

**PH13NA
PH13PA**

**13 SEER Split System Heat Pump
with R-410A Refrigerant
1.5 To 5 Nominal Tons**

Product Data



NOTE: Ratings contained in this document are subject to change at any time. Always refer to the AHRI directory (www.ahridirectory.org) for the most up-to-date ratings information.

FEATURES AND BENEFITS

AVAILABLE SIZES:

Nominal sizes are available from 018 through 060 to meet the needs of residential and light commercial applications.

PERFORMANCE:

All models are verified for efficiency and capacity by AHRI.

ELECTRICAL RANGE:

All units are offered in 208/230-1, single phase, with 208/230-3 three phase offered in models 048 - 060.

FAN MOTOR:

The totally enclosed fan motor provides greater reliability under adverse conditions and dependable performance for many years. The permanent split capacitor type motor was designed for optimum efficiency. The motor was then qualified under extreme conditions to help ensure a long, reliable life.

CABINET:

A weather protective cabinet of prepainted steel is protected underneath by a galvanized coating and treated with a layer of zinc phosphate for a finish that will last for many years. All screws on cabinet exterior are coated for a long-lasting, rust-resistant, quality appearance.

UNIT DESIGN:

The copper tube, enhanced sine wave, aluminum fin coil is designed for optimum heat transfer. Vertical air discharge carries sound and condenser air up and away from adjacent patio areas and foliage. The base pan is designed for easy removal of water, dirt, and leaves.

DEFROST CONTROL BOARD:

Incorporates defrost relay, defrost timer, and low voltage terminations. The defrost control is a time/temperature initiation/termination control which includes three field-selectable time periods of 30, 60 and 90 minutes.

COMPRESSOR:

Each compressor is protected with internal temperature- and current-sensitive overloads. An internal pressure relief valve provides high pressure protection to the refrigerant system. For improved serviceability, all models are equipped with a compressor terminal plug.

SERVICE VALVES:

Both service valves are brass, front seating type with sweat connections. Valves are externally located so refrigerant tube connections can be made quickly and easily. Each valve has a service port for ease of checking operating refrigerant pressures.

SERVICEABILITY:

One access panel provides access to electrical controls. Removal of top gives access to fan motor, compressor, and condenser coil.

SPECIFICATIONS

UNIT SIZE – SERIES	018-B	024-B	030-B	036-B	042-B	048-B	060-B
ELECTRICAL							
Unit Volts – Phase – Hertz			208/230 – 1 – 60			208/230 – 3 – 60	208/230 – 3 – 60
Operating Voltage Range			197 – 253				
Unit Ampacity for Wire Sizing (MCA)	12.9	16.8	20.8	22.2	26.2	28.7	34.3
Min Wire Size (60°C/75°C Copper) (AWG)*	14	12	10	10	8	8	8
Maximum Length (60°C/75°C) (Ft)†	61/58	74/70	95/91	91/86	115/109	107/102	89/84
Max Branch Circuit Fuse Size (Amps)‡	20	25	30	35	40	40	50
Compressor Rated Load Amps	9.9	12.8	16.0	16.7	19.9	21.8	26.3
Locked Rotor Amps	48.0	58.3	77.0	79.0	109.0	117.0	134.0
Fan Motor HP and RPM	1/12 & 1100	1/10 & 1100	1/10 & 1100	1/5 & 825	1/4 & 1100	1/4 & 1100	1/4 & 1100
Full Load Amps	0.5	0.8	0.8	1.4	1.4	1.4	1.4
COMPRESSOR AND REFRIGERANT							
Compressor Type					Scroll		
Refrigerant Charge lb (kg)	4.0 (1.81)	4.38 (1.99)	4.59 (2.08)	6.25 (2.83)	6.75 (3.08)	7.72 (3.50)	9.40 (4.26)
REFRIGERANT TUBES							
Rated Vapor***	5/8	3/4	3/4	3/4	7/8	1 – 1/8	
LIQUID							
OUTDOOR COIL AND FAN							
Coil Face Area (Sq Ft)	9.8	9.8	12.6	15.14	17.30	21.63	17.30
Rated Airflow (CFM)	1700	2000	2000	3400	3400	3400	3400
OPTIONAL EQUIPMENT							
Time – Delay Relay					KAATD0101TDR		
Outdoor Thermostat					KHAOT0301FST		
Secondary Outdoor Thermostat					KHAOT0201SEC		
Cycle Protector					KSAC Y0101AAA		
Crankcase Heater							
Compressor Start Assist – Capacitor/Relay					KAACH1401AAA	KAACH1201AAA	
Sound Hood					KSASH1501AAA		
TXV Kits (Hard Shutoff)					KSASH0601COP		
Low – Ambient Pressure Switch††					KSATX0301PUR	KSATX0401PUR	KSATX0501PUR
MotorMaster@ Low – Ambient Controller††					KSALA0301410		
Ball Bearing Fan Motor					KSALA0601AAA		
Liquid Line Filter Drier (RCD)							
Evaporator Freeze Thermostat**	HC32GE234		HC34GE239			HC40GE226	
Isolation Relay**					KH43LZ073		KH43LZ072
Liquid Solenoid Valve							
Thermostat, Manual Changeover, Non – Programmable, °F/°C, 2 – Stage Heat, 1 – Stage Cool							
Thermostat, Auto Changeover, 7 – Day Programmable, °F/°C, 1 – Stage Heat, 1 – Stage Cool							
Outdoor Sensor (For Programmable Thermostat)							
Backplate for Non – Programmable Thermostat							
Backplate for Programmable Thermostat							
N/A – Not applicable in this application.							
* The ampacity of non – metallic (NM) sheathed cable shall be that of 60°C (140°F) conductors per NEC 1999, Article 336 – 26. If wire used is other than specified in chart, refer to applicable tables available in 1999 NEC. Copper wire must be used from disconnect to unit.							
† Length shown is as measured 1 way along the wire path between the unit and the service panel for a voltage drop not to exceed 2%.							
‡ Units may use fuses or circuit breakers (U.S. only).							
** Consult low – ambient control Installation Instructions for application.							
†† Isolation relay required.							
‡‡ Required accessories include fan motor with ball bearings, crankcase heater, compressor start assist, evaporator freeze stat, isolation relay, hard shut – off TXV or liquid line solenoid valve.							
*** Units are rated with 25 ft (7.6 m) of lineset length. See Vapor Line Sizing and Cooling Capacity Loss table when using other sizes and lengths of lineset.							

DIMENSIONS - ENGLISH

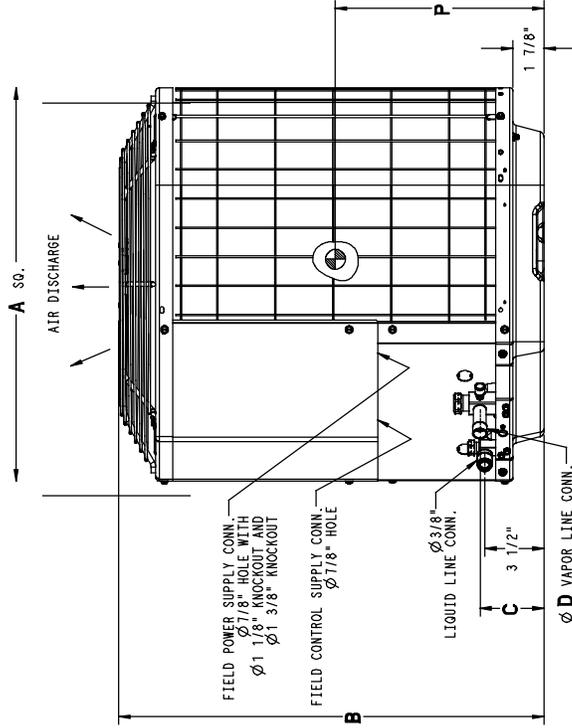
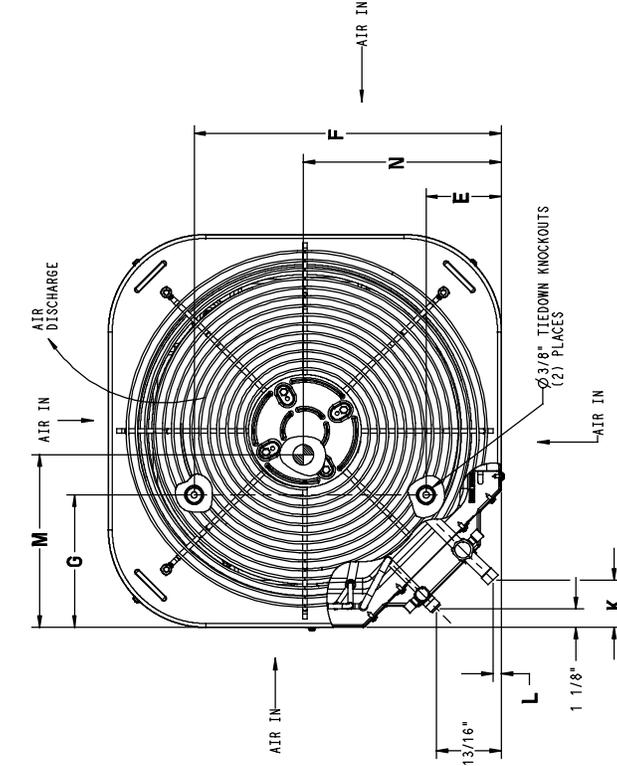
UNIT	SERIES	ELECTRICAL CHARACTERISTICS	A	B	C	D	E	F	G	K	L	M	N	P	OPERATING WEIGHT(LBS)	SHIPPING WEIGHT(LBS)	SHIPPING DIMENSIONS (L x W x H)
PH13MA018	B	X 0 0	23 1/8"	28 7/16"	3 3/4"	5 5/8"	4 7/16"	18 1/16"	7 13/16"	2 13/16"	1 1/2"	11 1/2"	10 1/2"	12 1/2"	117	131	24 1/8" X 24 1/8" X 30 5/8"
PH13MA024	B	X 0 0	23 1/8"	28 7/16"	3 3/4"	3 3/4"	4 7/16"	18 1/16"	7 13/16"	2 13/16"	1 1/2"	11 1/2"	10 1/2"	12 1/2"	132	138	24 1/8" X 24 1/8" X 30 5/8"
PH13MA030	B	X 0 0	23 1/8"	35 3/16"	3 3/4"	3 3/4"	4 7/16"	18 1/16"	7 13/16"	2 13/16"	1 1/2"	11 1/2"	10 1/2"	13 1/2"	147	152	24 1/8" X 24 1/8" X 37 7/16"
PH13MA036	B	X 0 0	31 3/16"	28 7/16"	3 7/8"	7/8"	6 9/16"	24 11/16"	9 1/8"	2 15/16"	5/8"	15"	15"	12"	151	175	32 3/16" X 32 3/16" X 30 5/8"
PH13MA042	B	X 0 0	31 3/16"	31 13/16"	3 7/8"	7/8"	6 9/16"	24 11/16"	9 1/8"	2 15/16"	5/8"	15"	15"	11 1/2"	182	205	32 3/16" X 32 3/16" X 30 5/8"
PH13MA048	B	X 0 0	31 3/16"	38 5/8"	3 7/8"	7/8"	6 9/16"	24 11/16"	9 1/8"	2 15/16"	5/8"	15"	15"	15 1/2"	198	220	32 3/16" X 32 3/16" X 40 13/16"
PH13MA060	B	X 0 0	31 3/16"	31 13/16"	3 7/8"	7/8"	6 9/16"	24 11/16"	9 1/8"	2 15/16"	5/8"	15"	15"	11 1/2"	220	243	32 3/16" X 32 3/16" X 34"
PH13PA048	B	0 0 X	31 3/16"	38 5/8"	3 7/8"	7/8"	6 9/16"	24 11/16"	9 1/8"	2 15/16"	5/8"	15"	15"	15 1/2"	198	220	32 3/16" X 32 3/16" X 40 13/16"
PH13PA060	B	0 0 X	31 3/16"	31 13/16"	3 7/8"	7/8"	6 9/16"	24 11/16"	9 1/8"	2 15/16"	5/8"	15"	15"	11 1/2"	220	243	32 3/16" X 32 3/16" X 34"

208-230-160	230-160	208/230-360	460-360
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X = YES
0 = NO

NOTES:

- ALLOW 30" CLEARANCE TO SERVICE SIDE OF UNIT, 48" ABOVE UNIT, 6" ON ONE SIDE, 12" ON REMAINING SIDE, AND 24" BETWEEN UNITS FOR PROPER AIRFLOW.
- MINIMUM OUTDOOR OPERATING AMBIENT IN COOLING MODE IS 55°F, MAX. 125°F.
- SERIES DESIGNATION IS THE 14TH POSITION OF THE UNIT MODEL NUMBER.
- CENTER OF GRAVITY
- ALL DIMENSIONS ARE IN "INCHES" UNLESS NOTED.



UNIT SIZE	MINIMUM MOUNTING PAD DIMENSIONS
18, 24, 30	23 1/2" X 23 1/2"
---	26" X 26"
36, 42, 48, 60	31 1/2" X 31 1/2"
---	35" X 35"

