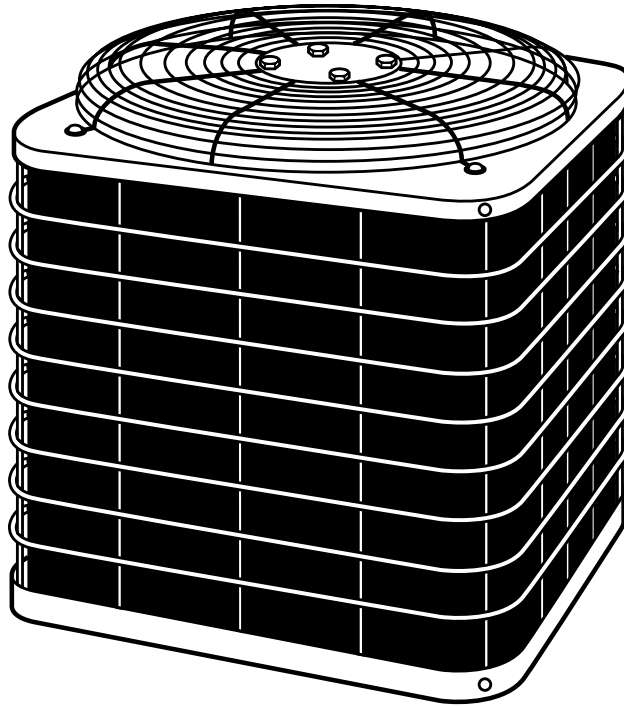




MODEL PA10 10 SEER 3-PHASE AIR CONDITIONER

Product Data



FEATURES

AVAILABLE SIZES: Nominal sizes available (036, 048 and 060) to meet the needs of light commercial applications.

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

ELECTRICAL RANGE: 208/230v, three phase in 036, 048 and 060 sizes; and 460v, three phase in 060 size.

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

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

UNIT DESIGN: The copper tube, enhanced sine wave, aluminum fin coil is designed for optimum heat transfer. Vertical air discharge carries sound and 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.

3-PHASE (SCROLL COMPRESSOR UNITS) MONITOR BOARD: 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.

SERVICE VALVES: Control board that monitors the electrical phase and prevents compressor operation if wired incorrectly.

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

LIMITED WARRANTY: Standard 1-year limited warranty on parts and 5-year limited warranty on compressor.

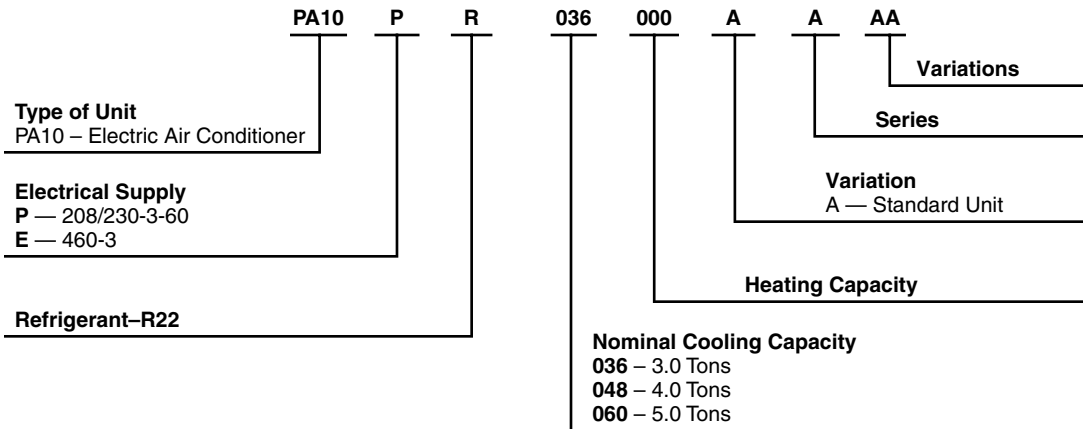
SOUND POWER (dBA) (A-wtd., non-pure tone corrected.)

UNIT SIZE	SOUND LEVEL	OCTAVE BAND CENTER FREQUENCY (Hz)						
		125	250	500	1000	2000	4000	8000
036-A	82	55.0	64.0	73.0	74.5	72.0	60.5	64.0
048-A	82	61.9	67.5	71.8	77.1	76.5	72.9	66.9
060-A	82	58.0	67.5	78.0	76.0	76.0	73.0	67.0

