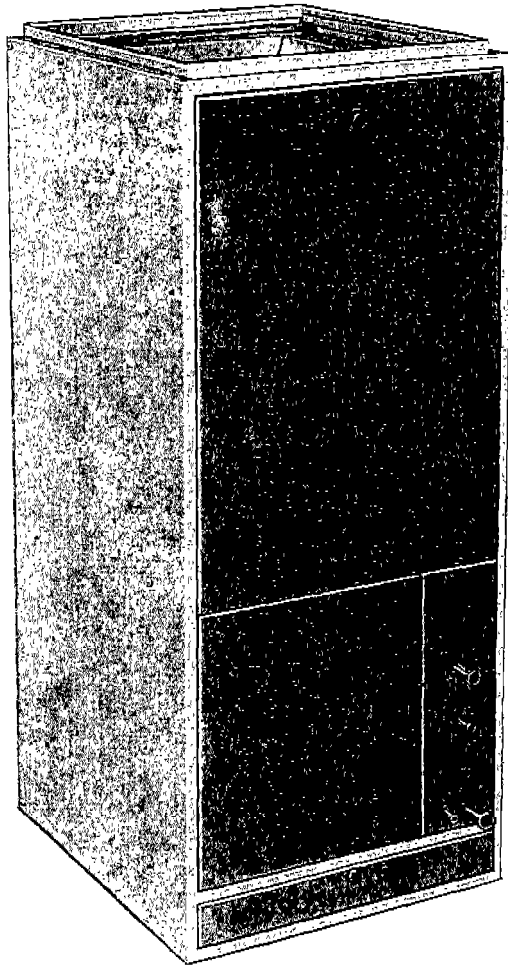
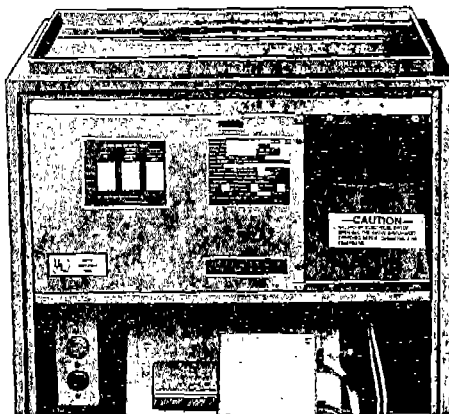


# AIR HANDLERS



Indoor Unit shown for upflow application. Unit may also be field modified for either downflow or horizontal application.



Indoor Unit shown for upflow application with optional circuit breaker installed.



## AIR HANDLERS

### RHQA- SERIES

#### Six Models

Heating 5 KW to 29 KW for Heat Pump, Air Conditioning and Heating Applications

The Rheem® RHQA- Air Handler Indoor unit is designed for use in residential, multifamily and light commercial heat pump applications or no heat fan coil applications.

The units can be installed for either vertical (upflow or downflow) or horizontal airflow applications.

A patented Watt-restrictor limits the amount of supplemental KW input necessary to provide only the heat required for warmth and comfort.

Watt-restrictor, standard on RHQA-08, 10 above 5KW and on RHQA-12, 13, 16 and 20 above 10KW stage supplemental heat so that only the necessary amount of supplemental heat is engaged to maintain comfort in the home. Watt-restrictors available on additional models to meet Florida requirements.

When combined with a Rheem Heat Pump Outdoor unit, the RHQA- Air Handler provides a system capable of delivering a maximum HSPF (Heating Seasonal Performance Factor) of 8.85 in the heating mode or a maximum standard S.E.E.R. (Seasonal Energy Efficiency Ratio) of 13.10 in the cooling mode.



"CERTIFIED UNDER THE A.R.I. CERTIFICATION PROGRAM-A.R.I. STANDARDS 210/240-84"

## Features

### RHQA- Series Air Handlers

The following additional features, plus its installation flexibility, make it an excellent choice for new construction or as a replacement or add on unit:

- Available upflow, downflow, or horizontal airflow applications.
- Coils mount inside the cabinet.
- Built-in optional electric heat for auxiliary heating up to 29 KW.
- Auxiliary heat strips are staged by the Watt-restrictor located inside the indoor unit rather than by thermostats located in the outdoor unit.
- Cleanable air filter furnished standard.
- Direct drive blower both statically and dynamically balanced.
- Factory installed internal fusing or circuit breakers over 10KW on single phase 208/240 volt models.
- Hinged control access doors standard (except circuit breaker models).
- Factory installed circuit breakers available (single phase units).
- Blower off time delay standard on RHQA- (single phase models only).
- All models are U.L. listed for either attic or closet installation.
- Insulated blower compartment furnished standard.
- U.L. listed with dual voltage 208-240/60/1 for 208 or 240 volt power supply. Also three phase power on sizes 15KW and larger, and 115V single phase for fan coil (no heat) models.

## Engineering Features

1. Power versatility — fused or circuit breaker, single, combination or multiple power line connections.
2. Insulated cabinet for cooling section standard on all units (units may have cooling coil added later in space provided).
3. Wide selection of cooling coils fit inside the cabinet for either upflow, downflow, or horizontal applications.
4. Direct drive blower assemblies are mounted on a slide-out rail for ease of service.
5. Blower compartment is factory insulated for thermal and sound benefits.
6. Cleanable air filter furnished standard, for bottom return only.
7. Direct drive blower assembly with motor factory lubricated does not require periodic maintenance.
8. Ease of access through front panel for electrical controls and components and blower—air filter access.
9. Sweat fittings standard on all models.
10. Watt-restrictor, standard on RHQA-08, 10 above 5KW and on RHQA-12, 13, 16 and 20 above 10KW stage supplemental heat so that only the necessary amount of supplemental heat is engaged to maintain comfort in the home. Watt-restrictors available on additional models to meet Florida requirements.
11. Defrost heat sensor modulates electric heat during defrost.

