

PA17NA

**17 SEER 2-Stage
Split-System Air Conditioner
With R-410A Refrigerant
2 To 5 Tons (024-060)**

Product Data



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

FEATURES / BENEFITS

AVAILABLE SIZES:

Nominal sizes are available from 024 through 060 to meet the needs of residential and light commercial applications.

CERTIFICATION:

All models are listed with UL, (U.S. and Canada), ARI, and CEC.

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 pre-painted 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 hot condenser air up and away from adjacent patio areas and foliage. The base pan is designed for easy removal of water, dirt, and leaves.

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.

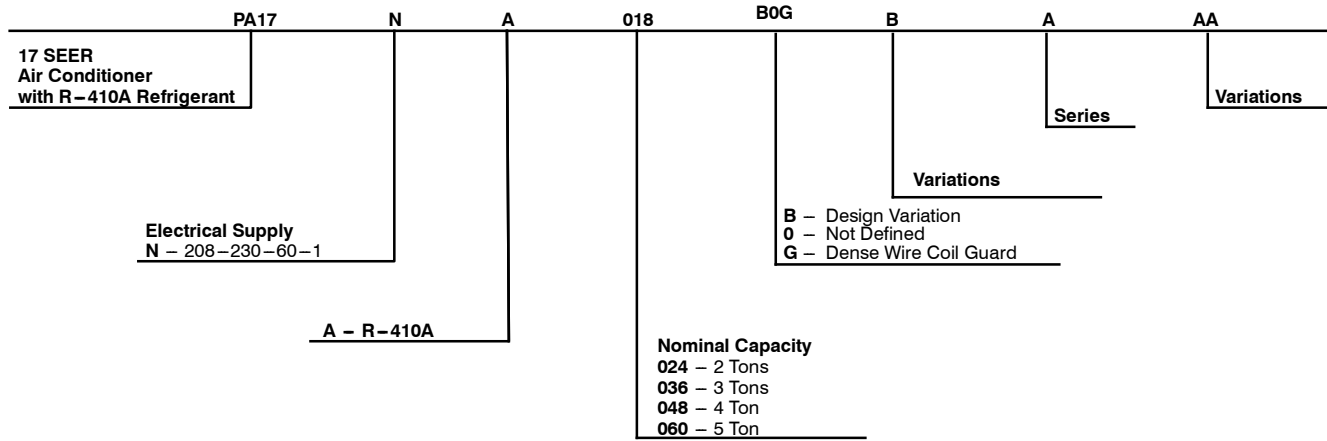
SERVICE VALVES:

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.

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.



ISO 9001
QMI-SAI Global



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.**

STANDARD FEATURES

FEATURES	Unit Size – Series			
	024 – C	036 – C	048 – C	060 – D
R-410A Refrigerant	X	X	X	X
Maximum SEER Rating*	17.0	17.0	17.0	16.0
2-Stage Scroll Compressor	X	X	X	X
Low Ambient Cooling Capability with Approved Kits	X	X	X	X
Field Installed Filter Drier	X	X	X	X
Front Seating Service Valves	X	X	X	X
Internal Pressure Relief Valve	X	X	X	X
Internal Thermal Overload	X	X	X	X
Long Line capability	X	X	X	X
Low Pressure Switch	X	X	X	X
High Pressure Switch	X	X	X	X
Crankcase Heater w/Temperature Switch	O	O	X	X

X = Standard O = Accessory
* With approved combinations

REFRIGERANT PIPING LENGTH LIMITATIONS

Liquid Line Sizing and Maximum Total Equivalent Lengths† for Cooling Only Systems with R-410A Refrigerant:

The maximum allowable length of a residential split system depends on the liquid line diameter and vertical separation between indoor and outdoor units.

See Table below for liquid line sizing and maximum lengths :

Maximum Total Equivalent Length Outdoor Unit BELOW Indoor Unit

Size	Liquid Line Connection	Liquid Line Diam. w/TXV	AC with R-410A Refrigerant Maximum Total Equivalent Length†: Outdoor unit BELOW Indoor Vertical Separation ft (m)								
			0-5 (0-1.5)	6-10 (1.8-3.0)	11-20 (3.4-6.1)	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)
024	3/8	1/4	75	75	75	50	50	--	--	--	--
		5/16	250*	250*	250*	250*	250*	225*	175	125	100
		3/8	250*	250*	250*	250*	250*	250*	250*	250*	250*
036	3/8	5/16	175	150	150	100	100	100	75	--	--
		3/8	250*	250*	250*	250*	250*	250*	250*	250*	250*
048	3/8	3/8	250*	250*	250*	250*	250*	250*	230	160	--
060	3/8	3/8	250*	250*	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

Maximum Total Equivalent Length Outdoor Unit ABOVE Indoor Unit

Size	Liquid Line Connection	Liquid Line Diam. w/TXV	AC with R-410A Refrigerant Maximum Total Equivalent Length†: Outdoor unit ABOVE Indoor Vertical Separation ft (m)							
			25 (7.6)	26-50 (7.9-15.2)	51-75 (15.5-22.9)	76-100 (23.2-30.5)	101-125 (30.8-38.1)	126-150 (38.4-45.7)	151-175 (46.0-53.3)	176-200 (53.6-61.0)
024	3/8	1/4	100	125	175	200	225*	250*	250*	250*
		5/16	250*	250*	250*	250*	250*	250*	250*	250*
		3/8	250*	250*	250*	250*	250*	250*	250*	250*
036	3/8	5/16	225*	250*	250*	250*	250*	250*	250*	250*
		3/8	250*	250*	250*	250*	250*	250*	250*	250*
048	3/8	3/8	250*	250*	250*	250*	250*	250*	250*	250*
060	3/8	3/8	250*	250*	250*	250*	250*	250*	250*	250*

* 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.

REFRIGERANT CHARGE ADJUSTMENTS

Liquid Line Size	R-410A Charge oz/ft (g/m)
3/8	0.60 (17.74) (Factory charge for lineset = 9 oz / 266.16 g)
5/16	0.40 (11.83)
1/4	0.27 (7.98)

Units are factory charged for 15 ft (4.6 m) of 3/8" liquid line. The factory charge for 3/8" lineset 9 oz.(266.16 g). When using other length or diameter liquid lines, charge adjustments are required per the chart above.

Charging Formula:

[(Lineset oz/ft x total length) – (factory charge for lineset)] = charge adjustment

Example 1: System has 15 ft of line set using existing 1/4" liquid line. What charge adjustment is required?

Formula: (.27 oz/ft x 15ft) – (9 oz) = (-4.95) oz.

Net result is to remove 4.95 oz of refrigerant from the system

Example 2: System has 45 ft of existing 5/16" liquid line. What is the charge adjustment?

Formula: (.40 oz/ft. x 45ft) – (9 oz.) = 9 oz.

Net result is to add 9 oz of refrigerant to the system

NOTE: Conditions must be favorable for charging by subcooling method. Indoor temperature must be 70°F to 80°F (21.1°C to 26.7°C), and outdoor temperature must be 70°F to 100°F (21.1°C to 37.8°C). If outside these conditions, adjust charge for long line sets by weigh-in method.

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. See Accessory Usage Guideline table for required accessories. 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 Air Conditioner systems, the chart below shows when an application is considered Long Line.

For Air Conditioner systems, the chart below shows when an application is considered Long Line.

AC with R-410A Refrigerant Long Line Description ft (m) Beyond these lengths, a TXV is required

Total Length	Outdoor Unit Above or Below Indoor Unit
TXV required beyond 50 ft. (15.2 m)	TXV required beyond 20 ft. (6.1 m)

AC 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
1/4 + TXV	No accessories needed within allowed lengths	No accessories needed within allowed lengths	175 (53.3)
5/16 + TXV	120 (36.6)	50 (15.2) vertical or 120 (36.6) total	120 (36.6)
3/8 + TXV	80 (24.4)	35 (10.7) vertical or 80 (24.4) total	80 (24.4)

Note: See Residential Piping and Long Line Guideline for details

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 AC systems with R-410A refrigerant:

Vapor Line Sizing and Cooling Capacity Losses — R-410A Refrigerant 2-Stage Air Conditioner 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)								
			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)
024	3/8	5/8	0	1	1	2	3	3	4	4	5
		3/4	0	0	0	0	1	1	1	1	1
036	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
048	3/8	3/4	1	2	2	3	4	5	6	7	7
		7/8	0	1	1	2	2	2	3	3	3
		1–1/8	0	0	—	—	—	—	—	—	—
060	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

Applications in this area may be long line and may have height restrictions. See the *Residential Piping and Long Line Guideline*.

