

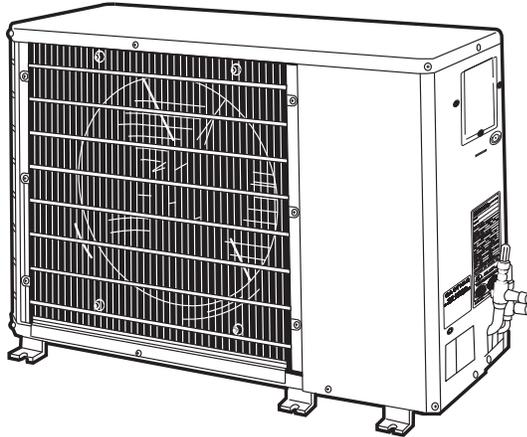
PH13NAZ

DUCTED HEAT PUMP

Sizes 018 To 060

1.5 To 5 Nominal Tons

Product Data



A08379

INDUSTRY LEADING FEATURES / BENEFITS

Energy Efficiency

- 13 - 14.5 SEER/10.5 - 12.0 EER/7.7 - 8.2 HSPF

Sound

- Levels as low as 71 dBA

Design Features

- New aesthetics
- Small footprint
- All steel cabinet construction
- Baked on powder paint
- Mesh coil guard

Reliability, Quality and Toughness

- Scroll compressor
- Factory-supplied filter drier
- High pressure switch
- Low pressure switch
- Accumulator
- Line lengths up to 250' (76 m)
- Low ambient operation (down to $-20^{\circ}\text{F}/-28.9^{\circ}\text{C}$)
(with low ambient accessories)

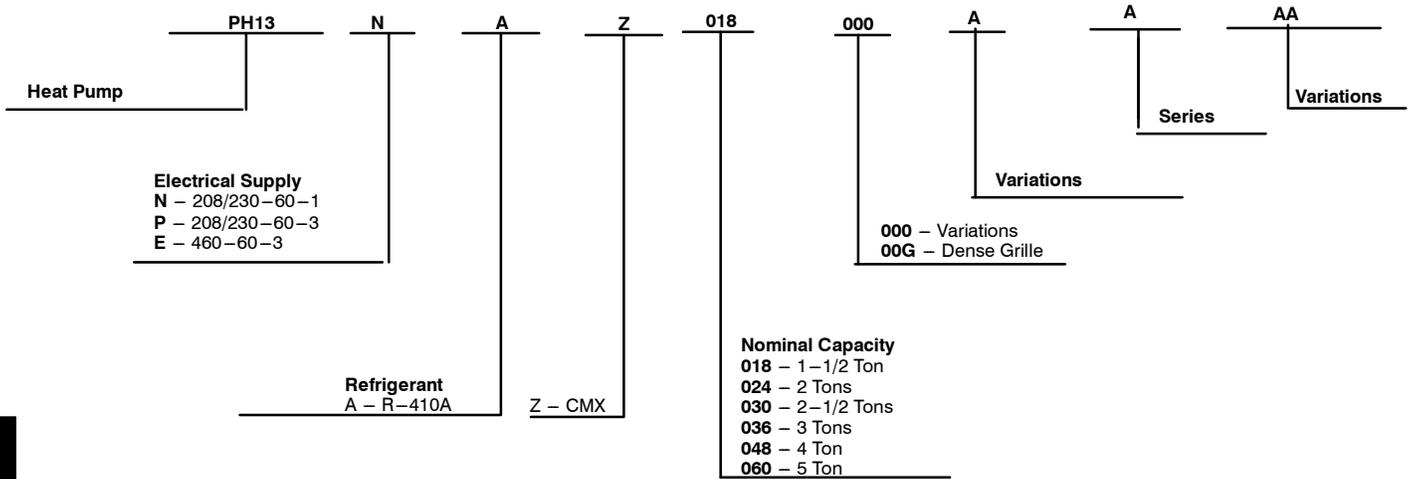
Warranty:

10 year limited warranty for parts and compressor on products registered within 90 days to original residential homeowner. Products not registered, installed commercially, or installed in multi-family applications carry the following warranty:

Single Phase - Limited 5-year compressor / 5-year parts

Three Phase - Limited 5-year compressor / 1-year parts

MODEL NUMBER NOMENCLATURE



PH13NAZ

PHYSICAL DATA

UNIT PH13NAZ	018	024	030	036	048	060
NOMINAL CAPACITY Tons (kg)	1.5 (1360.8)	2.0 (1814.4)	2.5 (2268.0)	3.0 (2721.6)	4.0 (3628.8)	5.0 (4536.0)
OPERATING WEIGHT lb (kg)	167 (75.75)	176 (79.83)	187 (84.82)	232 (105.23)	278 (126.10)	306 (138.80)
REFRIGERANT TYPE	R-410A					
METERING DEVICE	TXV					
CHARGE* lb (kg)	6.8 (3.0)	7.0 (3.1)	12.0 (5.4)	12.5 (5.6)	12.2 (5.5)	12.8 (5.8)
COMPRESSOR	Scroll					
Type	Scroll					
Oil Charge (POE – oz)	25.0	25.0	25.0	25.0	42.0	42.0
Crankcase Heater (watts)	—	—	40	40	40	40
OUTDOOR FAN						
Rpm/Cfm	840/1720	840/1720	850/3900	850/3900	850/3900	850/3900
Diameter in. (mm)	18 (457.2)	18 (457.2)	24 (609.6)	24 (609.6)	24 (609.6)	24 (609.6)
No. Blades	3	3	3	3	3	3
Motor (hp)	1/8	1/8	1/4	1/4	1/4	1/4
OUTDOOR COIL						
Face Area (sq ft)	5.8	7.3	12.1	12.1	14.1	14.1
No. Rows	3	3	2	3	3	3
FPI	20	20	20	20	20	20
HIGH PRESSURE SWITCH						
Cut–In (psig) Cutout (psig)	420 ± 25 650 ± 10	420 ± 25 650 ± 10	420 ± 25 650 ± 10			
LOW PRESSURE SWITCH						
Low Cutout (psig) Low Cut–in (psig)	20 ± 5 45 ± 25	20 ± 5 45 ± 25	20 ± 5 45 ± 25			
REFRIGERANT LINES						
Connection Type	Sweat					
Liquid Line (in.) OD	3/8	3/8	3/8	3/8	3/8	3/8
Vapor Line (in.) OD	5/8	5/8	3/4	3/4	7/8	7/8†
Max Length ft (m)	200 (61.0)	200 (61.0)	200 (61.0)	200 (61.0)	200 (61.0)	200 (61.0)
Max Lift ft (m)	65 (19.8)	65 (19.8)	65 (19.8)	65 (19.8)	65 (19.8)	65 (19.8)
Max Drop ft (m)	150 (45.7)	150 (45.7)	150 (45.7)	150 (45.7)	150 (45.7)	150 (45.7)
CONTROLS						
Fusible Plug °F (°C)	210 (150.6)					
Control Voltage‡	24 vac					
System Voltage	208/230 v	208/230 v	208/230 v	208/230 v, Single and 3 Phase, 460 v, 3 Phase		
FINISH	Gray					

* Unit shipped with full factory charge. See ARI (Air Conditioning and Refrigeration Institute) capacity table for proper charge and piston for each fan coil type.

† Valve connection size is 7/8 inch. Recommended line size is 1–1/8 inches.

‡ 24 v and a minimum of 40 va is provided in the fan coil unit.

FPI – Fins Per Inch

POE – Polyol Ester

VAPOR LINE SIZING AND COOLING CAPACITY LOSS

LONG LINE APPLICATION: An application is considered "Long line" when the total equivalent tubing length exceeds 80 ft. (24.38 m) or when there is more than 20 ft. (6.09 m) vertical separation between indoor and outdoor units. These applications require additional accessories and system modifications for reliable system operation. The maximum allowable total equivalent length is 250 ft. (76.2 m). The maximum vertical

separation is 200 ft. (60.96 m) when outdoor unit is above indoor unit, and 80 ft. (24.38 m) when the outdoor unit is below the indoor unit. Refer to Accessory Usage Guideline below for required accessories. See Longline Application Guideline for required piping and system modifications. Also, refer to the table below for vapor tube diameters based on the total length to minimize the cooling capacity loss.

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 R-410A HP	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 R-410A HP		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 R-410A HP		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 R-410A HP		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 R-410A HP		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 R-410A HP		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 R-410A HP		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

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

PH13NAZ



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.**

ACCESSORIES

PH13NAZ

KIT NUMBER	KIT NAME	018	024	030	036	048	060
KAACH1401AAA	Crankcase Heater	X	X	X	X		
KAACH1201AAA	Crankcase Heater					X	X
KAACS0201PTC	PTC Kit	X	X	X	X	X	X
KAFT0101AAA	Evaporator Freeze Stat	X	X	X	X	X	X
KAAHI0501PUR	High Press. Switch	X	X	X	X	X	X
KAALP0401PUR	Low Press. Switch	X	X	X	X	X	X
KAALS0201LLS	Solenoid Valve	X	X	X	X	X	X
KAATD0101TDR	Time Delay Relay	X	X	X	X	X	X
KAAWS0101AAA	Winter Start Kit (for low ambient)	X	X	X	X	X	X
KHAIR0101AAA	Isolation Relay	X	X	X	X	X	X
KHALS0401LLS	Solenoid Valve Kit	X	X	X	X	X	X
KHAOT0301FST	Outdoor Therm Kit	X	X	X	X	X	X
KHAOT0201SEC	Outdoor Therm Kit Se- condary	X	X	X	X	X	X
KSACY0101AAA	Cycle Protector	X	X	X	X	X	X
KSAS1501AAA	Hard Start Kit	X	X	X	X	X	X
KSASH1801COP	Sound Blanket	X	X	X	X		
KSASH0601COP	Sound Blanket					X	X
KSALA0301410	Low Ambient Kit	X	X	X	X	X	X
KSATX0201PUR	TXV	X	X	X			
KSATX0301PUR	TXV				X		
KSATX0401PUR	TXV					X	
KSATX0501PUR	TXV						X
53DS-900---070	Wind Baffle	X					
53DS-900---087	Wind Baffle		X				
53DS-900---071	Wind Baffle			X	X		
53DS-900---088	Wind Baffle					X	X
53DS-900---075	Stacking Kit	X	X				
53DS-900---076	Stacking Kit			X	X	X	X
53DS-900---077	Wall Mounting Kit	X	X				
53DS-900---078	Wall Mounting Kit			X	X	X	X

X = Accessory, S = Standard

ELECTRICAL DATA

UNIT SIZE	V-PH-Hz	VOLTAGE RANGE*		COMPRESSOR		OUTDOOR FAN MOTOR			MIN CKT AMPS	FUSE/CKTBKR AMPS
		Min	Max	RLA	LRA	FLA	NEC Hp	kw Out		
018	208/230-1-60	187	253	9.0	48.0	0.8	0.125	0.09	12.1	20
024	208/230-1-60	187	253	14.4	58.3	0.8	0.125	0.09	18.8	30
030	208/230-1-60	187	253	12.8	64.0	1.5	0.25	0.19	17.5	30
036	208/230-1-60	187	253	15.5	77.0	1.5	0.25	0.19	20.9	30
	208/230-3-60	187	253	10.1	71.0	1.5	0.25	0.19	14.1	20
	460-3-60	414	506	5.6	38.0	0.8	0.25	0.19	7.8	10
048	208/230-1-60	187	253	26.5	117.0	1.5	0.25	0.19	34.6	50
	208/230-3-60	187	253	16.7	83.1	1.5	0.25	0.19	22.4	30
	460-3-60	414	506	7.3	41.0	0.8	0.25	0.19	10	15
060	208/230-1-60	187	253	26.4	134.0	1.5	0.25	0.19	34.5	60
	208/230-3-60	187	253	17.7	110.0	1.5	0.25	0.19	23.6	40
	460-3-60	414	506	7.8	52.0	0.8	0.25	0.19	10.6	15

LEGEND:

- FLA – Full Load Amps
- HACR – Heating, Air Conditioning, Refrigeration
- LRA – Locked Rotor Amps
- NEC – National Electrical Code
- RLA – Rated Load Amps (compressor)

* Permissible limits of the voltage range at which the unit will operate satisfactorily

NOTE: Control circuit is 24-V on all units and requires external power source. Copper wire must be used from service disconnect to unit. All motors/compressors contain internal overload protection.

Complies with 2001 requirements of ASHRAE Standards 90.1

PH13NAZ

A-WEIGHTED SOUND POWER LEVEL

Unit Size	Standard Rating (dBA)	Standard Rating (dBA) With Sound Blanket	Typical Octave Band Spectrum (dB, without tone adjustment)						
			125	250	500	1000	2000	4000	8000
018	71	69	56.0	57.0	61.0	64.0	59.5	56.0	45.5
			55.0	56.5	60.5	63.0	59.5	56.0	45.0
024	72	70	53.5	58.0	65.0	65.5	60.5	57.5	46.5
			54.0	58.0	62.5	65.5	60.0	57.5	45.5
030	74	74	57.5	61.5	67.0	67.5	66.5	63.5	57.0
			59.0	61.5	66.0	67.0	66.0	63.0	56.5
036	74	74	58.5	62.5	64.5	65.0	63.5	62.5	52.5
			58.0	62.5	64.5	64.5	63.5	62.5	52.0
048	74	73	59.0	62.0	65.5	67.0	63.5	60.5	52.5
			58.5	61.5	64.0	66.0	63.0	60.5	52.0
060	74	73	65.5	63.0	66.5	65.0	63.5	63.0	57.0
			65.5	62.0	65.0	65.0	63.5	62.0	54.5

NOTE: Tested in accordance with ARI Standard 270-95 (not listed in ARI).

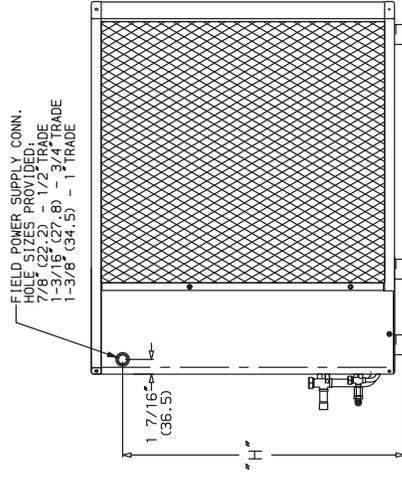
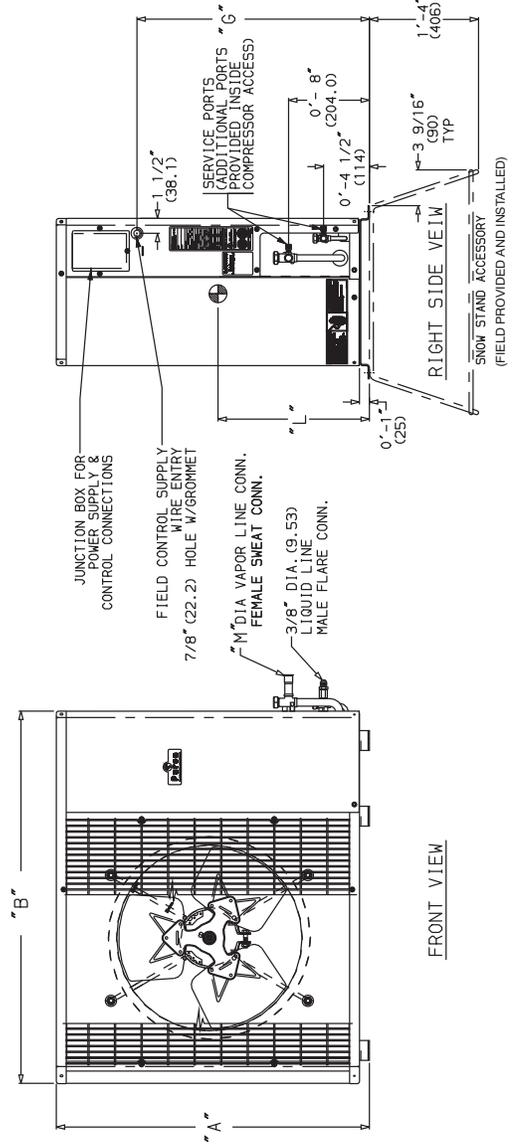
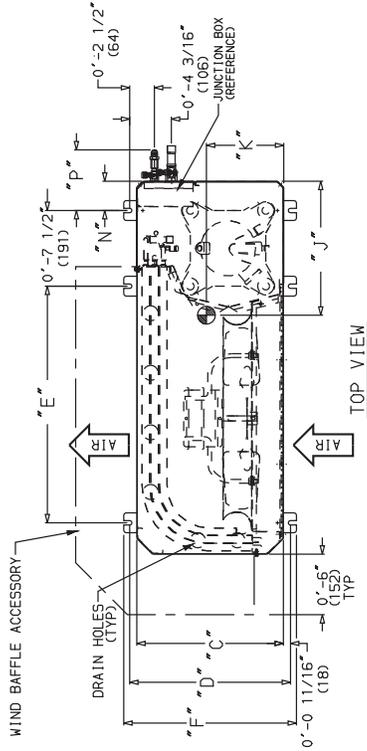
CHARGING SUBCOOLING (TXV-TYPE EXPANSION DEVICE)

UNIT SIZE	REQUIRED SUBCOOLING °F (°C)	OUTDOOR HEATING PISTON #
018	12 (6.7)	40
024		49
030		55
036		63
048		73
060		80

DIMENSIONS

UNIT MODELS	CHASSIS SIZE		A	B	C	D	E	F	G	H	J	K	L	N	P
	PH13NAZ Unit Size	(Reference)													
018	0	2-11/8 (538.2)	3-015/16 (369.9)	1-4 (406.4)	1-117/16 (595.3)	1-57/16 (436.6)	1-10 (559.1)	1-1 (330.2)	0-65/8 (168.3)	0-111/4 (285.8)	0-215/16 (152.4)	0-6 (152.4)			
024	0.6	2-7/8 (790.6)	3-015/16 (369.9)	1-4 (406.4)	1-117/16 (595.3)	1-53/16 (436.6)	2-4 (711.5)	1-2 (305.6)	0-63/4 (171.5)	0-6 (152.4)					
030,036	1.0	3-13/8 (944.6)	3-89/16 (1131.9)	1-51/16 (433.4)	2-61/2 (774.7)	1-75/8 (498.5)	2-101/16 (665.5)	1-111/16 (347.7)	0-81/8 (206.4)	1-37/8 (403.2)	0-37/16 (88)	0-61/2 (165.4)			
048,060	1.6	3-79/16 (1097)	3-89/16 (1131.9)	1-51/16 (433.4)	2-61/2 (774.7)	1-75/8 (498.5)	3-41/16 (1017.9)	1-21/2 (354.2)	0-81/2 (215.9)	1-67/8 (479.4)	0-37/16 (88)	0-61/2 (165.4)			

NOTE: Dimensions shown in feet-inches. Dimensions in () are millimeters.



