

PACKAGE HEAT PUMP UNITS

FORM NO. P22-773 REV. 4
Supersedes Form No. P22-773 Rev. 3

Featuring Industry Standard R-410A Refrigerant

R-410A

RJNL- 13 SEER HIGH EFFICIENCY SERIES
NOMINAL SIZES 3-5 TONS [10.6-17.6 kW]

RJNL- 11 EER HIGH EFFICIENCY SERIES
NOMINAL SIZES 6 TONS [21.1 kW]

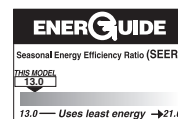
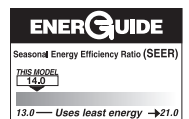
RJPL- 14 SEER HIGH EFFICIENCY SERIES
NOMINAL SIZES 3-5 TONS [10.6-17.6 kW]



*Unit shown with
optional louver
panels installed.



(14 SEER MODELS ONLY)





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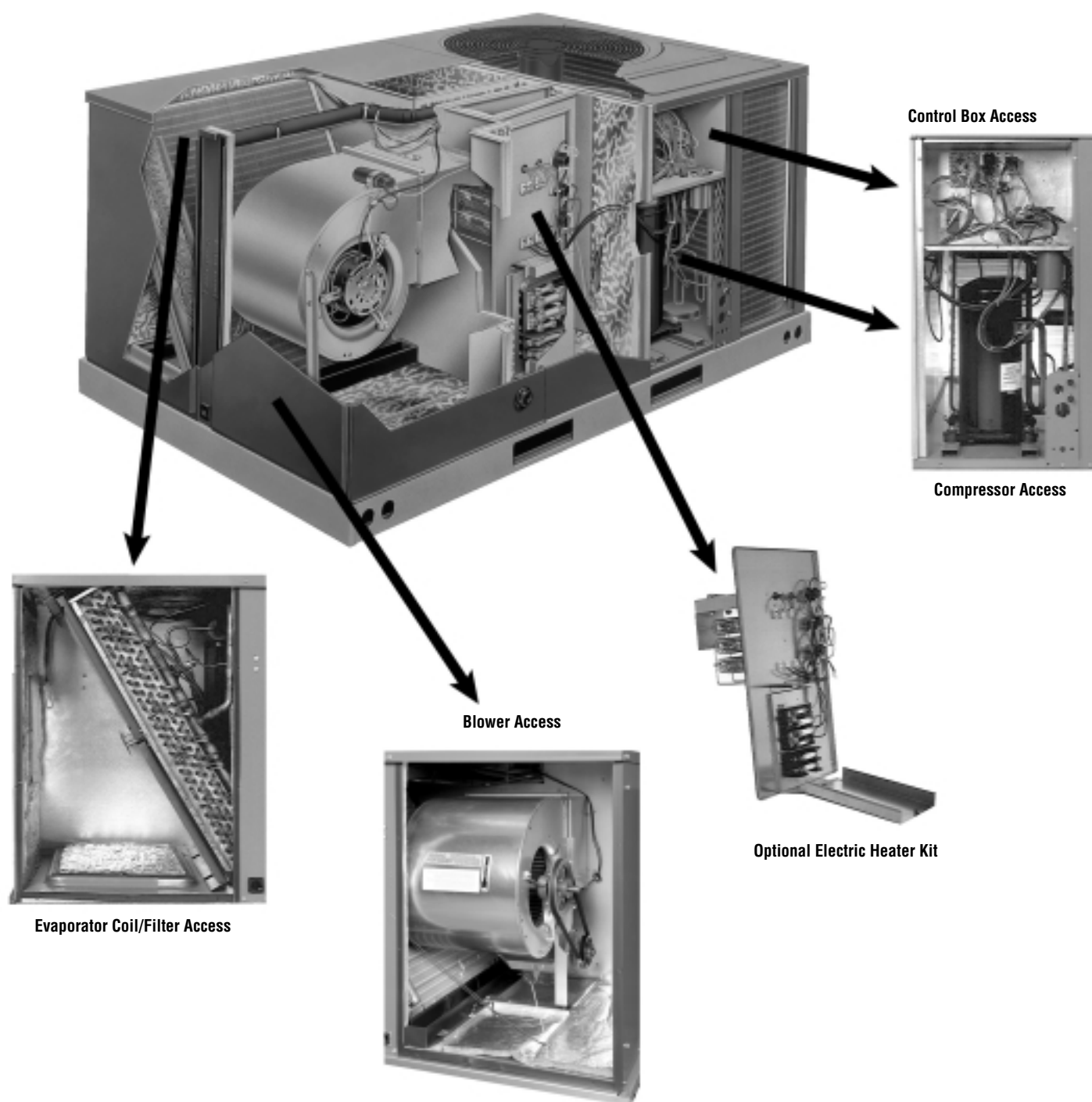
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These quality features are included in the Ruud Outdoor Package Heat Pumps