— Applications in this area are not recommended due to insufficient oil return

SPECIFICATIONS

UNIT SIZE – SERIES	024–C	036–C	048–C	060–D
ELECTRICAL				
Unit Volts – Hertz – Phase	208–230–60–1			
Operating Voltage Range* (min – max)	197–253			
Compressor – Rated Load Amps	11.1	15.3	21.2	28.8
Locked Rotor Amps	58.3	83.0	104.0	152.9
Condenser Fan Motor – Full Load Amps	0.60	0.70	1.30	1.30
Charging Subcooling – (TXV Expansion Dev) °F (°C)	10 (5.6)	14 (7.8)	13 (7.2)	14 (7.8)
Max Branch Circuit Fuse Size†	20	35	40	60
COMPRESSOR AND REFRIGERANT				
Compressor – Manufacturer	Copeland			
Type	Ultratech 2–Stage Scroll			
R–410A Refrigerant – Amount Lb (kg) @ 15 ft (4.6m)	6.64 (3.01)	9.26 (4.20)	12.94 (5.87)	12.70 (5.76)
Refrigerant Tubes (In. OD)	3/4 and 3/8	7/8 and 3/8	1–1/8 and 3/8	
Rated Vapor‡‡ and Liquid				
CONDENSER COIL AND FAN				
Coil Face Area (Sq Ft)	19.38	19.38	25.12	25.12
Fan Motor – HP, Type, and RPM	1/12, PSC, and 800	1/10, PSC, and 825	1/4, PSC, and 825	1/4, PSC, and 825
Condenser Airflow (CFM)	2481	3068	4700	4700
OPTIONAL EQUIPMENT				
Start Assist – Capacitor/Relay Type***	KSAHS2501AAA		KSAHS2801AAA	
Compressor Sound Blanket	KSASH2301COP		KSASH2401COP	
Compressor Crankcase Heater	KAACH1701AAA		STANDARD	
Support Feet	KSASF0201AAA			
Solenoid Valve	KAALS0201LLS			
Time – Delay Relay	KAATD0101TDR			
Low Ambient Pressure Switch	KSALA0301410			
Evaporator Freeze Thermostat	KSAFT0101AAA			
Winter Start Control	KAAWS0101AAA			

* Permissible limits of the voltage range at which unit will operate satisfactorily. Operation outside these limits may result in unit failure.

† Time–delay fuse or circuit breaker.

‡ Length shown is as measured 1 way along wire path between unit and service panel for voltage drop not to exceed 2%.

** If wire is applied at ambient greater than 30° C, consult Table 310–16 of the NEC (NFPA 70). The ampacity of nonmetallic–sheathed cable (NM), trade name ROMEX, shall be that of 60° C conductors, per the NEC (NFPA 70) Article 336–26.

†† Do not use hard shutoff TXV with liquid 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.

*** Not backward compatible to previous series

Complies with 2010 requirements of ASHRAE Standards 90.1

A-WEIGHTED SOUND POWER LEVEL (dBA)

Unit Size	Standard Rating (dBA)	TYPICAL OCTAVE BAND SPECTRUM (dBA, without tone adjustment)						
		125	250	500	1000	2000	4000	8000
24–C	73 – High Stage	49.0	58.0	66.5	69.5	64.0	61.0	57.5
	74 – Low Stage	52.0	59.5	67.0	69.5	64.0	61.0	55.0
36–C	74 – High Stage	53.5	61.5	68.0	71.0	65.0	62.5	57.5
	74 – Low Stage	54.0	61.5	67.5	68.0	64.5	63.0	56.0
48–C	75 – High Stage	54.5	59.5	67.0	68.0	63.0	60.0	53.5
	74 – Low Stage	55.5	61.5	67.0	66.0	62.5	60.5	55.0
60–D	75 – High Stage	54.0	59.0	65.5	71.0	64.0	61.5	57.5
	74 – Low Stage	55.0	61.5	65.5	69.5	64.5	64.0	59.0

NOTE: Tested in accordance with AHRI Standard 270–95. (Not listed with AHRI).

A-WEIGHTED SOUND POWER LEVEL (dBA) WITH SOUND SHIELD

Unit Size	Standard Rating (dBA)	TYPICAL OCTAVE BAND SPECTRUM (dBA, without tone adjustment)						
		125	250	500	1000	2000	4000	8000
24–C	72 – High Stage	50.5	57.5	66.0	68.0	63.5	60.5	54.5
	73 – Low Stage	53.0	59.0	66.5	68.0	63.5	60.5	53.5
36–C	72 – High Stage	55.0	60.5	66.5	68.0	64.5	61.5	54.0
	72 – Low Stage	55.5	61.0	67.0	67.5	64.5	62.0	54.0
48–C	72 – High Stage	54.5	59.5	66.5	67.0	62.0	59.0	52.5
	71 – Low Stage	55.0	60.5	66.0	65.0	62.0	59.5	53.0
60–D	74 – High Stage	55.5	59.5	65.5	69.5	63.0	59.0	57.0
	72 – Low Stage	56.5	61.0	65.5	68.0	63.5	60.5	55.0

NOTE: Tested in accordance with AHRI Standard 270–95. (Not listed with AHRI).

ACCESSORY USAGE GUIDELINE

Accessory	Required for Low Ambient Cooling Applications (Below 55° F / 12.8° C)	Required for Long Line Applications*	Required for Sea Coast Applications (within 2 miles/3.2 km)
Compressor Start Assist Capacitor and Relay	Yes	Yes	No
Crankcase Heater	Yes (standard on some units)	Yes (standard on some units)	No
Evaporator Freeze Thermostat	Yes	No	No
Hard Shutoff TXV	Yes (standard w/factory approved indoor unit)	Yes (standard w/factory approved indoor unit)	Yes (standard w/factory approved indoor unit)
Liquid Line Solenoid Valve	No	See Residential Piping and Long Line Guideline	No
Low-Ambient Pressure Switch	Yes	No	No
Support Feet	Recommended	No	Recommended
Winter Start Control	Yes	No	No

* For tubing line sets between 80 and 200 ft. (24.38 and 60.96 m) and/or 35 ft. (10.7 m) vertical differential, refer to Residential Piping and Longline Guideline.

Accessory Description and Usage (Listed Alphabetically)

1. Compressor Start Assist - Capacitor and Relay

Start capacitor and relay gives a "hard" boost to compressor motor at each start up.

Usage Guideline:

Required for 2-stage non-communicating units in the following applications:

- Long line
- Low ambient cooling

Suggested for all compressors in areas with a history of low voltage problems.

2. Crankcase Heater

An electric resistance heater which mounts to the base of the compressor to keep the lubricant warm during off cycles. Improves compressor lubrication on restart and minimizes the chance of liquid slugging.

Usage Guideline:

Required in long line applications.

Suggested in all commercial applications.

3. Evaporator Freeze Thermostat

An SPST temperature-actuated switch that stops unit operation when evaporator reaches freeze-up conditions.

Usage Guideline:

Required when low ambient kit has been added.

4. Low-Ambient Pressure Switch

A long life pressure switch which is mounted to outdoor unit service valve. It is designed to cycle the outdoor fan motor in order to maintain head pressure within normal operating limits. The control will maintain working head pressure at low-ambient temperatures down to -10°F (-23°C) when properly installed.

Usage Guideline:

A Low-Ambient Pressure Switch or MotorMaster® Low-Ambient Controller must be used when cooling operation is used at outdoor temperatures below 55°F (12.8°C).

5. Outdoor Air Temperature Sensor

This device enables the thermostat to display the outdoor temperature. This device also

is required to enable special thermostat features such as auxiliary heat lock out.

6. Support Feet

Four stick-on plastic feet that raise the unit 4 in. (101.6 mm) above the mounting pad. This allows sand, dirt, and other debris to be flushed from the unit base, minimizing corrosion.

Usage Guideline:

Suggested in the following applications:

Coastal installations.

Windy areas or where debris is normally circulating.

Rooftop installations.

For improved sound ratings.

7. Thermostatic Expansion Valve (TXV)

A modulating flow-control valve which meters refrigerant liquid flow rate into the evaporator in response to the superheat of the refrigerant gas leaving the evaporator.

Kit includes valve, adapter tubes, and external equalizer tube. Hard shut off types are available.

NOTE: When using a hard shut off TXV with single phase reciprocating compressors, a Compressor Start Assist Capacitor and Relay is required.

Usage Guideline:

Required to achieve AHRI ratings in certain equipment combinations. Refer to combination ratings.

Hard shut off TXV or LLS required in air conditioner long line applications.

Required for use on all zoning systems.

8. Time-Delay Relay

An SPST delay relay which briefly continues operation of indoor blower motor to provide additional cooling after the compressor cycles off.

NOTE: Most indoor unit controls include this feature. For those that do not, use the guideline below.

Usage Guideline:

For improved efficiency ratings for certain combinations of indoor and outdoor units. Refer to AHRI Unitary Directory.