UNIT SIZE	MINIMUM MOUNTING PAD DIMENSIONS	
	ft-in.	mm
CHASSIS SIZES 0 & 6	1-11 x 3-6	584.2 x 1066.8
CHASSIS SIZES 1 & 1.6	2-0 x 4-2	609.6 x 1270

NOTES:

- Required clearances: with coil facing wall, allow 6 in. minimum clearance on coil side and coil end, and 3 feet minimum clearance on compressor end and fan side. With fan facing wall, allow 8 in. minimum clearance on fan side and coil end, and 3 feet minimum clearance on compressor end and coil side. With multi-unit application, arrange units so discharge of one does not enter inlet of another.
- Dimensions in parenthesis are in millimeters.
- Center of Gravity



COMBINATION RATINGS

UNIT SIZE - SERIES	INDOOR MODEL	ARI STANDARD RATINGS										FURNACE MODEL
		COOLING					HEATING					
		CAPACITY	FACTORY ENHANCE	SEER		EER	HIGH TEMP		LOW TEMP		HSPF	
STANDARD	TDR			E	E COP		H	H COP				
18-A	*PF4MNA019	17,800	TDR&TXV	13.00		11.00	18,000	3.60	10,100	2.32	7.8	
	PF4MNA025	18,000	TDR&TXV	13.50		11.00	18,000	3.64	10,100	2.36	8.0	
	CAP**1814A**	17,800	TDR&TXV	13.00		11.00	18,000	3.46	10,000	2.30	7.7	PG8*EA024045
	CAP**2414A**	18,000	TDR&TXV	13.50		11.00	18,000	3.66	10,100	2.36	8.0	PG8*EA024045
	CAP**2417A**	18,000	TDR&TXV	13.50		11.00	18,000	3.72	10,000	2.40	8.0	PG9MXA036060
	CNPH*2417A**	18,000	TDR&TXV	13.50		11.00	18,000	3.70	10,100	2.36	8.0	PG8*EA024045
	CNPH*2417A**	18,000	TDR&TXV	13.00		11.00	18,000	3.78	10,300	2.38	8.0	PG9MTAV36050*A**
	CNPH*2417A**	18,000	TDR&TXV	13.00		11.00	18,000	3.78	10,300	2.38	8.0	PG9MTAV36075*A**
	CNPH*2417A**	18,000	TDR&TXV	13.50		11.00	18,000	3.72	10,000	2.38	8.0	PG9MXA036060
	CNPV*1814A**	17,800	TDR&TXV	13.00		11.00	18,000	3.58	10,000	2.32	7.8	PG8*EA024045
	CNPV*2414A**	18,000	TDR&TXV	13.50		11.00	18,000	3.70	10,100	2.36	8.0	PG8*EA024045
	CNPV*2417A**	18,000	TDR&TXV	13.50		11.00	18,000	3.72	10,000	2.38	8.0	PG9MXA036060
	CSPH*2412A**	18,000	TDR&TXV	13.50		11.00	18,000	3.66	10,100	2.36	8.0	PG8*EA024045
	CSPH*2412A**	18,000	TDR&TXV	13.00		11.00	18,000	3.80	10,300	2.38	8.0	PG9MTAV36050*A**
	CSPH*2412A**	18,000	TDR&TXV	13.00		11.00	18,000	3.78	10,300	2.38	8.0	PG9MTAV36075*A**
	CSPH*2412A**	18,000	TDR&TXV	13.50		11.00	18,000	3.64	9,900	2.36	8.0	PG9MXA036060
24-A	*PF4MNA024	23,000	TDR&TXV	13.00		10.50	23,400	3.68	14,600	2.42	8.0	
	FF1ENP024	23,000	TDR&TXV	13.00		11.00	23,400	3.68	14,700	2.42	8.0	
	FF1ENP030	23,400	TDR&TXV	13.00		10.50	23,600	3.70	14,600	2.42	8.0	
	PF4MNA025	23,000	TDR&TXV	14.00		11.50	23,400	3.90	14,200	2.56	8.2	
	PF4MNA030	23,400	TDR&TXV	13.00		11.00	23,600	3.78	14,600	2.46	8.0	
	PF4MNA031	23,400	TDR&TXV	14.50		12.00	23,600	4.04	14,200	2.62	8.2	
	CAP**2414A**	23,000	TDR&TXV	14.00		11.50	23,400	3.88	14,100	2.56	8.2	PG8*EA024045
	CAP**2414A**	23,000	TXV		13.00	11.00	23,400	3.74	14,700	2.44	8.0	
	CAP**2417A**	23,000	TDR&TXV	14.00		11.50	23,400	4.00	14,000	2.62	8.2	PG9MXA036080
	CAP**2417A**	23,000	TDR&TXV	14.00		11.50	23,400	4.06	14,100	2.64	8.2	PG9MXA036060
	CAP**2417A**	23,000	TXV		13.00	11.00	23,400	3.74	14,700	2.44	8.2	
	CAP**3014A**	23,400	TDR&TXV	14.50		12.00	23,600	3.92	14,100	2.60	8.2	PG8*EA024045
	CAP**3014A**	23,400	TXV		13.00	11.00	23,600	3.76	14,700	2.46	8.0	
	CAP**3017A**	23,400	TDR&TXV	14.50		12.00	23,600	4.04	14,100	2.66	8.2	PG9MXA036080
	CAP**3017A**	23,400	TDR&TXV	14.50		12.00	23,600	4.10	14,100	2.68	8.2	PG9MXA036060
	CAP**3017A**	23,400	TXV		13.00	11.00	23,600	3.76	14,700	2.46	8.0	
	CNPF*2418A**	23,000	TXV		13.00	11.00	23,400	3.82	14,700	2.46	8.0	
	CNPH*2417A**	23,000	TDR&TXV	14.00		11.50	23,400	4.00	14,000	2.62	8.2	PG9MXA036080
	CNPH*2417A**	23,000	TDR&TXV	14.00		11.50	23,400	3.92	14,100	2.56	8.2	PG8*EA024045
	CNPH*2417A**	23,000	TDR&TXV	14.00		11.50	23,400	3.88	14,200	2.54	8.2	PG9MTAV36050*A**
	CNPH*2417A**	23,000	TDR&TXV	14.00		11.50	23,400	3.90	14,200	2.54	8.2	PG9MTAV36075*A**
	CNPH*2417A**	23,000	TDR&TXV	14.00		11.50	23,400	4.00	14,300	2.60	8.2	PG9MTAV60100*A**
	CNPH*2417A**	23,000	TDR&TXV	14.00		11.50	23,400	4.06	14,200	2.62	9.0	PG9MTAV60125*A**
	CNPH*2417A**	23,000	TDR&TXV	14.00		11.50	23,400	4.04	14,100	2.62	8.2	PG9MXA036060
	CNPH*2417A**	23,000	TXV		13.00	11.00	23,400	3.82	14,700	2.46	8.0	
	CNPH*3017A**	23,400	TDR&TXV	14.50		12.00	23,600	4.06	14,100	2.66	8.2	PG9MXA036080
	CNPH*3017A**	23,400	TDR&TXV	14.50		12.00	23,600	3.96	14,100	2.60	8.2	PG8*EA024045
	CNPH*3017A**	23,400	TDR&TXV	14.50		12.00	23,600	3.94	14,200	2.58	8.2	PG9MTAV36050*A**
	CNPH*3017A**	23,400	TDR&TXV	14.50		12.00	23,600	3.96	14,300	2.60	8.2	PG9MTAV36075*A**
	CNPH*3017A**	23,400	TDR&TXV	14.50		12.00	23,600	4.08	14,300	2.66	8.2	PG9MTAV60100*A**
	CNPH*3017A**	23,400	TDR&TXV	14.50		12.00	23,600	4.12	14,300	2.68	8.2	PG9MTAV60125*A**
	CNPH*3017A**	23,400	TDR&TXV	14.50		12.00	23,600	4.10	14,100	2.68	8.2	PG9MXA036060
	CNPH*3017A**	23,400	TXV		13.00	11.00	23,600	3.78	14,700	2.46	8.0	
	CNPV*2414A**	23,000	TDR&TXV	14.00		11.50	23,400	3.92	14,100	2.56	8.2	PG8*EA024045
	CNPV*2414A**	23,000	TXV		13.00	11.00	23,400	3.82	14,700	2.46	8.0	
	CNPV*2417A**	23,000	TDR&TXV	14.00		11.50	23,400	4.00	14,000	2.62	8.2	PG9MXA036080
	CNPV*2417A**	23,000	TDR&TXV	14.00		11.50	23,400	4.04	14,100	2.62	8.2	PG9MXA036060
	CNPV*2417A**	23,000	TXV		13.00	11.00	23,400	3.82	14,700	2.46	8.0	
	CNPV*3014A**	23,400	TDR&TXV	14.50		12.00	23,600	3.90	14,100	2.58	8.2	PG8*EA024045
	CNPV*3014A**	23,400	TXV		13.00	11.00	23,600	3.78	14,700	2.46	8.0	
	CNPV*3017A**	23,400	TDR&TXV	14.50		12.00	23,600	4.06	14,100	2.66	8.2	PG9MXA036080
	CNPV*3017A**	23,400	TDR&TXV	14.50		12.00	23,600	4.10	14,100	2.68	8.2	PG9MXA036060
	CNPV*3017A**	23,400	TXV		13.00	11.00	23,600	3.78	14,700	2.46	8.2	
	CSPH*2412A**	23,000	TDR&TXV	14.00		11.50	23,400	4.00	14,000	2.62	8.2	PG9MXA036080
	CSPH*2412A**	23,000	TDR&TXV	14.00		11.50	23,400	3.92	14,100	2.58	8.2	PG8*EA024045
	CSPH*2412A**	23,000	TDR&TXV	14.00		11.50	23,400	3.88	14,200	2.54	8.2	PG9MTAV36050*A**
	CSPH*2412A**	23,000	TDR&TXV	14.00		11.50	23,400	3.88	14,200	2.54	8.2	PG9MTAV36075*A**
	CSPH*2412A**	23,000	TDR&TXV	14.00		11.50	23,400	4.00	14,300	2.60	8.2	PG9MTAV60100*A**
CSPH*2412A**	23,000	TDR&TXV	14.00		11.50	23,400	4.06	14,300	2.62	8.2	PG9MTAV60125*A**	
CSPH*2412A**	23,000	TDR&TXV	14.00		11.50	23,400	4.04	14,100	2.62	8.2	PG9MXA036060	
CSPH*2412A**	23,000	TXV		13.00	11.00	23,400	3.86	14,700	2.48	8.0		
CSPH*3012A**	23,400	TDR&TXV	14.50		12.00	23,600	4.02	14,100	2.64	8.2	PG9MXA036080	
CSPH*3012A**	23,400	TDR&TXV	14.50		12.00	23,600	3.94	14,100	2.60	8.2	PG8*EA024045	
CSPH*3012A**	23,400	TDR&TXV	14.50		12.00	23,600	3.92	14,200	2.58	8.2	PG9MTAV36050*A**	
CSPH*3012A**	23,400	TDR&TXV	14.45		12.00	23,600	3.94	14,200	2.58	8.2	PG9MTAV36075*A**	
CSPH*3012A**	23,400	TDR&TXV	14.50		12.00	23,600	4.06	14,300	2.64	8.2	PG9MTAV60100*A**	
CSPH*3012A**	23,400	TDR&TXV	14.50		12.00	23,600	4.10	14,300	2.66	8.2	PG9MTAV60125*A**	
CSPH*3012A**	23,400	TDR&TXV	14.50		12.00	23,600	4.08	14,100	2.66	8.2	PG9MXA036060	
CSPH*3012A**	23,400	TXV		13.00	11.00	23,600	3.80	14,700	2.48	8.0		
30-A	*PF4MNA030	27,600	TDR&TXV	13.00		11.00	28,400	3.76	17,400	2.32	7.8	
	FF1ENP030	27,400	TDR&TXV	13.00		11.00	28,600	3.72	17,300	2.30	8.0	
	FF1ENP036	27,800	TDR&TXV	13.00		11.00	28,600	3.78	17,400	2.34	8.0	
	PF4MNA031	27,600	TDR&TXV	14.00		11.50	28,400	3.96	17,000	2.44	8.2	
	PF4MNA036	27,800	TDR&TXV	13.00		11.00	28,600	3.76	17,500	2.32	8.0	
	PF4MNA037	27,800	TDR&TXV	14.00		11.50	28,600	3.94	17,100	2.42	8.2	
	CAP**3014A**	27,600	TXV		13.00	11.00	28,400	3.76	17,500	2.32	8.0	
	CAP**3017A**	27,600	TDR&TXV	14.00		11.50	28,200	3.94	16,700	2.46	8.2	PG9MXA036080
	CAP**3017A**	27,600	TDR&TXV	14.00		11.50	28,400	3.88	16,800	2.42	8.2	PG8*EA048070
	CAP**3017A**	27,600	TDR&TXV	14.00		11.50	28,200	3.98	16,800	2.46	8.2	PG9MXA036060
	CAP**3017A**	27,600	TDR&TXV	14.00		11.50	28,200	3.98	16,900	2.46	8.2	PG9MXA048080

PH13NAZ

See notes on page 11

COMBINATION RATINGS (CONT.)