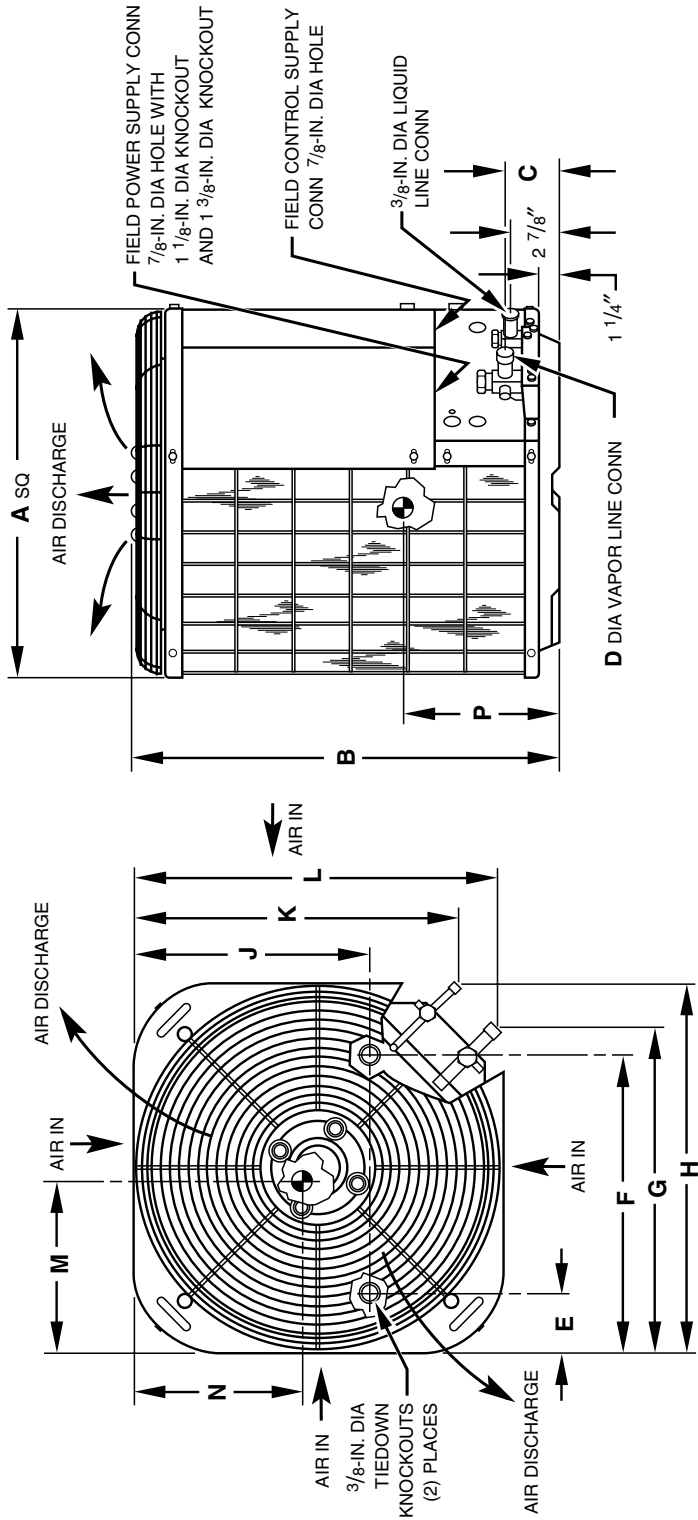
NOTE: Tested in accordance with ARI standard 270.95. (Not listed with ARI.)



MODEL NUMBER NOMENCLATURE



PA10



NOTES:

1. Allow 30 in. clearance to service side of unit, 48 in. above unit, 6 in. on one side, 12 in. on remaining side, and 24 in. between units for proper airflow.
2. Minimum outdoor operating ambient in cooling mode is 55°F, max. 125°F.
3. Series designation is the 14th position of the unit model number.
4. Center of gravity

DIMENSIONS (IN.)

UNIT SIZE	SERIES	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Min Mounting Pad Dim
036	A	22-1/2	25-15/16	3-3/16	3/4	3-11/16	18-1/8	19-3/4	22-1/4	14-3/8	19-9/16	22-1/16	10-3/8	10-3/4	11	22-1/2 x 22-1/2
048	A	22-1/2	33-15/16	3-1/4	7/8	3-11/16	18-1/8	19-13/16	22-1/4	14-3/8	19-9/16	22-1/16	10-3/8	10-3/4	15-1/2	22-1/2 x 22-1/2
060	A	30	29-15/16	3-1/4	7/8	6-1/2	23-1/2	27-1/4	29-3/4	20	27-1/16	29-9/16	15-1/2	14	15	30 x 30

NOTE: The data in this publication is displayed for all series, however, every series may not be available from manufacturer.

METERING DEVICE

UNIT SIZE-SERIES	PISTON* IDENTIFICATION NO.
036-A	70
048-A	82
060-A	93

* Piston listed is for any approved coil non-capillary tube combination.
Piston is shipped with outdoor unit and must be installed in an approved indoor coil.