## Optional Equipment

- Circuit Breakers—208v/240v single phase only
- Side return air plenum
- Combustible Floor Base (counterflow)
- Horizontal Drain Pan Kit for Evaporator Coils

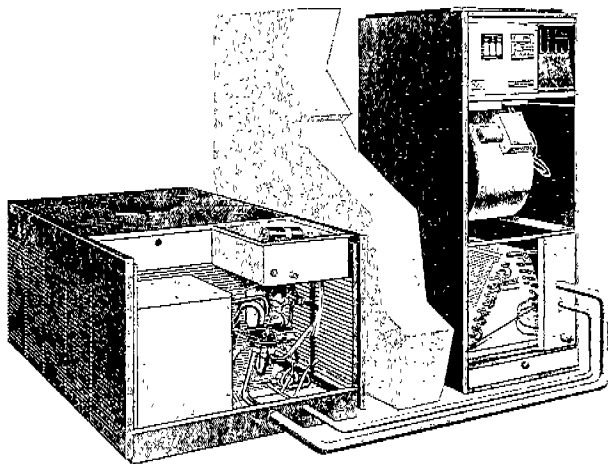
## Rheem Heat Pump System

For all season home comfort, performance and energy conservation, choose a Rheem Heat Pump and RHQA- Series Air Handler.

More than a reverse cycle air conditioner, it's a specially designed combination winter/summer comfort system using a single indoor coil for heating and cooling.

To choose a heat pump designed for use with the RHQA- air handler refer to the heat pump specification sheets.

RHQA- Series  
Air Handler Indoor Unit



Heat Pump Outdoor Unit

## Watt-restrictor

Supplemental heat, provided by electric heating elements may be necessary in some areas when heating requirements for indoor comfort exceed the capacity of the heat pump system.

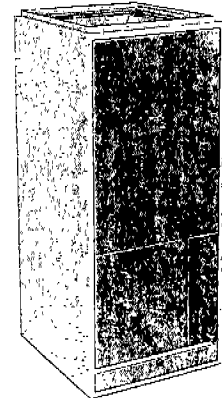
When supplemental heat is required, units with the Watt-restrictor feature operate as follows:

1. The second stage of the wall thermostat allows the heating elements to activate.
2. The Watt-restrictor determines the minimum amount of KW input necessary to provide only the supplemental heat required for warmth and comfort in the home.
3. The supplemental heat required for warmth and comfort as determined by the Watt-restrictor is then circulated through the system.

The Watt-restrictor utilizes sensing devices in the unit to measure the air leaving the indoor coil and disengage unnecessary heating elements when that temperature is at least 90°F [32°C]. (In this mode your system is controlled by the first stage of the wall thermostat.) This occurs only when the second stage of the wall thermostat calls for heat.

The Watt-restrictor is particularly effective when these conditions exist:

1. During defrost cycle
  2. During cold start ups
  3. If heat pump should fail
  4. If heat pump output is insufficient
- Unheated air leaves the heat pump indoor coil under all of the above conditions. Should the second stage of the thermostat call for additional heat, the watt-restrictor will automatically determine the number of heating elements necessary to provide it.



# Model Identification

## Heat Pump Air Handlers or Fan Coil Air Handlers\* without Electric Heat

		R	H	Q	A-	10	10	J	A	V
Model Unit Available	Model	Air Handler (Optional Electric Heat)	Heat Pump	Design Series	Nom. Air Volume [L/s]	Number Represents the Nominal Unit Electric Heat K.W. ①-②	K.W. ① ② Converted In BTU/Hr. @ 240V	Electrical Designation Power Supply And Internal Overcurrent	Indoor Coils Factory Installed ③ ④	Indoor Coil Position
RHQA-08*	R	H	Q	A	08 800 CFM [378]	00=No Heat 208/240 V. Only 05=4.8 KW 08=7.6 KW 10=9.6 KW	16,382 32,765	A=115 10 Non-Fused-No Heat B=240/208 10 Non-Fused-10 KW or Less S=240/208 10 Circuit Breaker Single Circuit-10 KW or Less	P = RCQB-B018 Q = RCQB-B024	V = Vertical Application H = Horizontal Application BLANK No Coil
RHQA-10*	R	H	Q	A	10 1000 CFM [472]	00=No Heat 208/240 V. Only 05=4.8 KW 08=7.6 KW 10=9.6 KW 15=14.4 KW	16,382 32,765 49,147	B=240/208 10 Non-Fused-10 KW or Less J=240/208 10 Fused Single Circuit-11 KW or More S=240/208 10 Circuit Breaker Single Circuit-10 KW or Less T=240/208 10 Circuit Breaker Comb. Circuit-11 KW or More	N = RCQB-B018 P = RCQB-B024	V = Vertical Application H = Horizontal Application BLANK No Coil
RHQA-12*	R	H	Q	A	12 1200 CFM [566]	00=No Heat 208/240 v. Only 05=4.8 KW 10=9.6 KW 15=14.4 KW 20=19.2 KW* *Available in 30	16,382 32,765 49,147 65,530	B=240/208 10 Non-Fused-10 KW or Less J=240/208 10 Fused Single Circuit-11 KW or More K=240/208 30 Fused Single Circuit-20 KW or More Non-Fused Single Circuit-18 KW or Less S=240/208 10 Circuit Breaker Single Circuit-10 KW or Less T=240/208 10 Circuit Breaker Comb. Circuit ⑤ 11 KW or More	N = RCQB-B030 P = RCQB-B036	V = Vertical Application H = Horizontal Application BLANK No Coil
RHQA-13*	R	H	Q	A	13 1200 CFM [566]	00=No Heat 208/240 V. Only 05=4.8 KW 10=9.6 KW 15=14.4 KW 20=19.2 KW* *Available in 30	16,382 32,765 49,147 65,530	A=115 10 Non-Fused-No Heat B=240/208 10 Non-Fused-10 KW or Less J=240/208 10 Fused Single Circuit-11 KW or More K=240/208 30 Fused Single Circuit-20 KW or More Non-Fused Single Circuit-18 KW or Less S=240/208 10 Circuit Breaker Single Circuit-10 KW or Less T=240/208 10 Circuit Breaker Comb. Circuit ⑤ 11 KW or More	Q = RCQB-B030 R = RCQB-B036	V = Vertical Application H = Horizontal Application BLANK No Coil
RHQA-16*	R	H	Q	A	16 1600 CFM [755]	00=No Heat 208/240 V. Only 08=7.6 KW 10=9.6 KW 15=14.4 KW* 20=19.2 KW* 24=24.0 KW* *Available in 30  460 V. 30 Only 12=11.2 KW 20=19.2 KW 23=22.4 KW	16,382 25,939 32,765 49,147 65,530 81,912  KW @ 460 38,192 65,530 76,384	A=115 10 Non-Fused-No Heat B=240/208 10 Non-Fused-10 KW or Less J=240/208 10 Fused Single Circuit-11 KW or More K=240/208 30 Fused Single Circuit-20 KW or More Non-Fused Single Circuit-18 KW or Less S=240/208 10 Circuit Breaker Single Circuit-10 KW or Less T=240/208 10 Circuit Breaker Comb. Circuit ⑤ 11 KW or More F=480 30 Non-Fused Single Circuit -12 KW or More G=480 10 Non-Fused-No Heat	V = RCQB-B042 W = RCQB-B048	V = Vertical Application H = Horizontal Application BLANK No Coil
RHQA-20*	R	H	Q	A	20 2000 CFM [944]	00=No Heat 208/240 V. Only 10=9.6 KW 15=14.4 KW* 20=19.2 KW* 24=24.0 KW* 29=28.8 KW* *Available in 30  460 V. 30 Only 12=11.2 KW 20=19.2 KW 23=22.4 KW 31=30.4 KW 39=38.4 KW	16,382 32,765 49,147 65,530 61,912 98,294  KW @ 460 38,192 65,530 76,384 103,725 131,020	A=115 10 Non-Fused-No Heat B=240/208 10 Non-Fused-10 KW or Less J=240/208 10 Fused Single Circuit-11 KW or More K=240/208 30 Fused Single Circuit-20 KW or More Non-Fused Single Circuit-18 KW or Less S=240/208 10 Circuit Breaker Single Circuit-10 KW or Less T=240/208 10 Circuit Breaker Comb. Circuit ⑤ 11 KW or More F=480 30 Non-Fused Single Circuit -12 KW or More G=480 10 Non-Fused-No Heat	N = RCQB-B060	V = Vertical Application H = Horizontal Application BLANK No Coil

