Department of Energy) test procedures. D.O.E. national average fuel rate natural gas \$1.09/therm; LP \$2.41/gallon.

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

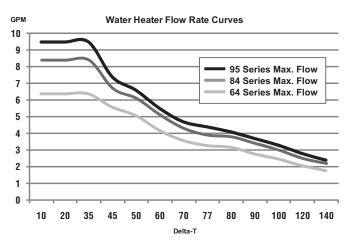
- SCQAMD rule 1146.2 compliant.
- Factory set maximum temperature is 120° F. See Use and Care Manual for setting.
- Consult factory for information on sizing the application.
- Add a "C" to the model number when ordering Canadian models. Outdoor models are only for seasonal use in Canada. Please contact Rheem 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 RTG-95 models, up to 180,000 Btu/h for RTG-84 models and up to 150,000 Btu/h for RTG-64 models. (Consult your gas supplier)

	Temperature Rise (° F)								
Model Number	35°	45°	50°	60°	70°	77°	80°	90°	100°
RTG-95 Water Flow (GPM)	9.5	7.4	6.6	5.5	4.7	4.3	4.1	3.7	3.3
RTG-84 Water Flow (GPM)	8.4	6.7	6.1	5.1	4.3	3.9	3.8	3.4	3.0
RTG-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.



## 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)

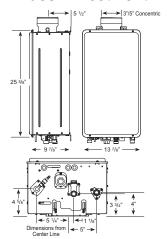
(Manufacturer approved venting required)

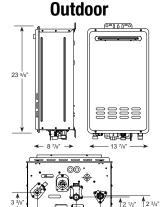
### **Parts and Accessories**

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

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

### **Indoor Direct Vent**





### **ACCESSORIES**

EXTERNAL BOTTOM FILTER RACK: RXHF-14, 17, 21, 24

**EXTERNAL SIDE FILTER RACK: RXHF-H** 

FILTER RACK FILTER SIZES* INCHES [mm]						
MODEL	RXHF (BOTTOM)	RXHF-H (SIDE)				
RW1*04A	15 <sup>3</sup> /4 x 25	15 <sup>3</sup> /4 x 25				
(RXHF-14)	[400 x 635]	[400 x 635]				
RW1*06A	15 <sup>3</sup> /4 x 25	15 <sup>3</sup> /4 x 25				
(RXHF-17)	[400 x 635]	[400 x 635]				
RW1*08A	22 <sup>3</sup> /4 x 25	15 <sup>3</sup> /4 x 25				
(RXHF-21)	[578 x 635]	[400 x 635]				
RW1*10A	22 <sup>3</sup> /4 x 25	15 <sup>3</sup> / <sub>4</sub> x 25				
(RXHF-24)	[578 x 635]	[400 x 635]				

<sup>\*</sup>Filter racks are shipped without filters.

[ ] Designates Metric Conversions

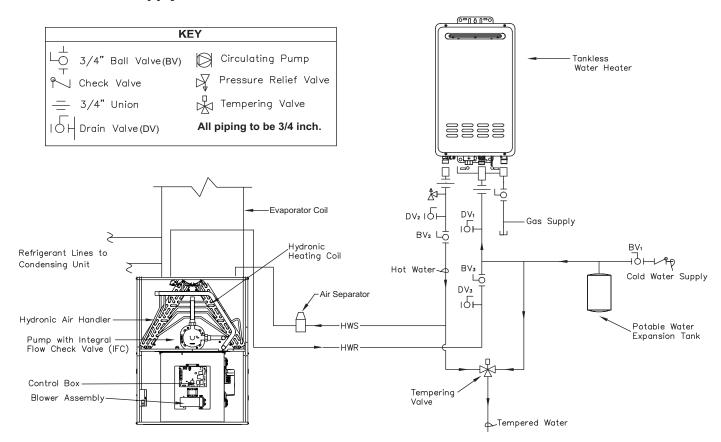
### **TANKLESS WATER HEATER ACCESSORIES**

Visit RheemTankless.com for a current listing of Rheem Tankless accessories.

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

<sup>1&</sup>quot; [25.4 mm] filter.

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



### **GENERAL TERMS OF LIMITED WARRANTY\***

Rheem 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, Rheem reserves the right to make changes without notice.

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