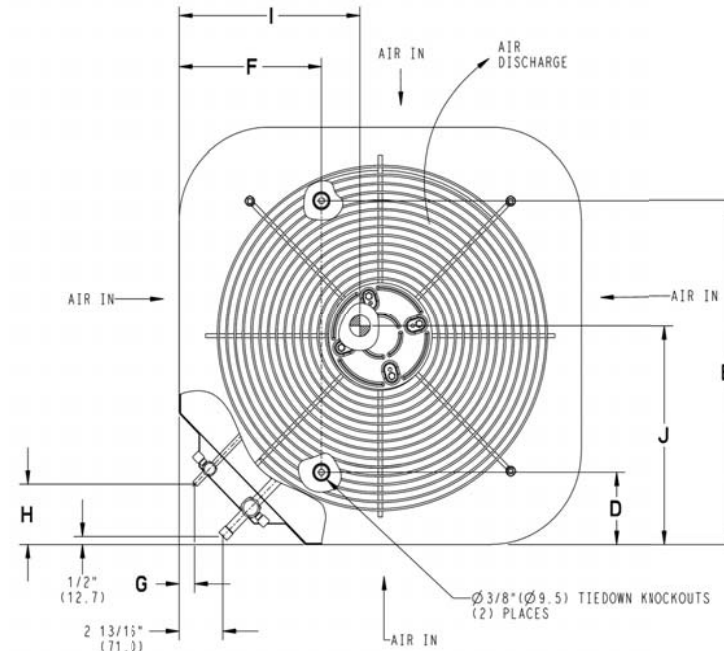
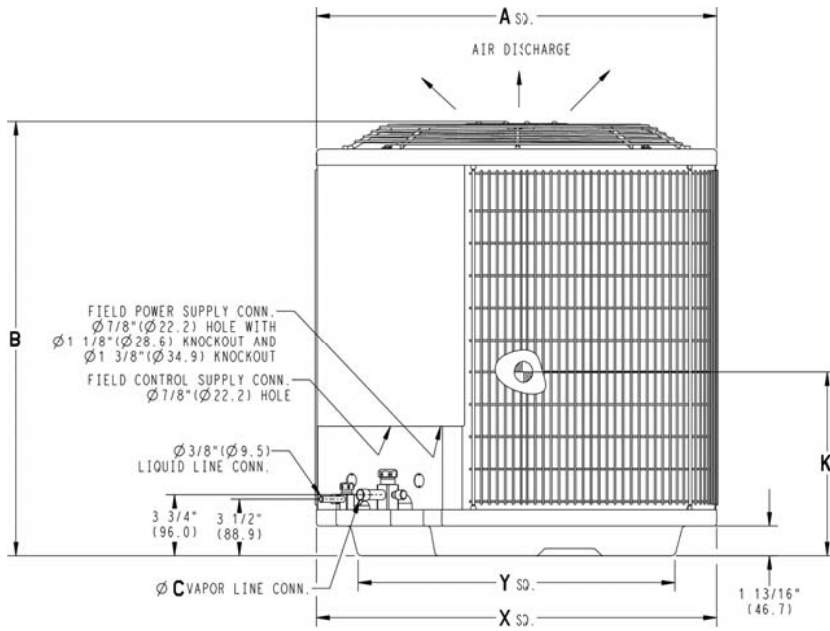
DIMENSIONS

UNIT	SERIES	ELECTRICAL CHARACTERISTICS				A		B		C		D		E		F		G		H		I		J		K		OPERATING WEIGHT		SHIPPING WEIGHT		SHIPPING LENGTH / WIDTH (Sq.)		SHIPPING HEIGHT	
						INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	Lbs	Kgs	Lbs	Kgs
PA17NA02400GACAA	C	Y	N	N	N	31 3/16	792.5	35 1/16	890.7	3/4	19.1	6 9/16	166.1	24 11/16	626.3	9 1/8	231.3	5/16	7.9	3	76.2	16	406.4	15 1/2	393.7	16 1/8	409.6	167	75.7	184	83.5	32 3/16	817.9	36 11/16	931.3
PA17NA03600GACAA	C	Y	N	N	N	31 3/16	792.5	35 1/16	890.7	7/8	22.2	6 9/16	166.1	24 11/16	626.3	9 1/8	231.3	5/16	7.9	3	76.2	15 3/4	400.1	15 1/2	393.7	15	381.0	191	86.6	210	95.3	32 3/16	817.9	36 11/16	931.3
PA17NA04800GACAA	C	Y	N	N	N	35	889.0	38 7/8	987.8	7/8	22.2	6 9/16	166.1	28 7/16	722.8	9 1/8	231.3	5/16	7.9	3	76.2	18 1/2	469.9	16 1/2	419.1	17	431.8	253	114.8	278	126.1	36	914.9	40 9/16	1030.4
PA17NA060B0GADAA	D	Y	N	N	N	35	889.0	38 7/8	987.8	7/8	22.2	6 9/16	166.1	28 7/16	722.8	9 1/8	231.3	5/16	7.9	3	76.2	17 3/4	450.9	16 1/2	419.1	17	431.8	258	117.0	284	128.8	36	914.9	40 9/16	1030.4

208-230-1-60	Y=YES N=NO
208-230-3-60	
460-3-60	
575-3-60	

NOTES:

1. CENTER OF GRAVITY 



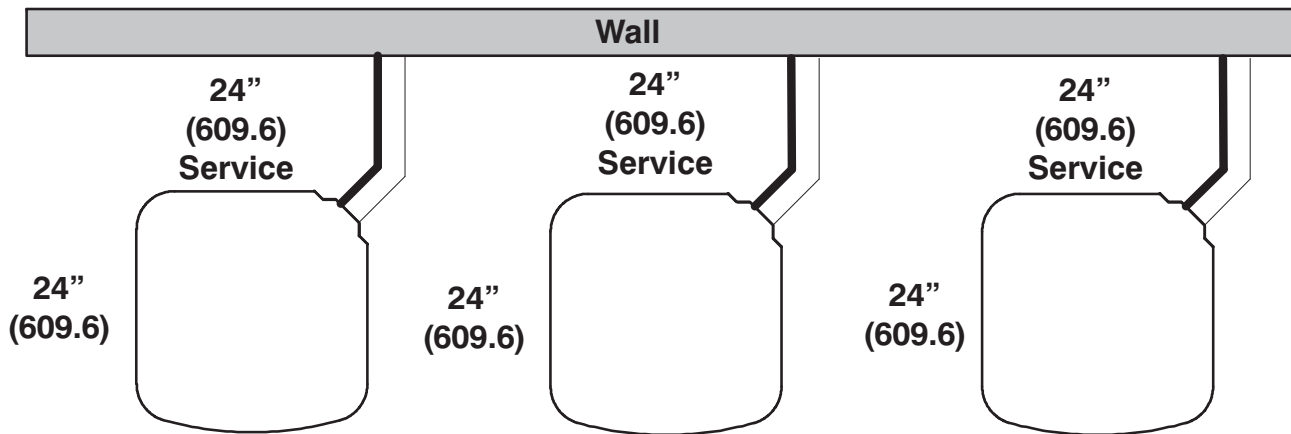
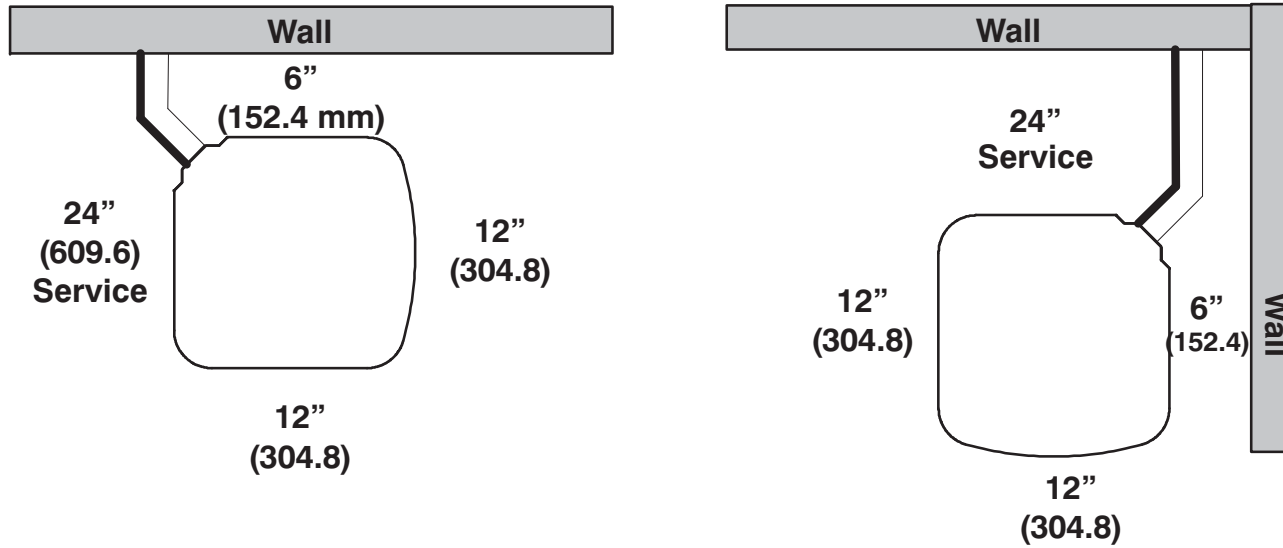
UNIT SIZE	"X"		"Y"	
	MINIMUM GROUND MOUNTING PAD APPLICATION DIMENSIONS		MINIMUM ROOF-TOP MOUNTING PAD APPLICATION DIMENSIONS	
-	23 1/8	587.3	17 7/8	454.6
-	25 3/4	654.0	20 7/16	518.5
24,36	31 3/16	792.5	22 15/16	583.2
48,60	35	889.0	26 3/4	679.7

NOTE: ALL DIMENSIONS IN INCH (MM)

U.S. ECCN: Not Subject to Regulation (N.S.R.)