CHARGING SUBCOOLING (TXV-TYPE EXPANSION DEVICE*)

UNIT SIZE	REQUIRED SUBCOOLING (°F)
036	15
048	15
060	15

SPECIFICATIONS

UNIT SIZE	036	048	060	
SERIES	A	A	A	A
Operating Weight (Lb)	122	154	214	
Shipping Weight (Lb)	141	175	236	
ELECTRICAL				
Unit Volts—Hertz—Phase	208/230-60-3	208/230-60-3	208/230-60-3	460-60-3
Operating Voltage Range*	187-253	187-253	187-253	414-506
Compressor—Rated Load Amps	10.0	12.8	16.0	8.0
Locked Rotor Amps	70.0	91.0	125.0	66.5
Condenser Fan Motor—Full Load Amps	1.4	1.4	1.4	0.8
Min Unit Ampacity for Wire Sizing	13.9	17.4	21.4	10.8
Min Wire Size (60°C/75°F Copper) AWG†	14/14	14/14	12/12	14/14
Max Wire Length (60°C/75°F) (Ft)‡	65/62	52/49	66/63	165/157
Max Branch Circuit Fuse Size**	20	30	30	15
COMPRESSOR & REFRIGERANT				
Compressor—Type	Reciprocating	Scroll		
Temperature and Current Protection	Internal Line Break			
Refrigerant—Type and Amount (Lbs)	R-22 5.00	R-22 6.25	R-22 8.31	
Refrigerant Tubes (In. OD) Vapor and Liquid (Up to 50 Ft)	3/4 and 3/8	7/8 and 3/8	1-1/8 and 3/8	
CONDENSER COIL & FAN				
Coil Face Area (Sq Ft)	9.1	12.4	18.5	
Fan Motor—HP, Type, and RPM	1/4 PSC and 1100	1/4 PSC and 1100		
Volts—Hertz—Phase	208/230—60—1	208-230—60—1	460—60—1	
Condenser Airflow (CFM)	2500	2500	3400	
OPTIONAL EQUIPMENT				
Cycle Protector	KSACY0101AAA			
Low-Pressure Switch	KAALP0101LPS			
High-Pressure Switch	KSAHI0101HPS			
Time-Delay Relay	KAATD0101TDR			
Winter Start Control	KAAWS0101AAA			
Evaporator Freeze Thermostat	KAAFT0101AAA			
Compressor Crankcase Heater	KAACH1001AAA	KAACH1201AAA	KAACH1301AAA	
Liquid Line Solenoid Valve	KAALS0101LLS	KAALS0101LLS		
Filter Drier	P502-8083S	P502-8163S		
MotorMaster® Control	32LT660004		32LT660005	
Ball Bearing Fan Motor	HC40GE232		HC40GE462	
Low-Ambient Pressure Switch Kit	KSALA0201R22			
Compressor Sound Hood	KSASH1201COP	KSASH2001CYL		
TXV (Hard Shutoff)	KSATX0601HSO	KSATX0701HSO	KSATX1001HSO	
Thermostat, Manual Changeover, Non-Programmable, °F/°C, 1-Stage Heat, 1-Stage Cool‡‡	TSTATPPBAC01-B			
Thermostat, Manual Changeover, 5-2-Day Programmable, °F/°C, 1-Stage Heat, 1-Stage Cool	TSTATPPSAC01-B			
Backplate for Standard Thermostat	TSTATXXBBP01			
Backplate for Programmable Thermostat	TSTATXXPBP01			
Outdoor Air Temperature Sensor	TSTATXXSEN01-B			

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

† If wire is applied at ambient greater than 30°C (86°F), consult Table 310-16 of the NEC (ANSI/NFPA 70).

The ampacity of nonmetallic-sheathed cable (NM), trade name ROMEX, shall be that of 60°C (140°F) conductors, per the NEC (ANSI/NFPA 70) Article 336-26.

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

** Time-delay fuse or circuit breaker.

‡‡ Furnace model numbers P08UA, P08LA, and PG8HA are not compatible with this thermostat.

N/A—Not applicable in this application.

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

ACCESSORY USAGE GUIDELINE

ACCESSORY	REQUIRED FOR LOW-AMBIENT APPLICATIONS (Below 55°F)	REQUIRED FOR LONG-LINE APPLICATIONS* (Over 80 Ft)	REQUIRED FOR SEA COAST APPLICATIONS (Within 2 Miles)
Compressor Crankcase Heater	Yes	Yes	No
Evaporator Freeze Thermostat	Yes	No	No
Winter Start Control	Yes†	No	No
Accumulator	No	No	No
MotorMaster® Control	Yes	No	No
Wind Baffle	See low-ambient instructions	No	No
Support Feet	Recommended	No	Recommended
Liquid-Line Solenoid Valve or Hard Shutoff TXV	No	See Long-Line Application Guideline	No
Ball Bearing Fan Motor	Yes‡	No	No

* For tubing line sets between 80 and 200 ft and/or 20 ft vertical differential, (250 ft total equivalent length), refer to Residential's Split Systems Long-Line Application Guidelines.

† Only when low-pressure switch is used.

‡ Required for MotorMaster Low-Ambient Control (full modulation of motor speed).