These quality features are included in the Ruud Package Gas Electric Unit



RJNL - A036, A042, A048, A060, A072
RJPL - A036, A042, A048, A060

STANDARD FEATURES INCLUDE:

- R-410A HFC refrigerant.
- Complete factory charged, wired and run tested.
- Scroll compressors with internal line break overload and high-pressure protection.
- Single stage compressor on all models.
- Convertible airflow.
- TXV refrigerant metering system on each circuit.
- High Pressure protection standard on all models. Low Pressure/Loss of charge protection standard on 6 ton model.
- Solid Core liquid line filter drier on each circuit.
- Single slab, single pass designed evaporator coil facilitate easy cleaning for maintained high efficiencies.
- Cooling operation up to 125 degree F ambient.
- Easy access to filter, blower, electric heat, and compressor/control compartments permit prompt service.
- Powder Paint Finish meets ASTM B117 steel coated on each side for maximum protection. G90 galvanized.
- One piece top cover and one piece base pan with drawn supply and return opening for superior water management.
- Externally mounted refrigerant gauge ports for easy service diagnostics.
- Easy to install plug-in; slip in, 100% fully modulating economizer with barometric relief.
- Forkable base rails for easy handling and lifting.
- Single point electrical connection.
- Direct drive or high performance belt drive motor with variable pitch pulleys and quick adjust belt system.
- Permanently lubricated evaporator and condenser motors.
- Condenser motors are internally protected, totally enclosed with shaft down design.
- 1 inch filter standard with slide out design.
- Colored and labeled wiring.
- Copper tube/Aluminum Fin coils.
- Molded compressor plug.
- Supplemental electric heat provides 100% efficient heating.



R	J	N	L	—	A	036	J	K	000	X	X	X
Tradebrand R = Ruud	Product Classification J = Package Heat Pump— Light Commercial	Efficiency Designation N = 13 SEER (11 EER – 6 TON) P = 14 SEER	Design Series (R-410A)	Future Technical Variations	Nominal Cooling Capacity (BTUH) [kW] 036 = 36,000 [10.55] 042 = 42,000 [12.31] 048 = 48,000 [14.07] 060 = 60,000 [17.58] 072 = 72,000 [21.10]	Electrical Designation J = 208-230 V, 1 PH, 60 Hz C = 208-230 V, 3 PH, 60 Hz D = 460 V, 3 PH, 60 Hz Y = 575 V, 3 PH, 60 Hz	Drive Package K = Direct Drive L = Belt Drive M = Belt Drive—High Static	Electric Heat 000 = No Resistance Heat 010 = 10 kW Resistance Heat 015 = 15 kW Resistance Heat 020 = 20 kW Resistance Heat	Factory Installed Options (See Next Page)	Economizer Option (See Next Page)		

[] Designates Metric Conversions

FACTORY INSTALLED OPTION CODES FOR RJNL- (3-6 Ton) [10.6-21.1 kW] (A036, A042, A048, A060) RJPL- (3-5 Ton) [10.6-17.6 kW]

Option Code	Hail Guard	Non-Powered Convenience Outlet	Low Ambient/ Freeze Stat
AD	X		
AG		X	
AP			X
BY	X		X
BJ	X	X	
CX	X	X	X
JC		X	X

Example: RJNL-A060JK000XX (where XX is factory installed option)

Example: No Options

RJNL-A060JK000

Example: No Options with Factory Installed Economizer

RJNL-A060JK000AAB

Example: Options with Hailguard with no Factory Installed Economizer

RJNL-A060JK000ADA

Example: Options same as above with Factory Installed Economizer

RJNL-A060JK000ADB

ECONOMIZER SELECTION FOR RJNL- (3-6 Ton) [10.6-21.1 kW] (A036, A042, A048, A060) RJPL- (3-5 Ton) [10.6-17.6 kW]

	No Economizer	Single Enthalpy Economizer With Barometric Relief
A	X	
B		X

"X" indicates factory installed option.