CLEARANCES

Clearances (various examples)



Note: Numbers in () = mm

IMPORTANT: When installing multiple units in an alcove, roof well, or partially enclosed area, ensure there is adequate ventilation to prevent re-circulation of discharge air.

TESTED AHRI COMBINATION RATINGS

NOTE: Ratings contained in this document are subject to change at any time.

For AHRI ratings certificates, please refer to the AHRI directory www.ahridirectory.org

Model Number	Indoor Model	AHRI STANDARD RATINGS – COOLING					
		Capacity		EER	SEER	ID SCFM	
		High	Low			High	Low
PA17NA024****C	CNPV*3117AL*	25000	21200	12.2	14.0	800	680
PA17NA036****C	CAP**3721AL*	36800	30200	12.2	14.0	1050	840
PA17NA048****C	CAP**6124AL*	49000	40500	12.5	15.0	1400	1120
PA17NA060B****D	CAP**6124AL*	56500	44500	14.5	12.0	1625	1300

AHRI — Air Conditioning, Heating & Refrigeration Institute

EER — Energy Efficiency Ratio – 80°F (26.6°C) indoor db/67°F (19.4°C) indoor wb & 95°F (35°C) outdoor wb.

SEER — Seasonal Energy Efficiency Ratio

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 affected.

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 System KW**	Capacity MBtuh		Total System KW**	Capacity MBtuh		Total System KW**	Capacity MBtuh		Total System KW**	Capacity MBtuh		Total System KW**	Capacity MBtuh		Total System KW**
		Total	Sens†		Total	Sens†		Total	Sens†		Total	Sens†		Total	Sens†		Total	Sens†	
PA17NA024****C Outdoor Section With CNPV*3117AL* Indoor Section High																			
600	57 (13.9)	22.30	22.30	1.61	21.56	21.56	1.77	20.75	20.75	1.95	19.87	19.87	2.16	18.91	18.91	2.41	17.90	17.90	2.71
	62 (16.7)	23.76	20.20	1.62	22.78	19.73	1.78	21.72	19.22	1.96	20.59	18.68	2.17	19.38	18.12	2.41	18.12	17.52	2.71
	63 (17.2)††	24.22	16.66	1.62	23.22	16.19	1.78	22.14	15.68	1.96	20.97	15.15	2.17	19.73	14.58	2.42	18.41	14.00	2.71
	67 (19.4)	26.19	17.29	1.63	25.11	16.81	1.79	23.94	16.31	1.97	22.69	15.77	2.18	21.36	15.21	2.43	19.98	14.64	2.72
	72 (22.2)	28.90	14.31	1.65	27.71	13.84	1.80	26.43	13.33	1.98	25.06	12.81	2.19	23.62	12.26	2.44	22.10	11.69	2.74
650	57 (13.9)	22.98	22.98	1.63	22.20	22.20	1.79	21.35	21.35	1.97	20.42	20.42	2.18	19.43	19.43	2.43	18.37	18.37	2.73
	62 (16.7)	24.16	21.11	1.64	23.17	20.63	1.80	22.08	20.11	1.98	20.90	19.56	2.19	19.68	18.98	2.43	18.79	17.66	2.73
	63 (17.2)††	24.61	17.28	1.64	23.58	16.80	1.80	22.46	16.28	1.98	21.26	15.74	2.19	19.98	15.17	2.44	18.63	14.57	2.73
	67 (19.4)	26.60	17.94	1.66	25.48	17.46	1.81	24.27	16.95	1.99	22.99	16.40	2.20	21.62	15.84	2.45	20.20	15.25	2.74
	72 (22.2)	29.33	14.74	1.67	28.10	14.25	1.82	26.78	13.72	2.00	25.37	13.19	2.21	23.88	12.64	2.46	22.32	12.07	2.76
700	57 (13.9)	23.59	23.59	1.66	22.78	22.78	1.81	21.89	21.89	1.99	20.92	20.92	2.21	19.89	19.89	2.46	18.79	18.79	2.75
	62 (16.7)	24.52	22.00	1.66	23.50	21.51	1.82	22.38	20.98	2.00	21.19	20.42	2.21	20.37	19.03	2.46	18.82	18.82	2.75
	63 (17.2)††	24.95	17.87	1.66	23.88	17.38	1.82	22.73	16.86	2.00	21.50	16.31	2.21	20.19	15.74	2.46	18.82	15.14	2.75
	67 (19.4)	26.95	18.58	1.68	25.79	18.09	1.83	24.56	17.57	2.01	23.24	17.02	2.22	21.84	16.45	2.47	20.38	15.86	2.76
	72 (22.2)	29.70	15.12	1.69	28.43	14.63	1.84	27.08	14.12	2.02	25.63	13.57	2.23	24.11	13.01	2.48	22.51	12.43	2.78
750	57 (13.9)	24.15	24.15	1.68	23.31	23.31	1.84	22.38	22.38	2.02	21.38	21.38	2.23	20.30	20.30	2.48	19.16	19.16	2.78
	62 (16.7)	24.84	22.86	1.68	23.79	22.36	1.84	22.66	21.82	2.02	21.47	21.22	2.23	20.34	20.34	2.48	19.20	19.20	2.78
	63 (17.2)††	25.24	18.45	1.69	24.14	17.96	1.84	22.96	17.43	2.02	21.70	16.88	2.23	20.37	16.29	2.48	18.97	15.69	2.77
	67 (19.4)	27.24	19.20	1.70	26.06	18.71	1.85	24.80	18.18	2.03	23.45	17.63	2.24	22.02	17.05	2.49	20.53	16.45	2.78
	72 (22.2)	30.01	15.50	1.71	28.71	15.01	1.86	27.32	14.48	2.04	25.84	13.94	2.25	24.29	13.37	2.50	22.66	12.78	2.80
800	57 (13.9)	24.66	24.66	1.70	23.78	23.78	1.86	22.82	22.82	2.04	21.79	21.79	2.25	20.68	20.68	2.50	19.50	19.50	2.80
	62 (16.7)	25.13	23.70	1.70	24.06	23.19	1.86	22.94	22.61	2.04	22.00	21.45	2.25	20.71	20.71	2.50	19.53	19.53	2.80
	63 (17.2)††	25.49	19.02	1.71	24.37	18.52	1.86	23.16	17.99	2.04	21.88	17.42	2.25	20.52	16.84	2.50	19.11	16.23	2.79
	67 (19.4)	27.50	19.81	1.72	26.30	19.32	1.87	25.00	18.78	2.05	23.62	18.22	2.26	22.18	17.64	2.51	20.66	17.03	2.80
	72 (22.2)	30.28	15.87	1.73	28.94	15.37	1.88	27.52	14.84	2.06	26.02	14.29	2.27	24.44	13.72	2.52	22.79	13.13	2.82
835	57 (13.9)	24.99	24.99	1.72	24.09	24.09	1.87	23.10	23.10	2.05	22.05	22.05	2.26	20.92	20.92	2.51	19.72	19.72	2.81
	62 (16.7)	25.34	24.28	1.72	24.26	23.74	1.87	23.33	22.74	2.05	22.08	22.08	2.26	20.95	20.95	2.51	19.75	19.75	2.81
	63 (17.2)††	25.64	19.41	1.72	24.51	18.91	1.87	23.28	18.37	2.05	21.99	17.81	2.26	20.61	17.21	2.51	19.18	16.60	2.81
	67 (19.4)	27.66	20.24	1.73	26.44	19.73	1.88	25.12	19.20	2.06	23.74	18.63	2.27	22.27	18.05	2.52	20.74	17.43	2.82
	72 (22.2)	30.44	16.12	1.75	29.09	15.62	1.90	27.65	15.09	2.08	26.13	14.53	2.29	24.53	13.96	2.54	22.86	13.36	2.83
900	57 (13.9)	25.55	25.55	1.74	24.61	24.61	1.90	23.59	23.59	2.08	22.49	22.49	2.29	21.32	21.32	2.54	20.08	20.08	2.84
	62 (16.7)	25.69	25.27	1.74	24.84	24.22	1.90	23.62	23.62	2.08	22.52	22.52	2.29	21.35	21.35	2.54	20.11	20.11	2.84
	63 (17.2)††	25.89	20.12	1.75	24.73	19.62	1.90	23.48	19.07	2.08	22.16	18.50	2.29	20.77	17.89	2.54	19.31	17.27	2.83
	67 (19.4)	27.92	21.00	1.76	26.66	20.49	1.91	25.33	19.95	2.09	23.91	19.38	2.30	22.42	18.79	2.55	20.87	18.17	2.84
	72 (22.2)	30.70	16.57	1.77	29.32	16.07	1.92	27.85	15.53	2.10	26.30	14.98	2.31	24.67	14.40	2.56	22.98	13.80	2.86