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DIMENSIONS - SI

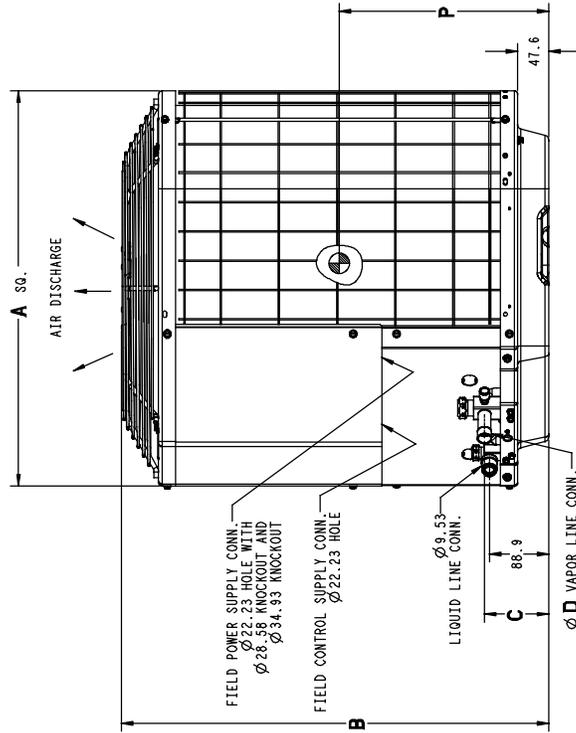
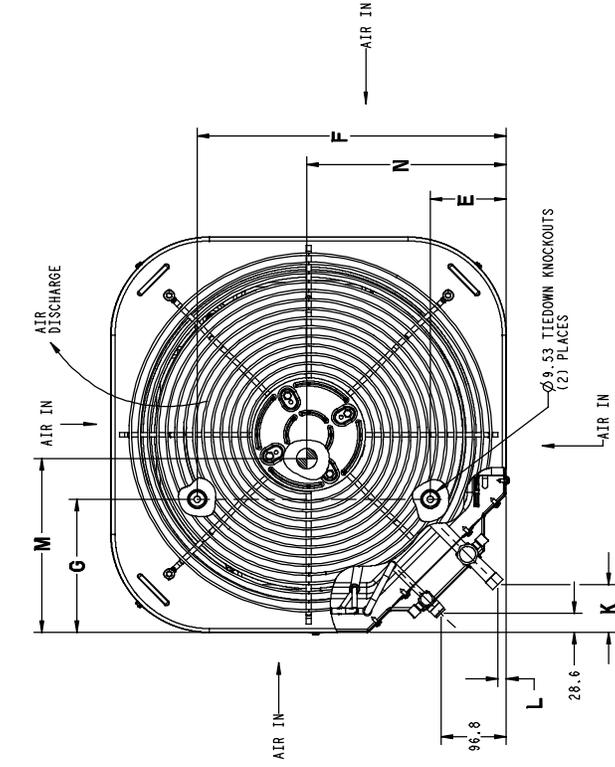
UNIT	SERIES	ELECTRICAL CHARACTERISTICS	A	B	C	D	E	F	G	K	L	M	N	P	OPERATING WEIGHT(KGS)	SHIPPING WEIGHT(KGS)	SHIPPING DIMENSIONS (L X W X H)
PH13NA018	B	X 0 0 0	587.4	722.3	95.2	15.8	112.7	458.8	198.4	71.4	12.7	292.1	266.7	317.5	53.1	59.4	612.8 X 612.8 X 777.9
PH13NA024	B	X 0 0 0	587.4	722.3	95.2	19.0	112.7	458.8	198.4	71.4	12.7	292.1	266.7	317.5	53.5	59.9	612.8 X 612.8 X 777.9
PH13NA030	B	X 0 0 0	587.4	893.8	95.2	19.0	112.7	458.8	198.4	71.4	12.7	292.1	266.7	342.9	59.9	66.7	612.8 X 612.8 X 950.9
PH13NA036	B	X 0 0 0	792.2	722.3	98.4	22.2	166.7	621.1	231.8	74.6	15.9	381.0	381.0	304.8	68.5	79.4	817.6 X 817.6 X 777.9
PH13NA042	B	X 0 0 0	792.2	808.0	98.4	22.2	166.7	621.1	231.8	74.6	15.9	381.0	381.0	292.1	82.5	93.0	817.6 X 817.6 X 863.6
PH13NA048	B	X 0 0 0	792.2	981.1	98.4	22.2	166.7	621.1	231.8	74.6	15.9	381.0	381.0	393.7	89.8	99.8	817.6 X 817.6 X 1036.6
PH13NA060	B	X 0 0 0	792.2	808.0	98.4	22.2	166.7	621.1	231.8	74.6	15.9	381.0	381.0	292.1	99.8	110.2	817.6 X 817.6 X 863.6
PH13PA048	B	0 0 X 0	792.2	981.1	98.4	22.2	166.7	621.1	231.8	74.6	15.9	381.0	381.0	393.7	89.8	99.8	817.6 X 817.6 X 1036.6
PH13PA060	B	0 0 X 0	792.2	808.0	98.4	22.2	166.7	621.1	231.8	74.6	15.9	381.0	381.0	292.1	99.8	110.2	817.6 X 817.6 X 863.6

208-230-160	208/230-360	460-360
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X = YES
0 = NO

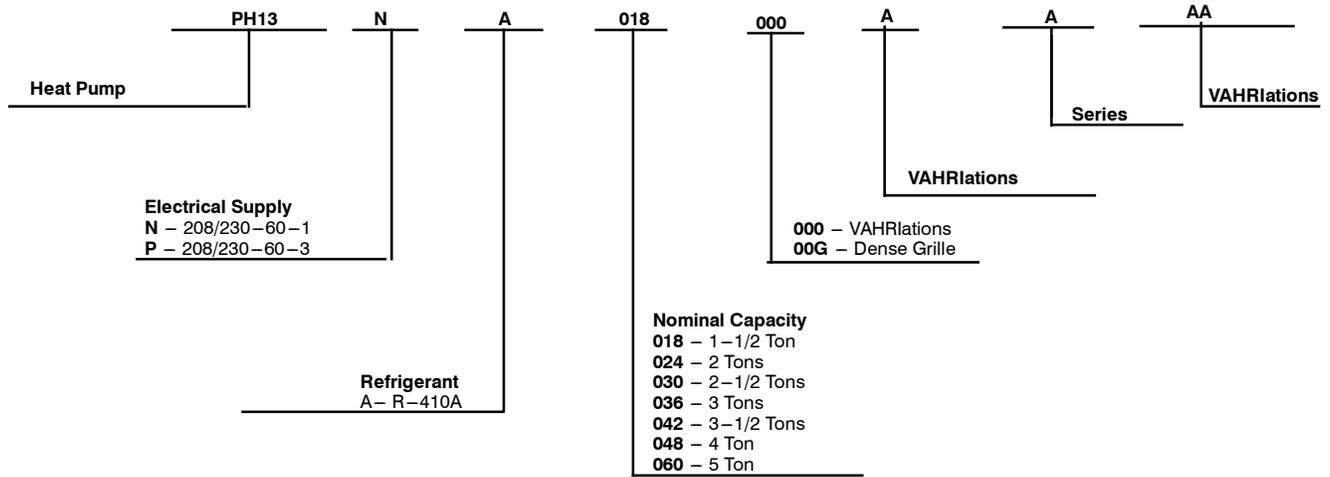
NOTES:

1. ALLOW 762.0 CLEARANCE TO SERVICE SIDE OF UNIT, 1219.2 ABOVE UNIT, 1832.4 ON ONE SIDE, 304.8 ON REMAINING SIDE, AND 609.6 BETWEEN UNITS FOR PROPER AIRFLOW.
2. MINIMUM OUTDOOR OPERATING AMBIENT IN COOLING MODE IS 13°C, MAX. 52°C.
3. SERIES DESIGNATION IS THE 14TH POSITION OF THE UNIT MODEL NUMBER.
4. CENTER OF GRAVITY
5. ALL DIMENSIONS ARE IN "MM" UNLESS NOTED.



UNIT SIZE	MINIMUM MOUNTING PAD DIMENSIONS
18, 24, 30	596.9 X 596.9
---	660.4 X 660.4
36, 42, 48, 60	800.1 X 800.1
---	889.0 X 889.0

PRODUCT NUMBER NOMENCLATURE



Use of the AHRI Certified TM Mark indicates a manufacturer's participation in the program. For verification of certification for individual products, go to www.ahridirectory.org.



This product has been designed and manufactured to meet Energy Star® criteria for energy efficiency when matched with appropriate coil components. However, proper refrigerant charge and proper air flow are critical to achieve rated capacity and efficiency. Installation of this product should follow all manufacturing refrigerant charging and air flow instructions. **Failure to confirm proper charge and air flow may reduce energy efficiency and shorten equipment life.**



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VAPOR LINE SIZING AND COOLING CAPACITY LOSS

Acceptable vapor line diameters provide adequate oil return to the compressor while avoiding excessive capacity loss. The suction line diameters shown in the chart below are acceptable for HP systems with R-410A refrigerant:

Vapor Line Sizing and Cooling Capacity Losses - R-410A® Refrigerant 1- Stage Heat Pump Applications

Unit Nominal Size (Btuh)	Maximum Liquid Line Diameters (In. OD)	Vapor Line Diameters (In.) OD	Cooling Capacity Loss (%) Total Equivalent Line Length ft. (m)								
			Standard Application		Long Line Application Requires Accessories						
			26–50 (7.9–15.2)	51–80 (15.5–24.4)	81–100 (24.7–30.5)	101–125 (30.8–38.1)	126–150 (38.4–45.7)	151–175 (46.0–50.3)	176–200 (53.6–60.0)	201–225 (61.3–68.6)	226–250 (68.9–76.2)
18,000 1–Stage	3/8	1/2	1	2	3	4	6	7	8	9	10
		5/8	0	0	1	1	1	2	2	3	3
24,000 1–Stage	3/8	5/8	0	1	1	2	3	3	4	4	5
		3/4	0	0	0	0	1	1	1	1	1
30,000 1–Stage	3/8	5/8	1	2	3	3	4	5	6	7	8
		3/4	0	0	1	1	1	2	2	2	3
		7/8	0	0	0	0	1	1	1	1	1
36,000 1–Stage	3/8	5/8	1	2	4	5	6	7	9	10	11
		3/4	0	0	1	1	2	2	3	3	4
		7/8	0	0	0	0	1	1	1	1	2
42,000 1–Stage	3/8	3/4	0	1	2	2	3	4	4	5	6
		7/8	0	0	1	1	1	2	2	2	3
48,000 1–Stage	3/8	3/4	0	1	2	3	4	5	5	6	7
		7/8	0	0	1	1	2	2	2	3	3
60,000 1–Stage	3/8	3/4	1	2	4	5	6	7	9	10	11
		7/8	0	1	2	2	3	4	4	5	5
		1–1/8	0	0	0	1	1	1	1	1	1

Standard Length = 80 ft. (24.4 m) or less total equivalent length

Applications in this area are long line. Accessories are required as shown recommended on Long Line Application Guidelines

Applications in this area may have height restrictions that limit allowable total equivalent length, when outdoor unit is below indoor unit. See Long Line Application Guidelines

REFRIGERANT PIPING LENGTH LIMITATIONS

Maximum Line Lengths:

The maximum allowable total equivalent length for heat pumps vAHRies depending on the vertical separation. See the tables below for allowable lengths depending on whether the outdoor unit is on the same level, above or below the indoor unit.

Maximum Line Lengths for Heat Pump Applications

	MAXIMUM ACTUAL LENGTH ft (m)	MAXIMUM EQUIVALENT LENGTH† ft (m)	MAXIMUM VERTICAL SEPARATION ft (m)
Units on equal level	200 (61)	250 (76.2)	N/A
Outdoor unit ABOVE indoor unit	200 (61)	250 (76.2)	200 (61)
Outdoor unit BELOW indoor unit	See Table 'Maximum Total Equivalent Length: Outdoor Unit BELOW Indoor Unit'		

† Total equivalent length accounts for losses due to elbows or fitting. See the Long Line Guideline for details.

Maximum Total Equivalent Length† - Outdoor Unit BELOW Indoor Unit

Size	Liquid Line Diameter w/ TXV	HP with R-410A® Refrigerant – Maximum Total Equivalent Length† Vertical Separation ft (m) Outdoor unit BELOW indoor unit;						
		0-20 (0 - 6.1)	21-30 (6.4 - 9.1)	31-40 (9.4 - 12.2)	41-50 (12.5 - 15.2)	51-60 (15.5 - 18.3)	61-70 (18.6 - 21.3)	71-80 (21.6 - 24.4)
018 HP with R-410A	3/8	250*	250*	250*	250*	250*	250*	250*
024 HP with R-410A	3/8	250*	250*	250*	250*	250*	250*	250*
030 HP with R-410A	3/8	250*	250*	250*	250*	250*	250*	250*
036 HP with R-410A	3/8	250*	250*	250*	250*	250*	250*	250*
042 HP with R-410A	3/8	250*	250*	250*	250*	250*	250*	150
048 HP with R-410A	3/8	250*	250*	250*	250*	230	160	--
060 HP with R-410A	3/8	250*	225*	190	150	110	--	--

* Maximum actual length not to exceed 200 ft (61 m)

† Total equivalent length accounts for losses due to elbows or fitting. See the Long Line Guideline for details.

-- = outside acceptable range

LONG LINE APPLICATIONS

An application is considered Long Line when the refrigerant level in the system requires the use of accessories to maintain acceptable refrigerant management for systems reliability. Defining a system as long line depends on the liquid line diameter, actual length of the tubing, and vertical separation between the indoor and outdoor units.

For Heat Pump systems, the chart below shows when an application is considered Long Line. Beyond these lengths, long line accessories are required:

HP WITH R-410A® REFRIGERANT LONG LINE DESCRIPTION ft (m) Beyond these lengths, long line accessories are required

Liquid Line Size	Units On Same Level	Outdoor Below Indoor	Outdoor Above Indoor
3/8	80 (24.4)	20 (6.1) vertical or 80 (24.4) total	80 (24.4)

Note: See Long Line Guideline for details

SOUND POWER

UNIT SIZE – SERIES	Standard Rating (dBA)	TYPICAL OCTAVE BAND SPECTRUM (dBA without tone adjustment)						
		125	250	500	1000	2000	4000	8000
018-B	76	50.5	58.5	64.5	66.0	64.0	57.5	52.0
024-B	76	51.5	59.5	66.5	67.5	65.5	61.0	55.5
030-B	77	55.0	65.0	71.0	71.5	67.5	62.0	54.5
036-B	78	57.5	66.0	71.5	73.5	70.5	67.0	60.0
042-B	80	57.5	66.0	72.0	73.0	71.0	66.5	61.0
048-B	80	59.0	64.5	69.5	69.5	67.0	63.5	60.0
060-B	80	62.5	69.5	72.0	74.5	72.5	69.5	67.0

Note: Tested in accordance with AHRI standard 270.95 (Not listed with AHRI)

METERING DEVICE

UNIT SIZE – SERIES	OUTDOOR PISTON	REQUIRED SUBCOOLING °F (°C)	INDOOR METERING DEVICE
018-B	40	15	TXV*
024-B	49	16	
030-B	52	12	
036-B	61	16	
042-B	65	16	
048-B	67	14	
060-B	76	15	

* TXV must be ordered separately when indoor coil is not equipped with a TXV. TXV must be hard-shutoff type.

RECOMMENDED TUBE DIAMETERS

UNIT SIZE	LIQUID TUBE DIAMETER (In.)	VAPOR TUBE DIAMETER (In.)
018	3/8	5/8
024, 030		3/4
036, 042, 048		7/8
060		1 – 1/8

* For tube set over 80 ft / 24.38 m horizontal and/or 20 ft / 6.10 m vertical differential, consult Residential Split System Long Line Application Guidelines.