ACCESSORY DESCRIPTION AND USAGE (Listed Alphabetically)

- 1. Ball Bearing Fan Motor**
A fan motor with ball bearings which permits speed reduction while maintaining bearing lubrication.
SUGGESTED USE: Required on all units where Low-Ambient kit (full modulation feature) or MotorMaster® Control has been added.
- 2. Compressor 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 chance of refrigerant slugging. May or may not include a thermostat control.
SUGGESTED USE: When interconnecting tube length exceeds 80 ft.
When unit will be operated below 55°F (12.8°C) outdoor air temperature. Use with low-ambient controller.
All commercial installations.
- 3. Compressor Sound Hood**
Wraparound sound attenuation cover for the compressor. Reduces unit sound level by about 2dBA.
SUGGESTED USE: Unit installed closer than 15 ft to quiet areas—bedrooms, etc.
Unit installed between 2 houses less than 10 ft apart.
- 4. Cycle Protector**
Solid-state timing device which prevents compressor rapid recycling. Control provides an approximate 5-minute delay after power to the compressor has been interrupted for any reason, including normal room thermostat cycling.
SUGGESTED USE: Installations in areas where power interruptions are frequent.
Where user is likely to “play” with the room thermostat.
All commercial installations.
Installations where interconnecting tube length exceeds 80 ft.
High-rise applications.
- 5. Evaporator Freeze Thermostat**
An SPST temperature actuated switch which stops unit operation when evaporator reaches freeze-up conditions.
SUGGESTED USE: All units where winter start control has been added.
- 6. Filter Drier**
A device for removing contaminants from refrigerant circulating in an air conditioning system: single-direction flow.
SUGGESTED USE: Suggested in all field-connected split-system air conditioners.
- 7. High-Pressure Switch**
Auto reset SPST switch activated by refrigerant pressure on high side of refrigerant circuit. Cycles compressor off if refrigerant pressure rises to about 400 psig. Provides additional protection against compressor damage due to loss of outdoor airflow. To prevent rapid compressor recycling, cycle protector can be used with this switch.
SUGGESTED USE: Installations exposed to very “dirty” outdoor air.
Installations where condenser inlet air temperature exceeds 125°F (51.7°C).
- 8. Liquid Solenoid Valve (LSV)**
An electrically operated shutoff valve to be installed at the outdoor or indoor unit (depending on tubing configuration) and which stops and starts refrigerant liquid flow in response to compressor operation. Maintains a column of refrigerant liquid ready for action at next compressor operation cycle.
SUGGESTED USE: For improved system performance in air conditioners for certain combinations of indoor and outdoor units. Refer to ARI Unitary Directory.
In certain long line applications. (Refer to Long-Line Application Guideline.)
- 9. 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 (approximately 100 psig to 225 psig). The control will maintain working head pressure at low-ambient temperatures down to 0°F (-17.8°C) when properly installed.
SUGGESTED USE: A Low-Ambient Pressure Switch or MotorMaster®—Low-Ambient Controller must be used when cooling operating is used at outdoor temperatures below 55°F (12.8°C).
- 10. Low-Pressure Switch**
Auto reset SPST switch activated by refrigerant pressure on low side of refrigerant circuit. Cycles compressor off if refrigerant pressure drops to about 27 psig. Prevents indoor coil freeze-up due to loss of indoor airflow. Also, provides additional protection against compressor damage due to loss of refrigerant charge. To prevent rapid compressor recycling, cycle protector can be used with this switch.
SUGGESTED USE: Where indoor coil is exposed to “dirty” air.
All commercial installations.
- 11. MotorMaster® Control**
A fan speed control device activated by a temperature sensor. Designed to control condenser fan motor speed in response to the saturated, condensing temperature during operation in cooling mode only. For outdoor temperatures down to -20°F, it maintains condensing temperature at 100°F ± 10°F.
SUGGESTED USE: Cooling operation at outdoor temperatures below 55°F.
All commercial installations.

ACCESSORY DESCRIPTION AND USAGE (Listed Alphabetically) Continued

12. Thermostatic Expansion Valve (TXV) Kits

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.

SUGGESTED USE: For improved system performance in cooling mode for certain combinations of indoor and outdoor units. Refer to ARI Unitary Directory.

13. Time-Delay Relay

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

SUGGESTED USE: For improved efficiency ratings for certain combinations of indoor and outdoor units. Refer to ARI Unitary Directory.

14. Winter Start Control

An SPST delay relay which bypasses the low-pressure switch for approximately 3 minutes to permit start-up for cooling operation under low-load conditions.

SUGGESTED USE: All air conditioners where low-ambient controller has been added.

