

Renaissance™ Commercial F-Series™
RHPCYB Packaged Heat Pumps | 3 to 6 Tons

Standard Features

- Convertible Airflow
- MicroChannel evaporator and condenser coils
- ServiceSmart features
 - Qwik-Change Flex-Fit Rack™
 - Qwik-Slide Blower Assembly™
 - Qwik-Clean Drain Pan™
- 3-5 Ton includes one single-stage compressor
- 6 Ton includes one two-stage compressor
- Designed for A2L refrigerant **R-454B**



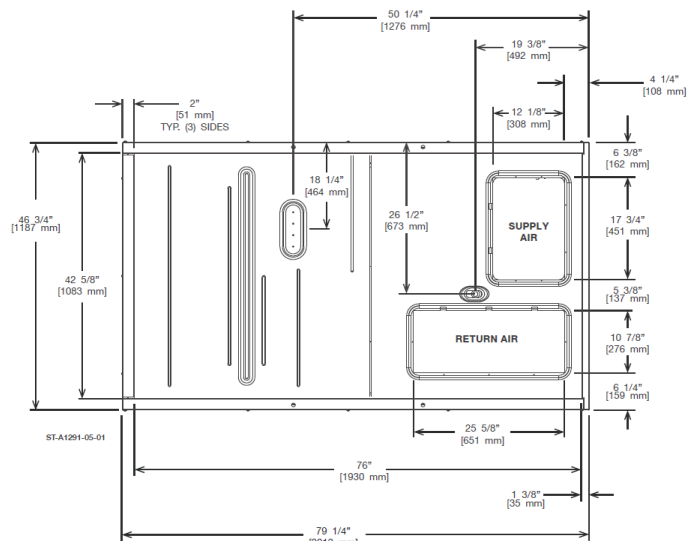
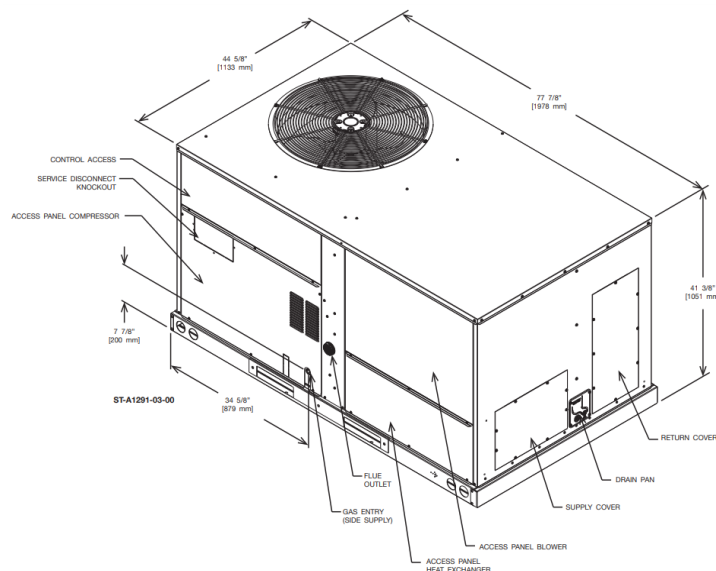
FRIEDRICH
Commercial Air

Capacities
Tons 3, 4, 5, 6

Power Options
V, PH 208-230 V, 1 PH
208-230 V, 3 PH
460 V, 3 PH

Information provided for pre-sale only.
Products will not be produced or
shipped until ratings are certified to
the Department of Energy.