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COMBINATION RATINGS

AHRF Ref. No.	Model Number	Coil Model Number	Furnace Model Number	Cooling Capacity	EER	SEER	High Temp		HSPF	Low Temp	
							E Capacity	E COP		H Capacity	H COP
3129749	PH13NA018(G)-B	†PF4MNA019		17,000	10.8	13.00	16,400	3.56	7.7	9,900	2.32
3464407	PH13NA018(G)-B	FF1ENP019		17,000	10.5	13.00	16,400	3.58	7.7	10,000	2.30
3129750	PH13NA018(G)-B	CNPV*1814A**	PG8*EA024045	17,000	10.8	13.00	16,400	3.54	7.7	9,900	2.30
3129751	PH13NA024(G)-B	†PF4MNA025		22,400	10.6	13.00	21,000	3.54	7.7	13,000	2.30
3464408	PH13NA024(G)-B	FF1ENP025		22,400	10.5	13.00	21,000	3.50	7.7	12,800	2.28
3724110	PH13NA024(G)-B	PF4MNB025		22,400	10.6	13.25	21,000	3.60	7.7	13,000	2.36
3129752	PH13NA024(G)-B	CAP**2414A**	PG8*EA024045	22,400	10.6	13.00	21,000	3.56	7.7	12,900	2.30
3129756	PH13NA024(G)-B	CAP**2417A**	PG9MXA036060	22,400	10.6	13.00	21,000	3.68	7.7	12,900	2.38
3129757	PH13NA024(G)-B	CAP**2417A**	PG9MXA036080	22,400	10.6	13.00	21,000	3.64	7.7	12,900	2.36
3129754	PH13NA024(G)-B	CNPH*2417A**	PG8*EA024045	22,400	10.6	13.00	21,000	3.58	7.7	12,900	2.32
3129760	PH13NA024(G)-B	CNPH*2417A**	PG9MXA036060	22,400	10.6	13.00	21,000	3.66	7.7	12,900	2.36
3129761	PH13NA024(G)-B	CNPH*2417A**	PG9MXA036080	22,400	10.6	13.00	21,000	3.64	7.7	12,900	2.34
3129753	PH13NA024(G)-B	CNPV*2414A**	PG8*EA024045	22,400	10.6	13.00	21,000	3.58	7.7	12,900	2.32
3129758	PH13NA024(G)-B	CNPV*2417A**	PG9MXA036060	22,400	10.6	13.00	21,000	3.66	7.7	12,900	2.36
3129759	PH13NA024(G)-B	CNPV*2417A**	PG9MXA036080	22,400	10.6	13.00	21,000	3.64	7.7	12,900	2.34
3129755	PH13NA024(G)-B	CSPH*2412A**	PG8*EA024045	22,400	10.6	13.00	21,000	3.54	7.7	12,900	2.32
3129762	PH13NA024(G)-B	CSPH*2412A**	PG9MXA036060	22,400	10.6	13.00	21,000	3.62	7.7	12,900	2.36
3129763	PH13NA024(G)-B	CSPH*2412A**	PG9MXA036080	22,400	10.6	13.00	21,000	3.60	7.7	12,900	2.34
3129764	PH13NA030(G)-B	†PF4MNA031		28,600	10.5	13.00	27,000	3.54	7.7	16,100	2.42
3464409	PH13NA030(G)-B	FF1ENP031		28,400	10.5	13.00	27,000	3.46	7.7	15,800	2.38
3724111	PH13NA030(G)-B	PF4MNB031		28,600	10.5	13.25	26,400	3.50	7.7	16,100	2.46
3129767	PH13NA030(G)-B	CAP**3017A**	PG9MXA036060	28,600	10.5	13.00	27,000	3.50	7.7	15,900	2.46
3129768	PH13NA030(G)-B	CAP**3017A**	PG9MXA036080	28,600	10.5	13.00	27,000	3.48	7.7	15,900	2.44
3129769	PH13NA030(G)-B	CAP**3017A**	PG9MXA048080	28,600	10.5	13.00	27,000	3.48	7.7	16,000	2.46
3129765	PH13NA030(G)-B	CNPH*3017A**	PG8*EA048090	28,600	10.5	13.00	27,000	3.44	7.7	15,900	2.42
3129773	PH13NA030(G)-B	CNPH*3017A**	PG9MXA036060	28,600	10.5	13.00	27,000	3.48	7.7	16,000	2.44
3129774	PH13NA030(G)-B	CNPH*3017A**	PG9MXA036080	28,600	10.5	13.00	27,000	3.48	7.7	15,900	2.44
3129775	PH13NA030(G)-B	CNPH*3017A**	PG9MXA048080	28,600	10.5	13.00	27,000	3.48	7.7	16,000	2.44
3129770	PH13NA030(G)-B	CNPV*3017A**	PG9MXA036060	28,600	10.5	13.00	27,000	3.48	7.7	16,000	2.44
3129771	PH13NA030(G)-B	CNPV*3017A**	PG9MXA036080	28,600	10.5	13.00	27,000	3.48	7.7	15,900	2.44
3129772	PH13NA030(G)-B	CNPV*3017A**	PG9MXA048080	28,600	10.5	13.00	27,000	3.48	7.7	16,000	2.44
3129766	PH13NA030(G)-B	CSPH*3012A**	PG8*EA048090	28,600	10.5	13.00	27,000	3.42	7.7	15,900	2.42
3129776	PH13NA030(G)-B	CSPH*3012A**	PG9MXA036060	28,600	10.5	13.00	26,800	3.46	7.7	16,000	2.44
3129777	PH13NA030(G)-B	CSPH*3012A**	PG9MXA036080	28,600	10.5	13.00	26,800	3.44	7.7	15,900	2.44
3129778	PH13NA030(G)-B	CSPH*3012A**	PG9MXA048080	28,600	10.5	13.00	26,800	3.46	7.7	16,000	2.44
3129779	PH13NA036(G)-B	†PF4MNA037		34,000	10.6	13.00	33,000	3.58	7.7	20,400	2.36
3464410	PH13NA036(G)-B	FF1ENP037		34,200	10.5	13.00	33,600	3.44	7.7	20,000	2.32
3724129	PH13NA036(G)-B	PF4MNB037		35,000	11.0	13.50	32,600	3.72	7.9	20,400	2.44
3724130	PH13NA036(G)-B	PF4MNB043		35,000	11.0	13.50	32,600	3.72	7.9	20,400	2.44
3129789	PH13NA036(G)-B	CAP**3617A**	PG9MXA036060	33,400	10.6	13.00	33,000	3.54	7.7	20,000	2.36
3129790	PH13NA036(G)-B	CAP**3617A**	PG9MXA036080	33,400	10.6	13.00	33,000	3.52	7.7	20,000	2.36
3129791	PH13NA036(G)-B	CAP**3617A**	PG9MXA048080	33,400	10.6	13.00	33,000	3.54	7.7	20,000	2.36
3129780	PH13NA036(G)-B	CAP**3621A**	PG8*EA048090	33,800	10.6	13.00	33,000	3.58	7.7	20,000	2.38
3129781	PH13NA036(G)-B	CAP**3621A**	PG8*EA060110	34,000	10.6	13.00	33,000	3.60	7.7	20,000	2.40
3129792	PH13NA036(G)-B	CAP**3621A**	PG9MXA060100	33,400	10.6	13.00	32,600	3.56	7.7	19,800	2.38
3129784	PH13NA036(G)-B	CNPH*3617A**	PG8*EA048090	33,200	10.6	13.00	33,000	3.48	7.7	19,900	2.34
3129785	PH13NA036(G)-B	CNPH*3617A**	PG8*EA060110	33,200	10.6	13.00	33,000	3.52	7.7	19,900	2.36
3129797	PH13NA036(G)-B	CNPH*3617A**	PG9MXA036060	33,400	10.6	13.00	33,000	3.48	7.7	20,000	2.34
3129798	PH13NA036(G)-B	CNPH*3617A**	PG9MXA036080	33,400	10.6	13.00	33,000	3.48	7.7	19,900	2.34
3129799	PH13NA036(G)-B	CNPH*3617A**	PG9MXA048080	33,400	10.6	13.00	33,000	3.48	7.7	20,000	2.34
3129800	PH13NA036(G)-B	CNPH*3617A**	PG9MXA060100	33,400	10.6	13.00	32,600	3.46	7.7	19,700	2.34
3724117	PH13NA036(G)-B	CNPH*4321A**	PG8*EA024045	34,600	10.6	13.00	32,800	3.62	7.8	20,800	2.40
3724118	PH13NA036(G)-B	CNPH*4321A**	PG8*EA048070	35,000	10.6	13.00	32,400	3.66	7.9	20,600	2.42
3724119	PH13NA036(G)-B	CNPH*4321A**	PG8*EA048090	35,000	11.0	13.00	32,200	3.76	8.1	20,200	2.48
3724120	PH13NA036(G)-B	CNPH*4321A**	PG8*EA060110	35,000	11.0	13.00	32,200	3.80	8.1	20,400	2.50
3724125	PH13NA036(G)-B	CNPH*4321A**	PG9MTAV36050*A**	34,600	10.5	13.00	32,800	3.60	7.7	20,800	2.38
3724126	PH13NA036(G)-B	CNPH*4321A**	PG9MTAV36075*A**	35,000	10.6	13.00	32,600	3.64	7.8	20,600	2.40
3724127	PH13NA036(G)-B	CNPH*4321A**	PG9MTAV60100*A**	35,000	11.0	13.00	32,400	3.76	8.1	20,600	2.48
3724128	PH13NA036(G)-B	CNPH*4321A**	PG9MTAV60125*A**	35,000	11.0	13.00	32,400	3.78	8.1	20,600	2.48
3724121	PH13NA036(G)-B	CNPH*4321A**	PG9MXA036060	35,000	11.0	13.00	32,400	3.76	8.0	20,400	2.48
3724122	PH13NA036(G)-B	CNPH*4321A**	PG9MXA036080	35,000	11.0	13.00	32,200	3.74	8.0	20,400	2.48
3724123	PH13NA036(G)-B	CNPH*4321A**	PG9MXA048080	35,000	11.0	13.00	32,400	3.74	8.0	20,400	2.48
3724124	PH13NA036(G)-B	CNPH*4321A**	PG9MXA060100	35,000	11.0	13.00	32,200	3.76	8.0	20,200	2.48
3129793	PH13NA036(G)-B	CNPV*3617A**	PG9MXA036060	33,400	10.6	13.00	33,000	3.48	7.7	20,000	2.34
3129794	PH13NA036(G)-B	CNPV*3617A**	PG9MXA036080	33,400	10.6	13.00	33,000	3.48	7.7	19,900	2.34
3129795	PH13NA036(G)-B	CNPV*3617A**	PG9MXA048080	33,400	10.6	13.00	33,000	3.48	7.7	20,000	2.34
3129782	PH13NA036(G)-B	CNPV*3621A**	PG8*EA048090	33,600	10.6	13.00	33,000	3.50	7.7	19,900	2.34
3129783	PH13NA036(G)-B	CNPV*3621A**	PG8*EA060110	33,600	10.6	13.00	33,000	3.52	7.7	19,900	2.36
3129796	PH13NA036(G)-B	CNPV*3621A**	PG9MXA060100	33,400	10.6	13.00	32,600	3.48	7.7	19,800	2.34
3724112	PH13NA036(G)-B	CNPV*3717A**	PG8*EA048070	34,800	10.6	13.00	32,400	3.66	7.8	20,400	2.42
3724113	PH13NA036(G)-B	CNPV*3717A**	PG9MXA036060	35,000	11.0	13.00	32,400	3.74	8.0	20,400	2.46
3724114	PH13NA036(G)-B	CNPV*3717A**	PG9MXA036080	35,000	11.0	13.00	32,200	3.72	8.0	20,400	2.46
3724115	PH13NA036(G)-B	CNPV*3717A**	PG9MXA048080	35,000	11.0	13.00	32,400	3.72	8.0	20,400	2.46
3724116	PH13NA036(G)-B	CNPV*4324A**	PG9MTAV60125*A**	35,000	11.0	13.00	32,400	3.80	8.1	20,600	2.50
3129786	PH13NA036(G)-B	CSPH*3612A**	PG8*EA048070	33,400	10.6	13.00	33,000	3.56	7.7	20,400	2.36
3129787	PH13NA036(G)-B	CSPH*3612A**	PG8*EA048090	33,400	10.6	13.00	32,600	3.66	7.7	20,200	2.42

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COMBINATION RATINGS CONTINUED