See notes on page 14

DETAILED COOLING CAPACITIES# (CONTINUED)

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‡	
PA17NA024***C Outdoor Section With CNPV*3117AL* Indoor Section – Low																			
450	57 (13.9)	17.13	17.13	1.15	15.55	15.55	1.29	13.98	13.98	1.46	12.43	12.43	1.65	10.95	10.95	1.86	9.54	9.54	2.10
	62 (16.7)	18.23	15.64	1.14	16.39	14.37	1.28	14.57	13.11	1.45	12.79	11.88	1.64	11.11	10.69	1.86	9.59	9.52	2.10
	63 (17.2)††	18.60	12.88	1.13	16.73	11.77	1.28	14.86	10.66	1.45	13.04	9.59	1.64	11.32	8.56	1.86	9.71	7.58	2.10
	67 (19.4)	20.17	13.39	1.12	18.14	12.24	1.26	16.13	11.11	1.43	14.18	10.01	1.63	12.33	8.96	1.85	10.59	7.97	2.10
	72 (22.2)	22.34	11.09	1.09	20.09	10.07	1.24	17.89	9.07	1.41	15.75	8.11	1.61	13.73	7.20	1.84	11.82	6.34	2.09
500	57 (13.9)	17.84	17.84	1.16	16.18	16.18	1.30	14.53	14.53	1.47	12.91	12.91	1.66	11.36	11.36	1.87	9.89	9.89	2.12
	62 (16.7)	18.65	16.61	1.15	16.76	15.27	1.30	14.88	13.95	1.47	13.06	12.65	1.66	11.37	11.37	1.87	9.91	9.91	2.12
	63 (17.2)††	19.01	13.53	1.15	17.08	12.37	1.29	15.15	11.22	1.46	13.29	10.10	1.66	11.52	9.03	1.87	9.86	8.02	2.12
	67 (19.4)	20.60	14.09	1.13	18.50	12.89	1.28	16.43	11.72	1.45	14.43	10.57	1.64	12.54	9.47	1.86	10.75	8.44	2.11
	72 (22.2)	22.79	11.53	1.11	20.48	10.47	1.26	18.21	9.44	1.43	16.01	8.45	1.63	13.93	7.51	1.85	11.99	6.62	2.11
550	57 (13.9)	18.47	18.47	1.17	16.74	16.74	1.31	15.01	15.01	1.48	13.33	13.33	1.67	11.71	11.71	1.89	10.19	10.19	2.13
	62 (16.7)	19.01	17.55	1.16	17.07	16.15	1.31	15.15	14.76	1.48	13.49	13.09	1.67	11.73	11.73	1.89	10.20	10.20	2.13
	63 (17.2)††	19.35	14.16	1.16	17.35	12.96	1.31	15.38	11.76	1.48	13.48	10.61	1.67	11.67	9.50	1.89	9.98	8.45	2.14
	67 (19.4)	20.95	14.76	1.14	18.79	13.52	1.29	16.67	12.30	1.46	14.63	11.12	1.66	12.69	9.98	1.88	10.88	8.90	2.13
	72 (22.2)	23.16	11.94	1.12	20.78	10.86	1.27	18.46	9.79	1.44	16.21	8.79	1.64	14.09	7.81	1.87	12.11	6.90	2.13
600	57 (13.9)	19.02	19.02	1.18	17.22	17.22	1.33	15.43	15.43	1.50	13.69	13.69	1.69	12.02	12.02	1.90	10.45	10.45	2.15
	62 (16.7)	19.33	18.46	1.18	17.35	16.99	1.33	15.62	15.14	1.49	13.71	13.71	1.69	12.04	12.04	1.90	10.46	10.46	2.15
	63 (17.2)††	19.62	14.78	1.18	17.58	13.53	1.32	15.57	12.30	1.49	13.63	11.10	1.69	11.79	9.96	1.91	10.08	8.87	2.15
	67 (19.4)	21.24	15.42	1.16	19.03	14.14	1.31	16.87	12.87	1.48	14.79	11.65	1.68	12.82	10.47	1.90	10.98	9.35	2.15
	72 (22.2)	23.46	12.34	1.14	21.03	11.23	1.29	18.65	10.15	1.46	16.37	9.11	1.66	14.22	8.11	1.89	12.20	7.17	2.14
650	57 (13.9)	19.52	19.52	1.19	17.65	17.65	1.34	15.81	15.81	1.51	14.01	14.01	1.70	12.29	12.29	1.92	10.67	10.67	2.17
	62 (16.7)	19.91	18.83	1.19	17.81	17.43	1.34	15.83	15.83	1.51	14.03	14.03	1.70	12.31	12.31	1.92	10.69	10.69	2.17
	63 (17.2)††	19.85	15.37	1.19	17.77	14.09	1.34	15.73	12.82	1.51	13.76	11.58	1.70	11.91	10.40	1.92	10.16	9.27	2.17
	67 (19.4)	21.47	16.07	1.17	19.23	14.74	1.32	17.03	13.43	1.49	14.92	12.17	1.69	12.93	10.95	1.91	11.07	9.79	2.17
	72 (22.2)	23.70	12.73	1.15	21.23	11.60	1.30	18.81	10.49	1.47	16.50	9.42	1.68	14.31	8.40	1.90	12.27	7.44	2.16
680	57 (13.9)	19.78	19.78	1.20	17.89	17.89	1.35	16.01	16.01	1.52	14.18	14.18	1.71	12.44	12.44	1.93	10.79	10.79	2.18
	62 (16.7)	20.10	19.26	1.20	17.92	17.92	1.35	16.04	16.04	1.52	14.21	14.21	1.71	12.46	12.46	1.93	10.81	10.81	2.18
	63 (17.2)††	19.97	15.73	1.20	17.87	14.42	1.35	15.81	13.12	1.52	13.82	11.87	1.72	11.95	10.66	1.94	10.21	9.51	2.18
	67 (19.4)	21.59	16.45	1.18	19.33	15.10	1.33	17.11	13.77	1.50	14.99	12.48	1.70	12.98	11.24	1.93	11.11	10.05	2.18
	72 (22.2)	23.83	12.96	1.16	21.33	11.81	1.31	18.89	10.68	1.48	16.56	9.60	1.69	14.36	8.57	1.91	12.31	7.59	2.17
700	57 (13.9)	19.96	19.96	1.21	18.04	18.04	1.35	16.14	16.14	1.52	14.29	14.29	1.72	12.53	12.53	1.94	10.87	10.87	2.19
	62 (16.7)	20.20	19.56	1.20	18.07	18.07	1.35	16.16	16.16	1.52	14.32	14.32	1.72	12.55	12.55	1.94	10.89	10.89	2.19
	63 (17.2)††	20.04	15.96	1.21	17.93	14.63	1.36	15.86	13.33	1.53	13.87	12.05	1.72	11.99	10.83	1.94	10.24	9.67	2.19
	67 (19.4)	21.67	16.70	1.19	19.39	15.33	1.34	17.16	13.99	1.51	15.03	12.68	1.71	13.01	11.43	1.93	11.14	10.22	2.18
	72 (22.2)	23.90	13.11	1.17	21.39	11.95	1.32	18.94	10.81	1.49	16.60	9.72	1.69	14.39	8.68	1.92	12.33	7.70	2.18

See notes on page 14

DETAILED COOLING CAPACITIES# (CONTINUED)