RATINGS AND PERFORMANCE

UNIT SIZE-SERIES	INDOOR MODEL	TOT. CAP. BTUH	FACTORY SUPPLIED ENHANCE- MENT	SEER			EER
				STANDARD RATING	PAYNE GAS FURNACE OR ACCESSORY TDR†	ACCESSORY TXV‡	
036-A	*CC5A/CD5AA036	33,800	NONE	10.00	10.20	10.20	9.15
	CAR**3614A**	33,200	TXV	—	10.00	—	9.05
	CAR**3617A**	33,200	TXV	—	10.00	—	9.00
	CAR**3621A**	33,200	TXV	—	10.00	—	9.00
	CAR**4221A**	34,000	TXV	—	10.00	—	9.05
	CAR**4224A**	34,000	TXV	—	10.00	—	9.05
	CC5A/CD5AA042	33,800	NONE	10.00	10.20	10.20	9.45
	CC5A/CD5AW036	33,800	NONE	10.00	10.20	10.20	9.45
	CE3AA036	33,400	NONE	10.00	10.20	10.20	9.10
	CE3AA042	33,600	NONE	10.00	10.20	10.20	9.20
	CF5AA036	33,600	NONE	10.00	10.20	10.20	9.40
	CK3BA036	33,800	NONE	10.00	10.20	10.20	9.45
	CK3BA042	33,800	NONE	10.00	10.20	10.20	9.45
	CK5A/CK5BA036	33,800	NONE	10.00	10.20	10.20	9.45
	CK5A/CK5BA042	33,800	NONE	10.00	10.20	10.20	9.45
	CK5A/CK5BT036	33,800	NONE	10.00	10.20	10.20	9.45
	CK5A/CK5BT042	33,800	NONE	10.00	10.20	10.20	9.45
	CK5A/CK5BW036	33,800	NONE	10.00	10.20	10.20	9.45
	CNRV*3617A**	33,200	TXV	—	10.00	—	9.00
	CNRV*3621A**	33,200	TXV	—	10.00	—	9.00
	CNRV*4221A**	34,000	TXV	—	10.00	—	9.10
	CNRH*3617A**	33,200	TXV	—	10.00	—	9.05
	CNRH*4221A**	34,000	TXV	—	10.00	—	9.10
	CNRF*3618A**	33,200	TXV	—	10.00	—	9.00
	CSRH*3612A**	33,200	TXV	—	10.00	—	9.15
	CSRH*4212A**	34,000	TXV	—	10.00	—	9.20
	PF1MNB036	33,000	TDR	10.00	—	10.00	8.90
	PF1MNB042	33,800	TDR	10.00	—	10.00	9.10
	PF1MNC036	33,200	TDR&TXV	10.00	—	—	8.95
	PF1MNC042	34,000	TDR&TXV	10.00	—	—	9.05
048-A	*CD5AA048	46,000	NONE	10.00	10.20	10.20	9.25
	CAR**4817A**	46,500	TXV	—	10.50	—	9.55
	CAR**4821A**	46,500	TXV	—	10.50	—	9.45
	CAR**4824A**	46,500	TXV	—	10.50	—	9.45
	CAR**6021A**	47,500	TXV	—	10.50	—	9.65
	CAR**6024A**	47,500	TXV	—	10.50	—	9.65
	CC5A/CD5AA060	46,500	NONE	10.00	10.20	10.20	9.25
	CC5A/CD5AC048	45,000	NONE	—	10.00	10.00	9.20
	CC5A/CD5AW048	46,000	NONE	10.00	10.20	10.20	9.25
	CC5A/CD5AW060	47,000	NONE	10.00	10.50	10.50	9.40
	CE3AA048	46,000	NONE	10.00	10.20	10.20	9.35
	CE3AA060	47,000	NONE	10.00	10.50	10.50	9.45
	CF5AA048	46,000	NONE	10.00	10.20	10.20	9.30
	CK3BA048	46,000	NONE	10.00	10.20	10.20	9.25
	CK3BA060	47,000	NONE	10.00	10.50	10.50	9.45
	CK5A/CK5BA048	46,000	NONE	10.00	10.20	10.20	9.25
	CK5A/CK5BA060	47,000	NONE	10.00	10.50	10.50	9.45
	CK5A/CK5BT048	46,000	NONE	10.00	10.20	10.20	9.25
	CK5A/CK5BT060	47,000	NONE	10.00	10.50	10.50	9.45
	CK5A/CK5BW048	46,000	NONE	10.00	10.20	10.20	9.25
	CK5A/CK5BX060	47,000	NONE	10.00	10.50	10.50	9.55
	CNRV*4821A**	46,500	TXV	—	10.50	—	9.50
	CNRV*4824A**	46,500	TXV	—	10.50	—	9.50
	CNRV*6024A**	47,500	TXV	—	10.50	—	9.65
	CNRH*4821A**	46,500	TXV	—	10.50	—	9.50
	CNRH*6024A**	47,500	TXV	—	10.50	—	9.65
	CNRF*4818A**	46,500	TXV	—	10.50	—	9.45
	CSRH*4812A**	46,500	TXV	—	10.50	—	9.55
	CSRH*6012A**	47,500	TXV	—	11.00	—	9.70
	PF1MNB048	46,500	TDR	10.00	—	10.00	9.20
PF1MNB060	48,000	TDR	10.00	—	10.00	9.20	
PF1MNB070	49,000	TDR	10.50	—	10.50	9.50	
PF1MNC048	46,500	TDR&TXV	10.50	—	—	9.40	
PF1MNC060	47,500	TDR&TXV	10.50	—	—	9.60	
060-A	*CC5A/CD5AW060	57,000	NONE	10.00	10.20	10.20	9.20
	CAR**6021A**	57,000	TXV	—	11.00	—	9.60
	CAR**6024A**	57,000	TXV	—	11.00	—	9.60
	CC5A/CD5AA060	55,000	NONE	10.00	10.20	10.20	9.05
	CE3AA060	57,000	NONE	10.20	10.50	10.50	9.30
	CK3BA060	56,000	NONE	10.00	10.20	10.20	9.15
	CK5A/CK5BA060	56,000	NONE	10.00	10.20	10.20	9.15
	CK5A/CK5BT060	56,000	NONE	10.00	10.20	10.20	9.15
	CK5A/CK5BX060	58,000	NONE	10.20	10.50	10.50	9.35
	CNRV*6024A**	57,000	TXV	—	11.00	—	9.55
	CNRH*6024A**	57,000	TXV	—	11.00	—	9.55
	CSRH*6012A**	57,000	TXV	—	11.00	—	9.60
	PF1MNB060	57,500	TDR	10.00	—	10.00	8.95
	PF1MNB070	58,000	TDR	10.50	—	10.50	9.30
	PF1MNC060	57,000	TDR&TXV	10.50	—	—	9.30