AHRI Ref. No.	Model Number	Coil Model Number	Furnace Model Number	Cooling Capacity	EER	SEER	High Temp		HSPF	Low Temp	
							E Capacity	E COP		H Capacity	H COP
3129788	PH13NA036(G)-B	CSPH*3612A**	PG8*EA060110	33,400	10.6	13.00	32,600	3.68	7.7	20,200	2.44
3129801	PH13NA036(G)-B	CSPH*3612A**	PG9MXA036060	33,400	10.6	13.00	32,600	3.66	7.7	20,200	2.40
3129802	PH13NA036(G)-B	CSPH*3612A**	PG9MXA036080	33,400	10.6	13.00	32,600	3.64	7.7	20,200	2.40
3129803	PH13NA036(G)-B	CSPH*3612A**	PG9MXA048080	33,400	10.6	13.00	32,600	3.66	7.7	20,200	2.40
3129804	PH13NA036(G)-B	CSPH*3612A**	PG9MXA060100	33,400	10.6	13.00	32,600	3.64	7.7	19,900	2.42
3129805	PH13NA042(G)-B	†PF4MNA043		40,000	10.6	13.00	39,000	3.62	7.8	24,600	2.44
3724143	PH13NA042(G)-B	PF4MNB049		39,500	11.0	13.50	37,600	3.66	8.0	24,400	2.54
3129806	PH13NA042(G)-B	CAP**4221A**	PG8*EA048090	39,500	10.6	13.00	39,000	3.54	7.8	24,000	2.42
3129807	PH13NA042(G)-B	CAP**4221A**	PG8*EA060110	39,500	10.6	13.00	39,000	3.56	7.8	23,800	2.42
3129815	PH13NA042(G)-B	CAP**4221A**	PG9MXA060100	39,500	10.6	13.00	39,000	3.56	7.8	24,000	2.44
3129808	PH13NA042(G)-B	CAP**4224A**	PG8*EA060135	39,500	10.6	13.00	39,000	3.56	7.8	24,000	2.42
3129816	PH13NA042(G)-B	CAP**4224A**	PG9MXA060120	39,500	10.6	13.00	39,000	3.60	7.8	24,000	2.46
3129810	PH13NA042(G)-B	CNPH*4221A**	PG8*EA060110	39,500	10.6	13.00	39,000	3.54	7.8	23,800	2.42
3129811	PH13NA042(G)-B	CNPH*4221A**	PG8*EA060135	39,500	10.6	13.00	39,000	3.52	7.8	24,000	2.40
3129818	PH13NA042(G)-B	CNPH*4221A**	PG9MXA060100	39,500	10.6	13.00	39,000	3.54	7.8	24,000	2.42
3129819	PH13NA042(G)-B	CNPH*4221A**	PG9MXA060120	39,500	10.6	13.00	39,000	3.56	7.8	24,000	2.44
3724133	PH13NA042(G)-B	CNPH*4321A**	PG8*EA048090	39,500	10.6	13.00	38,500	3.70	8.0	24,200	2.50
3724134	PH13NA042(G)-B	CNPH*4321A**	PG8*EA060110	39,500	11.0	13.00	38,500	3.72	8.0	24,200	2.52
3724135	PH13NA042(G)-B	CNPH*4321A**	PG8*EA060135	39,500	10.6	13.00	38,500	3.70	8.0	24,200	2.52
3724141	PH13NA042(G)-B	CNPH*4321A**	PG9MTAV60100*A**	39,500	10.6	13.00	39,000	3.70	8.0	24,600	2.50
3724142	PH13NA042(G)-B	CNPH*4321A**	PG9MTAV60125*A**	39,500	10.6	13.00	39,000	3.70	8.0	24,400	2.50
3724136	PH13NA042(G)-B	CNPH*4321A**	PG9MXA036060	39,500	10.6	13.00	39,000	3.70	8.0	24,600	2.50
3724137	PH13NA042(G)-B	CNPH*4321A**	PG9MXA036080	39,500	10.6	13.00	39,000	3.70	8.0	24,400	2.50
3724138	PH13NA042(G)-B	CNPH*4321A**	PG9MXA048080	39,500	10.6	13.00	38,500	3.68	8.0	24,400	2.50
3724139	PH13NA042(G)-B	CNPH*4321A**	PG9MXA060100	39,500	11.0	13.00	38,500	3.72	8.1	24,200	2.52
3724140	PH13NA042(G)-B	CNPH*4321A**	PG9MXA060120	39,500	11.0	13.00	38,500	3.76	8.1	24,200	2.54
3129809	PH13NA042(G)-B	CNPV*4221A**	PG8*EA060110	39,500	10.6	13.00	39,000	3.54	7.8	23,800	2.42
3129817	PH13NA042(G)-B	CNPV*4221A**	PG9MXA060100	39,500	10.6	13.00	39,000	3.54	7.8	24,000	2.42
3724236	PH13NA042(G)-B	CNPV*4324A**	PG8*EA060135	39,500	11.0	13.00	38,500	3.74	8.1	24,200	2.52
3724132	PH13NA042(G)-B	CNPV*4324A**	PG9MTAV60125*A**	39,500	10.6	13.00	39,000	3.74	8.1	24,400	2.52
3724131	PH13NA042(G)-B	CNPV*4324A**	PG9MXA060120	39,500	11.0	13.00	38,500	3.78	8.1	24,200	2.56
3129812	PH13NA042(G)-B	CSPH*4212A**	PG8*EA048090	39,500	10.6	13.00	39,000	3.64	7.8	24,200	2.46
3129813	PH13NA042(G)-B	CSPH*4212A**	PG8*EA060110	39,500	10.6	13.00	39,000	3.66	7.8	24,000	2.48
3129814	PH13NA042(G)-B	CSPH*4212A**	PG8*EA060135	39,500	10.6	13.00	39,000	3.64	7.8	24,200	2.46
3129820	PH13NA042(G)-B	CSPH*4212A**	PG9MXA036060	39,500	10.6	13.00	39,000	3.64	7.8	24,400	2.46
3129821	PH13NA042(G)-B	CSPH*4212A**	PG9MXA036080	39,500	10.6	13.00	39,000	3.64	7.8	24,400	2.46
3129822	PH13NA042(G)-B	CSPH*4212A**	PG9MXA048080	39,500	10.6	13.00	39,000	3.62	7.8	24,200	2.46
3129823	PH13NA042(G)-B	CSPH*4212A**	PG9MXA060100	39,500	10.6	13.00	39,000	3.66	7.8	24,200	2.48
3129824	PH13NA042(G)-B	CSPH*4212A**	PG9MXA060120	39,500	10.6	13.00	39,000	3.70	7.8	24,000	2.50
3129825	PH13NA048(G)-B	†PF4MNA049		45,000	10.6	13.00	43,500	3.66	7.8	27,400	2.56
3724144	PH13NA048(G)-B	PF4MNB049		45,500	10.6	13.50	43,000	3.72	8.2	27,200	2.60
3129826	PH13NA048(G)-B	CAP**4821A**	PG8*EA048090	44,000	10.4	13.00	43,500	3.64	7.8	27,000	2.52
3129827	PH13NA048(G)-B	CAP**4821A**	PG8*EA060110	44,000	10.6	13.00	43,500	3.66	7.8	26,800	2.54
3129840	PH13NA048(G)-B	CAP**4821A**	PG9MXA060100	44,000	10.5	13.00	43,500	3.66	7.8	26,800	2.54
3129829	PH13NA048(G)-B	CAP**4823A**	PG8*EA048090	44,000	10.4	13.00	43,500	3.64	7.8	27,000	2.52
3129830	PH13NA048(G)-B	CAP**4823A**	PG8*EA060110	44,000	10.6	13.00	43,500	3.66	7.8	26,800	2.54
3129842	PH13NA048(G)-B	CAP**4823A**	PG9MXA060100	44,000	10.5	13.00	43,500	3.66	7.8	26,800	2.54
3129828	PH13NA048(G)-B	CAP**4824A**	PG8*EA060135	44,000	10.5	13.00	43,500	3.66	7.8	26,800	2.54
3129841	PH13NA048(G)-B	CAP**4824A**	PG9MXA060120	44,000	10.5	13.00	43,500	3.70	7.8	26,800	2.56
3129834	PH13NA048(G)-B	CNPH*4821A**	PG8*EA048090	44,000	10.4	13.00	43,500	3.70	7.8	27,000	2.52
3129835	PH13NA048(G)-B	CNPH*4821A**	PG8*EA060110	44,000	10.6	13.00	43,500	3.72	7.8	26,800	2.56
3129836	PH13NA048(G)-B	CNPH*4821A**	PG8*EA060135	44,000	10.5	13.00	43,500	3.70	7.8	26,800	2.54
3129845	PH13NA048(G)-B	CNPH*4821A**	PG9MXA060100	44,000	10.5	13.00	43,500	3.72	7.8	26,800	2.54
3129846	PH13NA048(G)-B	CNPH*4821A**	PG9MXA060120	44,000	10.5	13.00	43,500	3.74	7.8	26,800	2.56
3129831	PH13NA048(G)-B	CNPV*4821A**	PG8*EA048090	44,000	10.4	13.00	43,500	3.70	7.8	27,000	2.52
3129832	PH13NA048(G)-B	CNPV*4821A**	PG8*EA060110	44,000	10.6	13.00	43,500	3.72	7.8	26,800	2.56
3129843	PH13NA048(G)-B	CNPV*4821A**	PG9MXA060100	44,000	10.5	13.00	43,500	3.72	7.8	26,800	2.54
3129833	PH13NA048(G)-B	CNPV*4824A**	PG8*EA060135	44,000	10.5	13.00	43,500	3.70	7.8	26,800	2.54
3129844	PH13NA048(G)-B	CNPV*4824A**	PG9MXA060120	44,000	10.5	13.00	43,500	3.74	7.8	26,800	2.56
3129837	PH13NA048(G)-B	CSPH*4812A**	PG8*EA048090	44,000	10.5	13.00	43,500	3.70	7.8	27,000	2.54
3129838	PH13NA048(G)-B	CSPH*4812A**	PG8*EA060110	44,000	10.6	13.00	43,500	3.72	7.8	26,800	2.56
3129839	PH13NA048(G)-B	CSPH*4812A**	PG8*EA060135	44,000	10.5	13.00	43,500	3.70	7.8	27,000	2.54
3129847	PH13NA048(G)-B	CSPH*4812A**	PG9MXA060100	44,000	10.5	13.00	43,500	3.72	7.8	27,000	2.54
3129848	PH13NA048(G)-B	CSPH*4812A**	PG9MXA060120	44,000	10.5	13.00	43,500	3.74	7.8	26,800	2.56
3134972	PH13PA048(G)-B	†PF4MNA049		45,000	10.6	13.00	43,500	3.66	7.8	27,400	2.56
3134973	PH13PA048(G)-B	CAP**4821A**	PG8*EA048090	44,000	10.4	13.00	43,500	3.64	7.8	27,000	2.52
3134974	PH13PA048(G)-B	CAP**4821A**	PG8*EA060110	44,000	10.6	13.00	43,500	3.66	7.8	26,800	2.54
3134987	PH13PA048(G)-B	CAP**4821A**	PG9MXA060100	44,000	10.5	13.00	43,500	3.66	7.8	26,800	2.54
3134976	PH13PA048(G)-B	CAP**4823A**	PG8*EA048090	44,000	10.4	13.00	43,500	3.64	7.8	27,000	2.52
3134977	PH13PA048(G)-B	CAP**4823A**	PG8*EA060110	44,000	10.6	13.00	43,500	3.66	7.8	26,800	2.54
3134989	PH13PA048(G)-B	CAP**4823A**	PG9MXA060100	44,000	10.5	13.00	43,500	3.66	7.8	26,800	2.54
3134975	PH13PA048(G)-B	CAP**4824A**	PG8*EA060135	44,000	10.5	13.00	43,500	3.66	7.8	26,800	2.54
3134988	PH13PA048(G)-B	CAP**4824A**	PG9MXA060120	44,000	10.5	13.00	43,500	3.70	7.8	26,800	2.56
3134981	PH13PA048(G)-B	CNPH*4821A**	PG8*EA048090	44,000	10.4	13.00	43,500	3.70	7.8	27,000	2.52
3134982	PH13PA048(G)-B	CNPH*4821A**	PG8*EA060110	44,000	10.6	13.00	43,500	3.72	7.8	26,800	2.56

PH13NA

See notes on page 9

COMBINATION RATINGS CONTINUED

AHRI Ref. No.	Model Number	Coil Model Number	Furnace Model Number	Cooling Capacity	EER	SEER	High Temp		HSPF	Low Temp	
							E Capacity	E COP		H Capacity	H COP
3134983	PH13PA048(G)-B	CNPH*4821A**	PG8*EA060135	44,000	10.5	13.00	43,500	3.70	7.8	26,800	2.54
3134992	PH13PA048(G)-B	CNPH*4821A**	PG9MXA060100	44,000	10.5	13.00	43,500	3.72	7.8	26,800	2.54
3134993	PH13PA048(G)-B	CNPH*4821A**	PG9MXA060120	44,000	10.5	13.00	43,500	3.74	7.8	26,800	2.56
3134978	PH13PA048(G)-B	CNPV*4821A**	PG8*EA048090	44,000	10.4	13.00	43,500	3.70	7.8	27,000	2.52
3134979	PH13PA048(G)-B	CNPV*4821A**	PG8*EA060110	44,000	10.6	13.00	43,500	3.72	7.8	26,800	2.56
3134990	PH13PA048(G)-B	CNPV*4821A**	PG9MXA060100	44,000	10.5	13.00	43,500	3.72	7.8	26,800	2.54
3134980	PH13PA048(G)-B	CNPV*4824A**	PG8*EA060135	44,000	10.5	13.00	43,500	3.70	7.8	26,800	2.54
3134991	PH13PA048(G)-B	CNPV*4824A**	PG9MXA060120	44,000	10.5	13.00	43,500	3.74	7.8	26,800	2.56
3134984	PH13PA048(G)-B	CSPH*4812A**	PG8*EA048090	44,000	10.5	13.00	43,500	3.70	7.8	27,000	2.54
3134985	PH13PA048(G)-B	CSPH*4812A**	PG8*EA060110	44,000	10.6	13.00	43,500	3.72	7.8	26,800	2.56
3134986	PH13PA048(G)-B	CSPH*4812A**	PG8*EA060135	44,000	10.5	13.00	43,500	3.70	7.8	27,000	2.54
3134994	PH13PA048(G)-B	CSPH*4812A**	PG9MXA060100	44,000	10.5	13.00	43,500	3.72	7.8	27,000	2.54
3134995	PH13PA048(G)-B	CSPH*4812A**	PG9MXA060120	44,000	10.5	13.00	43,500	3.74	7.8	26,800	2.56
3129849	PH13NA060(G)-B	†PF4MNA061		57,000	11.0	13.00	55,000	3.60	7.8	35,200	2.54
3724150	PH13NA060(G)-B	PF4MNB061		57,000	11.0	13.50	54,000	3.64	8.0	35,000	2.56
3129850	PH13NA060(G)-B	CAP**6021A**	PG8*EA060110	56,000	11.0	13.00	55,000	3.52	7.8	35,200	2.50
3129852	PH13NA060(G)-B	CAP**6024A**	PG9MXA060120	56,000	11.0	13.00	54,500	3.50	7.8	35,000	2.50
3129853	PH13NA060(G)-B	CAP**6025A**	PG9MXA060120	56,000	11.0	13.00	54,500	3.50	7.8	35,000	2.50
3129855	PH13NA060(G)-B	CNPH*6024A**	PG9MXA060120	56,000	11.0	13.00	55,000	3.52	7.8	34,800	2.48
3724147	PH13NA060(G)-B	CNPH*6124A**	PG8*EA060110	57,000	11.0	13.00	54,000	3.52	7.7	35,200	2.50
3724148	PH13NA060(G)-B	CNPH*6124A**	PG9MXA060100	56,500	10.6	13.00	54,000	3.50	7.7	35,200	2.48
3724149	PH13NA060(G)-B	CNPH*6124A**	PG9MXA060120	57,000	11.0	13.00	54,000	3.52	7.7	35,000	2.50
3129854	PH13NA060(G)-B	CNPV*6024A**	PG9MXA060120	56,000	11.0	13.00	55,000	3.52	7.8	34,800	2.48
3724145	PH13NA060(G)-B	CNPV*6124A**	PG8*EA060135	57,000	11.0	13.00	55,000	3.58	7.7	35,200	2.52
3724146	PH13NA060(G)-B	CNPV*6124A**	PG9MXA060120	57,000	11.0	13.00	55,000	3.60	7.8	35,000	2.54
3129851	PH13NA060(G)-B	CSPH*6012A**	PG8*EA060110	56,500	11.0	13.00	55,000	3.58	7.8	35,200	2.52
3129856	PH13NA060(G)-B	CSPH*6012A**	PG9MXA060100	56,000	11.0	13.00	55,000	3.54	7.8	35,000	2.50
3129857	PH13NA060(G)-B	CSPH*6012A**	PG9MXA060120	56,000	11.0	13.00	55,000	3.58	7.8	35,000	2.52
3134996	PH13PA060(G)-B	†PF4MNA061		57,000	11.0	13.00	55,000	3.60	7.8	35,200	2.54
3134997	PH13PA060(G)-B	CAP**6021A**	PG8*EA060110	56,000	11.0	13.00	55,000	3.52	7.8	35,200	2.50
3134999	PH13PA060(G)-B	CAP**6024A**	PG9MXA060120	56,000	11.0	13.00	54,500	3.50	7.8	35,000	2.50
3135000	PH13PA060(G)-B	CAP**6025A**	PG9MXA060120	56,000	11.0	13.00	54,500	3.50	7.8	35,000	2.50
3135002	PH13PA060(G)-B	CNPH*6024A**	PG9MXA060120	56,000	11.0	13.00	55,000	3.52	7.8	34,800	2.48
3135001	PH13PA060(G)-B	CNPV*6024A**	PG9MXA060120	56,000	11.0	13.00	55,000	3.52	7.8	34,800	2.48
3134998	PH13PA060(G)-B	CSPH*6012A**	PG8*EA060110	56,500	11.0	13.00	55,000	3.58	7.8	35,200	2.52
3135003	PH13PA060(G)-B	CSPH*6012A**	PG9MXA060100	56,000	11.0	13.00	55,000	3.54	7.8	35,000	2.50
3135004	PH13PA060(G)-B	CSPH*6012A**	PG9MXA060120	56,000	11.0	13.00	55,000	3.58	7.8	35,000	2.52

† Tested combination.

* Ratings are net values reflecting the effects of circulating fan heat. Supplemental electric heat is not included. Ratings are based on:

Cooling Standard: 80°F (27°C) db 67°F (19°C) wb indoor entering air temperature and 95°F (35°C) db air entering outdoor unit.

High-Temp Heating Standard: 70°F (21°C) db indoor entering air temperature and 47°F (8°C) db 43°F (6°C) wb air entering outdoor unit.

Low-Temp Heating Standard: 70°F (21°C) db indoor entering air temperature and 17°F (-8°C) db 15°F (-9°C) wb air entering outdoor unit.