[] Designates Metric Conversions



NOMINAL SIZES 3-5 TONS [10.6-17.6 kW]

Model RJNL- Series	A036CK	A036CL	A036CM	A036DK
Cooling Performance¹				CONTINUED →
Gross Cooling Capacity Btu [kW]	37,800 [11.08]	37,800 [11.08]	37,800 [11.08]	37,800 [11.08]
EER/SEER ²	11.5/13	11.5/13	11.5/13	11.5/13
Nominal CFM/AHRI Rated CFM [L/s]	1200/1200 [566/566]	1200/1200 [566/566]	1200/1200 [566/566]	1200/1200 [566/566]
AHRI Net Cooling Capacity Btu [kW]	36,200 [10.61]	36,200 [10.61]	36,200 [10.61]	36,200 [10.61]
Net Sensible Capacity Btu [kW]	27,000 [7.91]	27,000 [7.91]	27,000 [7.91]	27,000 [7.91]
Net Latent Capacity Btu [kW]	9,200 [2.7]	9,200 [2.7]	9,200 [2.7]	9,200 [2.7]
Net System Power kW	3.1	3.1	3.1	3.1
Heating Performance (Heat Pumps)				
Heating Temp. Btuh [kW] Rating	34,400 [10.08]	34,400 [10.08]	34,400 [10.08]	34,400 [10.08]
System Power KW/COP	2.94/3.4	2.94/3.4	2.94/3.4	2.94/3.4
Low Temp. Btuh [kW] Rating	19,600 [5.74]	19,600 [5.74]	19,600 [5.74]	19,600 [5.74]
System Power KW/COP	2.72/2.1	2.72/2.1	2.72/2.1	2.72/2.1
HSPF (Btu/Watts-hr)	7.7	7.7	7.7	7.7
Compressor				
No./Type	1/Scroll	1/Scroll	1/Scroll	1/Scroll
Outdoor Sound Rating (dB)³	83	83	83	83
Outdoor Coil—Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	Rifled	Rifled	Rifled	Rifled
Tube Size in. [mm] OD	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]
Face Area sq. ft. [sq. m]	16.89 [1.57]	16.89 [1.57]	16.89 [1.57]	16.89 [1.57]
Rows / FPI [FPcm]	1 / 22 [9]	1 / 22 [9]	1 / 22 [9]	1 / 22 [9]
Refrigerant Control	TX Valves	TX Valves	TX Valves	TX Valves
Indoor Coil—Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	Rifled	Rifled	Rifled	Rifled
Tube Size in. [mm]	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]
Face Area sq. ft. [sq. m]	5.16 [0.48]	5.16 [0.48]	5.16 [0.48]	5.16 [0.48]
Rows / FPI [FPcm]	3 / 13 [5]	3 / 13 [5]	3 / 13 [5]	3 / 13 [5]
Refrigerant Control	TX Valves	TX Valves	TX Valves	TX Valves
Drain Connection No./Size in. [mm]	1/1 [25.4]	1/1 [25.4]	1/1 [25.4]	1/1 [25.4]
Outdoor Fan—Type	Propeller	Propeller	Propeller	Propeller
No. Used/Diameter in. [mm]	1/24 [609.6]	1/24 [609.6]	1/24 [609.6]	1/24 [609.6]
Drive Type/No. Speeds	Direct/1	Direct/1	Direct/1	Direct/1
CFM [L/s]	4000 [1888]	4000 [1888]	4000 [1888]	4000 [1888]
No. Motors/HP	1 at 1/3 HP	1 at 1/3 HP	1 at 1/3 HP	1 at 1/3 HP
Motor RPM	1075	1075	1075	1075
Indoor Fan—Type	FC Centrifugal	FC Centrifugal	FC Centrifugal	FC Centrifugal
No. Used/Diameter in. [mm]	1/10x10 [254x254]	1/10x10 [254x254]	1/10x10 [254x254]	1/10x10 [254x254]
Drive Type/No. Speeds	Direct/3	Belt/Variable	Belt/Variable	Direct/3
No. Motors	1	1	1	1
Motor HP	1/2	1/2	3/4	1/2
Motor RPM	1075	1725	1725	1075
Motor Frame Size	48	56	56	48
Filter—Type	Disposable	Disposable	Disposable	Disposable
Furnished	Yes	Yes	Yes	Yes
(No.) Size Recommended in. [mm]	(2)1x25x16 [25x635x406]	(2)1x25x16 [25x635x406]	(2)1x25x16 [25x635x406]	(2)1x25x16 [25x635x406]
Refrigerant Charge Oz. [g]	116 [3289]	116 [3289]	116 [3289]	116 [3289]
Weights				
Net Weight lbs. [kg]	517 [235]	517 [235]	517 [235]	517 [235]
Ship Weight lbs. [kg]	532 [241]	532 [241]	532 [241]	532 [241]

See Page 23 for Notes.