PA10

See notes on page 8.

* 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. Most Payne furnaces are equipped with TDR.

‡ Requires hard shutoff TXV; based on computer simulation.

EER — Energy Efficiency Ratio

SEER — Seasonal Energy Efficiency Ratio

TDR — Time-Delay Relay

TXV — Thermostatic Expansion Valve

N/A — Not Applicable

- 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. Minimum outdoor operating ambient in cooling mode is 55°F (12.8°C), maximum 115°F (46.1°C).
 5. The dashes (—) appearing in the SEER WITH ACCESSORY TDR column indicate no improvement in efficiency due to time-delay function built into unit as manufactured (see table).

DETAILED COOLING CAPACITIES*

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES °F														
		75			85			95			105			115		
		Capacity MBtu/h†		Total System kW**	Capacity MBtu/h†		Total System kW**	Capacity MBtu/h†		Total System kW**	Capacity MBtu/h†		Total System kW**	Capacity MBtu/h†		Total System kW**
CFM	EWB	Total	Sens‡	Total	Sens‡	Total	Sens‡	Total	Sens‡	Total	Sens‡	Total	Sens‡	Total	Sens‡	Total
PA10036-A Outdoor Section With CC5A/CD5AA036 Indoor Section																
1050	72	40.10	20.78	3.18	38.64	20.34	3.41	36.81	19.70	3.65	34.68	18.95	3.90	32.40	18.12	4.16
	67	37.01	25.79	3.10	35.19	25.14	3.32	33.09	24.32	3.55	30.86	23.38	3.76	28.54	22.45	3.96
	62	33.44	30.40	3.01	31.46	29.44	3.21	29.48	28.41	3.39	27.41	27.41	3.58	25.59	25.59	3.78
	57	31.89	31.89	2.98	30.42	30.42	3.17	28.89	28.89	3.36	27.29	27.29	3.57	25.58	25.58	3.78
1200	72	40.42	21.37	3.26	39.22	21.15	3.49	37.38	20.58	3.73	35.33	19.94	3.98	32.98	19.14	4.25
	67	37.76	27.30	3.18	35.93	26.72	3.40	33.80	25.93	3.63	31.50	25.03	3.87	29.07	24.06	4.06
	62	34.27	32.45	3.09	32.30	31.46	3.30	30.29	30.29	3.49	28.53	28.53	3.70	26.75	26.75	3.91
	57	33.39	33.39	3.07	31.83	31.83	3.29	30.24	30.24	3.49	28.52	28.52	3.70	26.76	26.76	3.91
1350	72	40.97	22.12	3.33	39.58	21.83	3.56	37.81	21.38	3.81	35.78	20.83	4.06	33.34	20.05	4.32
	67	38.22	28.62	3.25	36.44	28.16	3.47	34.35	27.51	3.70	31.97	26.61	3.94	29.47	25.55	4.16
	62	34.94	34.25	3.17	33.09	33.09	3.38	31.35	31.35	3.62	29.54	29.54	3.82	27.73	27.73	4.04
	57	34.56	34.56	3.16	33.04	33.04	3.38	31.33	31.33	3.62	29.60	29.60	3.82	27.74	27.74	4.04
Multipliers for Determining the Performance With Other Indoor Sections																
Indoor Section	Size	Cooling		Indoor Section	Size	Cooling										
		Capacity	Power			Capacity	Power									
CAR**	3614A**	1.00	0.99	CK5A/CK5BT	036	1.00	1.00									
	3617A**	1.00	0.99		042	1.00	1.00									
	3621A**	1.00	0.99	CK5A/CK5BW	036	1.00	1.00									
	4221A**	1.00	0.99		CNRV*	3617A**	1.00	0.99								
	4224A**	1.00	0.99			3621A**	1.00	0.99								
CC5A/CD5AA	036	1.00	1.00	CNRH*	4221A**	1.00	0.99									
	042	1.00	1.00		3617A**	1.00	0.99									
CC5A/CD5AW	036	1.00	1.00		CNRV*	4221A**	1.00	0.99								
	042	1.00	1.01	3618A**		1.00	0.99									
CE3AA	036	0.99	1.00	CSRH*	3612A**	1.00	0.98									
	042	0.99	0.99		4212A**	1.00	0.97									
CF5AA	036	0.99	1.00	PF1MNB	036	0.98	1.01									
CK3BA	036	1.00	1.00		042	1.00	1.01									
	CK5A/CK5BA	036	1.00	1.00	PF1MNC	036	0.98	0.99								
042		1.00	1.00	042		1.00	0.99									
042		1.00	1.00	—		—	—									