① K.W. derated @ 208V. Refer to page 7 for operation at voltages other than 240V.

② Element K.W. does not include fan motor power.

③ See chart on page 3 for list of field installed coils and application information for both factory and field installed coils

④ See specification sheet for coil application with outdoor heat pump models.

⑤ Combination circuit for single or multiple power supplies.

NOTE: Electrical and Heating designations are not available for all model combinations.

# Application Data—Heat Pump Air Handler or Fan Coil Air Handler without Electric Heat

Air Handler Model	Indoor Coil Model ①	Outdoor Unit Size	Model No. = Max. KW	Blower Speed ⑤	Application Notes	Motor HP [W]	No. Speeds	Blower Size In. [mm]	Volts	Phase	Horiz. ① Drain Pan Kit RXCH-	Cleanable Filter ⑦ In. [mm]
<b>HEAT PUMP INDOOR COILS WITH EXPANSION VALVE</b>												
<b>INDOOR COILS FOR USE WITH RPGB-, RPMA-, and RANA- OUTDOOR UNITS ONLY.</b>												
RHQA-08	RCQB-B018 RCQB-B024	018 024	10 10	Lo Hi	③ ③	1/8 [93]	2	9x7 [229x178]	208/240	1	A10	17x19 1/4 [432x489]
RHQA-10	RCQB-B018 RCQB-B024	018 024	12 15	Med-Hi Hi	③ ③	1/4 [186]	4	9x7 [229x178]	208/240	1	A10	17x19 1/4 [432x489]
RHQA-12	RCQB-B030 RCQB-B036 RCQB-	030 036 042	15 20 20	Med-Hi Hi Hi		1/3 [249]	4	10x7 [254x178]	208/240	1 or 3	A14	17x21 3/8 [432x543]
RHQA-13	RCQB-B030 RCQB-B036 RCQB-	030 036 042	15 20 20	Lo Hi Hi		1/4 [186]	2	11x7 [279x178]	208/240	1 or 3	A14	17x21 3/8 [432x543]
RHQA-16	RCQB-B042 RCQB-B048	042 048	22 24	Lo Hi		1/3 [249]	2	11x10 [279x254]	208/240 480	1 or 3	B16	22x23 7/8 [559x606]
RHQA-20	RCQB-B060	060	29	Hi		1/2 [373]	1	12x9 [305x229]	208/240 480	1 or 3	B16	22x23 7/8 [559x606]
<b>STANDARD COOLING COILS ⑥</b>												
RHQA-08	RCAB-A021 RCAB-A025	018 024	00 00	Lo Lo	— —	1/8 [93]	2	9x7 [229x178]	115 208/240	1	A10	17x19 1/4 [432x489]
RHQA-13	RCAB-A031 RCAB-A037	030 036	00 00	Lo Hi	— —	1/4 [186]	2	11x7 [279x178]	115 208/240	1 or 3	A14	17x21 3/8 [432x543]
RHQA-16	RCAB-A049 RCAB-A049	042 048	00 00	Lo Hi	④ ④	1/3 [249]	1	11x10 [279x254]	115 208/240 480	1 or 3	B16	22x23 7/8 [559x606]
RHQA-20	RCEB-A059	060	00	Hi	②	1/2 [373]	1	12x9 [305x229]	208/240 480	1 or 3	B16	22x23 7/8 [559x606]
<b>HIGH EFFICIENCY COOLING COILS</b>												
RHQA-08	RCLB-A024 RCLB-A024	018 024	00 00	Lo Hi	③ ③	1/8 [93]	2	9x7 [229x178]	115 208/240	1	A10	17x19 1/4 [432x489]
RHQA-13	RCLB-A030 RCLB-A036	030 036	00 00	Lo Hi	— —	1/4 [186]	2	11x7 [279x178]	115 208/240	1 or 3	A14	17x21 3/8 [432x543]
RHQA-16	RCLB-A048 RCLB-A048 RCMB-A048	042 048 048	00 00 00	Lo Hi Hi	④ ④ —	1/3 [249]	2	11x10 [279x254]	115 208/240 480	1 or 3	B16	22x23 7/8 [559x606]
RHQA-20	RCMB-A060	060	00	Hi	—	1/2 [373]	1	12x9 [305x229]	208/240 480	1 or 3	B16	22x23 7/8 [559x606]
<b>HIGH EFFICIENCY COOLING COILS WITH EXPANSION VALVE</b>												
RHQA-08	RCTB-A018 RCTB-A024	018 024	00 00	Lo Hi	— ③	1/8 [93]	2	9x7 [229x178]	115 208/240	1	A10	17x19 1/4 [432x489]
RHQA-13	RCTB-A025 RCTB-A036 RCTB-A036	024 030 036	00 00 00	Lo Lo Hi	— — —	1/4 [186]	2	11x7 [279x178]	115 208/240	1 or 3	A14	17x21 3/8 [432x543]
RHQA-16	RCTB-A037 RCTB-A048 RCTB-A048	036 042 048	00 00 00	Lo Lo Hi	④ ④ ④	1/3 [249]	2	11x10 [279x254]	115 208/240 480	1 or 3	B16	22x23 7/8 [559x606]
RHQA-20	RCTB-B060	060	00	Hi	—	1/2 [373]	1	12x9 [305x229]	208/240 480	1 or 3	B16	22x23 7/8 [559x606]