[] Designates Metric Conversions

NOMINAL SIZES 3-5 TONS [10.6-17.6 kW]

Model RJNL- Series	A036DL	A036DM	A036JK	A042CK
Cooling Performance¹				CONTINUED →
Gross Cooling Capacity Btu [kW]	37,800 [11.08]	37,800 [11.08]	37,800 [11.08]	44,000 [12.89]
EER/SEER ²	11.5/13	11.5/13	11.5/13	11.2/13
Nominal CFM/AHRI Rated CFM [L/s]	1200/1200 [566/566]	1200/1200 [566/566]	1200/1200 [566/566]	1400/1400 [661/661]
AHRI Net Cooling Capacity Btu [kW]	36,200 [10.61]	36,200 [10.61]	36,200 [10.61]	42,000 [12.31]
Net Sensible Capacity Btu [kW]	27,000 [7.91]	27,000 [7.91]	27,000 [7.91]	31,200 [9.14]
Net Latent Capacity Btu [kW]	9,200 [2.7]	9,200 [2.7]	9,200 [2.7]	10,800 [3.16]
Net System Power kW	3.1	3.1	3.1	3.74
Heating Performance (Heat Pumps)				
Heating Temp. Btuh [kW] Rating	34,400 [10.08]	34,400 [10.08]	34,400 [10.08]	41,000 [12.01]
System Power KW/COP	2.94/3.4	2.94/3.4	2.94/3.4	3.38/3.5
Low Temp. Btuh [kW] Rating	19,600 [5.74]	19,600 [5.74]	19,600 [5.74]	24,400 [7.15]
System Power KW/COP	2.72/2.1	2.72/2.1	2.72/2.1	3.12/2.3
HSPF (Btu/Watts-hr)	7.7	7.7	7.7	7.7
Compressor				
No./Type	1/Scroll	1/Scroll	1/Scroll	1/Scroll
Outdoor Sound Rating (dB)³	83	83	83	83
Outdoor Coil—Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	Rifled	Rifled	Rifled	Rifled
Tube Size in. [mm] OD	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]
Face Area sq. ft. [sq. m]	16.89 [1.57]	16.89 [1.57]	16.89 [1.57]	16.89 [1.57]
Rows / FPI [FPcm]	1 / 22 [9]	1 / 22 [9]	1 / 22 [9]	1 / 22 [9]
Refrigerant Control	TX Valves	TX Valves	TX Valves	TX Valves
Indoor Coil—Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	Rifled	Rifled	Rifled	Rifled
Tube Size in. [mm]	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]
Face Area sq. ft. [sq. m]	5.16 [0.48]	5.16 [0.48]	5.16 [0.48]	5.16 [0.48]
Rows / FPI [FPcm]	3 / 13 [5]	3 / 13 [5]	3 / 13 [5]	3 / 13 [5]
Refrigerant Control	TX Valves	TX Valves	TX Valves	TX Valves
Drain Connection No./Size in. [mm]	1/1 [25.4]	1/1 [25.4]	1/1 [25.4]	1/1 [25.4]
Outdoor Fan—Type	Propeller	Propeller	Propeller	Propeller
No. Used/Diameter in. [mm]	1/24 [609.6]	1/24 [609.6]	1/24 [609.6]	1/24 [609.6]
Drive Type/No. Speeds	Direct/1	Direct/1	Direct/1	Direct/1
CFM [L/s]	4000 [1888]	4000 [1888]	4000 [1888]	4000 [1888]
No. Motors/HP	1 at 1/3 HP	1 at 1/3 HP	1 at 1/3 HP	1 at 1/3 HP
Motor RPM	1075	1075	1075	1075
Indoor Fan—Type	FC Centrifugal	FC Centrifugal	FC Centrifugal	FC Centrifugal
No. Used/Diameter in. [mm]	1/10x10 [254x254]	1/10x10 [254x254]	1/10x10 [254x254]	1/10x10 [254x254]
Drive Type/No. Speeds	Belt/Variable	Belt/Variable	Direct/3	Direct/3
No. Motors	1	1	1	1
Motor HP	1/2	3/4	1/2	1/2
Motor RPM	1725	1725	1075	1075
Motor Frame Size	56	56	48	48
Filter—Type	Disposable	Disposable	Disposable	Disposable
Furnished	Yes	Yes	Yes	Yes
(No.) Size Recommended in. [mm]	(2)1x25x16 [25x635x406]	(2)1x25x16 [25x635x406]	(2)1x25x16 [25x635x406]	(2)1x25x16 [25x635x406]
Refrigerant Charge Oz. [g]	116 [3289]	116 [3289]	120 [3402]	120 [3402]
Weights				
Net Weight lbs. [kg]	517 [235]	517 [235]	517 [235]	521 [236]
Ship Weight lbs. [kg]	532 [241]	532 [241]	532 [241]	536 [243]