COP — Coefficient of Performance

EER — Energy Efficiency Ratio

HSPF — Heating Seasonal Performance Factor

SEER — Seasonal Energy Efficiency Ratio

NOTE: Ratings contained in this document are subject to change at any time. Always refer to the AHRI directory (www.ahridirectory.org) for the most up-to-date ratings information.

PH13NA

DETAILED COOLING CAPACITIES*

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES ° F (° C)														
CFM	EWB ° F (° C)	75 (23.9)			85 (29.4)			95 (35)			105 (40.6)			115 (46.1)		
		Capacity MBTuh Total†	Sens†	Total Sys. KW**	Capacity MBTuh Total†	Sens†	Total Sys. KW**	Capacity MBTuh Total†	Sens†	Total Sys. KW**	Capacity MBTuh Total†	Sens†	Total Sys. KW**	Capacity MBTuh Total†	Sens†	Total Sys. KW**
PH13NA018 - B Outdoor Section With PF4MNA019 Indoor Section																
525	57 (13.9)	16.28	16.28	1.22	15.63	15.63	1.37	14.93	14.93	1.54	14.17	14.17	1.74	13.36	13.36	1.96
	62 (16.7)	16.88	15.29	1.22	16.06	14.88	1.37	15.19	14.44	1.55	14.27	13.96	1.74	13.36	13.36	1.96
	67 (19.4)	18.54	12.90	1.23	17.64	12.51	1.38	16.69	12.10	1.56	15.67	11.67	1.75	14.58	11.22	1.97
	72 (22.2)	20.35	10.48	1.23	19.38	10.11	1.40	18.35	9.71	1.57	17.26	9.30	1.77	16.09	8.86	1.99
	57 (13.9)	16.97	16.97	1.23	16.27	16.27	1.39	15.53	15.53	1.56	14.73	14.73	1.76	13.87	13.87	1.98
	62 (16.7)	17.28	16.37	1.23	16.44	15.93	1.39	15.56	15.49	1.56	14.73	14.73	1.76	13.87	13.87	1.98
	67 (19.4)	18.93	13.71	1.24	17.99	13.31	1.40	17.00	12.90	1.57	15.95	12.46	1.77	14.82	12.00	1.99
	72 (22.2)	20.76	10.99	1.25	19.75	10.60	1.41	18.68	10.21	1.59	17.55	9.79	1.79	16.34	9.34	2.01
	57 (13.9)	17.55	17.55	1.25	16.82	16.82	1.40	16.03	16.03	1.58	15.19	15.19	1.77	14.29	14.29	2.00
	62 (16.7)	17.84	17.34	1.25	16.82	16.82	1.40	16.03	16.03	1.58	15.19	15.19	1.77	14.29	14.29	2.00
	67 (19.4)	19.23	14.48	1.25	18.26	14.08	1.41	17.24	13.66	1.59	16.16	13.22	1.78	15.00	12.74	2.00
	72 (22.2)	21.08	11.47	1.26	20.04	11.08	1.43	18.94	10.67	1.61	17.78	10.25	1.80	16.53	9.80	2.02

COOLING INDOOR MODEL		CAPACITY		POWER		FURNACE MODEL	
*PF4MNA019	1.00	1.00	1.00	1.00	1.00		
FF1ENP019	1.00	1.00	1.03	1.03			
CNPV*1814A**	1.00	1.00	1.00	1.00	PG8*EA024045		

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES ° F (° C)														
CFM	EWB ° F (° C)	75 (23.9)			85 (29.4)			95 (35)			105 (40.6)			115 (46.1)		
		Capacity MBTuh Total†	Sens†	Total Sys. KW**	Capacity MBTuh Total†	Sens†	Total Sys. KW**	Capacity MBTuh Total†	Sens†	Total Sys. KW**	Capacity MBTuh Total†	Sens†	Total Sys. KW**	Capacity MBTuh Total†	Sens†	Total Sys. KW**
PH13NA024(G) - B Outdoor Section With PF4MNA025 Indoor Section																
700	57 (13.9)	21.35	21.35	1.64	20.55	20.55	1.84	19.67	19.67	2.07	18.70	18.70	2.32	17.62	17.62	2.60
	62 (16.7)	22.17	20.15	1.65	21.17	19.64	1.85	20.08	19.09	2.07	18.90	18.47	2.32	17.63	17.63	2.60
	67 (19.4)	24.25	16.96	1.67	23.18	16.49	1.87	22.01	15.99	2.09	20.73	15.44	2.34	19.30	14.84	2.62
	72 (22.2)	26.47	13.74	1.70	25.35	13.30	1.90	24.12	12.82	2.12	22.75	12.30	2.37	21.24	11.72	2.64
	57 (13.9)	22.20	22.20	1.66	21.35	21.35	1.87	20.42	20.42	2.09	19.40	19.40	2.34	18.27	18.27	2.62
	62 (16.7)	22.66	21.51	1.67	21.63	20.97	1.87	20.54	20.35	2.09	19.40	19.40	2.34	18.27	18.27	2.62
	67 (19.4)	24.71	17.98	1.69	23.61	17.51	1.89	22.40	17.00	2.11	21.07	16.45	2.36	19.60	15.84	2.64
	72 (22.2)	26.95	14.36	1.73	25.79	13.91	1.93	24.52	13.43	2.15	23.11	12.90	2.39	21.54	12.32	2.67
	57 (13.9)	22.90	22.90	1.69	22.01	22.01	1.89	21.05	21.05	2.12	19.99	19.99	2.37	18.80	18.80	2.65
	62 (16.7)	23.07	22.71	1.69	22.03	22.03	1.89	21.05	21.05	2.12	19.98	19.98	2.37	18.80	18.80	2.65
	67 (19.4)	25.06	18.95	1.72	23.93	18.47	1.92	22.89	17.96	2.14	21.33	17.40	2.38	19.82	16.77	2.66
	72 (22.2)	27.32	14.95	1.76	26.13	14.50	1.96	24.82	14.01	2.18	23.38	13.48	2.42	21.77	12.89	2.69

COOLING INDOOR MODEL		CAPACITY		POWER		FURNACE MODEL	
*PF4MNA025	1.00	1.00	1.00	1.00			
FF1ENP025	1.00	1.00	1.01	1.01			
PF4MNB025	1.00	1.00	1.00	1.00			
CAP**2414A**	1.00	1.00	1.00	1.00	PG8*EA024045		
CNPV*2417A**	1.00	1.00	1.00	1.00	PG8*EA024045		
CNPV*2414A**	1.00	1.00	1.00	1.00	PG8*EA024045		
CSPH*2412A**	1.00	1.00	1.00	1.00	PG8*EA024045		
CAP**2417A**	1.00	1.00	1.00	1.00	PG9MXXA036060		

See notes on pg. 16



PH13NA

DETAILED COOLING CAPACITIES* (CONT.)

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES °F (°C)														
		75 (23.9)			85 (29.4)			95 (35)			105 (40.6)			115 (46.1)		
		CFM	EWB °F (°C)	Capacity MBtuh Total†	Sens†	Total Sys. KW**	Capacity MBtuh Total†	Sens†	Total Sys. KW**	Capacity MBtuh Total†	Sens†	Total Sys. KW**	Capacity MBtuh Total†	Sens†	Total Sys. KW**	
PH13NA030(G)-B Outdoor Section With PF4MNA031 Indoor Section																
875	57 (13.9)	27.59	28.61	27.59	28.61	27.59	28.61	27.59	28.61	27.59	28.61	27.59	28.61	27.59	28.61	
	62 (16.7)	28.63	29.21	28.63	29.21	28.63	29.21	28.63	29.21	28.63	29.21	28.63	29.21	28.63	29.21	
	67 (19.4)	31.16	33.88	31.16	33.88	31.16	33.88	31.16	33.88	31.16	33.88	31.16	33.88	31.16	33.88	
	72 (22.2)	33.88	38.61	33.88	38.61	33.88	38.61	33.88	38.61	33.88	38.61	33.88	38.61	33.88	38.61	
	75 (23.9)	34.90	40.00	34.90	40.00	34.90	40.00	34.90	40.00	34.90	40.00	34.90	40.00	34.90	40.00	
1000	57 (13.9)	29.70	31.71	29.70	31.71	29.70	31.71	29.70	31.71	29.70	31.71	29.70	31.71	29.70	31.71	
	62 (16.7)	29.70	34.46	29.70	34.46	29.70	34.46	29.70	34.46	29.70	34.46	29.70	34.46	29.70	34.46	
	67 (19.4)	32.14	39.21	32.14	39.21	32.14	39.21	32.14	39.21	32.14	39.21	32.14	39.21	32.14	39.21	
	72 (22.2)	34.90	44.00	34.90	44.00	34.90	44.00	34.90	44.00	34.90	44.00	34.90	44.00	34.90	44.00	
	75 (23.9)	38.00	48.00	38.00	48.00	38.00	48.00	38.00	48.00	38.00	48.00	38.00	48.00	38.00	48.00	
1125	57 (13.9)	29.70	31.71	29.70	31.71	29.70	31.71	29.70	31.71	29.70	31.71	29.70	31.71	29.70	31.71	
	62 (16.7)	29.70	34.46	29.70	34.46	29.70	34.46	29.70	34.46	29.70	34.46	29.70	34.46	29.70	34.46	
	67 (19.4)	32.14	39.21	32.14	39.21	32.14	39.21	32.14	39.21	32.14	39.21	32.14	39.21	32.14	39.21	
	72 (22.2)	34.90	44.00	34.90	44.00	34.90	44.00	34.90	44.00	34.90	44.00	34.90	44.00	34.90	44.00	
	75 (23.9)	38.00	48.00	38.00	48.00	38.00	48.00	38.00	48.00	38.00	48.00	38.00	48.00	38.00	48.00	

COOLING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL	COOLING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL
*PF4MNA031	1.00	1.00		CAP**3017A**	1.00	1.00	PG9MXXA036080
FF1ENP031	0.99	0.99		CNPV*3017A**	1.00	1.00	PG9MXXA036080
PF4MNB031	1.00	1.00		CNPV*3017A**	1.00	1.00	PG9MXXA036080
CNPV*3017A**	1.00	1.00	PG8*EA048090	CSPH*3012A**	1.00	1.00	PG9MXXA048080
CSPH*3012A**	1.00	1.00	PG8*EA048090	CAP**3017A**	1.00	1.00	PG9MXXA048080
CAP**3017A**	1.00	1.00	PG9MXXA036060	CNPV*3017A**	1.00	1.00	PG9MXXA048080
CNPV*3017A**	1.00	1.00	PG9MXXA036060	CSPH*3012A**	1.00	1.00	PG9MXXA048080
CSPH*3012A**	1.00	1.00	PG9MXXA036060				
	1.00	1.00	PG9MXXA036060				

See notes on pg. 16

DETAILED COOLING CAPACITIES* (CONT.)

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES ° F (° C)																	
		75 (23.9)				85 (29.4)				95 (35)				105 (40.6)				115 (46.1)	
		CFM	EWB ° F (° C)	Capacity MBtuh	Sens†	Total Sys. KW**	Capacity MBtuh	Sens†	Total Sys. KW**	Capacity MBtuh	Sens†	Total Sys. KW**	Capacity MBtuh	Sens†	Total Sys. KW**	Capacity MBtuh	Sens†	Total Sys. KW**	
PH13NA036(G)-B Outdoor Section With PF4MNA037 Indoor Section																			
1050	57 (13.9)	32.52	31.30	2.55	2.83	29.99	29.99	3.14	28.56	28.56	3.50	27.00	27.00	3.50	27.00	27.00	3.92		
	62 (16.7)	33.65	32.04	2.56	2.83	30.54	30.54	3.14	28.82	28.82	3.50	27.01	27.01	3.50	27.01	27.01	3.92		
	67 (19.4)	36.82	26.93	2.58	2.85	33.45	33.45	3.17	31.56	31.56	3.52	29.49	29.49	3.52	29.49	29.49	3.93		
	72 (22.2)	40.26	21.75	2.60	2.88	36.67	36.67	3.19	34.65	34.65	3.55	32.44	32.44	3.55	32.44	32.44	3.95		
1200	57 (13.9)	33.76	33.76	2.60	2.87	31.10	31.10	3.19	29.59	29.59	3.54	27.95	27.95	3.54	27.95	27.95	3.96		
	62 (16.7)	34.37	34.18	2.60	2.88	33.32	33.32	3.19	29.59	29.59	3.54	27.95	27.95	3.54	27.95	27.95	3.96		
	67 (19.4)	37.50	28.54	2.62	2.90	34.00	34.00	3.21	32.04	32.04	3.56	29.91	29.91	3.56	29.91	29.91	3.97		
	72 (22.2)	40.96	22.73	2.65	2.93	37.25	37.25	3.24	35.16	35.16	3.59	32.88	32.88	3.59	32.88	32.88	3.99		
1350	57 (13.9)	34.80	34.80	2.64	2.92	32.01	32.01	3.23	30.44	30.44	3.59	28.73	28.73	3.59	28.73	28.73	4.00		
	62 (16.7)	35.00	36.06	2.64	2.92	32.01	32.01	3.23	30.44	30.44	3.59	28.72	28.72	3.59	28.72	28.72	4.00		
	67 (19.4)	38.03	30.11	2.66	2.94	34.43	34.43	3.25	32.42	32.42	3.60	30.24	30.24	3.60	30.24	30.24	4.01		
	72 (22.2)	41.51	23.67	2.69	2.97	37.69	37.69	3.28	35.55	35.55	3.63	33.21	33.21	3.63	33.21	33.21	4.04		

COOLING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL	
			Capacity MBtuh	Total Sys. KW**
*PF4MNA037	1.00	1.00		
FF1ENP037	1.01	1.02		
PF4MNB037	1.03	0.99		
PF4MNB043	1.03	0.99		
CNPH*4321A**	1.02	1.02	PG8*EA024045	
CNPH*4321A**	1.03	1.03	PG8*EA048070	
CNPH*4321A**	1.02	1.02	PG8*EA048070	
CSPH*3612A**	0.98	0.98	PG8*EA048070	
CAP**3621A**	0.99	0.99	PG8*EA048090	
CNPH*3617A**	0.98	0.98	PG8*EA048090	
CNPH*4321A**	1.03	0.99	PG8*EA048090	
CNPH*3621A**	0.98	0.98	PG8*EA048090	
CNPH*3612A**	0.98	0.98	PG8*EA048090	
CSPH*3612A**	0.98	0.98	PG8*EA048090	
CAP**3621A**	1.00	1.00	PG8*EA060110	
CNPH*3617A**	0.98	0.98	PG8*EA060110	
CNPH*4321A**	1.03	0.99	PG8*EA060110	
CNPH*3621A**	0.99	0.99	PG8*EA060110	
CSPH*3612A**	0.98	0.98	PG8*EA060110	
CNPH*4321A**	1.02	1.03	PG9MTAV36050*A**	
CNPH*4321A**	1.03	1.03	PG9MTAV36075*A**	
CNPH*4321A**	1.03	0.99	PG9MTAV60100*A**	
CNPH*4321A**	1.03	0.99	PG9MTAV60125*A**	
CNPH*4324A**	1.03	0.99	PG9MTAV60125*A**	

COOLING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL	
			Capacity MBtuh	Total Sys. KW**
CAP**3617A**	0.98	0.98		
CNPH*3617A**	0.98	0.98		
CNPH*4321A**	1.03	0.99		
CNPH*3617A**	0.98	0.98		
CNPH*3617A**	1.03	0.99		
CSPH*3612A**	0.98	0.98		
CAP**3617A**	0.98	0.98		
CNPH*3617A**	0.98	0.98		
CNPH*4321A**	1.03	0.99		
CNPH*3617A**	0.98	0.98		
CNPH*3617A**	1.03	0.99		
CSPH*3612A**	0.98	0.98		
CAP**3617A**	0.98	0.98		
CNPH*3617A**	0.98	0.98		
CNPH*4321A**	1.03	0.99		
CNPH*3617A**	0.98	0.98		
CNPH*3617A**	1.03	0.99		
CSPH*3612A**	0.98	0.98		
CAP**3621A**	0.98	0.98		
CNPH*3617A**	0.98	0.98		
CNPH*4321A**	1.03	0.99		
CNPH*3621A**	0.98	0.98		
CSPH*3612A**	0.98	0.98		

See notes on pg. 16

DETAILED COOLING CAPACITIES* (CONT.)