① All coils are suitable for upflow, downflow and horizontal airflow unless otherwise noted. All horizontal applications require horizontal drain pan kits as indicated.

② Coil is not suitable for downflow application.

③ Coil will fit in RHQA- unit size shown with removal and replacement of internal parts. This requires access to screws on either side of air handler.

④ Coil installation requires RXCA-B16 adapter kit.

⑤ This is the normal heating or cooling speed and the minimum electric heating speed for maximum KW shown in chart. For other than normal duct static or voltage, see unit airflow data, page 5.

⑥ This indoor coil and outdoor unit size combination requires a flow check piston size change on the indoor coil to obtain an approved match. See application table in outdoor unit installation instructions.

⑦ All filters are cleanable.

⑧ CSA certified Systems.

# Air Handlers (Units not listed are not available)

Model	Type of Control								Approx. Shpg. Wt. Lbs. [Kg]
	*A	*B	*J	*K	*S	*T	*F	*G	
RHQA-0800*XX RHQA-0805*XX RHQA-0810*XX	N.A.		N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	78 [35.38] 78 [35.38] 78 [35.38]
RHQA-1000*XX RHQA-1005*XX RHQA-1010*XX RHQA-1015*XX	N.A.		N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	78 [35.38] 78 [35.38] 78 [35.38] 78 [35.38]
RHQA-1200*XX RHQA-1205*XX RHQA-1210*XX RHQA-1215*XX RHQA-1220*XX	N.A.		N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	98 [44.45] 98 [44.45] 98 [44.45] 98 [44.45] 98 [44.45]
RHQA-1300*XX RHQA-1305*XX RHQA-1310*XX RHQA-1315*XX RHQA-1320*XX	N.A.		N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	98 [44.45] 98 [44.45] 98 [44.45] 98 [44.45] 98 [44.45]
RHQA-1600*XX RHQA-1605*XX RHQA-1608*XX RHQA-1610*XX RHQA-1612*XX RHQA-1615*XX RHQA-1620*XX RHQA-1623*XX RHQA-1624*XX	N.A.		N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	131 [59.42] 131 [59.42] 131 [59.42] 131 [59.42] 131 [59.42] 131 [59.42] 131 [59.42] 131 [59.42] 131 [59.42]
RHQA-2000*XX RHQA-2010*XX RHQA-2012*XX RHQA-2015*XX RHQA-2020*XX RHQA-2023*XX RHQA-2024*XX RHQA-2029*XX RHQA-2031*XX RHQA-2039*XX	N.A.		N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	142 [64.41] 142 [64.41] 142 [64.41] 142 [64.41] 142 [64.41] 142 [64.41] 142 [64.41] 142 [64.41] 148 [67.13] 148 [67.13]

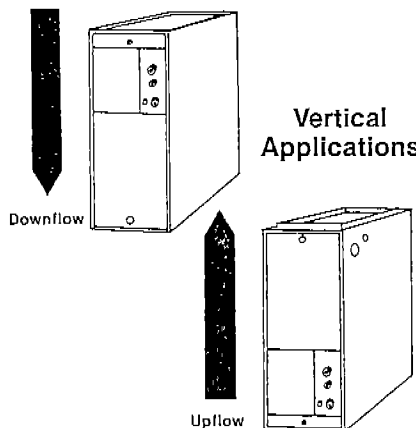
## Unit Airflow Data

Model No. RHQA-	Speed	Volts	CFM [L/s] External Duct Static Inches [kPa] H <sub>2</sub> O				
			.10 [.02]	.20 [.05]	.30 [.07]	.40 [.10]	.50 [.12]
08 ① ②	Hi	115/230 208	835 [394] 802 [379]	774 [365] 747 [353]	685 [323] 668 [315]		
	Lo	115/230 208	702 [331] 606 [286]	651 [307] 596 [281]	581 [274] 540 [255]		
10 ② ③	Hi	230 208	1030 [486] 975 [460]	990 [467] 955 [451]	925 [437]		834 [394] 814 [384]
	Med/Hi	230 208	894 [422] 754 [356]	884 [417] 764 [361]	854 [403] 754 [356]		759 [358] 678 [320]
	Med/Lo	230 208	734 [346] 568 [268]	734 [346] 598 [282]	724 [342] 603 [285]		673 [318] 593 [280]
	Lo	230 208	538 [254] 372 [176]	558 [263] 427 [202]	568 [268] 472 [223]	573 [270] 497 [235]	563 [266] 508 [240]
12 ② ③	Hi	230 208	1389 [656] 1263 [596]	1364 [644] 1257 [593]	1338 [631] 1242 [586]	1293 [610] 1217 [574]	1242 [586] 1182 [558]
	Med/Hi	230 208	1111 [524] 909 [429]	1151 [543] 960 [453]	1151 [543] 975 [460]	1131 [534] 980 [463]	1091 [515] 975 [460]