UNIT SIZE - SERIES	INDOOR MODEL	ARI STANDARD RATINGS										FURNACE MODEL	
		COOLING					HEATING						
		CAPACITY	FACTORY ENHANCE	SEER		EER	HIGH TEMP		LOW TEMP		HSPF		
STANDARD	TDR			E	E COP		H CAPACITY	H COP					
30-A	CAP**3017A**	27,600	TXV		13.00	11.00	28,400	3.76	17,500	2.32	8.0		
	CAP**3614A**	27,800	TXV		13.00	11.00	28,600	3.78	17,500	2.34	8.0		
	CAP**3617A**	27,800	TDR&TXV	14.50		12.00	28,200	4.00	16,700	2.48	8.2	PG9MXA036080	
	CAP**3617A**	27,800	TDR&TXV	14.00		11.50	28,400	3.92	16,900	2.42	8.2	PG8*EA048070	
	CAP**3617A**	27,800	TDR&TXV	14.50		12.00	28,400	4.02	16,800	2.48	8.2	PG9MXA036060	
	CAP**3617A**	27,800	TDR&TXV	14.50		12.00	28,400	4.02	16,900	2.48	8.2	PG9MXA048080	
	CAP**3617A**	27,800	TXV			13.00	11.00	28,600	3.78	17,500	2.34	8.0	
	CAP**3619A**	27,800	TDR&TXV	14.00		11.50	28,400	3.84	17,000	2.38	8.2	PG9MTAV36050*A**	
	CAP**3619A**	27,800	TDR&TXV	14.00		11.50	28,600	3.88	17,000	2.40	8.2	PG9MTAV36075*A**	
	CAP**3619A**	27,800	TXV			13.00	11.00	28,600	3.78	17,500	2.34	8.0	
	CAP**3621A**	27,800	TDR&TXV	14.50		12.00	28,400	4.00	16,800	2.48	8.2	PG8*EA048090	
	CAP**3621A**	27,800	TXV			13.00	11.00	28,600	3.78	17,500	2.34	8.2	
	CNPF*3618A**	27,800	TXV			13.00	11.00	28,600	3.78	17,500	2.34	8.0	
	CNPH*3017A**	27,600	TDR&TXV	14.00		11.50	28,200	3.96	16,700	2.46	8.2	PG9MXA036080	
	CNPH*3017A**	27,600	TDR&TXV	14.00		11.50	28,400	3.88	16,800	2.42	8.2	PG8*EA048070	
	CNPH*3017A**	27,600	TDR&TXV	14.00		11.50	28,200	3.90	16,800	2.44	8.2	PG8*EA048090	
	CNPH*3017A**	27,600	TDR&TXV	14.00		11.50	28,400	3.80	16,900	2.38	8.2	PG9MTAV36050*A**	
	CNPH*3017A**	27,600	TDR&TXV	14.00		11.50	28,400	3.82	17,000	2.38	8.2	PG9MTAV36075*A**	
	CNPH*3017A**	27,600	TDR&TXV	14.00		11.50	28,400	3.92	16,900	2.44	8.2	PG9MTAV60100*A**	
	CNPH*3017A**	27,600	TDR&TXV	14.00		11.50	28,200	3.94	16,800	2.44	8.2	PG9MTAV60125*A**	
	CNPH*3017A**	27,600	TDR&TXV	14.00		11.50	28,200	3.96	16,800	2.46	8.2	PG9MXA036060	
	CNPH*3017A**	27,600	TDR&TXV	14.00		11.50	28,200	3.98	16,900	2.46	8.2	PG9MXA048080	
	CNPH*3017A**	27,600	TXV			13.00	11.00	28,400	3.78	17,500	2.34	8.0	
	CNPH*3617A**	27,800	TDR&TXV	14.50		12.00	28,200	3.96	16,700	2.46	8.2	PG9MXA036080	
	CNPH*3617A**	27,800	TDR&TXV	14.00		11.50	28,400	3.88	16,800	2.42	8.2	PG8*EA048070	
	CNPH*3617A**	27,800	TDR&TXV	14.50		12.00	28,200	3.90	16,800	2.44	8.2	PG8*EA048090	
	CNPH*3617A**	27,800	TDR&TXV	14.00		11.50	28,400	3.80	16,900	2.38	8.2	PG9MTAV36050*A**	
	CNPH*3617A**	27,800	TDR&TXV	14.00		11.50	28,400	3.82	17,000	2.38	8.2	PG9MTAV36075*A**	
	CNPH*3617A**	27,800	TDR&TXV	14.00		11.50	28,400	3.92	16,900	2.44	8.2	PG9MTAV60100*A**	
	CNPH*3617A**	27,800	TDR&TXV	14.50		12.00	28,200	3.94	16,800	2.44	8.2	PG9MTAV60125*A**	
	CNPH*3617A**	27,800	TDR&TXV	14.50		12.00	28,400	3.96	16,800	2.46	8.2	PG9MXA036060	
	CNPH*3617A**	27,800	TDR&TXV	14.50		12.00	28,400	3.98	16,900	2.46	8.2	PG9MXA048080	
	CNPH*3617A**	27,800	TXV			13.00	11.00	28,600	3.78	17,500	2.34	8.0	
	CNPV*3014A**	27,600	TXV			13.00	11.00	28,400	3.78	17,500	2.34	8.0	
	CNPV*3017A**	27,600	TDR&TXV	14.00		11.50	28,200	3.96	16,700	2.46	8.2	PG9MXA036080	
	CNPV*3017A**	27,600	TDR&TXV	14.00		11.50	28,400	3.88	16,800	2.42	8.2	PG8*EA048070	
	CNPV*3017A**	27,600	TDR&TXV	14.00		11.50	28,200	3.96	16,800	2.46	8.2	PG9MXA036060	
	CNPV*3017A**	27,600	TDR&TXV	14.00		11.50	28,200	3.98	16,900	2.46	8.2	PG9MXA048080	
	CNPV*3017A**	27,600	TXV			13.00	11.00	28,400	3.78	17,500	2.34	8.2	
	CNPV*3617A**	27,800	TDR&TXV	14.50		12.00	28,200	3.96	16,700	2.46	8.2	PG9MXA036080	
	CNPV*3617A**	27,800	TDR&TXV	14.00		11.50	28,400	3.88	16,800	2.42	8.2	PG8*EA048070	
	CNPV*3617A**	27,800	TDR&TXV	14.50		12.00	28,400	3.88	16,800	2.42	8.2	PG8*EA048090	
	CNPV*3617A**	27,800	TDR&TXV	14.50		12.00	28,400	3.96	16,800	2.46	8.2	PG9MXA036060	
	CNPV*3617A**	27,800	TDR&TXV	14.50		12.00	28,400	3.98	16,900	2.46	8.2	PG9MXA048080	
	CNPV*3617A**	27,800	TXV			13.00	11.00	28,600	3.78	17,500	2.34	8.0	
	CNPV*3621A**	27,800	TDR&TXV	14.50		12.00	28,200	3.92	16,800	2.44	8.2	PG8*EA048090	
	CNPV*3621A**	27,800	TXV			13.00	11.00	28,600	3.78	17,500	2.34	8.0	
	CSPH*3012A**	27,600	TDR&TXV	14.00		11.50	28,200	3.94	16,700	2.46	8.2	PG9MXA036080	
CSPH*3012A**	27,600	TDR&TXV	14.00		11.50	28,400	3.86	16,900	2.40	8.2	PG8*EA048070		
CSPH*3012A**	27,600	TDR&TXV	14.00		11.50	28,200	3.90	16,700	2.42	8.2	PG8*EA048090		
CSPH*3012A**	27,600	TDR&TXV	14.00		11.50	28,400	3.80	16,900	2.36	8.2	PG9MTAV36050*A**		
CSPH*3012A**	27,600	TDR&TXV	14.00		11.50	28,400	3.82	17,000	2.38	8.2	PG9MTAV36075*A**		
CSPH*3012A**	27,600	TDR&TXV	14.00		11.50	28,400	3.90	16,900	2.42	8.2	PG9MTAV60100*A**		
CSPH*3012A**	27,600	TDR&TXV	14.00		11.50	28,200	3.92	16,800	2.44	8.2	PG9MTAV60125*A**		
CSPH*3012A**	27,600	TDR&TXV	14.00		11.50	28,200	3.96	16,800	2.46	8.2	PG9MXA036060		
CSPH*3012A**	27,600	TDR&TXV	14.00		11.50	28,200	3.98	16,900	2.46	8.2	PG9MXA048080		
CSPH*3012A**	27,600	TXV			13.00	11.00	28,400	3.80	17,500	2.34	8.0		
CSPH*3612A**	27,800	TDR&TXV	14.50		12.00	28,400	4.12	16,800	2.52	8.2	PG9MXA036080		
CSPH*3612A**	27,800	TDR&TXV	14.50		12.00	28,600	4.02	17,000	2.46	8.2	PG8*EA048070		
CSPH*3612A**	27,800	TDR&TXV	14.50		12.00	28,600	4.08	16,900	2.50	8.2	PG8*EA048090		
CSPH*3612A**	27,800	TDR&TXV	14.00		11.50	28,600	3.96	17,100	2.44	8.2	PG9MTAV36050*A**		
CSPH*3612A**	27,800	TDR&TXV	14.00		11.50	28,600	4.00	17,100	2.44	8.2	PG9MTAV36075*A**		
CSPH*3612A**	27,800	TDR&TXV	14.50		12.00	28,600	4.12	17,000	2.50	8.2	PG9MTAV60100*A**		
CSPH*3612A**	27,800	TDR&TXV	14.50		12.00	28,600	4.12	16,900	2.52	8.2	PG9MTAV60125*A**		
CSPH*3612A**	27,800	TDR&TXV	14.50		12.00	28,400	4.14	16,900	2.52	8.2	PG9MXA036060		
CSPH*3612A**	27,800	TDR&TXV	14.50		12.00	28,400	4.16	17,000	2.52	8.2	PG9MXA048080		
CSPH*3612A**	27,800	TXV			13.00	11.00	28,600	3.92	17,600	2.38	8.0		
36-A	*PF4MNA036	34,000	TDR&TXV	13.00		11.00	34,200	3.60	20,200	2.26	7.8		
	PF4MNA037	34,000	TDR&TXV	14.00		11.50	33,800	3.80	19,700	2.40	8.0		
	PF4MNA042	34,200	TDR&TXV	13.00		11.00	34,200	3.70	20,400	2.30	7.8		
	PF4MNA043	34,200	TDR&TXV	14.50		12.00	34,200	3.88	19,900	2.42	8.0		
	CAP**3617A**	34,000	TDR&TXV	14.00		11.50	33,200	3.74	19,400	2.38	7.8	PG9MXA036080	
	CAP**3617A**	33,800	TDR&TXV	14.00		11.50	33,400	3.66	19,500	2.34	7.8	PG8*EA048070	
	CAP**3617A**	34,000	TDR&TXV	14.00		11.50	33,400	3.76	19,400	2.40	7.8	PG9MXA036060	
	CAP**3617A**	34,000	TDR&TXV	14.00		11.50	33,400	3.76	19,400	2.40	7.8	PG9MXA048080	
	CAP**3617A**	34,000	TXV			13.00	11.00	34,000	3.62	20,200	2.30	7.7	
	CAP**3619A**	33,800	TDR&TXV	14.00		11.50	33,600	3.62	19,700	2.32	7.7	PG9MTAV36075*A**	
	CAP**3619A**	34,000	TXV			13.00	11.00	34,000	3.62	20,200	2.30	7.7	
	CAP**3621A**	34,000	TDR&TXV	14.00		11.50	33,400	3.80	19,400	2.42	8.0	PG8*EA048090	
	CAP**3621A**	34,000	TDR&TXV	14.00		11.50	33,400	3.84	19,400	2.44	8.0	PG8*EA060110	
	CAP**3621A**	34,000	TDR&TXV	14.00		11.50	33,200	3.78	19,200	2.42	8.0	PG9MXA060100	
	CAP**3621A**	34,000	TXV			13.00	11.00	34,000	3.62	20,200	2.30	7.7	
	CAP**4221A**	34,200	TDR&TXV	14.50		12.00	33,400	3.86	19,400	2.44	8.0	PG8*EA048090	
	CAP**4221A**	34,200	TDR&TXV	14.50		12.00	33,600	3.88	19,400	2.46	8.0	PG8*EA060110	
	CAP**4221A**	34,400	TDR&TXV	14.50		12.00	33,200	3.84	19,200	2.44	8.0	PG9MXA060100	
CAP**4221A**	34,200	TXV			13.00	11.00	34,400	3.68	20,200	2.30	7.8		
CAP**4224A**	34,200	TDR&TXV	14.50		12.00	33,800	3.90	19,700	2.46	8.2	PG9MTAV60125*A**		

COMBINATION RATINGS (CONT.)

UNIT SIZE - SERIES	INDOOR MODEL	ARI STANDARD RATINGS										FURNACE MODEL	
		COOLING					HEATING						
		CAPACITY	FACTORY ENHANCE	SEER		EER	HIGH TEMP		LOW TEMP		HSPF		
STANDARD	TDR			E	E COP		H CAPACITY	H COP					
36-A	CAP**4224A**	34,200	TXV			13.00	11.00	34,400	3.68	20,200	2.30	7.8	
	CNPF*3618A**	34,000	TXV			13.00	11.00	34,000	3.62	20,200	2.28	7.7	
	CNPH*3617A**	34,000	TDR&TXV	14.00			11.50	33,200	3.70	19,300	2.38	7.8	PG9MXA036080
	CNPH*3617A**	33,800	TDR&TXV	14.00			11.50	33,400	3.62	19,500	2.32	7.7	PG8*EA048070
	CNPH*3617A**	33,800	TDR&TXV	14.00			11.50	33,200	3.72	19,300	2.38	7.8	PG8*EA048090
	CNPH*3617A**	33,800	TDR&TXV	14.00			11.50	33,200	3.74	19,300	2.40	7.8	PG8*EA060110
	CNPH*3617A**	33,800	TDR&TXV	14.00			11.50	33,600	3.70	19,600	2.36	7.8	PG9MTAV60100*A**
	CNPH*3617A**	33,800	TDR&TXV	14.00			11.50	33,600	3.74	19,600	2.38	7.8	PG9MTAV60125*A**
	CNPH*3617A**	34,000	TDR&TXV	14.00			11.50	33,200	3.70	19,400	2.38	7.8	PG9MXA036060
	CNPH*3617A**	34,000	TDR&TXV	14.00			11.50	33,400	3.70	19,400	2.38	7.8	PG9MXA048080
	CNPH*3617A**	34,000	TDR&TXV	14.00			11.50	33,000	3.68	19,100	2.38	7.8	PG9MXA060100
	CNPH*3617A**	34,000	TXV			13.00	11.00	34,000	3.62	20,200	2.28	7.7	
	CNPH*4221A**	34,400	TDR&TXV	14.50			12.00	33,400	3.80	19,400	2.42	8.0	PG9MXA036080
	CNPH*4221A**	34,200	TDR&TXV	14.00			11.50	33,800	3.66	19,800	2.32	7.8	PG8*EA024045
	CNPH*4221A**	34,200	TDR&TXV	14.50			12.00	33,600	3.72	19,600	2.36	7.8	PG8*EA048070
	CNPH*4221A**	34,200	TDR&TXV	14.50			12.00	33,400	3.82	19,400	2.42	8.0	PG8*EA048090
	CNPH*4221A**	34,200	TDR&TXV	14.50			12.00	33,400	3.86	19,400	2.44	8.0	PG8*EA060110
	CNPH*4221A**	34,000	TDR&TXV	13.50			11.00	33,800	3.64	19,800	2.30	7.7	PG9MTAV36050*A**
	CNPH*4221A**	34,200	TDR&TXV	14.00			11.50	33,800	3.68	19,700	2.34	7.8	PG9MTAV36075*A**
	CNPH*4221A**	34,200	TDR&TXV	14.50			12.00	33,800	3.82	19,700	2.40	8.0	PG9MTAV60100*A**
	CNPH*4221A**	34,200	TDR&TXV	14.50			12.00	33,800	3.86	19,700	2.42	8.0	PG9MTAV60125*A**
	CNPH*4221A**	34,400	TDR&TXV	14.50			12.00	33,600	3.82	19,500	2.42	8.0	PG9MXA036060
	CNPH*4221A**	34,400	TDR&TXV	14.50			12.00	33,600	3.80	19,500	2.42	8.0	PG9MXA048080
	CNPH*4221A**	34,400	TDR&TXV	14.50			12.00	33,200	3.80	19,200	2.42	8.0	PG9MXA060100
	CNPH*4221A**	34,200	TXV			13.00	11.00	34,400	3.68	20,200	2.32	7.8	
	CNPV*3617A**	34,000	TDR&TXV	14.00			11.50	33,200	3.70	19,300	2.38	7.8	PG9MXA036080
	CNPV*3617A**	33,800	TDR&TXV	14.00			11.50	33,400	3.62	19,500	2.32	7.7	PG8*EA048070
	CNPV*3617A**	34,000	TDR&TXV	14.00			11.50	33,200	3.70	19,400	2.38	7.8	PG9MXA036060
	CNPV*3617A**	34,000	TDR&TXV	14.00			11.50	33,400	3.70	19,400	2.38	7.8	PG9MXA048080
	CNPV*3617A**	34,000	TXV			13.00	11.00	34,000	3.62	20,200	2.28	7.7	
	CNPV*3621A**	34,000	TDR&TXV	14.00			11.50	33,200	3.72	19,300	2.38	7.8	PG8*EA048090
	CNPV*3621A**	34,000	TDR&TXV	14.00			11.50	33,200	3.76	19,300	2.40	7.8	PG8*EA060110
	CNPV*3621A**	34,000	TDR&TXV	14.00			11.50	33,000	3.70	19,100	2.38	7.8	PG9MXA060100
	CNPV*3621A**	34,000	TXV			13.00	11.00	34,000	3.62	20,200	2.28	7.7	
	CNPV*4217A**	34,400	TDR&TXV	14.50			12.00	33,600	3.86	19,500	2.42	8.0	PG9MXA036080
	CNPV*4217A**	34,400	TDR&TXV	14.50			12.00	33,800	3.78	19,600	2.38	7.8	PG8*EA048070
	CNPV*4217A**	34,400	TDR&TXV	14.50			12.00	33,600	3.88	19,600	2.44	8.0	PG9MXA036060
	CNPV*4217A**	34,400	TDR&TXV	14.50			12.00	33,600	3.88	19,600	2.44	8.0	PG9MXA048080
	CNPV*4217A**	34,200	TXV			13.00	11.00	34,400	3.74	20,400	2.34	7.8	
	CNPV*4221A**	34,200	TDR&TXV	14.50			12.00	33,400	3.82	19,400	2.42	8.0	PG8*EA048090
	CNPV*4221A**	34,200	TDR&TXV	14.50			12.00	33,400	3.86	19,400	2.44	8.0	PG8*EA060110
	CNPV*4221A**	34,400	TDR&TXV	14.50			12.00	33,200	3.80	19,200	2.42	8.0	PG9MXA060100
	CNPV*4221A**	34,200	TXV			13.00	11.00	34,400	3.68	20,200	2.32	7.8	
	CSPH*3612A**	34,000	TDR&TXV	14.00			11.50	33,600	3.88	19,500	2.44	8.0	PG9MXA036080
	CSPH*3612A**	34,000	TDR&TXV	14.00			11.50	34,000	3.74	19,900	2.34	7.8	PG8*EA024045
	CSPH*3612A**	34,000	TDR&TXV	14.00			11.50	33,800	3.78	19,700	2.38	8.0	PG8*EA048070
	CSPH*3612A**	34,000	TDR&TXV	14.00			11.50	33,600	3.90	19,500	2.46	8.2	PG8*EA048090
	CSPH*3612A**	34,000	TDR&TXV	14.00			11.50	33,600	3.94	19,500	2.46	8.2	PG8*EA060110
	CSPH*3612A**	34,000	TDR&TXV	14.00			11.50	34,000	3.72	19,900	2.34	7.8	PG9MTAV36050*A**
	CSPH*3612A**	34,000	TDR&TXV	14.00			11.50	34,000	3.76	19,800	2.36	7.8	PG9MTAV36075*A**
CSPH*3612A**	34,000	TDR&TXV	14.00			11.50	34,000	3.90	19,800	2.44	8.2	PG9MTAV60100*A**	
CSPH*3612A**	34,000	TDR&TXV	14.00			11.50	34,000	3.94	19,700	2.46	8.2	PG9MTAV60125*A**	
CSPH*3612A**	34,000	TDR&TXV	14.00			11.50	33,800	3.90	19,600	2.44	8.0	PG9MXA036060	
CSPH*3612A**	34,000	TDR&TXV	14.00			11.50	33,800	3.90	19,600	2.44	8.0	PG9MXA048080	
CSPH*3612A**	34,000	TDR&TXV	14.00			11.50	33,400	3.88	19,300	2.44	8.0	PG9MXA060100	
CSPH*3612A**	34,000	TXV			13.00	11.00	34,000	3.76	20,400	2.34	7.8		
CSPH*4212A**	34,400	TDR&TXV	14.50			12.00	33,800	3.94	19,500	2.46	8.2	PG9MXA036080	
CSPH*4212A**	34,200	TDR&TXV	14.00			11.50	34,200	3.78	19,900	2.36	8.0	PG8*EA024045	
CSPH*4212A**	34,200	TDR&TXV	14.50			12.00	33,800	3.84	19,700	2.40	8.0	PG8*EA048070	
CSPH*4212A**	34,200	TDR&TXV	14.50			12.00	33,800	3.96	19,500	2.48	8.2	PG8*EA048090	
CSPH*4212A**	34,200	TDR&TXV	14.50			12.00	33,800	4.00	19,500	2.50	8.2	PG8*EA060110	
CSPH*4212A**	34,200	TDR&TXV	14.30			12.00	34,200	3.76	20,000	2.34	7.8	PG9MTAV36050*A**	
CSPH*4212A**	34,200	TDR&TXV	14.50			12.00	34,000	3.80	19,900	2.38	8.0	PG9MTAV36075*A**	
CSPH*4212A**	34,200	TDR&TXV	14.50			12.00	34,200	3.98	19,900	2.46	8.2	PG9MTAV60100*A**	
CSPH*4212A**	34,200	TDR&TXV	14.50			12.00	34,200	4.00	19,800	2.48	8.2	PG9MTAV60125*A**	
CSPH*4212A**	34,400	TDR&TXV	14.50			12.00	33,800	3.96	19,600	2.46	8.2	PG9MXA036060	
CSPH*4212A**	34,400	TDR&TXV	14.50			12.00	33,800	3.96	19,600	2.46	8.2	PG9MXA048080	
CSPH*4212A**	34,400	TDR&TXV	14.50			11.00	33,400	3.94	19,400	2.48	8.2	PG9MXA060100	
CSPH*4212A**	34,200	TXV			13.00	11.00	34,400	3.80	20,400	2.36	8.0		
48-A	*PF4MNA048	48,000	TDR&TXV	13.00		11.00	47,500	3.64	28,800	2.38	7.8		
	PF4MNA049	48,500	TDR&TXV	14.00		11.50	47,500	3.82	28,200	2.48	8.2		
	PF4MNA060	48,000	TDR&TXV	13.00		11.00	48,000	3.76	28,800	2.42	8.0		
	PF4MNA061	49,000	TDR&TXV	14.50		12.00	47,500	3.96	28,200	2.54	8.2		
	CAP**4817A**	47,500	TDR&TXV	13.00		11.00	47,500	3.56	28,400	2.34	7.8	PG8*EA048070	
	CAP**4817A**	47,500	TDR&TXV	14.00		11.50	47,000	3.70	28,000	2.42	8.0	PG9MXA048080	
	CAP**4817A**	47,500	TXV			13.00	11.00	47,000	3.64	28,200	2.38	7.8	
	CAP**4821A**	47,500	TDR&TXV	14.00		11.50	46,500	3.68	27,600	2.42	8.0	PG8*EA048090	
	CAP**4821A**	47,500	TDR&TXV	14.00		11.50	46,500	3.70	27,400	2.44	8.0	PG8*EA060110	
	CAP**4821A**	47,500	TDR&TXV	14.00		11.50	46,500	3.70	27,600	2.44	8.0	PG9MXA060100	
	CAP**4821A**	47,500	TXV			13.00	11.00	47,500	3.68	28,400	2.40	8.0	
	CAP**4823A**	47,500	TDR&TXV	14.00		11.50	46,500	3.68	27,600	2.42	8.0	PG8*EA048090	
	CAP**4823A**	47,500	TDR&TXV	14.00		11.50	46,500	3.70	27,400	2.44	8.0	PG8*EA060110	
	CAP**4823A**	47,500	TDR&TXV	13.50		11.00	47,000	3.64	28,000	2.40	7.8	PG9MTAV60100*A**	
	CAP**4823A**	47,500	TDR&TXV	14.00		11.50	46,500	3.70	27,600	2.44	8.0	PG9MXA060100	
	CAP**4823A**	47,500	TXV			13.00							