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES ° F (° C)													
		75 (23.9)			85 (29.4)			95 (35)			105 (40.6)			115 (46.1)	
		CFM	EWB ° F (° C)	Capacity MBtuh Total†	Sens†	Total Sys. KW**	Capacity MBtuh Total†	Sens†	Total Sys. KW**	Capacity MBtuh Total†	Sens†	Total Sys. KW**	Capacity MBtuh Total†	Sens†	Total Sys. KW**
PH13NA042(G)-B Outdoor Section With PF4MNA043 Indoor Section															
1225	57 (13.9)	38.22	39.66	38.22	3.03	36.77	35.23	3.37	35.23	35.23	3.74	33.60	32.99	4.14	
	62 (16.7)	39.66	43.44	35.89	3.02	37.84	34.02	3.37	35.94	34.02	3.74	33.96	32.99	4.15	
	67 (19.4)	43.44	47.61	30.19	2.97	41.45	28.42	3.34	39.35	28.42	3.73	37.14	27.48	4.15	
	72 (22.2)	47.61	49.20	24.46	2.89	45.44	23.60	3.29	43.16	22.72	3.71	40.76	21.81	4.15	
	77 (25.0)	49.20	50.78	19.71	2.81	49.20	18.16	3.41	46.52	16.52	3.79	44.79	15.79	4.20	
1400	57 (13.9)	39.71	40.51	39.71	3.06	38.16	37.34	3.41	36.70	36.25	3.79	34.79	34.79	4.20	
	62 (16.7)	40.51	44.27	38.33	3.05	40.51	31.11	3.38	40.00	30.20	3.77	37.71	29.25	4.20	
	67 (19.4)	44.27	48.52	32.00	2.99	42.19	24.70	3.32	43.87	23.80	3.74	41.38	22.87	4.19	
	72 (22.2)	48.52	50.78	25.57	2.91	46.24	19.31	3.45	45.77	18.59	3.83	43.77	17.77	4.24	
	77 (25.0)	50.78	52.36	19.71	2.81	50.78	14.24	3.45	49.20	13.59	3.83	47.77	12.77	4.24	
1575	67 (19.4)	44.90	44.90	33.73	3.03	42.74	32.82	3.41	40.48	31.90	3.82	38.12	30.92	4.24	
	72 (22.2)	49.20	49.20	26.61	2.94	46.85	25.73	3.36	44.40	24.82	3.78	41.84	23.88	4.23	
	77 (25.0)	52.36	52.36	19.71	2.81	52.36	14.24	3.45	49.20	13.59	3.83	47.77	12.77	4.24	

COOLING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL
*PF4MNA043	1.00	1.00	
PF4MNB049	0.99	0.95	
CAP**4221A**	0.99	0.99	PG8*EA048090
CNPH*4321A**	0.99	0.99	PG8*EA048090
CSPH*4212A**	0.99	0.99	PG8*EA048090
CAP**4221A**	0.99	0.99	PG8*EA060110
CNPH*4221A**	0.99	0.99	PG8*EA060110
CNPH*4321A**	0.99	0.95	PG8*EA060110
CNPH*4221A**	0.99	0.99	PG8*EA060110
CSPH*4212A**	0.99	0.99	PG8*EA060110
CAP**4224A**	0.99	0.99	PG8*EA060135
CNPH*4221A**	0.99	0.99	PG8*EA060135
CNPH*4321A**	0.99	0.99	PG8*EA060135
CNPH*4324A**	0.74	0.71	PG8*EA060135
CSPH*4212A**	0.99	0.99	PG8*EA060135
CNPH*4321A**	0.99	0.99	PG9MTAV60100*A**
CNPH*4321A**	0.99	0.99	PG9MTAV60125*A**

INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL
CNPH*4324A**	0.99	0.99	PG9MTAV60125*A**
CNPH*4321A**	0.99	0.99	PG9MXXA036060
CSPH*4212A**	0.99	0.99	PG9MXXA036060
CNPH*4321A**	0.99	0.99	PG9MXXA036080
CSPH*4212A**	0.99	0.99	PG9MXXA036080
CNPH*4321A**	0.99	0.99	PG9MXXA048080
CSPH*4212A**	0.99	0.99	PG9MXXA048080
CAP**4221A**	0.99	0.99	PG9MXXA060100
CNPH*4221A**	0.99	0.99	PG9MXXA060100
CNPH*4321A**	0.99	0.95	PG9MXXA060100
CNPH*4221A**	0.99	0.99	PG9MXXA060100
CSPH*4212A**	0.99	0.99	PG9MXXA060100
CAP**4224A**	0.99	0.99	PG9MXXA060120
CNPH*4221A**	0.99	0.99	PG9MXXA060120
CNPH*4321A**	0.99	0.95	PG9MXXA060120
CNPH*4324A**	0.99	0.95	PG9MXXA060120
CSPH*4212A**	0.99	0.99	PG9MXXA060120

See notes on pg. 16

DETAILED COOLING CAPACITIES* (CONT.)

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES ° F (° C)															
		75 (23.9)			85 (29.4)			95 (35)			105 (40.6)			115 (46.1)			
		CFM	EWB ° F (° C)	Capacity MBtuh Total†	Sens†	Total Sys. KW**	Capacity MBtuh Total†	Sens†	Total Sys. KW**	Capacity MBtuh Total†	Sens†	Total Sys. KW**	Capacity MBtuh Total†	Sens†	Total Sys. KW**		
PH13NA048(G)-B Outdoor Section With PF4MNA049 Indoor Section																	
1400	57 (13.9)	43.34	43.34	43.34	3.32	41.63	41.63	3.72	39.85	39.85	4.14	37.99	37.99	4.60	35.98	35.98	5.13
	62 (16.7)	44.87	44.87	40.83	3.32	42.73	41.15	3.73	40.55	39.51	4.15	38.30	38.30	4.61	35.98	35.98	5.13
	67 (19.4)	49.06	34.99	33.95	3.33	46.72	33.95	3.75	44.31	32.90	4.18	41.81	41.81	4.65	39.14	30.68	5.17
	72 (22.2)	53.58	28.21	27.19	3.32	51.03	27.19	3.76	48.41	26.16	4.21	45.69	45.69	4.69	42.80	23.99	5.21
	57 (13.9)	45.02	45.02	43.19	3.38	43.19	43.19	3.79	41.30	41.30	4.21	39.32	39.32	4.68	37.19	37.19	5.21
1600	62 (16.7)	45.80	44.60	43.61	3.38	43.61	43.61	3.79	41.40	41.17	4.21	39.32	39.32	4.68	37.19	37.19	5.21
	67 (19.4)	49.95	37.13	36.07	3.37	47.51	36.07	3.81	45.00	35.00	4.25	42.40	42.40	4.71	39.64	32.73	5.23
	72 (22.2)	54.51	29.49	28.46	3.37	51.85	28.46	3.82	49.14	27.41	4.27	46.31	46.31	4.75	43.31	25.21	5.27
1800	57 (13.9)	46.41	46.41	44.48	3.44	44.48	44.48	3.85	42.50	42.50	4.28	40.41	40.41	4.75	38.18	38.18	5.28
	62 (16.7)	46.62	47.13	44.48	3.44	44.48	44.48	3.85	42.49	42.49	4.28	40.41	40.41	4.75	38.17	38.17	5.28
	67 (19.4)	50.61	39.17	38.10	3.44	48.08	38.10	3.87	45.50	37.00	4.31	42.82	42.82	4.78	39.99	34.68	5.30
72 (22.2)	55.20	30.70	29.66	3.43	52.46	29.66	3.88	49.66	28.60	4.34	46.76	46.76	4.82	43.68	26.37	5.34	

COOLING INDOOR MODEL	CAPACITY	POWER	INDOOR MODEL		CAPACITY	POWER	FURNACE MODEL
			INDOOR MODEL	POWER			
*PF4MNA049	1.00	1.00	CNPH*4821A**	0.99	0.98	0.99	PG8*EA060135
PF4MNB049	1.01	1.01	CNPV*4824A**	0.98	0.98	0.99	PG8*EA060135
CAP**4821A**	0.98	1.00	CSPH*4812A**	0.98	0.98	0.99	PG8*EA060135
CAP**4823A**	0.98	1.00	CAP**4821A**	0.98	0.98	0.99	PG9MXXA060100
CNPH*4821A**	0.98	1.00	CAP**4823A**	0.98	0.98	0.99	PG9MXXA060100
CNPV*4821A**	0.98	1.00	CNPH*4821A**	0.99	0.98	0.99	PG9MXXA060100
CSPH*4812A**	0.98	0.99	CNPV*4821A**	0.98	0.98	0.99	PG9MXXA060100
CAP**4821A**	0.98	0.98	CSPH*4812A**	0.98	0.98	0.99	PG9MXXA060100
CAP**4823A**	0.98	0.98	CAP**4824A**	0.98	0.98	0.99	PG9MXXA060120
CNPH*4821A**	0.98	0.98	CNPH*4821A**	0.98	0.98	0.99	PG9MXXA060120
CNPV*4821A**	0.98	0.98	CNPV*4824A**	0.98	0.98	0.99	PG9MXXA060120
CSPH*4812A**	0.98	0.98	CSPH*4812A**	0.98	0.98	0.99	PG9MXXA060120
CAP**4824A**	0.98	0.99					

COOLING INDOOR MODEL	CAPACITY	POWER	INDOOR MODEL		CAPACITY	POWER	FURNACE MODEL
			INDOOR MODEL	POWER			
*PF4MNA049	1.00	1.00	PG8*EA048090	1.00	1.00	1.00	PG8*EA060135
PF4MNB049	1.01	1.01	PG8*EA048090	1.00	1.00	1.00	PG8*EA060135
CAP**4821A**	0.98	1.00	PG8*EA048090	0.98	1.00	1.00	PG8*EA060135
CAP**4823A**	0.98	1.00	PG8*EA048090	0.98	1.00	1.00	PG8*EA060135
CNPH*4821A**	0.98	1.00	PG8*EA048090	0.98	1.00	1.00	PG8*EA060135
CNPV*4821A**	0.98	1.00	PG8*EA048090	0.98	1.00	1.00	PG8*EA060135
CSPH*4812A**	0.98	0.99	PG8*EA048090	0.98	0.99	0.99	PG8*EA060135
CAP**4821A**	0.98	0.98	PG8*EA060110	0.98	0.98	0.98	PG8*EA060135
CAP**4823A**	0.98	0.98	PG8*EA060110	0.98	0.98	0.98	PG8*EA060135
CNPH*4821A**	0.98	0.98	PG8*EA060110	0.98	0.98	0.98	PG8*EA060135
CNPV*4821A**	0.98	0.98	PG8*EA060110	0.98	0.98	0.98	PG8*EA060135
CSPH*4812A**	0.98	0.98	PG8*EA060110	0.98	0.98	0.98	PG8*EA060135
CAP**4824A**	0.98	0.99	PG8*EA060135	0.98	0.99	0.99	PG8*EA060135

See notes on pg. 16

DETAILED COOLING CAPACITIES* (CONT.)

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES ° F (° C)															
		75 (23.9)			85 (29.4)			95 (35)			105 (40.6)			115 (46.1)			
		CFM	EWB ° F (° C)	Capacity MBtuh	Sens†	Total Sys. KW**	Capacity MBtuh	Sens†	Total Sys. KW**	Capacity MBtuh	Sens†	Total Sys. KW**	Capacity MBtuh	Sens†	Total Sys. KW**	Capacity MBtuh	Sens†
PH13NA060(G)-B Outdoor Section With PF4MNA061 Indoor Section																	
1750	57 (13.9)	55.54	53.48	51.28	4.16	53.48	4.59	5.08	48.90	48.90	5.65	46.29	46.29	6.29			
	62 (16.7)	57.44	54.88	51.38	4.18	54.88	4.61	5.10	49.30	49.30	5.65	46.30	46.30	6.29			
	67 (19.4)	62.76	59.97	42.89	4.26	59.97	4.69	5.18	53.81	40.23	5.74	50.35	38.77	6.37			
	72 (22.2)	68.52	65.52	34.33	4.35	65.52	4.79	5.28	58.87	31.74	5.84	55.14	30.30	6.47			
	77 (13.9)	57.66	55.47	55.47	4.26	55.47	4.70	5.19	50.59	50.59	5.76	47.81	47.81	6.40			
2000	62 (16.7)	58.62	56.27	4.28	56.00	54.88	4.71	5.19	50.59	50.59	5.76	47.81	47.81	6.40			
	67 (19.4)	63.88	46.77	4.35	60.98	45.53	4.79	5.27	54.57	42.83	5.83	50.98	41.32	6.46			
	72 (22.2)	69.71	37.09	4.44	66.59	35.89	4.88	5.37	59.70	33.24	5.93	55.84	31.77	6.56			
2250	57 (13.9)	59.42	57.10	4.37	57.10	4.80	5.30	51.97	51.97	5.86	49.05	49.05	6.50				
	62 (16.7)	59.64	59.42	4.37	57.10	4.80	5.30	51.96	51.96	5.86	49.04	49.04	6.50				
	67 (19.4)	64.70	61.71	4.44	61.71	4.88	5.36	55.12	45.28	5.92	51.44	43.74	6.55				
	72 (22.2)	70.61	67.39	4.54	67.39	4.97	5.46	60.30	34.65	6.02	56.34	33.14	6.65				

COOLING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL
*PF4MNA061	1.00	1.00	
PF4MNB061	1.00	1.00	
CAP**6021A**	0.98	0.98	PG8*EA060110
CNPH*6124A**	1.00	1.00	PG8*EA060110
CSPH*6012A**	0.99	0.99	PG8*EA060110
CNPV*6124A**	1.00	1.00	PG8*EA060135
CNPH*6124A**	0.99	1.03	PG9MXA060100
CSPH*6012A**	0.98	0.98	PG9MXA060100

COOLING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL
CAP**6024A**	0.98	0.98	PG9MXA060120
CAP**6025A**	0.98	0.98	PG9MXA060120
CNPH*6024A**	0.98	0.98	PG9MXA060120
CNPH*6124A**	1.00	1.00	PG9MXA060120
CNPV*6024A**	0.98	0.98	PG9MXA060120
CNPV*6124A**	1.00	1.00	PG9MXA060120
CSPH*6012A**	0.98	0.98	PG9MXA060120

* Detailed cooling capacities are based on indoor and outdoor unit at the same elevation, per AHRI Standard 210/240-94, and connected by 25 ft of tubing. If other than 25 ft of tubing is used and/or indoor unit is located above outdoor unit, a slight vAHRlation in capacity may occur.