Model No. RHQA-	Speed	Volts	CFM [L/s] External Duct Static Inches [kPa] H <sub>2</sub> O				
			.10 [.02]	.20 [.05]	.30 [.07]	.40 [.10]	.50 [.12]
12 ② ③ (cont.)	Med/Lo	230 208	879 [415] 737 [348]	909 [429] 783 [370]	839 [443] 808 [381]	939 [443] 828 [391]	934 [441] 823 [388]
	Lo	230 208	763 [360] 626 [295]	813 [384] 667 [315]	838 [395] 697 [329]	843 [398] 717 [338]	848 [400] 737 [348]
13 ② ③	Hi	115/230 208	1313 [620] 1256 [593]	1227 [579] 1187 [560]	1151 [543]	1066 [503]	1040 [491]
	Lo	115/230 208	1182 [558] 1071 [505]	1121 [529] 1020 [481]	1061 [501] 980 [463]	990 [467] 909 [429]	
16 ③ ⑤	Hi	115/230/460 208	1768 [834] 1656 [782]	1687 [796] 1656 [782]	1591 [751]	1454 [686]	1303 [615]
	Lo	115/230/460 208	1636 [772] 1374 [648]	1566 [739] 1404 [663]	1454 [720] 1353 [639]	1313 [620] 1263 [596]	1252 [591]
20 ③ ⑥	Hi	115/230/460 208	2131 [1006] 2081 [982]	2030 [958] 1980 [934]	1929 [910]	1798 [849]	1616 [763]
	Lo	115/230/460 208	1980 [934] 1869 [882]	1929 [910] 1869 [882]	1757 [829]	1616 [763]	1601 [756]

- ① Airflow shown with (2) elements. Increase CFM ½% for each element less than (2).
- ② Airflow shown with coil. Increase CFM 4% for no coil.

- ③ Airflow shown with (4) elements. Increase CFM ½% for each element less than (4).
- ④ Airflow shown with (5) elements. Increase CFM ½% for each element less than (5).
- ⑤ Airflow shown with dry coil. Decrease CFM 1% for wet coil. Increase CFM 3% for no coil.
- ⑥ Airflow shown with (6) elements. Increase CFM ½% for each element less than (6).
- ⑦ Single speed motor.
- ⑧ Airflow shown with (3) elements. Increase CFM ½% for each element less than (3).



### Vertical Applications

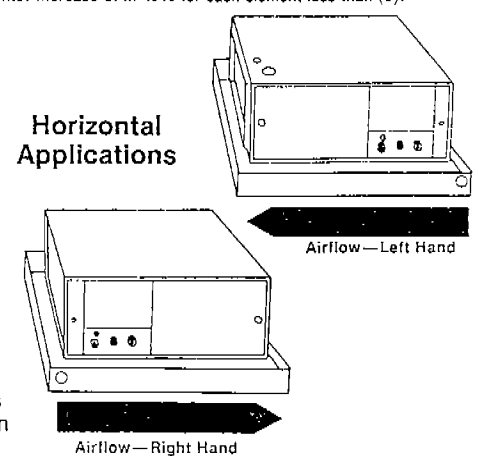
### Converting Upflow to Downflow

- Vertical units are shipped assembled for upflow applications.
- For downflow, remove coil door and coil.
- Turn unit upside down and place coil back in coil compartment.
- Replace coil door.

A combustible floor base is required when unit is applied counterflow on combustible flooring. (See page 8 for information.)

Horizontal units use the same indoor coil sections as vertical and counterflow units with the addition of a drain pan kit. See page 8 for information.

**CAUTION:** When coil is installed over a finished ceiling and/or living area, whether horizontally or vertically, it is recommended a secondary sheet metal condensate pan be constructed and installed under entire unit.



### Horizontal Applications

# Supplementary Heat Specifications

## Temperature Rise °F\* [°C]

CFM [L/s]	Total KW					
	5	10	15	20	25	30
500 [236]	32 [1.8]					
600 [283]	26 [-3.3]					
700 [330]			68 [20]			
800 [378]		40 [4.4]	59 [15]			
900 [425]		35 [1.7]	53 [11.7]	70 [21]		
1000 [472]		32 [1.8]	47 [8.3]	63 [17.2]		
1100 [519]		29 [-1.7]	43 [6.1]	57 [13.9]	72 [2.2]	
1200 [566]		26 [-3.3]	40 [4.4]	53 [11.7]	66 [18.9]	
1300 [614]			36 [2.2]	49 [9.4]	61 [16.1]	73 [22.8]
1400 [661]			34 [1.1]	45 [7.2]	56 [13.3]	67 [19.4]
1500 [708]			32 [1.8]	42 [5.6]	53 [11.7]	63 [17.2]
1600 [755]			30 [-1.1]	39 [3.8]	49 [9.4]	59 [15]
1700 [802]			28 [-2.2]	37 [2.8]	46 [7.8]	56 [13.3]
1800 [850]			26 [-3.3]	35 [1.7]	44 [6.7]	53 [11.7]
1900 [897]			25 [-3.8]	33 [5.5]	42 [5.6]	50 [10]
2000 [944]				32 [1.8]	40 [4.4]	47 [8.3]
2100 [991]				30 [-1.1]	38 [3.3]	45 [7.2]
2200 [1038]				29 [-1.7]	36 [2.2]	43 [6.1]

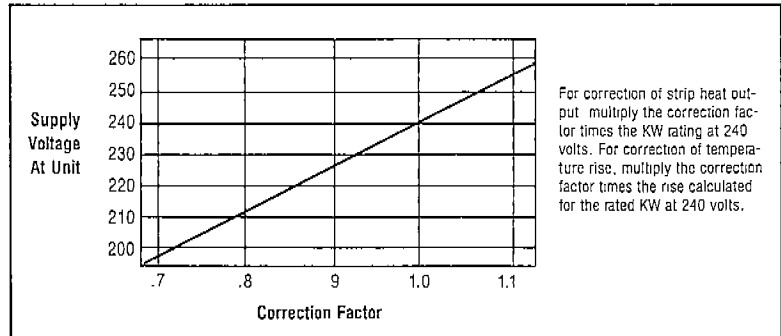
\*Based on actual KW without heat pump.