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**				
Total	Sens†			Total	Sens†		Total	Sens†		Total	Sens†		Total	Sens†		Total	Sens†								
PA17NA060B***D Outdoor Section With CAP**6124AL* Indoor Section – High																									
1500	57 (13.9)	52.86	52.86	3.81	51.03	51.03	4.17	49.08	49.08	4.58	46.93	46.93	5.05	44.52	44.52	5.60	41.77	41.77	6.21						
	62 (16.7)	55.69	48.76	3.84	53.31	47.64	4.19	50.79	46.46	4.60	48.06	45.18	5.07	45.06	43.75	5.60	41.74	41.74	6.21						
	63 (17.2)††	56.79	39.92	3.85	54.36	38.80	4.20	51.76	37.63	4.61	48.94	36.37	5.07	45.81	34.99	5.61	42.35	33.48	6.22						
	67 (19.4)	61.31	41.44	3.90	58.67	40.31	4.25	55.83	39.13	4.65	52.75	37.85	5.12	49.38	36.47	5.66	45.62	34.95	6.26						
	72 (22.2)	67.55	33.95	3.96	64.42	32.75	4.30	61.47	31.63	4.72	58.04	30.35	5.18	54.28	28.96	5.72	50.16	27.42	6.33						
1625	57 (13.9)	54.39	54.39	3.88	52.47	52.47	4.23	50.41	50.41	4.64	48.15	48.15	5.12	45.60	45.60	5.66	42.74	42.74	6.27						
	62 (16.7)	56.55	50.96	3.90	54.10	49.81	4.25	51.51	48.60	4.66	48.72	47.26	5.12	45.72	45.62	5.66	42.80	42.80	6.27						
	63 (17.2)††	57.59	41.39	3.91	55.07	40.26	4.26	52.40	39.08	4.66	49.48	37.79	5.13	46.28	36.40	5.67	42.72	34.86	6.27						
	67 (19.4)	62.15	43.03	3.95	59.42	41.89	4.30	56.50	40.68	4.71	53.33	39.39	5.18	49.84	37.98	5.71	45.99	36.44	6.32						
	72 (22.2)	68.43	34.93	4.02	65.39	33.78	4.37	62.16	32.57	4.77	58.63	31.26	5.24	54.80	29.86	5.78	50.53	28.32	6.38						
1750	57 (13.9)	55.76	55.76	3.94	53.76	53.76	4.29	51.60	51.60	4.71	49.24	49.24	5.18	46.59	46.59	5.72	43.60	43.60	6.34						
	62 (16.7)	57.31	53.09	3.95	54.80	51.91	4.31	52.18	50.65	4.71	49.87	48.12	5.19	46.66	46.66	5.72	43.67	43.67	6.34						
	63 (17.2)††	58.26	42.83	3.96	55.68	41.69	4.31	52.92	40.47	4.72	49.93	39.18	5.19	46.67	37.77	5.72	43.03	36.21	6.33						
	67 (19.4)	62.85	44.57	4.01	60.03	43.41	4.36	57.05	42.19	4.76	53.79	40.87	5.23	50.24	39.46	5.77	46.31	37.90	6.37						
	72 (22.2)	69.20	35.92	4.08	65.95	34.66	4.42	62.68	33.47	4.83	59.12	32.16	5.29	55.14	30.71	5.83	50.83	29.18	6.44						
2000	57 (13.9)	58.07	58.07	4.06	55.90	55.90	4.42	53.58	53.58	4.83	51.01	51.01	5.30	48.19	48.19	5.84	44.96	44.96	6.45						
	62 (16.7)	58.62	57.09	4.07	56.08	55.76	4.42	53.66	53.66	4.83	51.09	51.09	5.30	48.25	48.25	5.84	45.03	45.03	6.46						
	63 (17.2)††	59.34	45.61	4.07	56.62	44.43	4.42	53.75	43.19	4.83	50.63	41.85	5.29	47.24	40.41	5.83	43.48	38.79	6.43						
	67 (19.4)	63.96	47.56	4.12	61.03	46.38	4.47	57.88	45.12	4.87	54.51	43.77	5.34	50.80	42.30	5.87	46.76	40.71	6.48						
	72 (22.2)	70.34	37.66	4.19	67.07	36.47	4.53	63.58	35.22	4.93	59.85	33.88	5.40	55.75	32.43	5.94	51.28	30.87	6.55						
PA17NA060B***D Outdoor Section With CAP**6124AL* Indoor Section – Low																									
1100	57 (13.9)	39.47	39.47	2.61	36.39	36.39	2.93	33.18	33.17	3.30	29.90	29.90	3.71	26.63	26.63	4.17	23.40	23.40	4.69						
	62 (16.7)	41.54	36.96	2.59	37.89	34.50	2.92	34.11	31.99	3.29	30.29	29.44	3.71	26.70	26.70	4.17	23.44	23.44	4.69						
	63 (17.2)††	42.47	30.19	2.59	38.74	28.02	2.92	34.87	25.80	3.29	30.92	23.57	3.71	27.01	21.39	4.17	23.18	19.23	4.69						
	67 (19.4)	46.16	31.48	2.56	42.12	29.27	2.89	37.96	27.00	3.27	33.75	24.71	3.68	29.56	22.50	4.15	25.47	20.32	4.67						
	72 (22.2)	51.16	25.80	2.52	46.73	23.82	2.86	42.18	21.81	3.24	37.59	19.81	3.66	33.03	17.84	4.13	28.56	15.92	4.65						
1225	57 (13.9)	41.11	41.11	2.64	37.86	37.86	2.97	34.48	34.48	3.34	31.05	31.05	3.75	27.62	27.62	4.21	24.23	24.23	4.73						
	62 (16.7)	42.45	39.32	2.63	38.70	36.74	2.96	34.84	34.07	3.33	31.11	31.11	3.75	27.67	27.67	4.21	24.27	24.27	4.73						
	63 (17.2)††	43.35	31.80	2.63	39.49	29.54	2.96	35.50	27.24	3.33	31.45	24.93	3.75	27.43	22.64	4.22	23.51	20.42	4.74						
	67 (19.4)	47.06	33.20	2.60	42.89	30.88	2.93	38.60	28.53	3.31	34.28	26.17	3.73	29.98	23.86	4.19	25.80	21.61	4.72						
	72 (22.2)	52.13	26.86	2.56	47.56	24.83	2.90	42.87	22.76	3.28	38.15	20.70	3.70	33.47	18.67	4.17	28.89	16.70	4.69						
1350	57 (13.9)	42.54	42.54	2.67	39.15	39.15	3.00	35.63	35.63	3.37	32.05	32.05	3.79	28.47	28.47	4.25	24.94	24.94	4.77						
	62 (16.7)	43.25	41.59	2.67	39.54	38.98	3.00	35.69	35.69	3.37	32.10	32.10	3.79	28.52	28.52	4.25	24.98	24.98	4.77						
	63 (17.2)††	44.04	33.35	2.67	41.92	41.92	2.98	36.00	28.63	3.37	31.86	26.24	3.79	27.77	23.88	4.26	23.78	21.57	4.78						
	67 (19.4)	47.76	34.85	2.64	43.49	32.46	2.97	39.11	30.03	3.35	34.69	27.60	3.77	30.32	25.20	4.24	26.05	22.85	4.76						
	72 (22.2)	52.88	27.89	2.60	48.19	25.79	2.94	43.39	23.67	3.32	38.57	21.56	3.74	33.80	19.49	4.21	29.12	17.46	4.73						
1475	57 (13.9)	43.82	43.82	2.71	40.29	40.29	3.04	36.62	36.62	3.41	32.91	32.91	3.83	29.16	29.16	4.29	25.55	25.55	4.81						
	62 (16.7)	44.56	42.51	2.70	40.36	40.36	3.04	36.68	36.68	3.41	32.96	32.96	3.82	29.24	29.24	4.29	25.59	25.59	4.81						
	63 (17.2)††	44.62	34.87	2.71	40.58	32.45	3.04	36.41	29.99	3.41	32.20	27.53	3.83	28.04	25.08	4.30	24.01	22.68	4.83						
	67 (19.4)	48.34	36.48	2.68	43.99	34.01	3.01	39.45	31.46	3.39	35.02	28.98	3.81	30.58	26.50	4.28	26.27	24.06	4.80						
	72 (22.2)	53.48	28.88	2.64	48.68	26.73	2.98	43.67	24.54	3.35	38.90	22.39	3.78	34.04	20.27	4.25	29.30	18.21	4.78						

† 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).

Detailed cooling capacities are based on indoor and outdoor unit at the same elevation per AHRI standard 210/240–2008. If additional tubing length and/or indoor unit is located above outdoor unit, a slight variation in capacity may occur.

** System kw is total of indoor and outdoor unit kilowatts.

At TVA rating indoor condition (75°F edb/63°F ewb). All other indoor air temperatures are at 80°F edb.