† Total and sensible capacities are net capacities. Blower motor heat has been subtracted.

‡ Sensible capacities shown are based on 80° F (27° C) entering air at the indoor coil. For sensible capacities at other than 80° F (27° C), deduct 835 Btuh (245 kW) per 1000 CFM (480 L/S) of indoor coil air for each degree below 80° F (27° C), or add 835 Btuh (245 kW) per 1000 CFM (480 L/S) of indoor coil air per degree above 80° F (27° C).

When the required data falls between the published data, interpolation may be performed.

** Unit kW is total of indoor and outdoor unit kilowatts.

HEAT PUMP HEATING PERFORMANCE

INDOOR AIR		OUTDOOR COIL ENTERING AIR TEMPERATURES ° F (° C)															
EDB ° F (° C)	CFM	-3 (-19.4)		7 (-13.9)		17 (-8.3)		27 (-2.8)		37 (2.8)		47 (8.3)		57 (13.9)		67 (19.4)	
		Capacity MBtuh	Total Sys. KWt	Capacity MBtuh	Total Sys. KWt	Capacity MBtuh	Total Sys. KWt	Capacity MBtuh	Total Sys. KWt	Capacity MBtuh	Total Sys. KWt	Capacity MBtuh	Total Sys. KWt	Capacity MBtuh	Total Sys. KWt	Capacity MBtuh	Total Sys. KWt
65 (18.3)	525	5.98	5.50	7.95	7.31	10.05	9.16	12.36	10.97	14.69	13.36	16.61	16.61	18.39	18.39	19.94	19.94
	600	6.06	5.57	8.05	7.40	10.16	9.27	12.52	11.12	14.71	13.39	16.49	16.49	18.04	18.04	19.28	19.28
	675	6.13	5.64	8.14	7.48	10.26	9.36	12.66	11.24	14.79	13.37	16.30	16.30	17.61	17.61	18.27	18.27
70 (21.1)	525	5.77	5.31	7.75	7.12	9.83	8.97	12.09	10.74	14.52	13.21	16.46	16.46	18.29	18.29	19.91	19.91
	600	5.86	5.39	7.85	7.22	9.96	9.08	12.26	10.89	14.57	13.26	16.40	16.40	18.07	18.07	19.38	19.38
	675	5.93	5.46	7.91	7.27	10.06	9.17	12.40	11.01	14.58	13.27	16.26	16.26	17.70	17.70	18.78	18.78
75 (23.9)	525	5.54	5.09	7.53	6.92	9.60	8.75	11.82	10.50	14.26	12.98	16.28	16.28	18.14	18.14	19.83	19.83
	600	5.62	5.17	7.64	7.02	9.73	8.87	11.99	10.65	14.39	13.10	16.27	16.27	17.97	17.97	19.40	19.40
	675	5.70	5.25	7.73	7.10	9.84	8.97	12.13	10.77	14.47	13.17	16.20	16.20	17.72	17.72	18.86	18.86

HEATING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL
*PF4MNA019	1.00	1.00	
			FF1ENP019
			CNPV*1814A**
			1.00
			1.01
			PG8*EA024045

INDOOR AIR		OUTDOOR COIL ENTERING AIR TEMPERATURES ° F (° C)															
EDB ° F (° C)	CFM	-3 (-19.4)		7 (-13.9)		17 (-8.3)		27 (-2.8)		37 (2.8)		47 (8.3)		57 (13.9)		67 (19.4)	
		Capacity MBtuh	Total Sys. KWt	Capacity MBtuh	Total Sys. KWt	Capacity MBtuh	Total Sys. KWt	Capacity MBtuh	Total Sys. KWt	Capacity MBtuh	Total Sys. KWt	Capacity MBtuh	Total Sys. KWt	Capacity MBtuh	Total Sys. KWt	Capacity MBtuh	Total Sys. KWt
65 (18.3)	700	8.24	7.58	10.68	9.81	13.21	12.04	15.55	14.08	18.69	17.01	21.18	21.18	23.49	23.49	25.56	25.56
	800	8.38	7.71	10.83	9.96	14.39	12.20	15.4	14.26	18.87	17.17	21.20	21.20	23.29	23.29	25.20	25.20
	900	8.50	7.82	11.41	10.97	13.54	12.34	15.3	14.40	18.98	17.27	21.17	21.17	23.06	23.06	24.76	24.76
70 (21.1)	700	7.89	7.26	10.35	9.51	12.89	11.75	15.2	13.84	18.38	16.72	20.94	20.94	22.86	22.86	25.34	25.34
	800	8.03	7.39	10.51	9.66	13.07	11.92	15.1	13.61	18.58	16.91	21.00	21.00	22.97	22.97	25.08	25.08
	900	8.15	7.50	10.65	9.78	13.23	12.06	15.0	14.15	18.73	17.05	21.02	21.02	22.97	22.97	24.74	24.74
75 (23.9)	700	7.49	6.89	10.00	9.19	12.55	11.44	15.26	13.55	17.77	16.44	20.67	20.67	22.82	22.82	25.08	25.08
	800	7.64	7.03	10.16	9.34	12.74	11.61	15.1	13.74	18.29	16.64	20.78	20.78	22.89	22.89	24.90	24.90
	900	7.77	7.15	10.30	9.46	12.90	11.76	15.0	13.90	18.45	16.79	20.83	20.83	22.90	22.90	24.65	24.65

HEATING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL
*PF4MNA025	1.00	1.00	
FF1ENP025	1.00	1.02	
PF4MNB025	1.00	0.98	
CAP**2414A**	1.00	1.00	PG8*EA024045
CNPV*2417A**	1.00	0.99	PG8*EA024045
CSPH*2412A**	1.00	0.99	PG8*EA024045
CAP**2417A**	1.00	1.00	PG8*EA024045
CNPV*2417A**	1.00	0.96	PG9MXA036080
CSPH*2412A**	1.00	0.97	PG9MXA036080
CAP**2417A**	1.00	0.97	PG9MXA036080
CNPV*2417A**	1.00	0.97	PG9MXA036080
CSPH*2412A**	1.00	0.98	PG9MXA036080
CAP**2417A**	1.00	0.97	PG9MXA036080
CNPV*2417A**	1.00	0.97	PG9MXA036080
CSPH*2412A**	1.00	0.98	PG9MXA036080

See notes on pg. 22



HEAT PUMP HEATING PERFORMANCE

INDOOR AIR		OUTDOOR COIL ENTERING AIR TEMPERATURES ° F (° C)																							
EDB ° F (° C)	CFM	-3 (-19.4)			7 (-13.9)			17 (-8.3)			27 (-2.8)			37 (2.8)			47 (8.3)			57 (13.9)			67 (19.4)		
		Capacity MBtuh	Total Sys. KWt	Integ*	Capacity MBtuh	Total Sys. KWt	Integ*	Capacity MBtuh	Total Sys. KWt	Integ*	Capacity MBtuh	Total Sys. KWt	Integ*	Capacity MBtuh	Total Sys. KWt	Integ*	Capacity MBtuh	Total Sys. KWt	Integ*	Capacity MBtuh	Total Sys. KWt	Integ*	Capacity MBtuh	Total Sys. KWt	Integ*
65 (18.3)	875	12.30	1.78	15.19	13.96	1.86	18.26	16.65	1.95	21.59	19.18	2.04	24.67	22.45	2.10	27.32	27.32	2.18	29.97	29.97	2.25	32.24	32.24	2.32	
	1000	12.46	1.78	15.38	14.13	1.86	18.46	16.83	1.93	21.78	19.34	2.01	24.68	22.46	2.07	27.21	27.21	2.13	29.50	29.50	2.18	31.49	31.49	2.23	
	1125	12.61	1.79	15.53	14.27	1.86	18.63	16.99	1.93	21.91	19.46	1.99	24.66	22.44	2.04	26.95	26.95	2.09	28.98	28.98	2.14	30.71	30.71	2.17	
70 (21.1)	875	12.00	1.86	14.89	13.69	1.95	17.99	16.41	2.04	21.29	18.91	2.14	24.43	22.23	2.21	27.10	27.10	2.29	29.79	29.79	2.37	32.05	32.05	2.44	
	1000	12.17	1.86	15.08	13.86	1.95	18.20	16.60	2.03	21.49	19.06	2.11	24.49	22.29	2.17	27.00	27.00	2.24	29.44	29.44	2.30	31.47	31.47	2.35	
	1125	12.31	1.87	15.24	14.01	1.95	18.37	16.75	2.02	21.66	19.23	2.09	24.51	22.31	2.15	26.90	26.90	2.20	29.02	29.02	2.25	30.82	30.82	2.29	
75 (23.9)	875	11.66	1.95	14.58	13.39	2.05	17.68	16.12	2.14	20.95	18.61	2.25	24.16	21.99	2.32	26.89	26.89	2.41	29.58	29.58	2.50	31.85	31.85	2.57	
	1000	11.83	1.95	14.77	13.57	2.04	17.89	16.31	2.13	21.19	18.82	2.22	24.27	22.09	2.28	26.81	26.81	2.35	29.31	29.31	2.42	31.39	31.39	2.48	
	1125	11.99	1.96	14.93	13.72	2.04	18.08	16.48	2.12	21.36	18.97	2.20	24.33	22.14	2.25	26.71	26.71	2.31	28.99	28.99	2.37	30.85	30.85	2.42	

PH13NA030(G)-B Outdoor Section With PF4MNA031 Indoor Section

HEATING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL
*PF4MNA031	1.00	1.00	
FFIENP031	0.98	1.03	
PF4MNB031	1.00	1.03	
CNPH*3017A**	1.00	1.03	PG8*EA048090
CSPH*3012A**	1.00	1.03	PG8*EA048090
CAP**3017A**	1.00	1.01	PG9MXA036060
CNPH*3017A**	1.00	1.02	PG9MXA036060
CNPV*3017A**	1.00	1.02	PG9MXA036060
CSPH*3012A**	0.99	1.01	PG9MXA036060
CAP**3017A**	1.00	1.02	PG9MXA036060
CNPH*3017A**	1.00	1.02	PG9MXA036060
CNPV*3017A**	1.00	1.02	PG9MXA036060
CSPH*3012A**	0.99	1.01	PG9MXA036060
CAP**3017A**	1.00	1.02	PG9MXA036060
CNPH*3017A**	1.00	1.02	PG9MXA036060
CNPV*3017A**	1.00	1.02	PG9MXA036060
CSPH*3012A**	1.00	1.02	PG9MXA036060
CAP**3017A**	1.00	1.01	PG9MXA036060
CNPH*3017A**	1.00	1.01	PG9MXA036060
CNPV*3017A**	1.00	1.01	PG9MXA036060
CSPH*3012A**	0.99	1.01	PG9MXA036060

See notes on pg. 22

HEAT PUMP HEATING PERFORMANCE

INDOOR AIR		OUTDOOR COIL ENTERING AIR TEMPERATURES °F (°C)																							
EDB °F (°C)	CFM	-3 (-19.4)		7 (-13.9)		17 (-8.3)		27 (-2.8)		37 (2.8)		47 (8.3)		57 (13.9)		67 (19.4)									
		Capacity MBtuh	Total Sys. KW†	Capacity MBtuh	Total Sys. KW†	Capacity MBtuh	Total Sys. KW†	Capacity MBtuh	Total Sys. KW†	Capacity MBtuh	Total Sys. KW†	Capacity MBtuh	Total Sys. KW†	Capacity MBtuh	Total Sys. KW†	Capacity MBtuh	Total Sys. KW†								
		Total	Integ*	Total	Integ*	Total	Integ*	Total	Integ*	Total	Integ*	Total	Integ*	Total	Integ*	Total	Integ*								
		PH13NA042(G) - B Outdoor Section With PF4MNA043 Indoor Section																							
65 (18.3)	1225	16.50	15.18	2.35	20.70	19.02	2.49	25.09	22.87	2.65	29.65	26.33	2.82	34.58	31.47	2.98	39.24	39.24	3.09	43.69	43.69	3.20	48.12	48.12	3.30
	1400	16.79	15.44	2.36	21.01	19.30	2.50	25.43	23.19	2.65	30.03	26.67	2.81	34.96	31.81	2.95	39.41	39.41	3.04	43.59	43.59	3.13	47.74	47.74	3.21
	1575	17.04	15.67	2.37	21.27	19.55	2.51	25.73	23.46	2.65	30.34	26.95	2.80	35.23	32.06	2.93	39.45	39.45	3.01	43.38	43.38	3.09	47.21	47.21	3.15
70 (21.1)	1225	15.95	14.68	2.49	20.18	18.55	2.63	24.58	22.41	2.77	29.24	25.97	2.95	34.06	30.99	3.11	38.78	38.78	3.23	43.24	43.24	3.34	47.59	47.59	3.46
	1400	16.25	14.95	2.50	20.50	18.84	2.63	24.93	22.73	2.78	29.60	26.29	2.93	34.48	31.38	3.08	39.00	39.00	3.17	43.20	43.20	3.27	47.37	47.37	3.36
	1575	16.50	15.18	2.52	20.78	19.09	2.64	25.24	23.01	2.78	29.89	26.55	2.93	34.79	31.66	3.06	39.11	39.11	3.15	43.07	43.07	3.23	46.98	46.98	3.30
75 (23.9)	1225	15.66	14.13	2.64	19.62	18.03	2.77	24.03	21.91	2.91	28.71	25.50	3.08	33.55	30.53	3.25	38.29	38.29	3.37	42.81	42.81	3.50	47.05	47.05	3.62
	1400	15.64	14.39	2.65	19.95	18.33	2.77	24.40	22.25	2.91	29.11	25.86	3.06	33.99	30.94	3.22	38.52	38.52	3.32	43.04	43.04	3.43	46.92	46.92	3.52
	1575	15.90	14.63	2.67	20.23	18.59	2.78	24.71	22.53	2.91	29.46	26.16	3.06	34.32	31.23	3.19	38.70	38.70	3.29	43.01	43.01	3.38	46.64	46.64	3.46

