

# PTAC AIR CONDITIONERS AND HEAT PUMPS

# PRODUCT SPECIFICATIONS

11.7 EER / 3.4 COP

#### **Product Features**

- Quiet operation: STC of 28
- · Assembled in the USA for 30 years
- · Increased dehumidification capacity
- 100% run-tested at our plant in Fayetteville, TN, for leaks
- 7%" unit front depth: one of the shallowest silhouettes in the industry today
- Removable condenser shroud allows easy access to enable regular cleaning of coils
- Easy pull-out filters that are washable and easy to maintain
- Filter drier for sealed system refrigerant
- 7-Button touch pad provides complete control to guests for in-room comfort while maintaining energy efficiency
- Condensate dispersion system removes condensate from indoor cooling operation and evaporates it into the atmosphere through the condenser
- Digismart™ front desk control & energy management software
- Room freeze protection is activated when the unit senses temperatures of 40°F or below
- Versatile style that blends into any room's color scheme and decor
- Easy to service with on-board led diagnostics
- Digismart™ wireless remote thermostat is available
- Remote temperature sensing for guest climate control
- Extended heat pump heating down to as low as 24°F outdoor ambient temperature
- Zero floor clearance allows unit to be installed flush to a finished floor
- 30-second fan-off delay
- Compressor lock-in prevents compressor short-cycling
- Constant fan mode
- · Hidden ventilation control
- High-pressure switch





DIGISMAT CONTROL BOARD









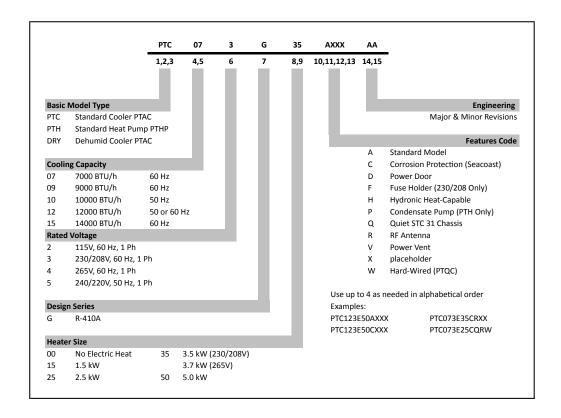






First-Year Warranty: Parts & Labor on entire unit
Second through Fifth Year: Parts & Labor on certain sealed system components
Second through Fifth Year: on certain functional parts only
\* Complete warranty details available at <a href="https://www.amana-ptac.com">www.amana-ptac.com</a>.

### **Nomenclature**















# PRODUCT SPECIFICATIONS: PTC Models — Cooling/Electric Heat



#### 230/208 Volts

MODEL <sup>6, 8, 9</sup>		PTC 073G***XXX	PTC 093G***XXX	PTC 123G***XXX	PTC 153G***XXX
Voltage <sup>3</sup>	230 / 208	230 / 208	230 / 208	230 / 208	
Capacity (BTU/h)		7,700 / 7,700	9,000 / 9,000	11,700 / 11,500	15,000 / 14,700
Amps <sup>10</sup>		3.5 / 3.5	4.1 / 4.1	5.6 / 5.6	7.0 / 7.0
Watts <sup>10</sup>		670/660	805/785	1135/1105	1500/1470
EER		11.5/11.7	11.2/11.5	10.3/10.4	10.0/10.0
UNIT WITHOUT ELECTRIC HEATER					
Min. Circuit Amps <sup>2, 4, 10</sup>		4.2	4.9	6.8	8.5
CENA (Co. al (NA) al Carilly	High	290	290	290	340
CFM (Cool/Wet Coil)	Low	264	264	264	314
CENA/D : C:!!\	High	310	310	310	360
CFM (Dry Coil)		282	282	282	332
Ventilated Air, CFM (Fan Only)*		65*	65*	65*	65*
Dehumidification (Pints/Hr.)		1.7	2.2	3.6	4.4
Net Weight (lbs.)		98	102	102	113
Ship Weight (lbs.)		113	117	119	130