## Heating Temperature Rise

Formula: For Resistance Heat Only  
 Temp. Rise °F =  $\frac{3.16 \times \text{Watts}}{\text{CFM}}$

Where:  
 3.160 = Constant  
 Watts = Volts × Amps  
 CFM = Airflow

## Heating Capacity Correction Factor



## Power Supply Specifications Supplementary Heat

Unit Nominal KW	Element KW 240/208V	Phase	No. of Elements	Single Power Supply ③		Multiple Power Supplies ("T" Designation Only) ②						
				Circuit Ampacity	Circuit Protector ①	Circuit Ampacity				Circuit Protector ①		
						CKT 1	CKT 2	CKT 3	CKT 4	CKT 1	CKT 2	CKT 3
03	2.8/2.1	1	1	20/20	20/20	—	—	—	—	—	—	—
05	4.8/3.6	1	1	30/30	30/30	—	—	—	—	—	—	—
07	6.6/4.9	1	2	40/35	40/35	—	—	—	—	—	—	—
08	7.6/5.7	1	2	45/40	45/40	—	—	—	—	—	—	—
08	7.6/5.7	3	2	40/35	40/35	—	—	—	—	—	—	—
09	8.4/6.3	3	3	30/30	30/30	—	—	—	—	—	—	—
10	9.6/7.2	1	2	60/50	60/50	—	—	—	—	—	—	—
12	11.4/8.6	1	3	70/60	70/60	45/40	20	—	—	45/40	20	—
12	11.4/8.6	3	3	40/35	40/35	—	—	—	—	—	—	—
15	14.4/10.8	1	3	80/70	80/70	60/50	30	—	—	60/50	30	—
15	14.4/10.8	3	3	50/45	50/45	—	—	—	—	—	—	—
18	17.2/12.9	1	4	100/90	100/90	60/50	40/40	—	—	60/50	40/40	—
18	17.2/12.9	3	4	60/60	60/60	—	—	—	—	—	—	—
20	19.2/14.4	1	4	110/100	110/100	60/50	50/50	—	—	60/50	50/50	—
20	19.2/14.4	3	4	70/70	70/70	—	—	—	—	—	—	—
22	22.0/16.5	1	5	125/110	125/110	60/50	50/50	15	—	60/50	50/50	15
22	22.0/16.5	3	5	90/80	90/80	—	—	—	—	—	—	—
24	24.0/18.0	1	5	150/125	150/125	60/50	50/50	30	—	60/50	50/50	25
24	24.0/18.0	3	5	90/80	90/80	—	—	—	—	—	—	—
27	26.8/20.0	1	6	150/150	150/150	60/50	50/50	40/40	—	60/50	50/50	40/40
27	26.8/20.0	3	6	90/80	90/80	—	—	—	—	—	—	—
29	28.8/21.6	1	6	175/150	175/150	60/50	50/50	50/50	—	60/50	50/50	50/50
29	28.8/21.6	3	6	90/80	90/80	—	—	—	—	—	—	—
Unit Nominal KW	Element KW 480V	Phase	No. of Elements	Single Power Supply		Multiple Power Supplies						
				Circuit Ampacity	Circuit Protector ①	Circuit Ampacity				Circuit Protector ①		
						CKT 1	CKT 2	CKT 3	CKT 4	CKT 1	CKT 2	CKT 3
12	11.2	3	3	20	20	—	—	—	—	—	—	—
20	19.2	3	3	35	35	—	—	—	—	—	—	—
23	22.4	3	6	40	40	—	—	—	—	—	—	—
31	30.4	3	6	60	60	—	—	—	—	—	—	—
39	38.1	3	6	60	60	—	—	—	—	—	—	—

① Supply circuit protective devices must be either fuses or "HACR" type circuit breakers.

② ONLY MODELS WITH A "T" ELECTRICAL DESIGNATION MAY BE CHANGED FOR MULTIPLE POWER SUPPLIES. This unit is shipped with terminal block connections for a single power supply. The terminal block and wiring to circuit breakers on "T" models may be removed, allowing multiple power supplies to be wired directly to the circuit breakers, as shown on the wiring diagram.

③ Circuit ampacity and circuit protector may be less on some models. See unit nameplate marking.

**BEFORE PURCHASING THIS APPLIANCE, READ IMPORTANT ENERGY COST AND EFFICIENCY INFORMATION AVAILABLE FROM YOUR RETAILER.**

# Watt-restrictor Application Data

## No. of Watt-restrictors per Unit

Air-Handler	Unit KW														
	0	2.8	4.8	6.6	7.6	8.4	9.6	11.4	14.4	17.2	19.2	22	24	26.8	28.8
RHQA-08	0	0	0	1	1	1	1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RHQA-10	0	0	0	1	1	1	1	1	1	N/A	N/A	N/A	N/A		
RHQA-12	0	0	0	0	0	0	0	1	1	1	1	N/A	N/A		
RHQA-13	0	0	0	0	0	0	0	1	1	1	1	N/A	N/A		
RHQA-16	0	0	0	0	0	0	0	N/A	1	1	1	2	2		
RHQA-20	0	0	0	0	0	0	0	N/A	1	1	1	2	2	2	2

NOTE: Watt-restrictors per unit may vary on units special ordered for the Florida market.