HEATING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL
*PF4MNA043	1.00	1.00	
PF4MNB049	0.96	0.95	
CAP**4221A**	1.00	1.03	PG8*EA048090
CNPH*4321A**	0.99	0.96	PG8*EA048090
CSPH*4212A**	1.00	0.99	PG8*EA048090
CAP**4221A**	1.00	1.02	PG8*EA060110
CNPH*4221A**	1.00	1.03	PG8*EA060110
CNPH*4321A**	0.99	0.96	PG8*EA060110
CNPH*4221A**	1.00	1.03	PG8*EA060110
CSPH*4212A**	1.00	0.99	PG8*EA060110
CAP**4224A**	1.00	1.02	PG8*EA060135
CNPH*4221A**	1.00	1.03	PG8*EA060135
CNPH*4321A**	0.99	0.96	PG8*EA060135
CNPH*4324A**	0.99	0.95	PG8*EA060135
CSPH*4212A**	1.00	0.99	PG8*EA060135
CNPH*4321A**	1.00	0.98	PG9MTAV60100*A**
CNPH*4321A**	1.00	0.97	PG9MTAV60125*A**
CNPH*4324A**	1.00	0.97	PG9MTAV60125*A**
CNPH*4321A**	1.00	0.98	PG9MNA036060
CSPH*4212A**	1.00	0.99	PG9MNA036060
CNPH*4321A**	1.00	0.98	PG9MNA036080
CSPH*4212A**	1.00	0.99	PG9MNA036080
CNPH*4321A**	0.99	0.97	PG9MNA048080
CSPH*4212A**	1.00	1.00	PG9MNA048080
CAP**4221A**	1.00	1.02	PG9MNA060100
CNPH*4221A**	1.00	1.03	PG9MNA060100
CNPH*4321A**	0.99	0.96	PG9MNA060100
CNPH*4221A**	1.00	1.03	PG9MNA060100
CSPH*4212A**	1.00	0.99	PG9MNA060100
CAP**4224A**	1.00	1.01	PG9MNA060120
CNPH*4221A**	1.00	1.02	PG9MNA060120
CNPH*4321A**	0.99	0.95	PG9MNA060120
CNPH*4324A**	0.99	0.94	PG9MNA060120
CSPH*4212A**	1.00	0.98	PG9MNA060120

See notes on pg. 22

HEAT PUMP HEATING PERFORMANCE

INDOOR AIR		OUTDOOR COIL ENTERING AIR TEMPERATURES ° F (° C)																						
		-3 (-19.4)		7 (-13.9)		17 (-8.3)		27 (-2.8)		37 (2.8)		47 (8.3)		57 (13.9)		67 (19.4)								
EDB ° F (° C)	CFM	Capacity MBtuh		Total Sys. KWt		Capacity MBtuh		Total Sys. KWt		Capacity MBtuh		Total Sys. KWt		Capacity MBtuh		Total Sys. KWt								
		Total	Integ*	Total	Integ*	Total	Integ*	Total	Integ*	Total	Integ*	Total	Integ*	Total	Integ*	Total	Integ*							
65 (18.3)	1400	19.51	17.94	2.85	24.31	2.96	29.33	26.75	3.09	34.59	30.72	3.23	39.59	36.03	3.32	43.98	43.98	3.43	48.36	48.36	3.54	52.16	52.16	3.64
	1600	19.80	18.22	2.87	24.64	2.98	29.70	27.08	3.09	34.93	31.02	3.20	39.69	36.11	3.29	43.77	43.77	3.38	47.47	47.47	3.46	48.90	48.90	3.48
	1800	20.08	18.47	2.91	24.94	2.91	30.02	27.37	3.11	35.20	31.26	3.20	39.67	36.10	3.28	43.40	43.40	3.35	45.69	45.69	3.39	46.67	46.67	3.39
70 (21.1)	1400	19.03	17.51	2.97	23.83	2.89	28.84	26.30	3.22	34.10	30.29	3.37	39.13	35.61	3.48	43.59	43.59	3.60	47.82	47.82	3.72	51.56	51.56	3.82
	1600	19.34	17.79	3.00	24.17	2.92	29.23	26.65	3.22	34.49	30.64	3.35	39.28	35.75	3.44	43.50	43.50	3.54	47.26	47.26	3.63	49.18	49.18	3.66
	1800	19.61	18.04	3.03	24.48	2.92	29.56	26.96	3.24	34.80	30.91	3.35	39.37	35.82	3.43	43.31	43.31	3.51	46.39	46.39	3.58	47.58	47.58	3.59
75 (23.9)	1400	18.48	17.00	3.11	23.28	2.92	28.31	25.81	3.37	33.63	29.87	3.53	38.65	35.18	3.64	43.12	43.12	3.77	47.48	47.48	3.90	51.18	51.18	4.01
	1600	18.79	17.29	3.13	23.64	2.92	28.71	26.17	3.37	34.04	30.24	3.51	38.86	35.38	3.60	43.15	43.15	3.71	47.19	47.19	3.81	48.98	48.98	3.85
	1800	19.08	17.55	3.16	23.96	2.92	29.05	26.49	3.38	34.36	30.52	3.50	38.98	35.47	3.59	43.08	43.08	3.68	46.82	46.82	3.76	48.22	48.22	3.78

PH13NA048(G)-B Outdoor Section With PF4MNA049 Indoor Section

HEATING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL
*PF4MNA049	1.00	1.00	
PF4MNB049	0.99	0.98	
CAP**4821A**	1.00	1.01	PG8*EA048090
CAP**4823A**	1.00	1.01	PG8*EA048090
CNPV*4821A**	1.00	1.00	PG8*EA048090
CSPH*4812A**	1.00	1.00	PG8*EA048090
CAP**4821A**	1.00	1.01	PG8*EA060110
CAP**4823A**	1.00	1.01	PG8*EA060110
CNPV*4821A**	1.00	0.99	PG8*EA060110
CSPH*4812A**	1.00	0.99	PG8*EA060110
CAP**4824A**	1.00	1.01	PG8*EA060135
CNPV*4821A**	1.00	1.00	PG8*EA060135
CSPH*4812A**	1.00	1.00	PG8*EA060135
CAP**4823A**	1.00	1.01	PG9MXXA060100
CNPV*4821A**	1.00	0.99	PG9MXXA060100
CSPH*4812A**	1.00	0.99	PG9MXXA060100
CAP**4824A**	1.00	1.00	PG9MXXA060120
CNPV*4821A**	1.00	0.99	PG9MXXA060120
CSPH*4812A**	1.00	0.98	PG9MXXA060120

See notes on pg. 22

HEAT PUMP HEATING PERFORMANCE (CONT.)

INDOOR AIR		OUTDOOR COIL ENTERING AIR TEMPERATURES ° F (° C)																							
EDB ° F (° C)	CFM	-3 (-19.4)		7 (-13.9)		17 (-8.3)		27 (-2.8)		37 (2.8)		47 (8.3)		57 (13.9)		67 (19.4)									
		Capacity MBtuh	Total Sys. KW†	Capacity MBtuh	Total Sys. KW†	Capacity MBtuh	Total Sys. KW†	Capacity MBtuh	Total Sys. KW†	Capacity MBtuh	Total Sys. KW†	Capacity MBtuh	Total Sys. KW†	Capacity MBtuh	Total Sys. KW†	Capacity MBtuh	Total Sys. KW†								
		Total	Integ*	Total	Integ*	Total	Integ*	Total	Integ*	Total	Integ*	Total	Integ*	Total	Integ*	Total	Integ*								
PH13NA060(G)-B Outdoor Section With PF4MNA061 Indoor Section																									
65 (18.3)	1750	23.44	21.56	3.50	29.34	26.96	3.66	35.48	32.35	3.81	42.10	37.39	3.98	48.97	44.56	4.10	55.64	55.64	4.27	62.78	62.78	4.47	67.11	67.11	4.58
	2000	23.86	21.95	3.54	29.79	27.37	3.68	35.93	32.76	3.81	42.65	37.88	3.96	49.31	44.87	4.07	55.85	55.85	4.21	62.14	62.14	4.36	63.31	63.31	4.37
	2250	24.24	22.30	3.59	30.19	27.74	3.72	36.35	33.14	3.84	43.06	38.25	3.96	49.56	45.10	4.06	55.88	55.88	4.19	59.55	59.55	4.26	60.70	60.70	4.26
70 (21.1)	1750	22.60	20.79	3.65	28.59	26.27	3.82	34.80	31.79	3.98	41.43	36.79	4.16	48.38	44.02	4.30	55.00	55.00	4.48	62.04	62.04	4.68	65.94	65.94	4.78
	2000	23.03	21.19	3.69	29.05	26.70	3.84	35.30	32.18	3.99	41.98	37.28	4.15	48.75	44.36	4.26	55.28	55.28	4.41	62.05	62.05	4.59	62.80	62.80	4.58
	2250	23.41	21.54	3.73	29.47	27.08	3.88	35.73	32.58	4.01	42.46	37.71	4.15	49.03	44.62	4.25	55.41	55.41	4.39	60.09	60.09	4.49	61.68	61.68	4.50
75 (23.9)	1750	21.71	19.97	3.80	27.80	25.54	3.99	34.09	31.08	4.17	40.72	36.16	4.36	47.74	43.44	4.51	54.34	54.34	4.70	61.36	61.36	4.91	65.75	65.75	5.04
	2000	22.14	20.37	3.84	28.27	25.97	4.01	34.59	31.54	4.17	41.28	36.66	4.34	48.18	43.84	4.47	54.66	54.66	4.63	61.54	61.54	4.82	63.78	63.78	4.85
	2250	22.52	20.72	3.89	28.68	26.35	4.05	35.03	31.94	4.19	41.76	37.09	4.35	48.49	44.13	4.45	54.88	54.88	4.60	60.85	60.85	4.73	62.33	62.33	4.75

HEATING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL
*PF4MNA061	1.00	1.00	
PF4MNB061	0.98	0.97	
CAP**6021A**	1.00	1.02	PG8*EA060110
CNPH*6124A**	0.98	1.00	PG8*EA060110
CSPH*6012A**	1.00	1.01	PG8*EA060110
CNPV*6124A**	1.00	1.01	PG8*EA060135
CNPH*6124A**	0.98	1.01	PG9MNA060100
CSPH*6012A**	1.00	1.02	PG9MNA060100
CAP**6024A**	0.99	1.02	PG9MNA060120
CAP**6025A**	0.99	1.02	PG9MNA060120
CNPH*6024A**	1.00	1.03	PG9MNA060120
CNPH*6124A**	0.98	1.01	PG9MNA060120
CNPV*6024A**	1.00	1.03	PG9MNA060120
CNPV*6124A**	1.00	1.00	PG9MNA060120
CSPH*6012A**	1.00	1.01	PG9MNA060120

NOTE: When the required data fall between the published data, interpolation may be performed. Extrapolation is not an acceptable practice.

* The Btuh heating capacity values shown are net "integrated" values from which the defrost effect has been subtracted. The Btuh heating from supplement heaters should be added to those values to obtain total system capacity.

† The kW values include the compressor, outdoor fan motor, and indoor blower motor. The kW from supplement heaters should be added to these values to obtain total system kilowatts.

EDB = Entering Dry Bulb

GUIDE SPECIFICATIONS

GENERAL

System Description

Outdoor-mounted, air-cooled, split-system heat pump unit suitable for ground or rooftop installation. Unit consists of a scroll-type hermetic compressor, an air-cooled coil, propeller-type condenser fan, and a control box. Unit will discharge supply air horizontally as shown on contract drawings. Unit will be used in a refrigeration circuit to match up to a packaged fan coil or furnace.

Quality Assurance

- Unit will be rated in accordance with the latest edition of AHRI Standard 210.
- Unit will be certified for capacity and efficiency, and listed in the latest AHRI directory.
- Unit construction will comply with latest edition of ANSI/ASHRAE and with NEC.
- Unit will be constructed in accordance with UL standards and will carry the UL label of approval. Unit will have c-UL approval.
- Unit cabinet will be capable of withstanding Federal Test Method Standard No. 141 (Method 6061) 500-hr salt spray test.
- Air-cooled condenser coils will be leak tested and pressure tested
- Unit constructed in ISO9001 approved facility.

Delivery, Storage, and Handling

- Unit will be shipped as single package only and is stored and handled per unit manufacturer's recommendations.

Warranty (for inclusion by specifying engineer)

- U.S. and Canada only.

PRODUCTS

Equipment

- Factory assembled, single piece, air-cooled heat pump unit. Contained within the unit enclosure is all factory wiring, piping, controls, compressor, refrigerant charge (R-410A), and special features required prior to field start-up.

Unit Cabinet

- Unit cabinet will be constructed of galvanized steel, bonderized, and coated with a powder coat paint.

Fans

- Condenser fan will be direct-drive propeller type, discharging air horizontally.

SPLIT-SYSTEM HEAT PUMP

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1-1/2 TO 5 NOMINAL TONS

- Condenser fan motors will be totally enclosed, 1-phase type with class B insulation and permanently lubricated bearings. Shafts will be corrosion resistant.
- Fan blades will be statically and dynamically balanced.
- Condenser fan openings will be equipped with coated steel wire safety guards.

Compressor

- Compressor will be a scroll-type, hermetically sealed.
- Compressor will be mounted on rubber vibration isolators.

Condenser Coil

- Condenser coil will be air cooled.
- Coil will be constructed of aluminum fins mechanically bonded to copper tubes which are then cleaned, dehydrated, and sealed.

Refrigeration Components

- Refrigeration circuit components will include liquid-line front-seating shutoff valve with sweat connections, vapor-line front-seating shutoff valve with sweat connections, system charge of R-410A refrigerant, and compressor oil.
- Unit will be equipped with high-pressure switch, low pressure switch and filter drier for R-410A refrigerant.

Operating Characteristics

- The capacity of the unit will meet or exceed _____ Btuh at a suction temperature of _____ °F/°C. The power consumption at full load will not exceed _____ kW.
- Combination of the unit and the evaporator or fan coil unit will have a total net cooling capacity of _____ Btuh or greater at conditions of _____ CFM entering air temperature at the evaporator at _____ °F/°C wet bulb and _____ °F/°C dry bulb, and air entering the unit at _____ °F/°C.
- The system will have a SEER of _____ Btuh/watt or greater at DOE conditions.

Electrical Requirements

- Nominal unit electrical characteristics will be _____ v, single phase, 60 hz. The unit will be capable of satisfactory operation within voltage limits of _____ v to _____ v.
- Nominal unit electrical characteristics will be _____ v, three phase, 60 hz. The unit will be capable of satisfactory operation within voltage limits of _____ v to _____ v.
- Unit electrical power will be single point connection.
- Control circuit will be 24v.

Special Features

- Refer to section of this literature identifying accessories and descriptions for specific features and available enhancements.

SYSTEM DESIGN

1. Intended for outdoor installation with free air inlet and outlet. Outdoor fan external static pressure available is less than 0.01-in. wc.
2. Minimum outdoor operating air temperature without low-ambient operation accessory is 55°F (12.8°C).
3. Maximum outdoor operating air temperature is 115°F (46.1°C).
4. For reliable operation, unit should be level in all horizontal planes.
5. Maximum elevation of indoor coil above or below base of outdoor unit is: indoor coil above = 80 ft (24.38 m), indoor coil below = 200 ft (60.96).
6. For interconnecting refrigerant tube lengths greater than 80 ft (24.38 m) horizontal or 20 ft (6.10 m) vertical differential, consult Residential Split System Long-Line Application Guideline available from equipment distributor.
7. Crankcase heater required when interconnecting refrigerant tube length exceeds 80 ft (24.38 m).
8. If any refrigerant tubing is buried, provide a minimum 6 in (152.4 mm) vertical rise to the valve connections at the unit. Refrigerant tubing lengths up to 36 in (914.4 mm) may be buried without further consideration.
9. Use only copper wire for electric connection at unit. Aluminum and clad aluminum are not acceptable for the type of connector provided.

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