See notes on page 11.

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DETAILED COOLING CAPACITIES* Continued

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES °F														
		75			85			95			105			115		
		Capacity MBtu/h†		Total System kW**	Capacity MBtu/h†		Total System kW**	Capacity MBtu/h†		Total System kW**	Capacity MBtu/h†		Total System kW**	Capacity MBtu/h†		Total System kW**
CFM	EWB	Total	Sens‡		Total	Sens‡		Total	Sens‡		Total	Sens‡		Total	Sens‡	
PA10048-A Outdoor Section With CC5A/CD5AA048 Indoor Section																
1400	72	52.44	27.12	4.34	50.89	26.57	4.73	49.02	25.94	5.15	46.92	25.15	5.63	44.62	24.27	6.13
	67	48.51	33.51	4.27	46.71	32.83	4.66	44.62	31.96	5.10	42.34	30.99	5.56	39.85	29.96	5.99
	62	44.11	39.53	4.21	42.11	38.57	4.58	39.96	37.47	4.95	37.75	36.31	5.36	35.25	35.25	5.78
	57	41.80	41.80	4.17	40.16	40.16	4.52	38.49	38.49	4.90	36.83	36.83	5.32	34.92	34.92	5.77
1600	72	53.16	28.05	4.44	51.62	27.58	4.83	49.80	27.01	5.26	47.65	26.30	5.73	45.30	25.45	6.23
	67	49.37	35.32	4.36	47.62	34.74	4.75	45.50	33.97	5.19	43.22	33.04	5.65	41.07	32.43	6.09
	62	45.15	42.21	4.30	43.15	41.12	4.71	40.91	39.86	5.07	38.62	38.62	5.47	36.50	36.50	5.91
	57	43.62	43.62	4.28	41.99	41.99	4.65	40.29	40.29	5.05	38.40	38.40	5.47	36.47	36.47	5.91
1800	72	53.66	28.86	4.53	52.15	28.47	4.92	50.31	27.97	5.36	48.15	27.34	5.82	45.77	26.55	6.32
	67	50.02	36.96	4.46	48.25	36.48	4.84	46.10	35.81	5.27	43.78	34.93	5.74	41.76	34.50	6.21
	62	45.93	44.48	4.39	43.77	43.77	4.79	41.74	41.74	5.19	40.11	40.11	5.62	37.92	37.92	6.08
	57	45.07	45.07	4.38	43.47	43.47	4.79	41.65	41.65	5.19	39.85	39.85	5.61	38.06	38.06	6.04
Multipliers for Determining the Performance With Other Indoor Sections																
Indoor Section	Size	Cooling		Indoor Section	Size	Cooling										
		Capacity	Power			Capacity	Power									
CAR**	4817A**	1.00	0.97	CK5A/CK5BT	048	1.00	1.00									
	4821A**	1.00	0.98		060	1.00	0.98									
	4824A**	1.00	0.98	CNRV*	4821A**	1.00	0.98									
	6021A**	1.01	0.97		4824A**	1.00	0.98									
	6024A**	1.01	0.97		6024A**	1.01	0.98									
CC5A/CD5AA	060	1.00	1.00	CNRH*	4821A**	1.00	0.98									
CC5A/CD5AC	048	0.98	0.99		6024A**	1.01	0.98									
CC5A/CD5AW	048	1.00	1.00	CNRF*	4818A**	1.00	0.98									
	060	1.01	0.99	CSRH*	4812A**	1.00	0.97									
CD5AA	048	1.00	1.00		6012A**	1.01	0.97									
CE3AA	048	1.00	0.99	CK5A/CK5BW	048	1.00	1.00									
	060	1.01	0.99	CK5A/CK5BX	060	1.01	0.98									
CF5AA	048	1.00	0.99	PF1MNB	048	1.00	1.01									
CK3BA	048	1.00	1.00		060	1.01	1.02									
	060	1.00	0.98		070	1.02	1.00									
CK5A/CK5BA	048	1.00	1.00	PF1MNC	048	0.99	0.98									
	060	1.00	0.98		060	1.01	0.98									

See notes on page 10.