COMBINATION RATINGS (CONT.)

UNIT SIZE - SERIES	INDOOR MODEL	ARI STANDARD RATINGS										FURNACE MODEL
		COOLING					HEATING					
		CAPACITY	FACTORY ENHANCE	SEER		EER	HIGH TEMP		LOW TEMP		HSPF	
STANDARD	TDR			E	E COP		H	H COP				
48-A	CAP**4824A**	47,500	TDR&TXV	14.00		11.50	47,000	3.68	27,800	2.42	8.0	PG9MTAV60125*A**
	CAP**4824A**	47,500	TDR&TXV	14.00		11.50	46,500	3.74	27,600	2.46	8.0	PG9MXA060120
	CAP**4824A**	47,500	TXV		13.00	11.00	47,500	3.68	28,400	2.40	8.0	
	CAP**6021A**	48,000	TDR&TXV	14.50		12.00	47,000	3.78	27,800	2.48	8.2	PG8*EA048090
	CAP**6021A**	48,000	TDR&TXV	14.50		12.00	46,500	3.82	27,600	2.50	8.2	PG8*EA060110
	CAP**6021A**	48,000	TDR&TXV	14.50		12.00	47,000	3.82	27,800	2.50	8.2	PG9MXA060100
	CAP**6021A**	48,000	TXV		13.00	11.00	48,000	3.76	28,600	2.44	8.0	
	CAP**6024A**	48,000	TDR&TXV	14.50		12.00	46,500	3.78	27,600	2.48	8.2	PG8*EA060135
	CAP**6024A**	48,000	TDR&TXV	14.50		12.00	47,000	3.76	28,000	2.46	8.0	PG9MTAV60125*A**
	CAP**6024A**	48,000	TDR&TXV	14.50		12.00	46,500	3.82	27,600	2.50	8.2	PG9MXA060120
	CAP**6024A**	48,000	TXV		13.00	11.00	48,000	3.76	28,600	2.44	8.0	
	CAP**6025A**	48,000	TDR&TXV	14.50		12.00	46,500	3.78	27,600	2.48	8.2	PG8*EA060135
	CAP**6025A**	48,000	TDR&TXV	14.50		12.00	47,000	3.76	28,000	2.46	8.0	PG9MTAV60125*A**
	CAP**6025A**	48,000	TDR&TXV	14.50		12.00	46,500	3.82	27,600	2.50	8.2	PG9MXA060120
	CAP**6025A**	48,000	TXV		13.00	11.00	48,000	3.76	28,600	2.44	8.0	
	CNPF*4818A**	47,000	TXV		13.00	11.00	47,000	3.52	27,800	2.34	7.7	
	CNPH*4821A**	47,500	TDR&TXV	13.00		11.00	47,500	3.54	28,400	2.32	7.7	PG8*EA048070
	CNPH*4821A**	47,500	TDR&TXV	14.00		11.50	46,500	3.68	27,600	2.42	8.0	PG8*EA048090
	CNPH*4821A**	47,500	TDR&TXV	14.00		11.50	46,500	3.72	27,400	2.46	8.0	PG8*EA060110
	CNPH*4821A**	47,500	TDR&TXV	14.00		11.50	46,500	3.70	27,600	2.44	8.0	PG8*EA060135
	CNPH*4821A**	47,500	TDR&TXV	13.50		11.00	47,000	3.66	28,000	2.40	8.0	PG9MTAV60100*A**
	CNPH*4821A**	47,500	TDR&TXV	13.00		11.50	47,000	3.68	27,800	2.42	8.0	PG9MTAV60125*A**
	CNPH*4821A**	47,500	TDR&TXV	14.00		11.50	47,000	3.66	27,800	2.40	8.0	PG9MXA048080
	CNPH*4821A**	47,500	TDR&TXV	14.00		11.50	46,500	3.72	27,600	2.44	8.0	PG9MXA060100
	CNPH*4821A**	47,500	TDR&TXV	14.00		11.50	46,500	3.74	27,600	2.46	8.0	PG9MXA060120
	CNPH*4821A**	47,500	TXV		13.00	11.00	47,500	3.68	28,400	2.40	8.0	
	CNPH*6024A**	48,000	TDR&TXV	13.50		11.00	47,500	3.60	28,400	2.36	7.8	PG8*EA048070
	CNPH*6024A**	48,000	TDR&TXV	14.50		12.00	47,000	3.76	27,800	2.46	8.0	PG8*EA048090
	CNPH*6024A**	48,000	TDR&TXV	14.50		12.00	46,500	3.80	27,600	2.50	8.2	PG8*EA060110
	CNPH*6024A**	48,000	TDR&TXV	14.50		12.00	46,500	3.78	27,600	2.48	8.2	PG8*EA060135
	CNPH*6024A**	48,000	TDR&TXV	14.00		11.50	47,500	3.74	28,200	2.44	8.0	PG9MTAV60100*A**
	CNPH*6024A**	48,000	TDR&TXV	14.50		12.00	47,000	3.76	28,000	2.46	8.0	PG9MTAV60125*A**
	CNPH*6024A**	48,000	TDR&TXV	14.45		12.00	47,000	3.72	28,000	2.44	8.0	PG9MXA048080
	CNPH*6024A**	48,000	TDR&TXV	14.50		12.00	46,500	3.80	27,600	2.48	8.2	PG9MXA060100
	CNPH*6024A**	48,000	TDR&TXV	14.50		12.00	46,500	3.82	27,600	2.50	8.2	PG9MXA060120
	CNPH*6024A**	48,000	TXV		13.00	11.00	48,000	3.74	28,600	2.42	8.0	
	CNPV*4821A**	47,500	TDR&TXV	14.00		11.50	46,500	3.68	27,600	2.42	8.0	PG8*EA048090
	CNPV*4821A**	47,500	TDR&TXV	14.00		11.50	46,500	3.72	27,400	2.46	8.0	PG8*EA060110
	CNPV*4821A**	47,500	TDR&TXV	14.00		11.50	46,500	3.72	27,600	2.44	8.0	PG9MXA060100
	CNPV*4821A**	47,500	TXV		13.00	11.00	47,500	3.68	28,400	2.40	8.0	
	CNPV*4824A**	47,500	TDR&TXV	14.00		11.50	46,500	3.70	27,600	2.44	8.0	PG8*EA060135
	CNPV*4824A**	47,500	TDR&TXV	14.00		11.00	47,000	3.68	27,800	2.42	8.0	PG9MTAV60125*A**
	CNPV*4824A**	47,500	TDR&TXV	14.00		11.50	46,500	3.74	27,600	2.46	8.0	PG9MXA060120
	CNPV*4824A**	47,500	TXV		13.00	11.00	47,500	3.68	28,400	2.40	8.0	
	CNPV*6024A**	48,000	TDR&TXV	14.50		12.00	46,500	3.78	27,600	2.48	8.2	PG8*EA060135
	CNPV*6024A**	48,000	TDR&TXV	14.50		11.50	47,000	3.76	28,000	2.46	8.0	PG9MTAV60125*A**
	CNPV*6024A**	48,000	TDR&TXV	14.50		12.00	46,500	3.82	27,600	2.50	8.2	PG9MXA060120
	CNPV*6024A**	48,000	TXV		13.00	11.00	48,000	3.74	28,600	2.42	8.0	
	CSPH*4812A**	47,500	TDR&TXV	13.00		11.00	47,500	3.56	28,400	2.34	7.8	PG8*EA048070
	CSPH*4812A**	47,500	TDR&TXV	14.00		11.50	46,500	3.70	27,800	2.44	8.0	PG8*EA048090
CSPH*4812A**	47,500	TDR&TXV	14.00		11.50	46,500	3.72	27,400	2.46	8.0	PG8*EA060110	
CSPH*4812A**	47,500	TDR&TXV	14.00		11.50	46,500	3.70	27,600	2.44	8.0	PG8*EA060135	
CSPH*4812A**	47,500	TDR&TXV	14.00		11.50	47,000	3.68	28,000	2.40	8.0	PG9MTAV60100*A**	
CSPH*4812A**	47,500	TDR&TXV	14.00		11.50	47,000	3.70	28,000	2.42	8.0	PG9MTAV60125*A**	
CSPH*4812A**	47,500	TDR&TXV	14.00		11.50	47,000	3.68	28,000	2.42	8.0	PG9MXA048080	
CSPH*4812A**	47,500	TDR&TXV	14.00		11.50	46,500	3.72	27,600	2.46	8.0	PG9MXA060100	
CSPH*4812A**	47,500	TDR&TXV	14.00		11.50	46,500	3.76	27,600	2.46	8.0	PG9MXA060120	
CSPH*4812A**	47,500	TXV		13.00	11.00	47,500	3.72	28,600	2.42	8.0		
CSPH*6012A**	48,000	TDR&TXV	13.50		11.00	47,500	3.64	28,600	2.38	7.8	PG8*EA048070	
CSPH*6012A**	48,000	TDR&TXV	14.50		12.00	47,000	3.82	27,800	2.48	8.2	PG8*EA048090	
CSPH*6012A**	48,000	TDR&TXV	14.50		12.00	46,500	3.84	27,600	2.52	8.2	PG8*EA060110	
CSPH*6012A**	48,000	TDR&TXV	14.50		12.00	47,000	3.82	27,800	2.50	8.2	PG8*EA060135	
CSPH*6012A**	48,000	TDR&TXV	14.45		12.00	47,500	3.80	28,200	2.46	8.2	PG9MTAV60100*A**	
CSPH*6012A**	48,000	TDR&TXV	14.50		12.00	47,500	3.82	28,000	2.48	8.2	PG9MTAV60125*A**	
CSPH*6012A**	48,000	TDR&TXV	14.50		12.00	47,500	3.78	28,000	2.46	8.2	PG9MXA048080	
CSPH*6012A**	48,000	TDR&TXV	14.50		12.00	47,000	3.84	27,800	2.50	8.2	PG9MXA060100	
CSPH*6012A**	48,000	TDR&TXV	14.50		12.00	47,000	3.88	27,800	2.52	8.2	PG9MXA060120	
CSPH*6012A**	48,000	TXV		13.00	11.00	48,000	3.78	28,600	2.44	8.2		
60-A	*PF4MNA060	55,500	TDR&TXV	13.00		10.50	57,000	3.58	35,600	2.50	8.0	
	PF4MNA061	55,500	TDR&TXV	13.50		11.00	56,000	3.80	34,600	2.64	8.0	
	CAP**6021A**	55,000	TDR&TXV	13.50		11.00	55,500	3.56	34,000	2.54	8.0	PG8*EA048090
	CAP**6021A**	55,500	TDR&TXV	13.50		11.00	55,500	3.62	34,000	2.58	8.0	PG8*EA060110
	CAP**6021A**	55,000	TDR&TXV	13.50		11.00	55,500	3.58	33,800	2.56	8.0	PG9MXA060100
	CAP**6021A**	55,500	TXV		13.00	11.00	56,000	3.56	34,400	2.52	8.0	
	CAP**6024A**	55,000	TDR&TXV	13.50		11.00	55,500	3.58	33,800	2.54	8.0	PG8*EA060135
	CAP**6024A**	55,500	TDR&TXV	13.50		11.00	55,500	3.60	33,800	2.56	8.0	PG9MXA060120
	CAP**6024A**	55,500	TXV		13.00	11.00	56,000	3.64	35,000	2.56	8.0	
	CAP**6025A**	55,000	TDR&TXV	13.50		11.00	55,500	3.58	33,800	2.54	8.0	PG8*EA060135
	CAP**6025A**	55,500	TDR&TXV	13.50		11.00	55,500	3.60	33,800	2.56	8.0	PG9MXA060120
	CAP**6025A**	55,500	TXV		13.00	11.00	56,000	3.64	35,000	2.56	8.0	
	CNPH*6024A**	55,000	TDR&TXV	13.50		11.00	55,500	3.54	33,800	2.52	8.0	PG8*EA048090
	CNPH*6024A**	55,000	TDR&TXV	13.50		11.00	55,500	3.60	33,800	2.56	8.0	PG8*EA060110
	CNPH*6024A**	55,000	TDR&TXV	13.50		11.00	55,500	3.56	33,800	2.54	8.0	PG8*EA060135
CNPH*6024A**	54,500	TDR&TXV	13.00		11.00	55,500	3.48	34,000	2.50	8.0	PG9MXA048080	
CNPH*6024A**	55,000	TDR&TXV	13.50		11.00	55,000	3.56	33,800	2.54	8.0	PG9MXA060100	
CNPH*6024A**	55,000	TDR&TXV	13.50		11.00	55,000	3.60	33,600	2.56	8.0	PG9MXA060120	

See notes on page 11

COMBINATION RATINGS (CONT.)