EWB — Entering Wet Bulb

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

CONDENSER ONLY RATINGS*

SST ° F (° C)		CONDENSER ENTERING AIR TEMPERATURES ° F (° C)							
		55 (12.78)	65 (18.33)	75 (23.89)	85 (29.44)	95 (35.0)	105 (40.56)	115 (46.11)	125 (51.67)
PA17NA024****C – High									
30 (-1.11)	TCG	20.20	19.70	19.00	18.10	17.10	16.00	14.80	13.60
	SDT	71.20	81.10	90.90	100.60	110.20	119.90	129.60	139.40
	KW	1.07	1.20	1.34	1.49	1.67	1.87	2.12	2.41
35 (1.67)	TCG	22.50	21.90	21.10	20.10	19.10	17.90	16.70	15.30
	SDT	72.70	82.40	92.20	101.80	111.40	121.10	130.80	140.50
	KW	1.10	1.23	1.36	1.51	1.69	1.90	2.15	2.44
40 (4.44)	TCG	24.90	24.20	23.30	22.30	21.20	20.00	18.60	17.20
	SDT	74.20	83.80	93.50	103.10	112.70	122.30	132.00	141.60
	KW	1.12	1.25	1.38	1.54	1.71	1.92	2.17	2.47
45 (7.22)	TCG	27.50	26.70	25.70	24.60	23.40	22.10	20.70	19.20
	SDT	75.70	85.30	94.90	104.50	114.00	123.50	133.10	142.80
	KW	1.15	1.27	1.40	1.56	1.73	1.95	2.20	2.50
50 (10.0)	TCG	30.30	29.40	28.30	27.10	25.80	24.40	23.00	21.40
	SDT	77.30	86.90	96.40	105.90	115.30	124.80	134.30	143.90
	KW	1.17	1.29	1.42	1.58	1.76	1.97	2.22	2.53
55 (12.78)	TCG	33.30	32.20	31.10	29.80	28.40	26.90	25.30	23.70
	SDT	79.00	88.40	97.90	107.30	116.70	126.10	135.60	145.00
	KW	1.19	1.31	1.44	1.60	1.78	1.99	2.25	2.56
60 (15.56)	TCG	36.40	35.20	34.00	32.60	31.10	29.50	27.90	26.10
	SDT	80.70	90.10	99.40	108.80	118.10	127.40	136.80	146.20
	KW	1.21	1.33	1.46	1.62	1.80	2.02	2.28	2.58
PA17NA024****C – Low									
30 (-1.11)	TCG	14.50	14.20	13.70	12.90	12.00	11.00	9.90	8.80
	SDT	63.50	73.40	83.10	92.70	102.20	111.70	121.10	130.60
	KW	0.79	0.91	1.04	1.18	1.34	1.51	1.69	1.90
35 (1.67)	TCG	16.20	15.90	15.30	14.50	13.50	12.40	11.30	10.20
	SDT	64.30	74.10	83.80	93.40	102.90	112.30	121.80	131.20
	KW	0.78	0.90	1.02	1.17	1.33	1.50	1.69	1.89
40 (4.44)	TCG	18.10	17.70	17.00	16.10	15.10	14.00	12.80	11.60
	SDT	65.20	75.00	84.60	94.10	103.60	113.00	122.40	131.80
	KW	0.77	0.88	1.01	1.15	1.31	1.49	1.68	1.89
45 (7.22)	TCG	20.10	19.60	18.80	17.80	16.70	15.50	14.30	13.00
	SDT	66.10	75.80	85.40	94.90	104.30	113.70	123.10	132.40
	KW	0.76	0.87	0.99	1.14	1.30	1.47	1.67	1.89
50 (10.0)	TCG	22.20	21.60	20.70	19.70	18.50	17.20	15.90	14.50
	SDT	67.10	76.70	86.10	95.70	105.00	114.40	123.70	133.10
	KW	0.75	0.85	0.98	1.12	1.28	1.46	1.66	1.88
55 (12.78)	TCG	24.50	23.70	22.70	21.60	20.30	19.00	17.50	16.10
	SDT	68.10	77.60	87.10	96.50	105.80	115.10	124.40	133.70
	KW	0.73	0.83	0.96	1.10	1.26	1.45	1.65	1.88
60 (15.56)	TCG	26.90	26.00	24.90	23.60	22.20	20.80	19.30	17.70
	SDT	69.10	78.60	88.00	97.30	106.60	115.90	125.10	134.40
	KW	0.71	0.81	0.93	1.08	1.24	1.43	1.64	1.87
PA17NA036****C – High									
30 (-1.11)	TCG	31.90	30.70	29.40	28.00	26.50	24.90	23.00	20.90
	SDT	71.60	81.10	90.60	100.20	109.60	119.10	128.40	137.70
	KW	1.61	1.77	1.97	2.19	2.45	2.74	3.06	3.42
35 (1.67)	TCG	35.30	34.00	32.60	31.10	29.50	27.60	25.60	23.30
	SDT	73.10	82.50	92.00	101.40	110.80	120.20	129.50	138.70
	KW	1.65	1.81	2.00	2.22	2.48	2.77	3.10	3.46
40 (4.44)	TCG	38.90	37.50	36.00	34.40	32.60	30.60	28.40	26.00
	SDT	74.70	84.00	93.40	102.80	112.20	121.40	130.60	139.80
	KW	1.69	1.85	2.03	2.25	2.51	2.80	3.13	3.50
45 (7.22)	TCG	42.70	41.20	39.60	37.90	36.00	33.80	31.40	28.80
	SDT	76.30	85.60	94.90	104.20	113.50	122.70	131.80	140.80
	KW	1.74	1.89	2.07	2.29	2.54	2.83	3.16	3.53
50 (10.0)	TCG	46.70	45.10	43.40	41.60	39.50	37.20	34.60	31.80
	SDT	77.90	87.20	96.50	105.70	114.90	124.00	133.00	141.90
	KW	1.80	1.93	2.11	2.32	2.57	2.87	3.20	3.57
55 (12.78)	TCG	50.90	49.30	47.50	45.50	43.30	40.80	38.00	35.00
	SDT	79.70	88.90	98.10	107.20	116.30	125.30	134.20	143.10
	KW	1.85	1.98	2.15	2.36	2.61	2.90	3.23	3.60
60 (15.56)	TCG	55.40	53.60	51.70	49.60	47.20	44.60	41.60	38.40
	SDT	81.50	90.60	99.70	108.80	117.80	126.70	135.50	144.20
	KW	1.92	2.04	2.20	2.40	2.65	2.94	3.27	3.64

See notes on page 17

CONDENSER ONLY RATINGS* CONTINUED

SST ° F (° C)		CONDENSER ENTERING AIR TEMPERATURES ° F (° C)							
		55 (12.78)	65 (18.33)	75 (23.89)	85 (29.44)	95 (35.0)	105 (40.56)	115 (46.11)	125 (51.67)
PA17NA036****C – Low									
30 (-1.11)	TCG	21.70	20.80	19.90	19.00	17.90	16.70	15.20	13.60
	SDT	64.40	74.10	83.70	93.30	102.90	112.50	121.90	131.40
	KW	1.44	1.49	1.54	1.59	1.63	1.66	1.67	1.66
35 (1.67)	TCG	24.20	23.20	22.20	21.20	20.00	18.70	17.20	15.40
	SDT	65.40	74.90	84.50	94.10	103.70	113.20	122.60	132.00
	KW	1.41	1.47	1.53	1.58	1.62	1.65	1.66	1.65
40 (4.44)	TCG	27.00	25.90	24.70	23.60	22.30	20.90	19.20	17.40
	SDT	66.30	75.80	85.40	95.00	104.50	114.00	123.30	132.70
	KW	1.38	1.45	1.51	1.56	1.60	1.64	1.65	1.64
45 (7.22)	TCG	29.90	28.70	27.40	26.10	24.80	23.20	21.50	19.50
	SDT	67.40	76.80	86.40	95.90	105.40	114.70	124.10	133.40
	KW	1.34	1.42	1.49	1.54	1.59	1.62	1.64	1.62
50 (10.0)	TCG	33.10	31.70	30.30	28.90	27.40	25.70	23.80	21.70
	SDT	68.50	77.90	87.40	96.80	106.30	115.60	124.90	134.10
	KW	1.31	1.39	1.47	1.53	1.58	1.61	1.62	1.61
55 (12.78)	TCG	36.40	34.90	33.40	31.80	30.10	28.30	26.20	24.00
	SDT	69.70	79.00	88.50	97.80	107.20	116.50	125.70	134.80
	KW	1.26	1.36	1.44	1.51	1.56	1.60	1.61	1.60
60 (15.56)	TCG	40.00	38.30	36.60	34.90	33.00	31.00	28.80	26.30
	SDT	70.90	80.20	89.50	98.90	108.20	117.40	126.50	135.60
	KW	1.22	1.33	1.42	1.49	1.55	1.58	1.60	1.58
PA17NA048****C – High									
30 (-1.11)	TCG	40.00	39.40	38.00	36.20	34.10	31.80	29.50	27.20
	SDT	71.70	81.50	91.20	100.70	110.10	119.60	129.20	139.00
	KW	2.03	2.28	2.54	2.83	3.16	3.54	3.99	4.52
35 (1.67)	TCG	44.60	43.70	42.20	40.20	38.00	35.50	33.10	30.70
	SDT	73.30	83.00	92.60	102.10	111.50	120.90	130.40	140.10
	KW	2.08	2.32	2.58	2.87	3.20	3.58	4.03	4.58
40 (4.44)	TCG	49.40	48.30	46.60	44.50	42.10	39.50	36.90	34.30
	SDT	75.00	84.60	94.10	103.50	112.80	122.20	131.70	141.30
	KW	2.12	2.36	2.62	2.91	3.24	3.63	4.09	4.63
45 (7.22)	TCG	54.40	53.10	51.30	48.90	46.40	43.60	40.90	38.20
	SDT	76.70	86.20	95.60	104.90	114.20	123.50	132.90	142.50
	KW	2.16	2.40	2.66	2.95	3.28	3.68	4.14	4.70
50 (10.0)	TCG	59.60	58.10	56.10	53.60	50.90	48.00	45.10	42.20
	SDT	78.40	87.80	97.10	106.30	115.60	124.80	134.20	143.60
	KW	2.19	2.43	2.69	2.99	3.33	3.73	4.20	4.76
55 (12.78)	TCG	64.90	63.30	61.00	58.40	55.50	52.50	49.50	46.40
	SDT	80.10	89.40	98.60	107.80	116.90	126.20	135.40	144.80
	KW	2.22	2.46	2.73	3.03	3.38	3.78	4.26	4.83
60 (15.56)	TCG	70.40	68.50	66.10	63.40	60.30	57.20	54.00	50.80
	SDT	81.80	91.00	100.20	109.20	118.30	127.50	136.60	145.90
	KW	2.25	2.49	2.76	3.06	3.42	3.84	4.33	4.90
PA17NA048****C – Low									
30 (-1.11)	TCG	28.80	27.80	26.40	24.60	22.60	20.30	17.80	15.10
	SDT	66.70	76.50	86.20	95.80	105.30	114.70	124.20	133.60
	KW	1.47	1.67	1.90	2.15	2.43	2.75	3.11	3.52
35 (1.67)	TCG	32.00	30.90	29.40	27.60	25.40	0.00	20.40	17.60
	SDT	67.80	77.50	87.20	96.80	106.30	0.00	125.10	134.60
	KW	1.44	1.65	1.88	2.13	2.42	0.00	3.10	3.51
40 (4.44)	TCG	35.50	34.30	32.70	30.80	28.50	26.00	23.30	20.30
	SDT	68.90	78.70	88.30	97.90	107.30	116.80	126.10	135.60
	KW	1.41	1.63	1.86	2.12	2.40	2.73	3.09	3.50
45 (7.22)	TCG	39.20	38.00	36.30	34.30	31.90	29.30	26.40	23.20
	SDT	70.10	79.80	89.50	99.00	108.40	117.80	127.20	136.60
	KW	1.39	1.60	1.84	2.10	2.39	2.72	3.08	3.50
50 (10.0)	TCG	43.30	42.00	40.20	38.10	35.60	32.80	29.70	0.00
	SDT	71.50	81.10	90.70	100.20	109.60	118.90	128.30	0.00
	KW	1.36	1.58	1.82	2.09	2.38	2.70	3.07	0.00
55 (12.78)	TCG	47.70	46.30	44.40	42.20	39.60	36.60	33.40	30.00
	SDT	72.80	82.50	92.00	101.50	110.80	120.20	129.40	138.70
	KW	1.33	1.56	1.80	2.07	2.36	2.69	3.06	3.47
60 (15.56)	TCG	52.50	51.00	49.00	46.60	43.90	40.80	37.40	33.80
	SDT	74.30	83.90	93.40	102.80	112.10	121.40	130.60	139.90
	KW	1.30	1.53	1.78	2.05	2.35	2.68	3.05	3.46