Copper = CU  
Aluminum = AL

## Wire Size — Awg. (for 3% voltage drop)

SUPPLY WIRE LENGTH- FEET	SUPPLY CIRCUIT AMPACITY																			
	CU/AL	CU/AL	CU/AL	CU/AL	CU/AL	CU/AL	CU/AL	CU/AL	CU/AL	CU/AL	CU/AL	CU/AL	CU/AL	CU/AL	CU/AL	CU/AL	CU/AL	CU/AL	CU/AL	CU/AL
300	8/6	8/6	6/4	6/4	6/4	6/3	4/3	4/2	3/1	3/1	2/0	2/0	1/00	1/00	0/000	0/000	00/0000	000/250	0000/③	
250	10/8	8/6	8/4	6/4	6/4	6/4	6/4	4/3	4/2	4/2	3/1	2/0	2/0	2/0	1/00	0/000	00/0000	000/250	0000	
200	12/8	10/8	8/6	8/6	8/6	6/4	6/4	6/4	4/3	4/2	3/1	3/1	2/0	2/0	1/00	0/000	00/0000	000/250	0000	
150	12/10	10/8	10/8	10/8	8/6	8/6	6/4	6/4	6/4	4/3	4/2	3/2	3/1	2/0	1/00	0/000	00/0000	000/250	0000	
100	14/12	12/10	10/10	10/8	8/8	8/8	8/6	6/6	6/4	4/3	4/2	3/2	3/1	2/0	1/00	0/000	00/0000	000/250	0000	

- NOTE: 1. Wire size based on 75°C rated wire.  
2. For more than 3 conductors in a raceway or cable. See the N.E.C. for derating the ampacity of each conductor.  
3. Aluminum wire cannot be used at 225 circuit ampacity (40KW).

## Coil Selection Guide

### Cooling ④

Coil Model Number	RHQA- Series Indoor Coil Selection Chart Sizes			
	08	13	16	20
RCAB-A021	•			
RCAB-A025	•			
RCAB-A031		•		
RCAB-A037		•		
RCAB-A049			①	
RCEB-A059				⑤

### Cooling High Efficiency With Expansion Valve ④

Coil Model Number	RHQA- Series Indoor Coil Selection Chart Sizes			
	08	13	16	20
RCTB-A018	•			
RCTB-A024	②			
RCTB-A025		•		
RCTB-A036		•		
RCTB-A037			③	
RCTB-A048			③	
RCTB-B060				•

### Cooling High Efficiency ④

Coil Model Number	RHQA- Series Indoor Coil Selection Chart Sizes			
	08	13	16	20
RCLB-A024	②			
RCLB-A030		•		
RCLB-A036		•		
RCLB-A048			①	
RCMB-A048			•	
RCMB-A060				•

### Heat Pump High Efficiency ④

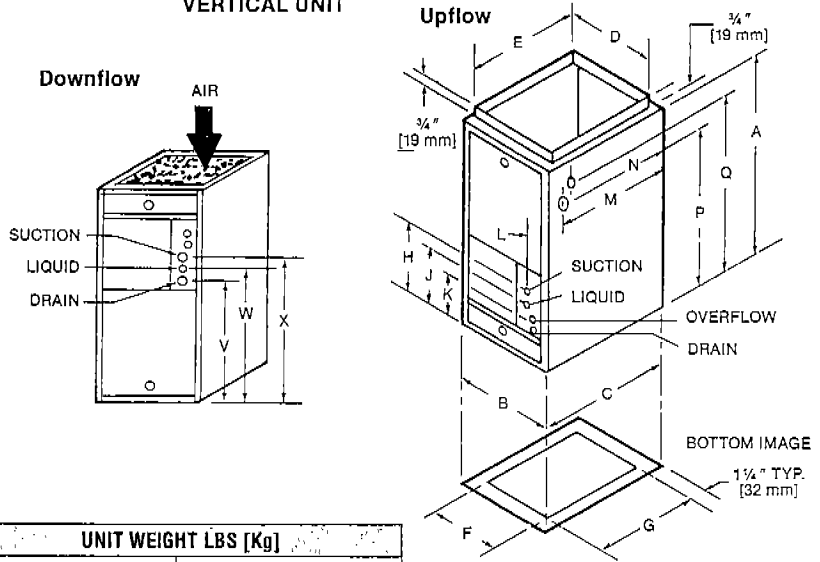
Coil Model Number	RHQA- Series Indoor Coil Selection Chart Sizes					
	08	10	12	13	16	20
RCQB-B018	•	•				
RCQB-B024	•	•				
RCQB-B030			•	•		
RCQB-B036			•	•		
RCQB-B042					•	
RCQB-B048					•	
RCQB-B060						•

- ① Requires Coil Adapter Kit RXCA-B16.  
② Coil will fit in RHQA- unit with removal and replacement of internal parts. This requires access to screws on either side of furnace.  
③ Can be used but requires field modification.  
④ RCAB-, RCLB-, RCTB- coils are not available factory installed.  
⑤ Not suitable for downflow applications.

# Unit Dimensions

Dim.	Model No. RHQA-		
	08, 10	12, 13	16, 20
	In. [mm]	In. [mm]	In. [mm]
A	42 1/2 [1080]	47 1/4 [1200]	60 1/2 [1537]
B	18 1/8 [458]	18 1/8 [458]	23 1/4 [591]
C	19 7/8 [505]	22 [559]	24 1/2 [622]
D	16 5/8 [422]	16 5/8 [422]	21 3/4 [552]
E	18 [457]	20 1/8 [511]	22 5/8 [575]
F	15 5/8 [397]	15 5/8 [397]	20 3/4 [527]
G	17 3/8 [441]	19 1/2 [495]	22 [559]
H	12 1/4 [311]	12 1/4 [311]	12 1/4 [311]
J	9 5/8 [244]	9 5/8 [244]	9 5/8 [244]
K	4 1/8 [105]	4 1/8 [105]	4 1/8 [105]
L	2 7/8 [73]	2 7/8 [73]	2 3/4 [70]
M	17 1/4 [438]	19 5/8 [492]	22 1/8 [562]
N	14 1/4 [362]	16 3/8 [416]	19 1/8 [486]
P	34 3/4 [883]	39 1/2 [1003]	50 [1270]
Q	35 1/4 [895]	41 [1041]	51 1/2 [1308]
R	6 1/4 [159]	8 3/8 [213]	16 5/8 [422]
S	8 [203]	10 1/4 [260]	18 1/2 [470]
T	10 5/8 [270]	12 7/8 [327]	21 1/4 [540]
U	14 1/4 [362]	14 1/4 [362]	14 1/4 [362]
V	25 1/2 [648]	28 1/2 [711]	32 7/8 [835]
W	31 7/8 [810]	34 3/8 [873]	39 1/4 [997]
X	34 1/2 [876]	37 1/2 [940]	42 1/2 [1069]