DETAILED COOLING CAPACITIES* Continued

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES °F														
		75			85			95			105			115		
		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**
CFM	EWB	Total	Sens‡		Total	Sens‡		Total	Sens‡		Total	Sens‡		Total	Sens‡	
PA10060-A Outdoor Section With CC5A/CD5AA060 Indoor Section																
1950	72	65.78	33.91	5.12	63.76	33.16	5.59	61.29	32.26	6.11	58.55	31.20	6.68	55.48	30.06	7.30
	67	60.83	41.73	5.02	58.56	40.81	5.49	56.01	39.73	6.00	53.08	38.47	6.52	50.44	37.61	7.01
	62	55.48	49.20	4.93	53.14	48.04	5.36	50.44	46.70	5.77	47.70	45.29	6.26	44.84	43.75	6.78
	57	52.32	52.32	4.84	50.52	50.52	5.26	48.89	48.89	5.76	46.35	46.35	6.19	44.33	44.33	6.69
2000	72	66.67	35.03	5.24	64.66	34.41	5.71	62.19	33.57	6.23	59.39	32.57	6.80	56.30	31.50	7.42
	67	61.97	43.97	5.14	59.61	43.12	5.60	57.00	42.08	6.11	54.07	40.90	6.67	50.98	39.65	7.23
	62	56.63	52.35	5.04	54.24	51.12	5.51	51.50	49.66	5.93	48.58	48.58	6.40	45.98	45.98	6.96
	57	54.52	54.52	5.01	52.66	52.66	5.44	50.94	50.94	5.94	48.24	48.24	6.38	46.15	46.15	6.89
2250	72	67.33	36.04	5.35	65.30	35.52	5.82	62.84	34.77	6.35	60.00	33.87	6.93	56.93	32.86	7.54
	67	62.76	46.05	5.25	60.41	45.31	5.71	57.75	44.36	6.22	54.80	43.27	6.78	51.66	41.98	7.37
	62	57.55	55.11	5.14	55.14	53.81	5.61	52.43	52.43	6.08	49.85	49.85	6.59	47.51	47.51	7.14
	57	56.36	56.36	5.13	54.42	54.42	5.60	52.22	52.22	6.07	49.95	49.95	6.58	47.72	47.72	7.09
Multipliers for Determining the Performance With Other Indoor Sections																
Indoor Section	Size	Cooling		Indoor Section	Size	Cooling										
		Capacity	Power			Capacity	Power									
CAR**	6021A**	0.98	0.96	CK5A/CK5BX	060	1.00	0.98									
	6024A**	0.98	0.96			CNRV*	6024A**	0.98	0.96							
CC5A/CD5AA	060	0.98	0.99	CNRH*	6024A**	0.98	0.96									
CC5A/CD5AW	060	1.00	1.00	CSRH*	6012A**	1.00	0.98									
CE3AA	060	1.00	0.99	PF1MNB	060	1.01	1.04									
CK3BA	060	0.98	0.99		070	1.02	1.01									
CK5A/CK5BA	060	0.98	0.99	PF1MNC	060	1.01	1.02									
CK5A/CK5BT	060	0.98	0.99		—	—	—									

- * Detailed cooling capacities are based on indoor and outdoor unit at same elevation per ARI standard 210/240-94. If additional tubing length and/or indoor unit is located above outdoor unit, a slight variation in capacity may occur.
- † Total and sensible capacities are net capacities. Blower motor heat has been subtracted.
- ‡ Sensible capacities shown are based on 80°F (27°C) entering air at the indoor coil. For sensible capacities at other than 80°F (27°C), deduct 835 Btuh (245 kW) per 1000 CFM (480 L/S) of indoor coil air for each degree below 80°F (27°C), or add 835 Btuh (245 kW) per 1000 CFM (480 L/S) of indoor coil air per degree above 80°F (27°C). When the required data falls between the published data, interpolation may be performed.
- ** Unit kW is total of indoor and outdoor unit kilowatts.

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SYSTEM DESIGN

1. Intended for outdoor installation with free air inlet and outlet. Outdoor fan external static pressure available is less than 0.01-in. wc.
2. Minimum outdoor operating air temperature without low-ambient operation accessory is 55°F (12.8°C).
3. Maximum outdoor operating air temperature is 125°F (51.7°C).
4. For reliable operation, unit should be level in all horizontal planes.
5. Maximum elevation of indoor coil above or below base of outdoor unit is: indoor coil above = 60 ft, indoor coil below = 200 ft.
6. For interconnecting refrigerant tube lengths greater than 80 ft or 20 ft vertical differential (250 ft total equivalent length), consult Long-Line Application Guideline available from equipment distributor.
7. Crankcase heater required when interconnecting refrigerant tube length exceeds 80 ft.
8. If any refrigerant tubing is buried, provide a minimum 6 in. vertical rise to the valve connections at the unit. Refrigerant tubing lengths up to 36 in. may be buried without further consideration.
9. Use only copper wire for electric connection at unit. Aluminum and clad aluminum are not acceptable for the type of connector provided.