UNIT SIZE – SERIES	INDOOR MODEL	ARI STANDARD RATINGS										FURNACE MODEL	
		COOLING					HEATING						
		CAPACITY	FACTORY ENHANCE	SEER		EER	HIGH TEMP		LOW TEMP		HSPF		
				STANDARD	TDR		E CAPACITY	E COP	H CAPACITY	H COP			
60–A	CNPH*6024A**	55,500	TXV			13.00	11.00	56,000	3.62	34,800	2.54	8.0	
	CNPV*6024A**	55,000	TDR&TXV	13.50			11.00	55,500	3.56	33,800	2.54	8.0	PG8*EA060135
	CNPV*6024A**	55,000	TDR&TXV	13.50			11.00	55,000	3.60	33,600	2.56	8.0	PG9MXA060120
	CNPV*6024A**	55,500	TXV			13.00	11.00	56,000	3.62	34,800	2.54	8.0	
	CSPH*6012A**	55,500	TDR&TXV	13.50			11.00	55,500	3.60	34,000	2.54	8.0	PG8*EA048090
	CSPH*6012A**	55,500	TDR&TXV	13.50			11.00	55,500	3.66	34,000	2.58	8.0	PG8*EA060110
	CSPH*6012A**	55,500	TDR&TXV	13.50			11.00	55,500	3.62	34,000	2.56	8.0	PG8*EA060135
	CSPH*6012A**	55,000	TDR&TXV	13.00			11.00	55,500	3.54	34,000	2.52	8.0	PG9MXA048080
	CSPH*6012A**	55,500	TDR&TXV	13.50			11.00	55,500	3.62	33,800	2.56	8.0	PG9MXA060100
	CSPH*6012A**	55,500	TDR&TXV	13.50			11.00	55,500	3.66	33,800	2.60	8.0	PG9MXA060120
	CSPH*6012A**	55,500	TXV			13.00	11.00	56,000	3.68	35,000	2.56	8.0	

* Tested combination

† In most cases, only 1 method should be used to achieve TDR function. Using more than 1 method in a system may cause degradation in performance. Use either the accessory Time–Delay Relay KAATD0101TDR or a furnace equipped with TDR.

EER — Energy Efficiency Ratio

SEER — Seasonal Energy Efficiency Ratio

TDR — Time–Delay Relay

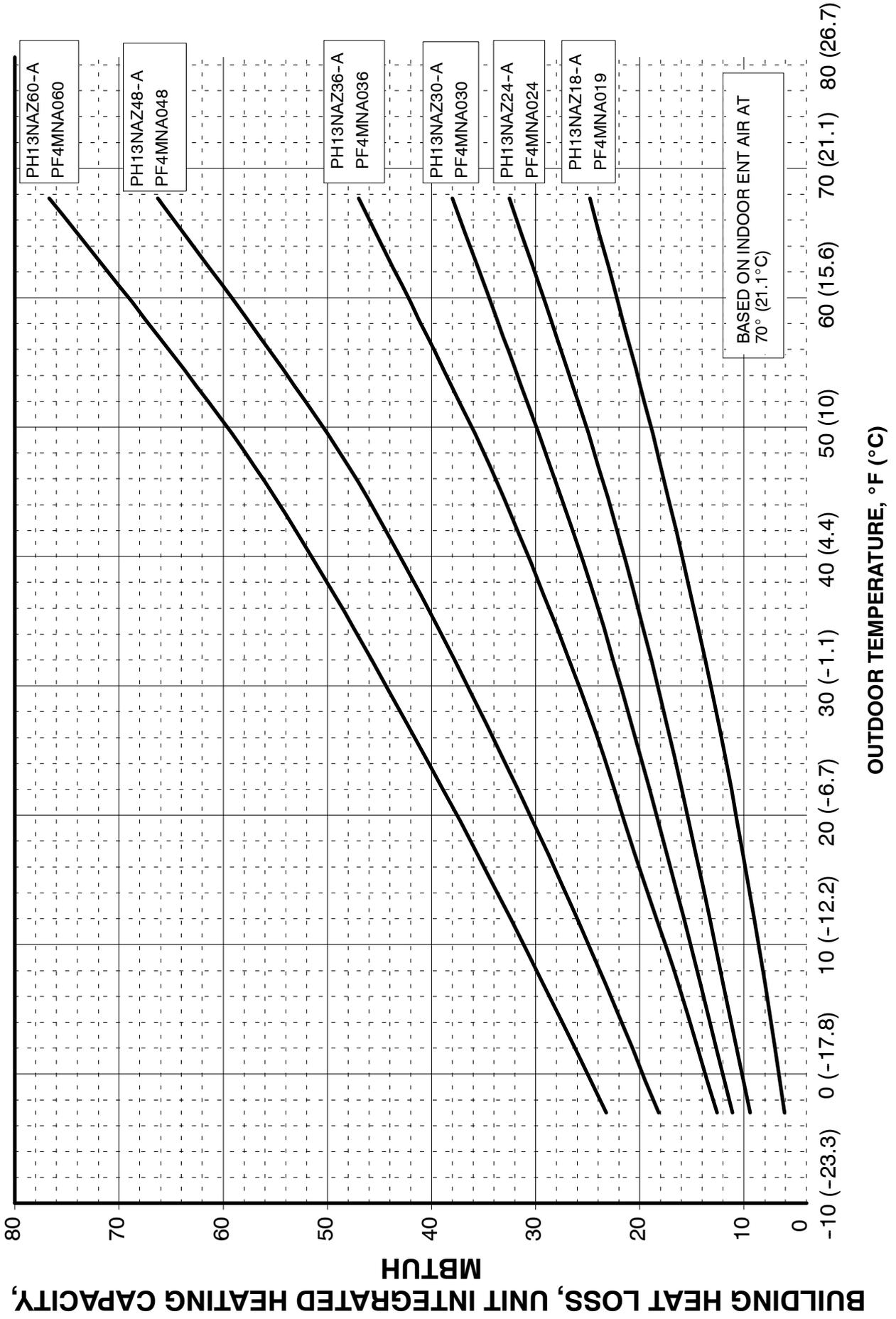
TXV — Thermostatic Expansion Valve

NOTES:

1. Ratings are net values reflecting the effects of circulating fan motor heat. Supplemental electric heat is not included.
2. Tested outdoor/indoor combinations have been tested in accordance with DOE test procedures for central air conditioners. Ratings for other combinations are determined under DOE computer simulation procedures.
3. Determine actual CFM values obtainable for your system by referring to fan performance data in fan coil or furnace coil literature.
4. Do not apply with capillary tube coils as performance and reliability are significantly affected.

PH13NAZ

PH13NAZ BALANCE POINT WORKSHEET



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)			125 (51.7)				
		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	Sens†	Total	Sens†	Total	Sens†	Total	Sens†	Total	Sens†	Total	Sens†	Total	Sens†	Total	Sens†	Total	Sens†		
PH13NAZ18-A Outdoor Section With PF4MNA019 Indoor Section																					
	57 (13.9)	17.41	17.41	1.26	16.66	16.66	15.87	15.87	1.64	15.04	15.04	15.04	15.04	1.86	14.15	14.15	14.15	14.15	2.10	13.18	13.18
525	62 (16.7)	18.03	15.46	1.25	17.08	15.01	16.10	14.55	1.64	15.10	14.04	14.04	14.15	1.86	14.15	14.15	14.15	14.15	2.10	13.17	13.17
	67 (19.4)	19.83	13.02	1.23	18.78	12.59	17.69	12.16	1.62	16.55	11.71	11.71	11.71	1.84	15.35	11.24	11.24	11.24	2.09	14.06	10.74
	72 (22.2)	21.81	10.56	1.21	20.67	10.15	19.47	9.71	1.60	18.22	9.27	9.27	9.27	1.82	16.90	8.81	8.81	8.81	2.07	15.48	8.32
	57 (13.9)	18.14	18.14	1.27	17.33	17.33	16.49	16.49	1.65	15.60	15.60	15.60	15.60	1.87	14.66	14.66	14.66	14.66	2.11	13.61	13.61
600	62 (16.7)	18.44	16.55	1.27	17.47	16.06	16.50	16.50	1.65	15.60	15.60	15.60	15.60	1.87	14.66	14.66	14.66	14.66	2.11	13.61	13.61
	67 (19.4)	20.24	13.84	1.25	19.14	13.40	18.00	12.96	1.64	16.82	12.50	12.50	12.50	1.86	15.57	12.02	12.02	12.02	2.10	14.24	11.51
	72 (22.2)	22.25	11.07	1.23	21.05	10.64	19.80	10.20	1.62	18.50	9.75	9.75	9.75	1.84	17.13	9.28	9.28	9.28	2.09	15.65	8.78
	57 (13.9)	18.75	18.75	1.28	17.90	17.90	17.01	17.01	1.67	16.07	16.07	16.07	16.07	1.89	15.07	15.07	15.07	15.07	2.13	13.97	13.97
675	62 (16.7)	18.82	18.64	1.28	17.90	17.90	17.01	17.01	1.67	16.07	16.07	16.07	16.07	1.89	15.07	15.07	15.07	15.07	2.13	13.97	13.97
	67 (19.4)	20.55	14.63	1.27	19.41	14.18	18.23	13.73	1.65	17.01	13.25	13.25	13.25	1.88	15.74	12.76	12.76	12.76	2.12	14.37	12.23
	72 (22.2)	22.58	11.55	1.24	21.34	11.12	20.05	10.67	1.63	18.71	10.21	10.21	10.21	1.86	17.30	9.74	9.74	9.74	2.10	15.78	9.23

COOLING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL
*PF4MNA019	1.00	1.00	
PF4MNA025	1.01	1.01	
CAP**1814A**	1.00	1.00	PG8*EA024045
CAP**2414A**	1.01	1.01	PG8*EA024045
CNPH*2417A**	1.01	1.01	PG8*EA024045
CNPV*1814A**	1.00	1.00	PG8*EA024045
CNPV*2414A**	1.01	1.01	PG8*EA024045
CSPH*2412A**	1.01	1.01	PG8*EA024045
CNPH*2417A**	1.01	1.01	PG9MTAV36050*A**
CSPH*2412A**	1.01	1.01	PG9MTAV36050*A**
CNPH*2417A**	1.01	1.01	PG9MTAV36075*A**
CSPH*2412A**	1.01	1.01	PG9MTAV36075*A**
CAP**2417A**	1.01	1.01	PG9MXXA036060
CNPH*2417A**	1.01	1.01	PG9MXXA036060
CNPV*2417A**	1.01	1.01	PG9MXXA036060
CSPH*2412A**	1.01	1.01	PG9MXXA036060

See notes on pg.18

PH13NAZ

DETAILED COOLING CAPACITIES# (CONT.)

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)		125 (51.7)	
		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	Sens†	Total	Sens†	Total	Sens†	Total	Sens†	Total	Sens†	Total	Sens†
700	57 (13.9)	22.45	22.45	21.50	21.50	20.47	20.47	19.37	19.37	18.17	18.17	16.82	16.82
	62 (16.7)	23.21	20.45	22.01	19.87	20.75	19.26	19.45	18.58	18.17	18.17	16.82	16.82
	67 (19.4)	25.40	17.12	24.08	16.57	22.68	15.99	21.18	15.39	19.59	14.75	17.84	14.06
	72 (22.2)	27.81	13.77	26.37	13.23	24.81	12.65	23.19	12.07	21.44	11.44	19.50	10.76
	77 (25.0)	30.21	10.42	28.81	10.00	27.25	9.63	25.64	9.31	24.04	8.99	22.43	8.76
800	57 (13.9)	23.31	23.31	22.28	22.28	21.19	21.19	20.02	20.02	18.74	18.74	17.30	17.30
	62 (16.7)	23.67	21.86	22.45	21.23	21.19	21.19	20.01	20.01	18.73	18.73	17.30	17.30
	67 (19.4)	25.84	18.17	24.47	17.61	23.00	17.02	21.45	16.40	19.80	15.75	17.99	15.03
	72 (22.2)	28.28	14.40	26.78	13.85	25.15	13.26	23.48	12.66	21.66	12.03	19.66	11.33
	77 (25.0)	30.68	11.11	29.18	10.66	27.62	10.29	26.03	9.99	24.44	9.70	22.84	9.49
900	57 (13.9)	24.01	24.01	22.93	22.93	21.77	21.77	20.54	20.54	19.19	19.19	17.67	17.67
	62 (16.7)	24.08	23.91	22.93	22.93	21.77	21.77	20.53	20.53	19.18	19.18	17.67	17.67
	67 (19.4)	26.17	19.17	24.75	18.60	23.23	18.00	21.64	17.37	19.95	16.69	18.09	15.95
	72 (22.2)	28.64	14.99	27.08	14.43	25.41	13.84	23.67	13.23	21.81	12.59	19.76	11.89
	77 (25.0)	31.04	11.75	29.48	11.20	27.92	10.75	26.33	10.30	24.74	9.90	23.15	9.50

PH13NAZ24-A Outdoor Section With PF4MNA024 Indoor Section

COOLING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL
CSPH*2412A**	1.00	0.91	PG9MTAV36050*A**
CSPH*3012A**	1.02	0.89	PG9MTAV36050*A**
CNPH*2417A**	1.00	0.91	PG9MTAV36075*A**
CNPH*3017A**	1.02	0.89	PG9MTAV36075*A**
CSPH*2412A**	1.00	0.91	PG9MTAV36075*A**
CSPH*3012A**	1.02	0.89	PG9MTAV36075*A**
CNPH*2417A**	1.00	0.91	PG9MTAV60100*A**
CNPH*3017A**	1.02	0.89	PG9MTAV60100*A**
CSPH*2412A**	1.00	0.91	PG9MTAV60100*A**
CSPH*3012A**	1.02	0.89	PG9MTAV60100*A**
CNPH*2417A**	1.00	0.91	PG9MTAV60125*A**
CNPH*3017A**	1.02	0.89	PG9MTAV60125*A**
CSPH*2412A**	1.00	0.91	PG9MTAV60125*A**
CSPH*3012A**	1.02	0.89	PG9MTAV60125*A**
CAP**2417A**	1.00	0.91	PG9MXA036060
CAP**3017A**	1.02	0.89	PG9MXA036060
CNPH*2417A**	1.00	0.91	PG9MXA036060
CNPH*3017A**	1.02	0.89	PG9MXA036060
CNPV*3017A**	1.00	0.89	PG9MXA036060
CSPH*2412A**	1.02	0.89	PG9MXA036060
CSPH*3012A**	1.00	0.91	PG9MXA036060
CAP**2417A**	1.00	0.91	PG9MXA036060
CAP**3017A**	1.02	0.89	PG9MXA036060
CNPH*2417A**	1.00	0.91	PG9MXA036060
CNPH*3017A**	1.02	0.89	PG9MXA036060
CNPV*3017A**	1.00	0.89	PG9MXA036060
CSPH*2412A**	1.02	0.89	PG9MXA036060
CSPH*3012A**	1.00	0.91	PG9MXA036060
CAP**2417A**	1.00	0.91	PG9MXA036060
CAP**3017A**	1.02	0.89	PG9MXA036060
CNPH*2417A**	1.00	0.91	PG9MXA036060
CNPH*3017A**	1.02	0.89	PG9MXA036060
CNPV*3017A**	1.00	0.89	PG9MXA036060
CSPH*2412A**	1.02	0.89	PG9MXA036060
CSPH*3012A**	1.00	0.91	PG9MXA036060
CAP**2417A**	1.00	0.91	PG9MTAV36050*A**
CAP**3017A**	1.02	0.89	PG9MTAV36050*A**

See notes on pg.18

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)				125 (51.7)	
CFM	EWB °F (°C)	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	Sens†		Total	Sens†		Total	Sens†		Total	Sens†		Total	Sens†		Total	Sens†		Total	Sens†		Total
PH13NAZ36-A Outdoor Section With PF4MNA036 Indoor Section																							
	57 (13.9)	32.85	32.85	2.42	31.56	31.56	2.71	30.20	30.20	3.03	28.74	28.74	3.39	27.17	27.17	3.78	25.42	25.42	4.20				
1050	62 (16.7)	33.74	30.42	2.42	29.63	28.77	3.03	30.50	28.77	3.03	28.76	28.76	3.39	27.16	27.16	3.78	25.42	25.42	4.20				
	67 (19.4)	37.12	25.47	2.41	35.36	24.74	2.70	33.51	23.98	3.03	31.56	23.19	3.38	29.46	22.35	3.78	21.44	21.44	4.20				
1200	72 (22.2)	40.95	20.46	2.41	39.05	19.75	2.70	37.05	19.01	3.02	34.93	18.24	3.38	32.66	17.42	3.77	30.18	16.54	4.20				
	57 (13.9)	34.07	34.07	2.48	32.70	32.70	2.77	31.25	31.25	3.09	29.71	29.71	3.45	28.04	28.04	3.84	26.21	26.21	4.27				
1350	62 (16.7)	34.43	32.41	2.48	32.82	32.51	2.77	31.25	31.25	3.09	29.71	29.71	3.45	28.04	28.04	3.84	26.20	26.20	4.27				
	67 (19.4)	37.75	27.01	2.48	35.92	26.27	2.77	34.00	25.50	3.09	31.98	24.69	3.45	29.81	25.83	3.84	27.46	22.89	4.27				
1500	72 (22.2)	41.65	21.38	2.48	39.67	20.66	2.77	37.60	19.91	3.09	35.41	19.13	3.45	33.06	18.31	3.84	30.49	17.41	4.27				
	57 (13.9)	35.07	35.07	2.54	33.64	33.64	2.83	32.12	32.12	3.16	30.51	30.51	3.51	28.76	28.76	3.90	26.84	26.84	4.33				
1650	62 (16.7)	35.09	35.09	2.54	33.63	33.63	2.83	32.12	32.12	3.16	30.50	30.50	3.51	28.76	28.76	3.90	26.84	26.84	4.33				
	67 (19.4)	38.24	28.52	2.54	36.34	27.76	2.83	34.37	26.97	3.15	32.29	26.14	3.51	30.07	25.24	3.90	27.67	24.25	4.33				
72 (22.2)	42.20	22.28	2.54	40.15	21.54	2.83	38.01	20.79	3.15	35.76	20.00	3.51	33.34	19.16	3.90	30.71	18.25	4.33					