## VERTICAL UNIT



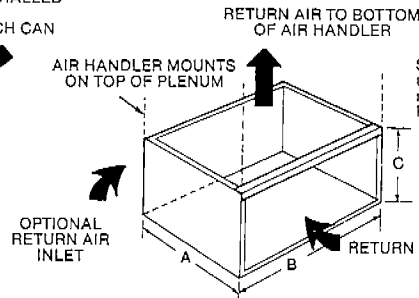
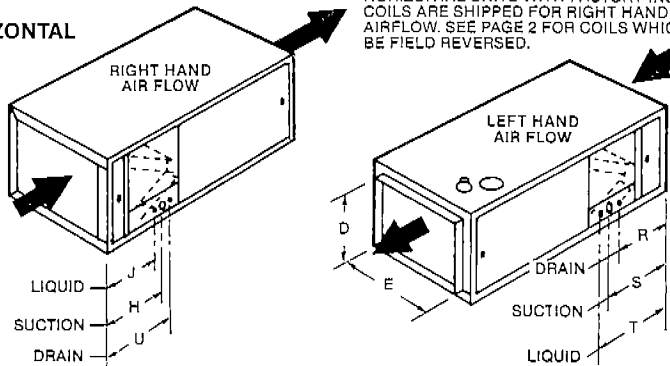
UNIT WEIGHT LBS [Kg]	
RHQA-08 = 78 [35.38]	RHQA-13 = 98 [44.45]
RHQA-10 = 78 [35.38]	RHQA-16 = 131 [59.42]
RHQA-12 = 98 [44.45]	RHQA-20 = 142 [64.41]

NOTE: ALL DRAIN FITTINGS ARE 3/4" [19 mm] MALE PIPE THREAD

**Caution:** Install unit with drain pan level or pitched toward condensate drain connection: All horizontal units should have an external drip pan installed under the unit. This will insure that no condensate water will drip from the installation due to a malfunction of the unit or abnormal operating conditions.

HORIZONTAL UNITS WITH FACTORY INSTALLED COILS ARE SHIPPED FOR RIGHT HAND AIRFLOW. SEE PAGE 2 FOR COILS WHICH CAN BE FIELD REVERSED.

## HORIZONTAL UNIT



SIDE RETURN AIR PLENUM for use with Air Handler when side return air inlet is required. Plenum is shipped unassembled.

(MAY BE INSTALLED FOR EITHER SIDE INLET AT TIME OF ASSEMBLY/INSTALLATION)

## SIDE RETURN AIR PLENUM

Model No.	Use with Model	A In. [mm]	B In. [mm]	C In. [mm]	Air Opening In. [mm]
RXHL-A10A	RHQA-08, 10	18 1/8 [460]	19 7/8 [505]	10 [254]	18 1/2 x 18 3/8 [470] x [467]
RXHL-A12A	RHQA-12, 13	18 1/8 [460]	22 [559]	12 [305]	10 1/2 x 20 1/2 [267] x [521]
RXHL-A16A	RHQA-16, 20	23 1/4 [591]	24 1/2 [622]	17 1/4 [438]	15 3/4 x 23 [400] x [584]

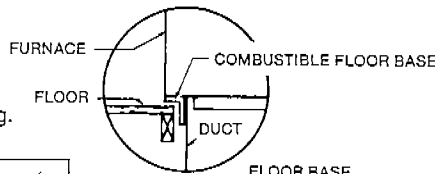
A duct flange is standard on the air outlet end of the units. A screw-on duct flange with the same dimensions as the outlet end is available as an accessory for the air inlet end of the units.

Model No.	Use with Model
RXEF-A10	RHQA-08, 10
RXEF-A14	RHQA-12, 13
RXEF-A16	RHQA-16, 20

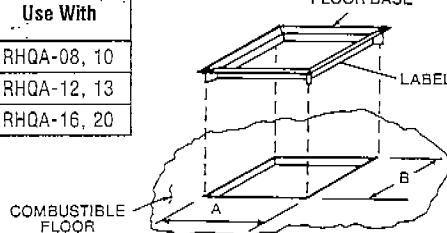
## Combustible Floor Base/Counterflow

NOTE: A combustible floor base is required when unit is applied counterflow on combustible flooring.

### TYPICAL CROSS-SECTION

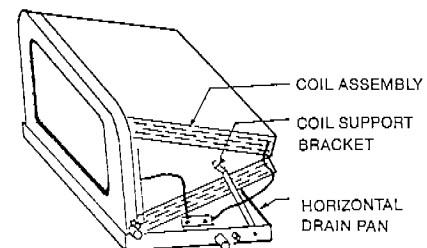


Model Number	A In. [mm]	B In. [mm]	Use With
RXEC-A10	20 5/8 [516]	19 1/4 [489]	RHQA-08, 10
RXEC-A14	22 3/4 [579]	19 1/4 [489]	RHQA-12, 13
RXEC-A16	25 1/4 [641]	24 3/8 [619]	RHQA-16, 20



## Drain Pan Kit

Horizontal units can use the same indoor coil sections as vertical and counterflow units with the addition of a drain pan kit. Refer to cooling coil specification sheet.



Before proceeding with installation, refer to installation instructions packaged with each model, as well as complying with all Federal, State, Provincial, and Local codes, regulations, and practices.

## RHEEM AIR CONDITIONING DIVISION

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