Specifications and Diagrams



Specification	Unit	RHPCYB036	RHPCYB048	RHPCYB060	RHPCYB072
Gross Cooling Capacity	Btu/h [kW]	35,100 [10.29]	47,000 [13.77]	59,200 [17.35]	70,400 [20.63]
Heating Capacity @ 47°F	Btu/h [kW]	34,200 [10.02]	45,500 [13.34]	57,000 [16.71]	66,500 [20.08]
Net Cooling Capacity	Btu/h [kW]	34,200 [10.02]	45,500 [13.34]	57,000 [16.71]	68,500 [20.08]
Net Sensible Capacity	Btu/h [kW]	25,600 [7.5]	34,200 [10.02]	43,000 [12.6]	51,500 [15.09]
Net Latent Capacity	Btu/h [kW]	8,600 [2.52]	11,300 [3.31]	14,000 [4.1]	17,000 [4.98]
EER2 (EER)		10.6	10.6	10.6	(11.2)
SEER2 (IEER)		13.4	13.4	13.4	(14.6)
HSPF2	Btu/Watt-hr	6.7	6.7	6.7	NA
COP @ 47°F / 17°F		3.80 / 2.50	3.40 / 2.20	3.80 / 2.30	3.30 / 2.50
Stages of Heating / Cooling		2 / 1	2 / 1	2 / 1	2 / 2
Nominal Airflow	CFM [L/s]	1,200 [566]	1,600 [755]	2,000 [944]	2,400 [1,133]
Indoor Airflow	CFM [L/s]	1,175 [555]	1,570 [741]	1,825 [861]	2,400 [1133]
Estimated Net Weight	lbs. [kg]	532 [232]	559 [244]	562 [245]	583 [264]
Estimated Shipping Weight	lbs. [kg]	570 [249]	597 [260]	600 [262]	621 [282]

Preliminary information based on preliminary estimates. Not a representation of energy use or efficiency of these models.

Renaissance™ Commercial F-Series™ | Packaged Heat Pumps

Model Number Nomenclature	<u>R</u>	<u>HP</u>	<u>C</u>	<u>Y</u>	<u>B</u>	<u>036</u>	<u>A</u>	<u>C</u>	<u>I</u>	<u>10</u>	<u>2</u>	<u>A</u>	<u>A</u>	<u>***</u>		
	1	23	4	5	6	789	10	11	12	13 14	15	16	17	18	19	20

1 - Brand

R = Friedrich

2, 3 - Unit Type

HP = Packaged HP

4 - Cabinet Type

C = Small Commercial

5 - Refrigerant

Y = R-454B

6 - Efficiency Level

B = Standard Efficiency

7, 8, 9 - Capacity

036 = 3 Ton

048 = 4 Ton

060 = 5 Ton

072 = 6 Ton

10 - Major Series

A = 1st Design

11 - Voltage

J = 208-230 V, 1 PH, 60 Hz

C = 208-230 V, 3 PH, 60Hz

D = 460 V, 3 PH, 60Hz

12 - Drive

T = Direct Drive Standard Static

Constant Torque

U = Direct Drive High Static

Constant Torque

13, 14 - Heat Capacity

00 = No Heat

10 = 10 kW

15 = 15 kW

20 = 20 kW

24 = 24 kW

15 - Heat Configuration

0 = No Heat

1 = 1 Stage

2 = 2 Stages

16 - Control

A = Core Command™ (Non-Communicating)

B = Core Command™ with Comfort Alert®

C = Clear Control™ (DDC)

D = Clear Control™ (DDC) & Comfort Alert®

17 - Minor Series

A = 1st Design

18, 19, 20 - Option Code

AA0

18				19				20			
LV = Louver Protection HA = Hinged Access CC = Coil Coating				NP = Non-Powered Convenience Outlet LF = Low Ambient & Freeze Stat				EC = Economizer SS = Supply & Return Smoke Detector RS = Return Smoke Dectector			
Option Code Character Highlighted											
A	None			A	None			0	None		
B	LV			B	LF			1	EC		
C	HA			C	NP			2	RS		
D	LV	HA		D	LF		NP	3	EC	RS	
E	LV	CC						4	SS	RS	
F	LV	HA	CC					5	EC	SS	RS

Not all model/option combinations are available. Refer to the product specifications sheet or rapidspec.com for specific details.

Accessories

Note: Factory installation available for highlighted models.