See Page 23 for Notes.

[] Designates Metric Conversions

NOMINAL SIZES 3-5 TONS [10.6-17.6 kW]

Model RJPL- Series	A060DK	A060DL	A060DM	A060JK
Cooling Performance¹				
Gross Cooling Capacity Btu [kW]	61,000 [17.87]	61,000 [17.87]	61,000 [17.87]	61,000 [17.87]
EER/SEER ²	11.7/14	11.7/14	11.7/14	11.7/14
Nominal CFM/AHRI Rated CFM [L/s]	2000/1850 [944/873]	2000/1850 [944/873]	2000/1850 [944/873]	2000/1850 [944/873]
AHRI Net Cooling Capacity Btu [kW]	59,500 [17.43]	59,500 [17.43]	59,500 [17.43]	59,500 [17.43]
Net Sensible Capacity Btu [kW]	43,600 [12.77]	43,600 [12.77]	43,600 [12.77]	43,600 [12.77]
Net Latent Capacity Btu [kW]	15,900 [4.66]	15,900 [4.66]	15,900 [4.66]	15,900 [4.66]
Net System Power kW	5.05	5.05	5.05	5.05
Heating Performance (Heat Pumps)				
Heating Temp. Btuh [kW] Rating	59,500 [17.43]	59,500 [17.43]	59,500 [17.43]	59,500 [17.43]
System Power KW/COP	4.8/3.6	4.8/3.6	4.8/3.6	4.8/3.6
Low Temp. Btuh [kW] Rating	36,400 [10.67]	36,400 [10.67]	36,400 [10.67]	36,400 [10.67]
System Power KW/COP	4.47/2.2	4.47/2.2	4.47/2.2	4.47/2.2
HSPF (Btu/Watts-hr)	8	8	8	8
Compressor				
No./Type	1/Scroll	1/Scroll	1/Scroll	1/Scroll
Outdoor Sound Rating (dB)³				
	83	83	83	83
Outdoor Coil—Fin Type				
Tube Type	Louvered	Louvered	Louvered	Louvered
Tube Size in. [mm] OD	Rifled	Rifled	Rifled	Rifled
Tube Size in. [mm] OD	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]
Face Area sq. ft. [sq. m]	16.56 [1.54]	16.56 [1.54]	16.56 [1.54]	16.56 [1.54]
Rows / FPI [FPcm]	2 / 22 [9]	2 / 22 [9]	2 / 22 [9]	2 / 22 [9]
Refrigerant Control	TX Valves	TX Valves	TX Valves	TX Valves
Indoor Coil—Fin Type				
Tube Type	Louvered	Louvered	Louvered	Louvered
Tube Type	Rifled	Rifled	Rifled	Rifled
Tube Size in. [mm]	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]
Face Area sq. ft. [sq. m]	5.16 [0.48]	5.16 [0.48]	5.16 [0.48]	5.16 [0.48]
Rows / FPI [FPcm]	4 / 13 [5]	4 / 13 [5]	4 / 13 [5]	4 / 13 [5]
Refrigerant Control	TX Valves	TX Valves	TX Valves	TX Valves
Drain Connection No./Size in. [mm]	1/1 [25.4]	1/1 [25.4]	1/1 [25.4]	1/1 [25.4]
Outdoor Fan—Type				
Propeller	Propeller	Propeller	Propeller	Propeller
No. Used/Diameter in. [mm]	1/24 [609.6]	1/24 [609.6]	1/24 [609.6]	1/24 [609.6]
Drive Type/No. Speeds	Direct/1	Direct/1	Direct/1	Direct/1
CFM [L/s]	4000 [1888]	4000 [1888]	4000 [1888]	4000 [1888]
No. Motors/HP	1 at 1/3 HP	1 at 1/3 HP	1 at 1/3 HP	1 at 1/3 HP
Motor RPM	1075	1075	1075	1075
Indoor Fan—Type				
FC Centrifugal	FC Centrifugal	FC Centrifugal	FC Centrifugal	FC Centrifugal
No. Used/Diameter in. [mm]	1/11x9 [279x229]	1/10x10 [254x254]	1/10x10 [254x254]	1/11x9 [279x229]
Drive Type/No. Speeds	Direct/2	Belt/Variable	Belt/Variable	Direct/2
No. Motors	1	1	1	1
Motor HP	1	3/4	1	1
Motor RPM	1100	1725	1725	1100
Motor Frame Size	48	56	56	48
Filter—Type				
Disposable	Disposable	Disposable	Disposable	Disposable
Furnished	Yes	Yes	Yes	Yes
(No.) Size Recommended in. [mm]	(2)1x25x16 [25x635x406]	(2)1x25x16 [25x635x406]	(2)1x25x16 [25x635x406]	(2)1x25x16 [25x635x406]
Refrigerant Charge Oz. [g]				
	197 [5585]	195 [5528]	197 [5585]	197 [5585]
Weights				
Net Weight lbs. [kg]	565 [256]	565 [256]	565 [256]	565 [256]
Ship Weight lbs. [kg]	580 [263]	580 [263]	580 [263]	580 [263]