See notes on page 17

CONDENSER ONLY RATINGS* CONTINUED

SST °F (°C)		CONDENSER ENTERING AIR TEMPERATURES °F (°C)							
		55 (12.78)	65 (18.33)	75 (23.89)	85 (29.44)	95 (35.0)	105 (40.56)	115 (46.11)	125 (51.67)
PA17NA060B***D – High									
30 (-1.11)	TCG	49.90	47.90	45.90	43.90	41.70	39.30	36.50	33.30
	SDT	72.70	81.80	91.10	100.50	109.90	119.20	128.50	137.70
	KW	2.48	2.75	3.06	3.41	3.81	4.27	4.78	5.36
35 (1.67)	TCG	55.00	52.80	50.70	48.60	46.20	43.60	40.60	37.10
	SDT	74.30	83.40	92.60	101.90	111.20	120.40	129.60	138.80
	KW	2.54	2.80	3.11	3.46	3.86	4.32	4.85	5.44
40 (4.44)	TCG	60.50	58.20	55.90	53.60	51.00	48.20	44.90	41.30
	SDT	76.00	85.00	94.20	103.40	112.60	121.70	130.80	139.90
	KW	2.60	2.86	3.16	3.51	3.92	4.38	4.91	5.51
45 (7.22)	TCG	66.40	63.90	61.50	59.00	56.20	53.10	49.60	45.70
	SDT	77.80	86.70	95.80	104.90	114.00	123.10	132.10	141.10
	KW	2.67	2.92	3.22	3.57	3.98	4.45	4.98	5.58
50 (10.0)	TCG	72.70	70.10	67.50	64.70	61.70	58.40	54.60	50.40
	SDT	79.70	88.60	97.50	106.50	115.50	124.50	133.40	142.20
	KW	2.75	2.99	3.29	3.64	4.05	4.52	5.05	5.66
55 (12.78)	TCG	79.60	76.70	73.90	70.80	67.60	64.00	59.90	55.40
	SDT	81.80	90.50	99.40	108.30	117.10	126.00	134.80	143.50
	KW	2.83	3.07	3.36	3.71	4.12	4.59	5.13	5.74
60 (15.56)	TCG	86.80	83.80	80.70	77.40	73.90	69.90	65.60	60.80
	SDT	84.00	92.60	101.30	110.00	118.80	127.50	136.10	144.70
	KW	2.91	3.15	3.44	3.79	4.20	4.67	5.21	5.82
PA17NA060B***D – Low									
30 (-1.11)	TCG	33.30	32.50	31.00	29.00	26.50	23.70	20.70	17.50
	SDT	66.60	76.30	85.90	95.30	104.70	113.90	123.10	132.30
	KW	1.73	1.97	2.23	2.53	2.87	3.24	3.66	4.13
35 (1.67)	TCG	37.30	36.30	34.70	32.50	29.90	27.00	23.90	20.50
	SDT	67.80	77.50	87.10	96.50	105.70	115.00	124.10	133.30
	KW	1.71	1.95	2.22	2.52	2.86	3.24	3.66	4.13
40 (4.44)	TCG	41.50	40.40	38.60	36.30	33.60	30.50	27.20	23.70
	SDT	69.20	78.80	88.30	97.60	106.90	116.00	125.10	134.30
	KW	1.68	1.93	2.20	2.51	2.85	3.23	3.66	4.13
45 (7.22)	TCG	46.10	44.70	42.80	40.40	37.50	34.30	30.80	27.10
	SDT	70.60	80.20	89.50	98.80	108.00	117.10	126.20	135.20
	KW	1.66	1.91	2.19	2.50	2.84	3.23	3.65	4.13
50 (10.0)	TCG	50.90	49.40	47.30	44.70	41.70	38.30	34.70	30.80
	SDT	72.10	81.50	90.80	100.00	109.20	118.20	127.20	136.30
	KW	1.63	1.89	2.17	2.48	2.83	3.21	3.64	4.12
55 (12.78)	TCG	56.10	54.30	52.10	49.30	46.10	42.50	38.70	34.70
	SDT	73.60	83.00	92.20	101.30	110.40	119.40	128.40	137.30
	KW	1.60	1.86	2.14	2.46	2.81	3.20	3.64	4.11
60 (15.56)	TCG	61.50	59.60	57.10	54.20	50.80	47.00	43.00	38.80
	SDT	75.20	84.40	93.60	102.60	111.70	120.60	129.50	138.40
	KW	1.57	1.83	2.12	2.44	2.79	3.19	3.62	4.10

* AHRI listing applies only to systems shown in Combination Ratings table.

KW – Outdoor Unit Kilowatts Only.

SDT – Saturated Temperature Leaving Compressor (°F)

SST – Saturated Temperature Entering Compressor (°F/°C)

TCG – Gross Cooling Capacity (1000 Btuh)

GUIDE SPECIFICATIONS

GENERAL

System Description

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

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 air conditioner 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, including louvered coil guard, 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 upward.

AIR-COOLED, SPLIT-SYSTEM AIR CONDITIONER

PA17NA

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 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 shutoff valve with sweat connections, vapor-line 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.
- 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 SUMMARY

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. This product is not qualified for low ambient cooling operation (below 55°F/12.8°C) and no low ambient kit is available.
3. The maximum outdoor operating ambient in cooling mode is 125°F (51.67°C) when operating voltage is 230v. For 208v applications, the maximum outdoor ambient is 120°F (48.9°C).
4. For reliable operation, unit should be level in all horizontal planes.
5. For interconnecting refrigerant tube lengths greater than 80 ft (23.4 m) and/or 35 ft (10.7 m) vertical differential, consult Residential Piping and Longline Guideline and Service Manual available from equipment distributor.
6. If any refrigerant tubing is buried, provide a 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. Do not bury refrigerant lines longer than 36 in. (914.4 mm).
7. Use only copper wire for electric connection at unit. Aluminum and clad aluminum are not acceptable for the type of connector provided.
8. Do not apply capillary tube indoor coils to these units.
9. Factory-supplied filter drier must be installed.