COOLING INDOOR MODEL		CAPACITY		POWER	FURNACE MODEL	
Model	Capacity	Power	Furnace Model	Capacity	Power	Furnace Model
*PF4MNA036	1.00	1.00				
PF4MNA037	1.00	0.96				
PF4MNA042	1.01	1.01				
PF4MNA043	1.01	0.92				
CAP**3617A**	1.00	1.00				
CAP**3619A**	1.00	1.00				
CAP**3621A**	1.00	1.00				
CAP**4221A**	1.01	1.01				
CAP**4224A**	1.01	1.01				
CNP**3618A**	1.00	1.00				
CNP**3617A**	1.00	1.00				
CNP**4217A**	1.01	1.01				
CNP**4212A**	1.01	1.01				
CNP**3617A**	1.00	1.00				
CNP**4217A**	1.01	1.01				
CNP**4212A**	1.01	1.01				
CNP**3617A**	1.00	1.00				
CNP**4217A**	1.01	1.01				
CNP**4212A**	1.01	1.01				
CNP**3617A**	1.00	1.00				
CNP**4217A**	1.01	1.01				
CNP**4212A**	1.01	1.01				
CNP**3617A**	1.00	1.00				
CNP**4217A**	1.01	1.01				
CNP**4212A**	1.01	1.01				
CNP**3617A**	1.00	1.00				
CNP**4217A**	1.01	1.01				
CNP**4212A**	1.01	1.01				
CNP**3617A**	1.00	1.00				
CNP**4217A**	1.01	1.01				
CNP**4212A**	1.01	1.01				
CNP**3617A**	1.00	1.00				
CNP**4217A**	1.01	1.01				
CNP**4212A**	1.01	1.01				
CNP**3617A**	1.00	1.00				
CNP**4217A**	1.01	1.01				
CNP**4212A**	1.01	1.01				
CNP**3617A**	1.00	1.00				
CNP**4217A**	1.01	1.01				
CNP**4212A**	1.01	1.01				
CNP**3617A**	1.00	1.00				
CNP**4217A**	1.01	1.01				
CNP**4212A**	1.01	1.01				
CNP**3617A**	1.00	1.00				
CNP**4217A**	1.01	1.01				
CNP**4212A**	1.01	1.01				
CNP**3617A**	1.00	1.00				
CNP**4217A**	1.01	1.01				
CNP**4212A**	1.01	1.01				
CNP**3617A**	1.00	1.00				
CNP**4217A**	1.01	1.01				
CNP**4212A**	1.01	1.01				
CNP**3617A**	1.00	1.00				
CNP**4217A**	1.01	1.01				
CNP**4212A**	1.01	1.01				
CNP**3617A**	1.00	1.00				
CNP**4217A**	1.01	1.01				
CNP**4212A**	1.01	1.01				
CNP**3617A**	1.00	1.00				
CNP**4217A**	1.01	1.01				
CNP**4212A**	1.01	1.01				
CNP**3617A**	1.00	1.00				
CNP**4217A**	1.01	1.01				
CNP**4212A**	1.01	1.01				
CNP**3617A**	1.00	1.00				
CNP**4217A**	1.01	1.01				
CNP**4212A**	1.01	1.01				
CNP**3617A**	1.00	1.00				
CNP**4217A**	1.01	1.01				
CNP**4212A**	1.01	1.01				
CNP**3617A**	1.00	1.00				
CNP**4217A**	1.01	1.01				
CNP**4212A**	1.01	1.01				
CNP**3617A**	1.00	1.00				
CNP**4217A**	1.01	1.01				
CNP**4212A**	1.01	1.01				
CNP**3617A**	1.00	1.00				
CNP**4217A**	1.01	1.01				
CNP**4212A**	1.01	1.01				
CNP**3617A**	1.00	1.00				
CNP**4217A**	1.01	1.01				
CNP**4212A**	1.01	1.01				
CNP**3617A**	1.00	1.00				
CNP**4217A**	1.01	1.01				
CNP**4212A**	1.01	1.01				
CNP**3617A**	1.00	1.00				
CNP**4217A**	1.01	1.01				
CNP**4212A**	1.01	1.01				
CNP**3617A**	1.00	1.00				
CNP**4217A**	1.01	1.01				
CNP**4212A**	1.01	1.01				
CNP**3617A**	1.00	1.00				
CNP**4217A**	1.01	1.01				
CNP**4212A**	1.01	1.01				
CNP**3617A**	1.00	1.00				
CNP**4217A**	1.01	1.01				
CNP**4212A**	1.01	1.01				
CNP**3617A**	1.00	1.00				
CNP**4217A**	1.01	1.01				
CNP**4212A**	1.01	1.01				
CNP**3617A**	1.00	1.00				
CNP**4217A**	1.01	1.01				
CNP**4212A**	1.01	1.01				
CNP**3617A**	1.00	1.00				
CNP**4217A**	1.01	1.01				
CNP**4212A**	1.01	1.01				
CNP**3617A**	1.00	1.00				
CNP**4217A**	1.01	1.01				
CNP**4212A**	1.01	1.01				
CNP**3617A**	1.00	1.00				
CNP**4217A**	1.01	1.01				
CNP**4212A**	1.01	1.01				
CNP**3617A**	1.00	1.00				
CNP**4217A**	1.01	1.01				
CNP**4212A**	1.01	1.01				
CNP**3617A**	1.00	1.00				
CNP**4217A**	1.01	1.01				
CNP**4212A**	1.01	1.01				
CNP**3617A**	1.00	1.00				
CNP**4217A**	1.01	1.01				
CNP**4212A**	1.01	1.01				
CNP**3617A**	1.00	1.00				
CNP**4217A**	1.01	1.01				
CNP**4212A**	1.01	1.01				
CNP**3617A**	1.00	1.00				
CNP**4217A**	1.01	1.01				
CNP**4212A**	1.01	1.01				
CNP**3617A**	1.00	1.00				
CNP**4217A**	1.01	1.01				
CNP**4212A**	1.01	1.01				
CNP**3617A**	1.00	1.00				
CNP**4217A**	1.01	1.01				
CNP**4212A**	1.01	1.01				
CNP**3617A**	1.00	1.00				
CNP**4217A**	1.01	1.01				
CNP**4212A**	1.01	1.01				
CNP**3617A**	1.00	1.00				
CNP**4217A**	1.01	1.01				
CNP**4212A**	1.01	1.01				
CNP**3617A**	1.00	1.00				
CNP**4217A**	1.01	1.01				
CNP**4212A**	1.01	1.01				

DETAILED COOLING CAPACITIES# (CONT.)

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)			125 (51.7)		
		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	Sens†	Total	Sens†	Total	Sens†	Total	Sens†	Total	Sens†	Total	Sens†	Total	Sens†	Total	Sens†	Total	Sens†
PH13NAZ60-A Outdoor Section With PF4MNA060 Indoor Section																			
	57 (13.9)	55.23	55.23	4.02	52.89	52.89	4.46	50.39	50.39	4.94	47.68	47.68	5.48	44.70	44.70	6.06	41.27	41.27	6.69
1750	62 (16.7)	56.78	50.07	4.03	53.89	48.89	4.47	50.86	47.21	4.95	47.70	47.70	5.48	44.70	44.70	6.06	41.27	41.27	6.69
	67 (19.4)	62.09	41.69	4.06	58.84	40.36	4.49	55.38	38.97	4.97	51.69	37.50	5.50	47.71	35.94	6.07	43.29	34.22	6.69
	72 (22.2)	67.81	33.20	4.09	64.18	31.87	4.52	60.30	30.47	5.00	56.16	28.99	5.52	51.73	27.44	6.09	48.71	25.71	6.70
2000	57 (13.9)	57.21	57.21	4.15	54.70	4.59	52.01	52.01	5.07	49.09	49.09	5.60	45.87	45.87	6.18	42.20	42.20	6.81	
	62 (16.7)	57.83	53.47	4.15	54.88	54.40	4.59	52.00	52.00	5.07	49.08	49.08	5.60	45.87	45.87	6.18	42.20	42.20	6.81
	67 (19.4)	63.02	44.22	4.18	59.82	42.87	4.61	56.00	41.44	5.09	52.16	39.93	5.61	48.03	38.33	6.19	43.46	36.54	6.81
	72 (22.2)	68.76	34.66	4.21	64.97	33.31	4.64	60.91	31.87	5.11	56.61	30.37	5.63	52.03	28.80	6.20	46.83	27.04	6.81
2250	57 (13.9)	58.83	58.83	4.27	56.16	56.16	4.71	53.29	53.29	5.19	50.18	50.18	5.72	46.77	46.77	6.30	42.85	42.85	6.92
	62 (16.7)	58.83	58.83	4.27	56.15	56.15	4.71	53.29	53.29	5.19	50.18	50.18	5.72	46.76	46.76	6.30	42.85	42.85	6.92
	67 (19.4)	63.66	46.64	4.30	60.14	45.25	4.73	56.40	43.79	5.21	52.44	42.24	5.73	48.21	40.58	6.30	43.52	38.70	6.92
	72 (22.2)	69.43	36.04	4.33	65.50	34.67	4.76	61.30	33.21	5.23	56.88	31.70	5.75	52.11	30.08	6.31	46.77	28.31	6.92

COOLING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL	COOLING INDOOR MODEL			FURNACE MODEL		
				MODEL	CAPACITY	POWER	MODEL	CAPACITY	POWER
*PF4MNA060	1.00	1.00		CSPH*6012A**	1.00	0.95	PG8*EA048090	0.99	0.95
PF4MNA061	1.00	0.95		CAP**6021A**	1.00	0.95	PG8*EA060110	0.99	0.95
CAP**6021A**	1.00	0.95		CNPH*6024A**	0.99	0.95	PG8*EA060110	0.99	0.95
CAP**6024A**	1.00	0.95		CSPH*6012A**	1.00	0.95	PG8*EA060110	1.00	0.95
CAP**6025A**	1.00	0.95		CAP**6024A**	0.99	0.95	PG8*EA060135	1.00	0.95
CNPH*6024A**	1.00	0.95		CAP**6025A**	0.99	0.95	PG8*EA060135	1.00	0.95
CNPH*6024A**	1.00	0.95		CNPH*6024A**	0.99	0.95	PG8*EA060135	1.00	0.95
CSPH*6012A**	1.00	0.95	PG8*EA048090	CNPV*6024A**	0.99	0.95	PG8*EA060135	0.99	0.95
CAP**6021A**	0.99	0.95	PG8*EA048090	CSPH*6012A**	1.00	0.95	PG8*EA060135	1.00	0.95
CNPH*6024A**	0.99	0.95	PG8*EA048090	CNPH*6024A**	0.98	0.94	PG9MXA048090	1.00	0.95

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

Detailed Cooling Capacities are based on indoor and outdoor unit at the same elevation per the latest edition of ARI standard 210/240. If additional tubing length and/or indoor unit is located above outdoor unit, a slight variation in capacity may occur.

* Tested Combination

† 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 Btu/h (245 kW) per 1000 CFM (480 L/S) of indoor coil air for each degree below 80°F (27°C), or add 835 Btu/h (245 kW) per 1000 CFM (480 L/S) of indoor coil air per degree above 80°F (27°C).

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

** Total system kW is total of indoor and outdoor unit kilowatts.

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. 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*							
65 (18.3)	525	6.23	5.73	1.13	7.49	1.17	10.20	9.30	1.22	12.54	11.14	1.27	15.17	13.81	1.33	18.09	18.09	1.42	21.35	21.35	1.52	24.96	24.96	1.61
	600	6.35	5.84	1.13	8.28	1.17	10.36	9.44	1.21	12.73	11.31	1.25	15.39	14.01	1.31	18.35	18.35	1.39	21.60	21.60	1.47	25.12	25.12	1.57
	675	6.45	5.94	1.14	8.38	1.18	10.50	9.57	1.21	12.89	11.45	1.25	15.59	14.18	1.30	18.56	18.56	1.38	21.73	21.73	1.45	25.15	25.15	1.55
70 (21.1)	525	5.94	5.47	1.18	7.88	1.23	9.95	9.08	1.28	12.24	10.87	1.34	14.86	13.52	1.41	17.74	17.74	1.49	20.95	20.95	1.60	24.58	24.58	1.70
	600	6.06	5.57	1.18	8.01	1.23	10.10	9.21	1.28	12.43	11.04	1.32	15.08	13.72	1.39	18.00	18.00	1.46	21.23	21.23	1.55	24.80	24.80	1.65
	675	6.16	5.67	1.19	8.12	1.24	10.23	9.33	1.27	12.59	11.19	1.32	15.26	13.89	1.37	18.19	18.19	1.45	21.41	21.41	1.52	24.89	24.89	1.63
75 (23.9)	525	5.63	5.18	1.23	7.61	1.29	9.69	8.84	1.35	11.94	10.60	1.41	14.55	13.24	1.48	17.39	17.39	1.57	20.54	20.54	1.68	24.18	24.18	1.79
	600	5.75	5.29	1.24	7.74	1.29	9.84	8.97	1.34	12.13	10.77	1.39	14.77	13.44	1.46	17.65	17.65	1.54	20.85	20.85	1.65	24.44	24.44	1.74
	675	5.85	5.39	1.25	7.86	1.30	9.97	9.09	1.34	12.29	10.92	1.39	14.95	13.60	1.45	17.86	17.86	1.52	21.06	21.06	1.61	24.58	24.58	1.71

PH13NAZ18--A Outdoor Section With PF4MNA019 Indoor Section

HEATING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL
*PF4MNA019	1.00	1.00	
PF4MNA025	1.00	0.99	
CAP**1814A**	1.00	1.04	PG8*EA024045
CAP**2414A**	1.00	0.98	PG8*EA024045
CNPH*2417A**	1.00	0.97	PG8*EA024045
CNPV*1814A**	1.00	1.00	PG8*EA024045
CNPV*2414A**	1.00	0.97	PG8*EA024045
CSPH*2412A**	1.00	0.98	PG8*EA024045
CNPH*2417A**	1.00	0.95	PG9MTAV36050*A**
CSPH*2412A**	1.00	0.95	PG9MTAV36050*A**
CNPH*2417A**	1.00	0.95	PG9MTAV36075*A**
CSPH*2412A**	1.00	0.95	PG9MTAV36075*A**
CAP**2417A**	1.00	0.96	PG9MXXA036060
CNPH*2417A**	1.00	0.97	PG9MXXA036060
CNPV*2417A**	1.00	0.97	PG9MXXA036060
CSPH*2412A**	1.00	0.99	PG9MXXA036060

See notes on pg. 24

HEAT PUMP HEATING PERFORMANCE (CONT.)

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. 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*										
65 (18.3)	700	9.57	8.81	1.60	12.07	11.10	1.64	14.70	13.41	1.67	17.48	15.53	1.71	20.55	18.70	1.77	24.05	24.05	1.84	28.04	28.04	1.93	32.57	32.57	2.01
	800	9.77	8.99	1.61	12.29	11.29	1.65	14.92	13.60	1.67	17.73	15.75	1.71	20.86	18.99	1.75	24.42	24.42	1.81	28.50	28.50	1.89	32.95	32.95	1.96
	900	9.95	9.16	1.64	12.48	11.47	1.66	15.13	13.79	1.68	17.94	15.94	1.71	21.14	19.23	1.74	24.73	24.73	1.80	28.85	28.85	1.87	33.18	33.18	1.93
70 (21.1)	700	9.18	8.44	1.67	11.73	10.78	1.72	14.38	13.11	1.76	17.18	15.26	1.81	20.17	18.35	1.86	23.64	23.64	1.94	27.55	27.55	2.03	32.04	32.04	2.13
	800	9.40	8.64	1.69	11.96	10.99	1.73	14.60	13.31	1.77	17.43	15.48	1.80	20.48	18.64	1.85	24.00	24.00	1.91	28.00	28.00	1.99	32.52	32.52	2.07
	900	9.58	8.81	1.72	12.15	11.17	1.75	14.81	13.50	1.78	17.65	15.68	1.80	20.75	18.89	1.84	24.31	24.31	1.90	28.37	28.37	1.97	32.79	32.79	2.03
75 (23.9)	700	8.77	8.07	1.75	11.37	10.45	1.81	14.02	12.79	1.86	16.84	14.96	1.91	19.84	18.06	1.97	23.24	23.24	2.04	27.07	27.07	2.14	31.49	31.49	2.26
	800	8.97	8.25	1.77	11.59	10.65	1.82	14.26	13.00	1.86	17.10	15.19	1.90	20.23	18.41	1.95	23.59	23.59	2.01	27.51	27.51	2.10	32.01	32.01	2.18
	900	9.16	8.42	1.80	11.79	10.84	1.84	14.50	13.22	1.87	17.35	15.41	1.90	20.37	18.54	1.94	23.89	23.89	2.00	27.88	27.88	2.08	32.37	32.37	2.14

PH13NAZ24--A Outdoor Section With PF4MNA024 Indoor Section

HEATING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL
CNPH*3017A**	1.01	0.94	PG9MTAV36075*A**
CSPH*2412A**	1.00	0.95	PG9MTAV36075*A**
CSPH*3012A**	1.01	0.94	PG9MTAV36075*A**
CNPH*2417A**	1.00	0.92	PG9MTAV60100*A**
CNPH*3017A**	1.01	0.91	PG9MTAV60100*A**
CSPH*2412A**	1.00	0.92	PG9MTAV60100*A**
CSPH*3012A**	1.01	0.91	PG9MTAV60100*A**
CNPH*2417A**	1.00	0.91	PG9MTAV60125*A**
CNPH*3017A**	1.01	0.90	PG9MTAV60125*A**
CSPH*2412A**	1.00	0.91	PG9MTAV60125*A**
CSPH*3012A**	1.01	0.90	PG9MTAV60125*A**
CAP**2417A**	1.00	0.91	PG9MXA036060
CAP**3017A**	1.01	0.90	PG9MXA036060
CNPH*2417A**	1.00	0.91	PG9MXA036060
CNPH*3017A**	1.01	0.90	PG9MXA036060
CNPV*2417A**	1.00	0.91	PG9MXA036060
CNPV*3017A**	1.01	0.90	PG9MXA036060
CSPH*2412A**	1.00	0.91	PG9MXA036060
CSPH*3012A**	1.01	0.91	PG9MXA036060