Accessory	Model Number	Accessory	Model Number	Accessory	Model Number
Comfort Alert (1 Phase) DDC	RXRX-AZ03	Fresh Air Damper, Motorized	RXRF-ACB1	Electric Heater Kits	RXJJ-DC10JT
Comfort Alert (1 Phase) Non-DDC	RXRX-AZ04	Fresh Air Damper, Motorized (DDC)	RXRF-ACC1		RXJJ-DC15JT
Comfort Alert (3 Phase) DDC	RXRX-AZ01	Low-Ambient Control Kit	RXRP-A04		RXJJ-DC20JT
Comfort Alert (3 Phase) Non-DDC	RXRX-AZ02	MERV 13 Filter	RXMF-M13A21616		RXJJ-DC10CP
Communication Card, BACnet	RXRX-AY01	MERV 8 Filter	RXMF-M08A21616		RXJJ-DC15CP
Communication Card, LonWorks	RXRX-AY02	Outdoor Coil Louver Kit	RXRX-ADD04C		RXJJ-DC20CP
Concentric Adapter 3-4 Ton Drop	RXMC-DC01	Power Exhaust			RXJJ-DC24CP
Concentric Adapter 5-6 Ton Drop	RXMC-DC02	(230V) Vertical	RXRX-CCF02C		RXJJ-DC10DNV
Concentric Diffuser 3-4 Ton Drop	RXRN-AED1800	(460V) Vertical	RXRX-CCF02D		RXJJ-DC15DNV
Concentric Diffuser 3-4 Ton Flush	RXRN-AEF1800	(230V) Horizontal	RXRX-CCF03C		RXJJ-DC20DNV
Concentric Diffuser 5-6 Ton Drop	RXRN-AED2000	(460V) Horizontal	RXRX-CCF03D		RXJJ-DC24DNV
Concentric Diffuser 5-6 Ton Flush	RXRN-AEF2000	(230V) Vertical RRS	RXRX-RCF02C		
Convenience Outlet, Non-powered	RXRX-BN01	(460V) Vertical RRS	RXRX-RCF02D		
Dual Enthalpy Kit, Honeywell	RXRX-BV01	(230V) Horizontal RRS	RXRX-RCF03C		
Dual Enthalpy Kit DDC, Honeywell	RXRX-BV02	(460V) Horizontal RRS	RXRX-RCF03D		
Dual Enthalpy Optional Sensor, Siemens	PD555460	Return Smoke Detector (Field kit)	RXRX-BS01		
Dual Enthalpy Optional Sensor, RRS Basic	PD555463	Return/ Supply Smoke Detector (Field kit)	RXRX-BS02		
Economizer w/ Single Enthalpy		Roofcurb Adapter	RXRX-DCCAE		
(Downflow/Vertical) Honeywell	RXRD-01MCDAM3	Roofcurb, 14"	RXKG-DCC14		
(Horizontal) Honeywell	RXRD-01MCHAM3	Roofcurb, 24"	RXKG-DCC24		
(Downflow/Vertical) DDC, Honeywell	RXRD-01MCDBM3	Room Humidity Sensor	RHC-ZNS4		
(Horizontal) DDC, Honeywell	RXRD-01MCH-BM3	Room Temperature and Relative Humidity Sensor	RHC-ZNS5		
(Downflow/Vertical) Siemens	RXRD-11MCDAM3	Wall Mounted Carbon Dioxide Sensor	RXRX-AR02		
(Horizontal) Siemens	RXRD-11MCHAM3	Unfused Service Disconnect	RXRX-BP01		
(Downflow/Vertical) RRS Basic	RXRD-41MCDAM3	UV-C Light Kit for 208/230V	RXRX-UV22C	Information provided for pre-sale purposes only. Products will not be produced or shipped until ratings are certified with the Department of En	
(Horizontal) RRS Basic	RXRD-41MCHAM3	UV-C Transformer Kit for 460V/230V	RXRX-UVCTC		
(Downflow/Vertical) No Controls	RXRD-31MCDAM3	Single Point Wiring Kits, Single Phase	RXJX-AJ0601		
Freeze Stat Kit	RXRX-AM05	Single Point Wiring Kits, Three Phase	RXJX-AZ0601		
Fresh Air Damper, Manual	RXRF-ACA1				

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