See Page 23 for Notes.

[] Designates Metric Conversions

ELECTRICAL DATA – RJPL SERIES															
		-A048CK	-A048CL	-A048CM	-A048DK	-A048DL	-A048DM	-A048JK	-A060CK	-A060CL	-A060CM	-A060DK	-A060DL	-A060DM	-A060JK
Unit Information	Unit Operating Voltage Range	187-253	187-253	187-253	414-506	414-506	414-506	187-253	187-253	187-253	187-253	414-506	414-506	414-506	187-253
	Minimum Circuit Ampacity	21/21	22/22	23/23	10	11	11	31/31	25/25	26/26	26/26	13	13	13	39/39
	Minimum Overcurrent Protection Device Size	25/25	25/25	30/30	15	15	15	40/40	30/30	30/30	30/30	15	15	15	45/45
	Maximum Overcurrent Protection Device Size	30/30	35/35	35/35	15	15	15	50/50	40/40	40/40	40/40	20	20	20	60/60
Compressor Motor	No.	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Volts	208/230	208/230	208/230	460	460	460	208/230	208/230	208/230	208/230	460	460	460	208/230
	Phase	3	3	3	3	3	3	1	3	3	3	3	3	3	1
	HP	3.5	3.5	3.5	3.5	3.5	3.5	3.5	5	5	5	5	5	5	5
	RPM	3450	3450	3450	3450	3450	3450	3450	3450	3450	3450	3450	3450	3450	3450
	Amps (RLA)	13.7/13.7	13.7/13.7	13.7/13.7	6.2	6.2	6.2	21.8/21.8	16/16	16/16	16/16	7.8	7.8	7.8	26.4/26.4
	Amps (LRA)	83.1/83.1	83.1/83.1	83.1/83.1	41	41	41	117/117	110/110	110/110	110/110	52	52	52	134/134
Condenser Motor	No.	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Volts	208/230	208/230	208/230	460	460	460	208/230	208/230	208/230	208/230	460	460	460	208/230
	Phase	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	HP	1/3	1/3	1/3	1/3	1/3	1/3	1/3	1/3	1/3	1/3	1/3	1/3	1/3	1/3
	Amps (FLA)	1.5	1.5	1.5	1	1	1	1.5	2.2	2.2	2.2	1	1	1	2.2
	Amps (LRA)	3	3	3	1.9	1.9	1.9	3	4.7	4.7	4.7	2.4	2.4	2.4	4.7
Evaporator Fan	No.	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Volts	208/230	208/230	208/230	460	460	460	208/230	208/230	208/230	208/230	460	460	460	208/230
	Phase	1	3	3	1	3	3	1	1	3	3	1	3	3	1
	HP	1/2	1/2	3/4	3/4	1/2	3/4	1/2	1	3/4	1	1	3/4	1	1
	Amps (FLA)	1.9	2.8	3.4	1.2	1.4	1.6	1.9	2.8	3.4	3.8	1.7	1.6	1.9	2.8
	Amps (LRA)	0	10.6	16.8	0	5.3	8.4	0	0	16.8	24	0	8.4	12	0

1. Horsepower Per Compressor.

2. Amp Draw Per Motor. Multiply Value By Number of Motors to Determine Total Amps.