HEATING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL
*PF4MNA024	1.00	1.00	
FF1ENP024	1.00	1.00	
FF1ENP030	1.01	1.00	
PF4MNA025	1.00	0.94	
PF4MNA030	1.01	0.98	
PF4MNA031	1.01	0.92	
CAP**2414A**	1.00	0.98	
CAP**2417A**	1.00	0.98	
CAP**3014A**	1.01	0.98	
CAP**3017A**	1.01	0.98	
CNPF*2418A**	1.00	0.96	
CNPH*2417A**	1.00	0.96	
CNPH*3017A**	1.01	0.98	
CNPV*2414A**	1.00	0.96	
CNPV*2417A**	1.00	0.96	
CNPV*3014A**	1.01	0.98	
CNPV*3017A**	1.01	0.98	
CSPH*2412A**	1.00	0.95	
CSPH*3012A**	1.01	0.98	
CAP**2417A**	1.00	0.92	PG9MXA036060
CAP**3017A**	1.01	0.92	PG9MXA036060
CNPH*2417A**	1.00	0.92	PG9MXA036060
CNPH*3017A**	1.01	0.92	PG9MXA036060
CNPV*2417A**	1.00	0.92	PG9MXA036060
CNPV*3017A**	1.01	0.92	PG9MXA036060
CSPH*2412A**	1.00	0.92	PG9MXA036060
CSPH*3012A**	1.01	0.92	PG9MXA036060
CAP**2414A**	1.00	0.95	PG8*EA024045
CAP**3014A**	1.01	0.94	PG8*EA024045
CNPH*2417A**	1.00	0.94	PG8*EA024045
CNPH*3017A**	1.01	0.94	PG8*EA024045
CNPV*2414A**	1.00	0.94	PG8*EA024045
CNPV*3014A**	1.01	0.95	PG8*EA024045
CSPH*2412A**	1.00	0.94	PG8*EA024045
CSPH*3012A**	1.01	0.94	PG8*EA024045
CNPH*2417A**	1.00	0.95	PG9MTAV36050*A**
CNPH*3017A**	1.01	0.94	PG9MTAV36050*A**
CSPH*2412A**	1.00	0.95	PG9MTAV36050*A**
CSPH*3012A**	1.01	0.95	PG9MTAV36050*A**
CNPH*2417A**	1.00	0.94	PG9MTAV36075*A**

See notes on pg. 24

HEAT PUMP HEATING PERFORMANCE (CONT.)

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)			
		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	
EDB °F (°C)	CFM	Total	Integ*	Total	Integ*	Total	Integ*	Total	Integ*	Total	Integ*	Total	Integ*	Total	Integ*	Total	Integ*	Total	Integ*	Total	Integ*	Total	Integ*	Total		
65 (18.3)	1050	12.91	11.88	2.38	15.18	2.43	20.35	18.56	21.86	2.54	29.25	26.61	2.61	34.46	34.46	2.69	40.41	40.41	2.80	46.94	46.94	2.83	51.47	51.47	2.93	
	1200	13.20	12.14	2.41	16.82	2.45	20.74	18.91	22.23	2.54	29.72	27.05	2.60	35.14	35.14	2.67	41.10	41.10	2.76	47.76	47.76	2.88	53.35	53.35	2.98	
	1350	13.45	12.37	2.45	17.12	2.49	21.09	19.22	22.57	2.56	30.14	27.42	2.60	35.63	35.63	2.67	41.66	41.66	2.75	48.48	48.48	2.85	54.84	54.84	2.95	
	1050	12.29	11.30	2.48	15.93	2.54	19.80	18.05	21.39	2.67	28.71	26.13	2.74	33.81	33.81	2.82	39.71	39.71	2.94	46.15	46.15	3.07	50.71	50.71	3.16	
	1200	12.61	11.60	2.52	16.34	2.57	20.20	18.42	20.82	2.67	29.19	26.56	2.73	34.40	34.40	2.80	40.39	40.39	2.89	46.97	46.97	3.01	52.68	52.68	3.10	
70 (21.1)	1350	12.90	11.87	2.56	16.70	2.61	20.55	18.74	21.10	2.68	29.60	26.93	2.73	34.90	34.90	2.79	40.96	40.96	2.88	47.62	47.62	2.98	52.65	52.65	3.07	
	1050	11.65	10.72	2.59	15.30	2.66	19.23	17.53	20.88	2.80	28.15	25.62	2.88	33.19	33.19	2.96	39.02	39.02	3.08	45.37	45.37	3.22	50.71	50.71	3.31	
	1200	11.98	11.02	2.63	15.67	2.69	19.63	17.89	21.27	2.80	28.63	26.06	2.88	33.74	33.74	2.94	39.69	39.69	3.04	46.17	46.17	3.16	52.68	52.68	3.25	
	75 (23.9)	1350	12.27	11.29	2.67	15.99	2.72	19.98	18.22	21.61	2.81	29.05	26.44	2.87	34.24	34.24	2.93	40.25	40.25	3.02	46.83	46.83	3.13	50.71	50.71	3.22

PH13NAZ36 - A Outdoor Section With PFAMNA036 Indoor Section

HEATING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL	HEATING INDOOR MODEL		POWER	FURNACE MODEL	CAPACITY		POWER	FURNACE MODEL	HEATING INDOOR MODEL		POWER	FURNACE MODEL	CAPACITY		POWER	FURNACE MODEL	HEATING INDOOR MODEL		POWER	FURNACE MODEL	CAPACITY		POWER	FURNACE MODEL
				Total	Integ*			Total	Integ*			Total	Integ*			Total	Integ*			Total	Integ*			Total	Integ*		
*PFAMNA036	1.00	1.00		CNPV*4221A**	0.98	0.92	PG8*EA048080	0.98	0.92	0.92	PG8*EA048080	0.98	0.92	0.92	PG8*EA048080	0.98	0.92	0.92	PG8*EA048080	0.98	0.92	0.92	PG8*EA048080	0.98	0.92	0.92	PG8*EA048080
PFAMNA037	0.99	0.93		CSPH*3612A**	0.98	0.90	PG8*EA048080	0.98	0.90	0.90	PG8*EA048080	0.98	0.90	0.90	PG8*EA048080	0.98	0.90	0.90	PG8*EA048080	0.98	0.90	0.90	PG8*EA048080	0.98	0.90	0.90	PG8*EA048080
PFAMNA042	1.00	0.97		CSPH*4212A**	0.99	0.91	PG8*EA060110	0.99	0.91	0.91	PG8*EA060110	0.99	0.91	0.91	PG8*EA060110	0.99	0.91	0.91	PG8*EA060110	0.99	0.91	0.91	PG8*EA060110	0.99	0.91	0.91	PG8*EA060110
PFAMNA043	1.00	0.93		CAP**3621A**	0.98	0.91	PG8*EA060110	0.98	0.91	0.91	PG8*EA060110	0.98	0.91	0.91	PG8*EA060110	0.98	0.91	0.91	PG8*EA060110	0.98	0.91	0.91	PG8*EA060110	0.98	0.91	0.91	PG8*EA060110
CAP**3617A**	0.99	0.98		CAP**4221A**	0.98	0.91	PG8*EA060110	0.98	0.91	0.91	PG8*EA060110	0.98	0.91	0.91	PG8*EA060110	0.98	0.91	0.91	PG8*EA060110	0.98	0.91	0.91	PG8*EA060110	0.98	0.91	0.91	PG8*EA060110
CAP**3619A**	0.99	0.98		CNPV*3617A**	0.97	0.93	PG8*EA060110	0.97	0.93	0.93	PG8*EA060110	0.97	0.93	0.93	PG8*EA060110	0.97	0.93	0.93	PG8*EA060110	0.97	0.93	0.93	PG8*EA060110	0.97	0.93	0.93	PG8*EA060110
CAP**3621A**	0.99	0.98		CNPV*4221A**	0.98	0.91	PG8*EA060110	0.98	0.91	0.91	PG8*EA060110	0.98	0.91	0.91	PG8*EA060110	0.98	0.91	0.91	PG8*EA060110	0.98	0.91	0.91	PG8*EA060110	0.98	0.91	0.91	PG8*EA060110
CAP**4221A**	1.01	0.98		CNPV*3621A**	0.97	0.93	PG8*EA060110	0.97	0.93	0.93	PG8*EA060110	0.97	0.93	0.93	PG8*EA060110	0.97	0.93	0.93	PG8*EA060110	0.97	0.93	0.93	PG8*EA060110	0.97	0.93	0.93	PG8*EA060110
CAP**4224A**	1.01	0.98		CNPV*4221A**	0.98	0.91	PG8*EA060110	0.98	0.91	0.91	PG8*EA060110	0.98	0.91	0.91	PG8*EA060110	0.98	0.91	0.91	PG8*EA060110	0.98	0.91	0.91	PG8*EA060110	0.98	0.91	0.91	PG8*EA060110
CNPV*3618A**	0.99	0.98		CSPH*3612A**	0.98	0.90	PG8*EA060110	0.98	0.90	0.90	PG8*EA060110	0.98	0.90	0.90	PG8*EA060110	0.98	0.90	0.90	PG8*EA060110	0.98	0.90	0.90	PG8*EA060110	0.98	0.90	0.90	PG8*EA060110
CNPV*3617A**	0.99	0.99		CSPH*4212A**	0.99	0.89	PG8*EA060110	0.99	0.89	0.89	PG8*EA060110	0.99	0.89	0.89	PG8*EA060110	0.99	0.89	0.89	PG8*EA060110	0.99	0.89	0.89	PG8*EA060110	0.99	0.89	0.89	PG8*EA060110
CNPV*4221A**	1.01	0.98		CNPV*4221A**	0.99	0.98	PG9MTAV36050*A**	0.99	0.98	0.98	PG9MTAV36050*A**	0.99	0.98	0.98	PG9MTAV36050*A**	0.99	0.98	0.98	PG9MTAV36050*A**	0.99	0.98	0.98	PG9MTAV36050*A**	0.99	0.98	0.98	PG9MTAV36050*A**
CNPV*3617A**	0.99	0.99		CSPH*3612A**	0.99	0.96	PG9MTAV36050*A**	0.99	0.96	0.96	PG9MTAV36050*A**	0.99	0.96	0.96	PG9MTAV36050*A**	0.99	0.96	0.96	PG9MTAV36050*A**	0.99	0.96	0.96	PG9MTAV36050*A**	0.99	0.96	0.96	PG9MTAV36050*A**
CNPV*4217A**	1.01	0.96		CSPH*4212A**	1.00	0.96	PG9MTAV36050*A**	1.00	0.96	0.96	PG9MTAV36050*A**	1.00	0.96	0.96	PG9MTAV36050*A**	1.00	0.96	0.96	PG9MTAV36050*A**	1.00	0.96	0.96	PG9MTAV36050*A**	1.00	0.96	0.96	PG9MTAV36050*A**
CNPV*4221A**	1.01	0.98		CAP**3619A**	0.98	0.97	PG9MTAV36075*A**	0.98	0.97	0.97	PG9MTAV36075*A**	0.98	0.97	0.97	PG9MTAV36075*A**	0.98	0.97	0.97	PG9MTAV36075*A**	0.98	0.97	0.97	PG9MTAV36075*A**	0.98	0.97	0.97	PG9MTAV36075*A**
CSPH*3612A**	0.99	0.95		CNPV*4221A**	0.99	0.97	PG9MTAV36075*A**	0.99	0.97	0.97	PG9MTAV36075*A**	0.99	0.97	0.97	PG9MTAV36075*A**	0.99	0.97	0.97	PG9MTAV36075*A**	0.99	0.97	0.97	PG9MTAV36075*A**	0.99	0.97	0.97	PG9MTAV36075*A**
CSPH*4212A**	1.01	0.95		CSPH*3612A**	0.99	0.94	PG9MTAV36075*A**	0.99	0.94	0.94	PG9MTAV36075*A**	0.99	0.94	0.94	PG9MTAV36075*A**	0.99	0.94	0.94	PG9MTAV36075*A**	0.99	0.94	0.94	PG9MTAV36075*A**	0.99	0.94	0.94	PG9MTAV36075*A**
CAP**3617A**	0.97	0.93		CNPV*4212A**	0.98	0.95	PG9MTAV60100*A**	0.98	0.95	0.95	PG9MTAV60100*A**	0.98	0.95	0.95	PG9MTAV60100*A**	0.98	0.95	0.95	PG9MTAV60100*A**	0.98	0.95	0.95	PG9MTAV60100*A**	0.98	0.95	0.95	PG9MTAV60100*A**
CNPV*3617A**	0.97	0.94		CNPV*4221A**	0.99	0.93	PG9MTAV60100*A**	0.99	0.93	0.93	PG9MTAV60100*A**	0.99	0.93	0.93	PG9MTAV60100*A**	0.99	0.93	0.93	PG9MTAV60100*A**	0.99	0.93	0.93	PG9MTAV60100*A**	0.99	0.93	0.93	PG9MTAV60100*A**
CNPV*4221A**	0.98	0.92		CSPH*3612A**	0.99	0.91	PG9MTAV60100*A**	0.99	0.91	0.91	PG9MTAV60100*A**	0.99	0.91	0.91	PG9MTAV60100*A**	0.99	0.91	0.91	PG9MTAV60100*A**	0.99	0.91	0.91	PG9MTAV60100*A**	0.99	0.91	0.91	PG9MTAV60100*A**
CNPV*3617A**	0.97	0.94		CSPH*4212A**	1.00	0.90	PG9MTAV60100*A**	1.00	0.90	0.90	PG9MTAV60100*A**	1.00	0.90	0.90	PG9MTAV60100*A**	1.00	0.90	0.90	PG9MTAV60100*A**	1.00	0.90	0.90	PG9MTAV60100*A**	1.00	0.90	0.90	PG9MTAV60100*A**
CNPV*4217A**	0.98	0.94		CAP**4224A**	0.99	0.91	PG9MTAV60125*A**	0.99	0.91	0.91	PG9MTAV60125*A**	0.99	0.91	0.91	PG9MTAV60125*A**	0.99	0.91	0.91	PG9MTAV60125*A**	0.99	0.91	0.91	PG9MTAV60125*A**	0.99	0.91	0.91	PG9MTAV60125*A**
CNPV*4221A**	0.98	0.92		CNPV*3617A**	0.98	0.94	PG9MTAV60125*A**	0.98	0.94	0.94	PG9MTAV60125*A**	0.98	0.94	0.94	PG9MTAV60125*A**	0.98	0.94	0.94	PG9MTAV60125*A**	0.98	0.94	0.94	PG9MTAV60125*A**	0.98	0.94	0.94	PG9MTAV60125*A**
CNPV*4217A**	0.98	0.95		CNPV*4221A**	0.99	0.92	PG9MTAV60125*A**	0.99	0.92	0.92	PG9MTAV60125*A**	0.99	0.92	0.92	PG9MTAV60125*A**	0.99	0.92	0.92	PG9MTAV60125*A**	0.99	0.92	0.92	PG9MTAV60125*A**	0.99	0.92	0.92	PG9MTAV60125*A**
CNPV*4212A**	1.00	0.95		CSPH*4212A**	1.00	0.91	PG9MTAV60125*A**	1.00	0.91	0.91	PG9MTAV60125*A**	1.00	0.91	0.91	PG9MTAV60125*A**	1.00	0.91	0.91	PG9MTAV60125*A**	1.00	0.91	0.91	PG9MTAV60125*A**	1.00	0.91	0.91	PG9MTAV60125*A**
CAP**3617A**	0.98	0.96		CAP**3617A**	0.98	0.93	PG9MTAV6036080	0.98	0.93	0.93	PG9MTAV6036080	0.98	0.93	0.93	PG9MTAV6036080	0.98	0.93	0.93	PG9MTAV6036080	0.98	0.93	0.93	PG9MTAV6036080	0.98	0.93	0.93	PG9MTAV6036080
CNPV*3617A**	0.98	0.96		CNPV*4221A**	0.97	0.92	PG9MTAV60																				

HEAT PUMP HEATING PERFORMANCE (CONT.)

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)		
		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†
EDB *F (°C)	CFM	Total	Integ*	Total	Integ*	Total	Integ*	Total	Integ*	Total	Integ*	Total	Integ*	Total	Integ*	Total	Integ*	Total	Integ*	Total	Integ*	Total	Integ*		
		65 (18.3)	1400	18.54	17.06	23.54	21.63	3.26	28.92	26.37	3.36	34.75	30.86	3.46	41.04	37.35	3.57	48.01	48.01	3.71	56.46	56.46	3.89	66.21	66.21
1600	18.98		17.46	24.01	22.06	3.29	29.43	26.83	3.34	35.28	31.34	3.46	41.63	37.88	3.55	48.90	48.90	3.67	57.41	57.41	3.82	67.39	67.39	4.02	
1800	19.41		17.86	24.45	22.47	3.33	29.87	27.24	3.40	35.76	31.76	3.47	42.14	38.35	3.55	49.54	49.54	3.65	58.20	58.20	3.79	68.36	68.36	3.97	
70 (21.1)	1400	17.79	16.36	21.00	22.85	3.42	28.29	25.79	3.53	34.15	30.33	3.65	40.45	36.81	3.77	47.29	47.29	3.91	55.57	55.57	4.10	65.13	65.13	4.33	
	1600	18.24	16.76	23.34	21.45	3.45	28.80	26.26	3.54	34.70	30.82	3.64	41.04	37.35	3.75	48.00	48.00	3.86	56.49	56.49	4.03	66.28	66.28	4.23	
	1800	18.65	17.16	23.77	21.84	3.50	29.26	26.68	3.57	35.18	31.24	3.66	41.56	37.82	3.74	48.64	48.64	3.85	57.27	57.27	3.99	67.24	67.24	4.18	
75 (23.9)	1400	16.95	15.59	22.10	20.31	3.58	27.58	25.15	3.71	33.49	29.75	3.84	39.82	36.24	3.98	46.65	46.65	4.13	54.69	54.69	4.32	64.05	64.05	4.56	
	1600	17.40	16.01	22.59	20.76	3.61	28.12	25.64	3.72	34.06	30.25	3.83	40.43	36.79	3.95	47.31	47.31	4.07	55.58	55.58	4.25	65.19	65.19	4.46	
	1800	17.81	16.39	23.03	21.16	3.66	28.57	26.05	3.75	34.55	30.69	3.85	40.95	37.27	3.95	47.90	47.90	4.05	56.36	56.36	4.21	66.14	66.14	4.40	

PH13NAZ48--A Outdoor Section With PF4MNA048 Indoor Section

HEATING INDOOR MODEL	CAPACITY	POWER	HEATING INDOOR MODEL		CAPACITY	POWER	FURNACE MODEL
			Capacity	Power			
CNPH*6024A**	0.98	0.97	CNPH*6024A**	0.98	0.97	PG8*EA060135	PG8*EA060135
CNPH*6025A**	0.98	0.95	CNPH*6025A**	0.98	0.95	PG8*EA060135	PG8*EA060135
CNPH*4812A**	0.98	0.97	CNPH*4812A**	0.98	0.97	PG8*EA060135	PG8*EA060135
CNPH*6024A**	0.98	0.94	CNPH*6024A**	0.98	0.94	PG8*EA060135	PG8*EA060135
CNPH*4824A**	0.98	0.97	CNPH*4824A**	0.98	0.97	PG8*EA060135	PG8*EA060135
CNPH*6024A**	0.98	0.94	CNPH*6024A**	0.98	0.94	PG8*EA060135	PG8*EA060135
CNPH*4812A**	0.98	0.97	CNPH*4812A**	0.98	0.97	PG8*EA060135	PG8*EA060135
CNPH*6024A**	0.98	0.94	CNPH*6024A**	0.98	0.94	PG8*EA060135	PG8*EA060135
CNPH*4812A**	0.98	0.97	CNPH*4812A**	0.98	0.97	PG8*EA060135	PG8*EA060135
CNPH*6024A**	0.98	0.94	CNPH*6024A**	0.98	0.94	PG8*EA060135	PG8*EA060135
CNPH*4812A**	0.98	0.97	CNPH*4812A**	0.98	0.97	PG8*EA060135	PG8*EA060135
CNPH*6024A**	0.98	0.94	CNPH*6024A**	0.98	0.94	PG8*EA060135	PG8*EA060135
CNPH*4812A**	0.98	0.97	CNPH*4812A**	0.98	0.97	PG8*EA060135	PG8*EA060135
CNPH*6024A**	0.98	0.94	CNPH*6024A**	0.98	0.94	PG8*EA060135	PG8*EA060135
CNPH*4812A**	0.98	0.97	CNPH*4812A**	0.98	0.97	PG8*EA060135	PG8*EA060135
CNPH*6024A**	0.98	0.94	CNPH*6024A**	0.98	0.94	PG8*EA060135	PG8*EA060135
CNPH*4812A**	0.98	0.97	CNPH*4812A**	0.98	0.97	PG8*EA060135	PG8*EA060135
CNPH*6024A**	0.98	0.94	CNPH*6024A**	0.98	0.94	PG8*EA060135	PG8*EA060135
CNPH*4812A**	0.98	0.97	CNPH*4812A**	0.98	0.97	PG8*EA060135	PG8*EA060135
CNPH*6024A**	0.98	0.94	CNPH*6024A**	0.98	0.94	PG8*EA060135	PG8*EA060135
CNPH*4812A**	0.98	0.97	CNPH*4812A**	0.98	0.97	PG8*EA060135	PG8*EA060135
CNPH*6024A**	0.98	0.94	CNPH*6024A**	0.98	0.94	PG8*EA060135	PG8*EA060135
CNPH*4812A**	0.98	0.97	CNPH*4812A**	0.98	0.97	PG8*EA060135	PG8*EA060135
CNPH*6024A**	0.98	0.94	CNPH*6024A**	0.98	0.94	PG8*EA060135	PG8*EA060135
CNPH*4812A**	0.98	0.97	CNPH*4812A**	0.98	0.97	PG8*EA060135	PG8*EA060135
CNPH*6024A**	0.98	0.94	CNPH*6024A**	0.98	0.94	PG8*EA060135	PG8*EA060135
CNPH*4812A**	0.98	0.97	CNPH*4812A**	0.98	0.97	PG8*EA060135	PG8*EA060135
CNPH*6024A**	0.98	0.94	CNPH*6024A**	0.98	0.94	PG8*EA060135	PG8*EA060135
CNPH*4812A**	0.98	0.97	CNPH*4812A**	0.98	0.97	PG8*EA060135	PG8*EA060135
CNPH*6024A**	0.98	0.94	CNPH*6024A**	0.98	0.94	PG8*EA060135	PG8*EA060135
CNPH*4812A**	0.98	0.97	CNPH*4812A**	0.98	0.97	PG8*EA060135	PG8*EA060135
CNPH*6024A**	0.98	0.94	CNPH*6024A**	0.98	0.94	PG8*EA060135	PG8*EA060135
CNPH*4812A**	0.98	0.97	CNPH*4812A**	0.98	0.97	PG8*EA060135	PG8*EA060135
CNPH*6024A**	0.98	0.94	CNPH*6024A**	0.98	0.94	PG8*EA060135	PG8*EA060135
CNPH*4812A**	0.98	0.97	CNPH*4812A**	0.98	0.97	PG8*EA060135	PG8*EA060135
CNPH*6024A**	0.98	0.94	CNPH*6024A**	0.98	0.94	PG8*EA060135	PG8*EA060135
CNPH*4812A**	0.98	0.97	CNPH*4812A**	0.98	0.97	PG8*EA060135	PG8*EA060135
CNPH*6024A**	0.98	0.94	CNPH*6024A**	0.98	0.94	PG8*EA060135	PG8*EA060135
CNPH*4812A**	0.98	0.97	CNPH*4812A**	0.98	0.97	PG8*EA060135	PG8*EA060135
CNPH*6024A**	0.98	0.94	CNPH*6024A**	0.98	0.94	PG8*EA060135	PG8*EA060135
CNPH*4812A**	0.98	0.97	CNPH*4812A**	0.98	0.97	PG8*EA060135	PG8*EA060135
CNPH*6024A**	0.98	0.94	CNPH*6024A**	0.98	0.94	PG8*EA060135	PG8*EA060135
CNPH*4812A**	0.98	0.97	CNPH*4812A**	0.98	0.97	PG8*EA060135	PG8*EA060135
CNPH*6024A**	0.98	0.94	CNPH*6024A**	0.98	0.94	PG8*EA060135	PG8*EA060135
CNPH*4812A**	0.98	0.97	CNPH*4812A**	0.98	0.97	PG8*EA060135	PG8*EA060135
CNPH*6024A**	0.98	0.94	CNPH*6024A**	0.98	0.94	PG8*EA060135	PG8*EA060135
CNPH*4812A**	0.98	0.97	CNPH*4812A**	0.98	0.97	PG8*EA060135	PG8*EA060135
CNPH*6024A**	0.98	0.94	CNPH*6024A**	0.98	0.94	PG8*EA060135	PG8*EA060135
CNPH*4812A**	0.98	0.97	CNPH*4812A**	0.98	0.97	PG8*EA060135	PG8*EA060135
CNPH*6024A**	0.98	0.94	CNPH*6024A**	0.98	0.94	PG8*EA060135	PG8*EA060135
CNPH*4812A**	0.98	0.97	CNPH*4812A**	0.98	0.97	PG8*EA060135	PG8*EA060135
CNPH*6024A**	0.98	0.94	CNPH*6024A**	0.98	0.94	PG8*EA060135	PG8*EA060135
CNPH*4812A**	0.98	0.97	CNPH*4812A**	0.98	0.97	PG8*EA060135	PG8*EA060135
CNPH*6024A**	0.98	0.94	CNPH*6024A**	0.98	0.94	PG8*EA060135	PG8*EA060135
CNPH*4812A**	0.98	0.97	CNPH*4812A**	0.98	0.97	PG8*EA060135	PG8*EA060135
CNPH*6024A**	0.98	0.94	CNPH*6024A**	0.98	0.94	PG8*EA060135	PG8*EA060135
CNPH*4812A**	0.98	0.97	CNPH*4812A**	0.98	0.97	PG8*EA060135	PG8*EA060135
CNPH*6024A**	0.98	0.94	CNPH*6024A**	0.98	0.94	PG8*EA060135	PG8*EA060135
CNPH*4812A**	0.98	0.97	CNPH*4812A**	0.98	0.97	PG8*EA060135	PG8*EA060135
CNPH*6024A**	0.98	0.94	CNPH*6024A**	0.98	0.94	PG8*EA060135	PG8*EA060135
CNPH*4812A**	0.98	0.97	CNPH*4812A**	0.98	0.97	PG8*EA060135	PG8*EA060135
CNPH*6024A**	0.98	0.94	CNPH*6024A**	0.98	0.94	PG8*EA060135	PG8*EA060135
CNPH*4812A**	0.98	0.97	CNPH*4812A**	0.98	0.97	PG8*EA060135	PG8*EA060135
CNPH*6024A**	0.98	0.94	CNPH*6024A**	0.98	0.94	PG8*EA060135	PG8*EA060135
CNPH*4812A**	0.98	0.97	CNPH*4812A**	0.98	0.97	PG8*EA060135	PG8*EA060135
CNPH*6024A**	0.98	0.94	CNPH*6024A**	0.98	0.94	PG8*EA060135	PG8*EA060135
CNPH*4812A**	0.98	0.97	CNPH*4812A**	0.98	0.97	PG8*EA060135	PG8*EA060135
CNPH*6024A**	0.98	0.94	CNPH*6024A**	0.98	0.94	PG8*EA060135	PG8*EA060135
CNPH*4812A**	0.98	0.97	CNPH*4812A**	0.98	0.97	PG8*EA060135	PG8*EA060135
CNPH*6024A**	0.98	0.94	CNPH*6024A**	0.98	0.94	PG8*EA060135	PG8*EA060135
CNPH*4812A**	0.98	0.97	CNPH*4812A**	0.98	0.97	PG8*EA060135	PG8*EA060135
CNPH*6024A**	0.98	0.94	CNPH*6024A**	0.98	0.94	PG8*EA060135	PG8*EA060135
CNPH*4812A**	0.98	0.97	CNPH*4812A**	0.98	0.97	PG8*EA060135	PG8*EA060135
CNPH*6024A**	0.98	0.94	CNPH*6024A**	0.98	0.94	PG8*EA060135	PG8*EA060135
CNPH*4812A**	0.98	0.97	CNPH*4812A**	0.98	0.97	PG8*EA060135	PG8*EA060135
CNPH*6024A**	0.98	0.94	CNPH*6024A**	0.98	0.94	PG8*EA060135	PG8*EA060135
CNPH*4812A**	0.98	0.97	CNPH*4812A**	0.98	0.97	PG8*EA060135	PG8*EA060135
CNPH*6024A**	0.98	0.94	CNPH*6024A**	0.98	0.94	PG8*EA060135	PG8*EA060135
CNPH*4812A**	0.98	0.97	CNPH*4812A**	0.98	0.97	PG8*EA060135	PG8*EA060135
CNPH*6024A**	0.98	0.94	CNPH*6024A**	0.98	0.94	PG8*EA060135	PG8*EA060135
CNPH*4812A**	0.98	0.97	CNPH*4812A**	0.98	0.97	PG8*EA060135	PG8*EA060135
CNPH*6024A**	0.98	0.94	CNPH*6024A**	0.98	0.94	PG8*EA060135	PG8*EA060135
CNPH*4812A**	0.98	0.97	CNPH*4812A**	0.98	0.97	PG8*EA060135	PG8*EA060135
CNPH*6024A**	0.98	0.94	CNPH				

HEAT PUMP HEATING PERFORMANCE (CONT.)

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. 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*								
65 (18.3)	1750	23.58	21.70	3.66	29.51	27.12	3.80	35.74	32.59	3.94	42.30	37.57	4.10	49.30	44.86	4.27	57.00	57.00	4.46	66.22	66.22	4.71	76.76	76.76	4.96
	2000	24.18	22.24	3.73	30.13	27.69	3.86	36.40	33.19	3.99	42.98	38.18	4.13	50.08	45.57	4.28	57.95	57.95	4.45	67.33	67.33	4.68	77.76	77.76	4.88
	2250	24.74	22.76	3.82	30.70	28.21	3.94	37.00	33.73	4.05	43.61	38.73	4.18	50.76	46.19	4.31	58.77	58.77	4.47	68.32	68.32	4.69	78.45	78.45	4.86
	1750	22.60	20.79	3.81	28.66	26.33	3.97	34.94	31.85	4.12	41.55	36.90	4.29	48.50	44.13	4.47	56.14	56.14	4.68	65.14	65.14	4.94	75.49	75.49	5.21
70 (21.1)	2000	23.20	21.34	3.89	29.26	26.89	4.03	35.60	32.46	4.17	42.25	37.52	4.32	49.28	44.84	4.48	57.00	57.00	4.66	66.23	66.23	4.90	76.69	76.69	5.12
	2250	23.76	21.86	3.98	29.82	27.41	4.11	36.20	33.01	4.23	42.87	38.08	4.37	49.96	45.47	4.52	57.78	57.78	4.68	67.18	67.18	4.90	77.49	77.49	5.09
75 (23.9)	1750	21.54	19.81	3.96	27.71	25.47	4.14	34.08	31.07	4.32	40.75	36.19	4.49	47.94	43.63	4.70	55.26	55.26	4.91	64.10	64.10	5.18	74.23	74.23	5.47
	2000	22.14	20.37	4.04	28.35	26.05	4.21	34.75	31.69	4.36	41.46	36.82	4.52	48.46	44.10	4.70	56.15	56.15	4.89	65.15	65.15	5.14	75.54	75.54	5.38
2250	22.69	20.88	4.13	28.93	26.58	4.28	35.36	32.24	4.42	42.10	37.39	4.57	49.15	44.73	4.73	56.90	56.90	4.90	66.07	66.07	5.13	76.45	76.45	5.33	

PH13NAZ80-A Outdoor Section With PF4MNA060 Indoor Section

HEATING INDOOR MODEL	CAPACITY		POWER	FURNACE MODEL		HEATING INDOOR MODEL	CAPACITY		POWER	FURNACE MODEL		HEATING INDOOR MODEL	CAPACITY		POWER	FURNACE MODEL	
	Total	Integ*		Total	Integ*		Total	Integ*		Total	Integ*		Total	Integ*		Total	Integ*
*PF4MNA060	1.00		1.00		PG8*EA048090	CSPH*6012A**	0.97		0.97		PG8*EA048090	CSPH*6012A**	0.97		0.99		PG9MXA048080
PF4MNA061	0.98		0.92		PG8*EA060110	CAP**6021A**	0.96		0.96		PG8*EA060110	CAP**6021A**	0.97		0.97		PG9MXA060100
CAP**6021A**	0.98		0.99		PG8*EA060110	CNPH*6024A**	0.97		0.97		PG8*EA060110	CNPH*6024A**	0.96		0.97		PG9MXA060100
CAP**6024A**	0.98		0.97		PG8*EA060135	CSPH*6012A**	0.97		0.95		PG8*EA060135	CSPH*6012A**	0.97		0.96		PG9MXA060120
CAP**6025A**	0.98		0.97		PG8*EA060135	CAP**6025A**	0.98		0.98		PG8*EA060135	CAP**6025A**	0.97		0.97		PG9MXA060120
CNPH*6024A**	0.98		0.97		PG8*EA060135	CAP**6025A**	0.97		0.98		PG8*EA060135	CAP**6025A**	0.97		0.97		PG9MXA060120
CNPH*6024A**	0.98		0.97		PG8*EA060135	CNPH*6024A**	0.97		0.98		PG8*EA060135	CNPH*6024A**	0.97		0.96		PG9MXA060120
CSPH*6012A**	0.98		0.96		PG8*EA060135	CNPH*6024A**	0.97		0.98		PG8*EA060135	CNPH*6024A**	0.97		0.96		PG9MXA060120
CAP**6021A**	0.97		0.98		PG8*EA060135	CSPH*6012A**	0.97		0.96		PG8*EA060135	CSPH*6012A**	0.97		0.96		PG9MXA060120
CNPH*6024A**	0.97		0.99		PG8*EA060135	CNPH*6024A**	0.97		1.00		PG9MXA048090	CNPH*6024A**	0.97		0.95		PG9MXA060120

* Tested combination.

† 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.

‡ 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.

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

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 ARI Standard 210.
- Unit will be certified for capacity and efficiency, and listed in the latest ARI 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.

AIR-COOLED, SPLIT-SYSTEM HEAT PUMP

PH13NAZ

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.