#### **265/277 Volts**

Model <sup>1, 6, 8</sup>		PTC 074G***XXX	PTC 094G***XXX	PTC 124G***XXX	PTC 154G***XXX
Voltage <sup>1, 3</sup>		265	265 265 265		265
Capacity (BTU/h)		7,700	9,000	12,000	14,800
Amps <sup>10</sup>		3.0	3.6	4.8	6.0
Watts <sup>10</sup>		670	795	1,165	1,480
EER		11.5	11.3	10.3	10.0
UNIT WITHOUT ELECTRIC HEATER					
Min. Circuit Amps <sup>2, 4, 10</sup>		3.6	4.4	5.9	7.4
CENA (Cool (Match Coil)	High	290	290	290	340
CFM (Cool/Wet Coil)	Low	264	264	264	314
High		310	310	310	360
CFM (Dry Coil)		282	282	282	332
Ventilated Air, CFM (Fan Only)*		65*	65*	65*	65*
Dehumidification (Pints/Hr.)		1.7	2.2	3.6	4.4
Net Weight (lbs.)		98	102	102	113
Ship Weight (lbs.)		113	117	119	130

<sup>\*</sup> Approximately 95 CFM with optional power vent kit. Actual vent CFM performance will vary due to application and installation conditions. See Notes on following page.

# PRODUCT SPECIFICATIONS: PTC / PTH Models — Electric Heat Performance

(Primary Heating for PTC Models; Auxiliary Heating for PTH Models; See below for Power Cord Configuration)

ELECTRIC	TRIC NO. OF	NOMINAL HEATING (BTU/H)		TOTAL	TOTAL	Min. Circuit	MOP⁴	Power		
VOLTAGE	HEAT (KW)	STAGES	@ 230V	@ 208V	@ 265V	WATTS <sup>6</sup>	AMPS	AMPACITY <sup>2</sup>	(AMPS)	CORD
230/208V	2.5	1	8,500	6,800		2,570 / 2,115	11.2 / 10.1	14.0	15	6-15 P
230/208V	3.5	1	12,000	9,900		3,570 / 2,935	15.5 / 14.1	19.4	20	6-20 P
230/208V	5	1	17,100	14,000		5,070 / 4,160	22.1 / 20.0	27.5	30	6-30 P
265V	2.5	1			8,500	2,570	9.7	12.1	15	7-20 P
265V	3.7	1			12,600	3,770	14.2	17.8	20	7-20 P
265V	5	1			17,100	5,070	19.2	23.9	25	7-30 P

#### NOTES

- 1 All 265-volt models must use an Amana® brand sub-base (PTSB4\*\*E) or an Amana® brand hard-wire kit PTPWHWK4 and disconnect switch PSHW04A.
- <sup>2</sup> Minimum Circuit Ampacity (MCA) ratings conform to the National Electric Code; however, local codes should apply.
- Minimum voltage on 230/208-volt models is 197 volts; maximum is 253 volts. Minimum voltage on 265-volt models is 239 volts; maximum is 292 volts.
- Overcurrent protection for all units without electric heaters is 15 amps. Overcurrent protection on 265-volt models must be cartridge-style time-delay fuses (included and factory-installed on all Amana® brand 265-volt chassis). See heater performance
- <sup>5</sup> Heating capacity and efficiency based on unit operation without condensate pump; unit automatically switches to electric heat at approximately 24°F outdoor ambient.
- <sup>6</sup> Specify two-digit heater kW size to complete model number.
- <sup>7</sup> R-410A refrigerant used in all systems.
- <sup>8</sup> All units meet or exceed ASHRAE 90.1 standards.
- 9 All units less than 250 volts have a Leak Current Detector Interrupter (LCDI) power cord and meet UL 484 standards.
- <sup>10</sup> Refer to electric heat performance data for total MCA and recommended overcurrent protection. Amps and Watts notation refers to compressor only.













# PRODUCT SPECIFICATIONS: PTH MODELS — COOLING/HEAT PUMP/ELECTRIC HEAT



#### 230208 Volts

MODEL <sup>6, 8, 9</sup>		PTH 073E**AXXX	PTH 093E**AXXX	PTH 123E**AXXX	PTH 153E**AXXX	
Voltage <sup>3</sup>	,	230 / 208	230 / 208	230 / 208	230 / 208	
Capacity (BTU/h)		7,600 / 7,500	9,000 / 8,900	11,500 / 11,100	14,000 / 13,900	
Amps <sup>10</sup>		3.5 / 3.5	4.1 / 4.1	5.6 / 5.6	7.0 / 7.0	
Watts <sup>10</sup>		650 / 620	770 / 765	1095 / 1065	1460 / 1465	
EER		11.3 / 11.4	11.1 / 11.1	10.2 / 10.1	9.6 / 9.5	
UNIT WITHOUT ELECTRIC HEATER			,			
Min. Circuit Amps <sup>2, 4, 10</sup>		4.2	5.0	6.8	8.5	
CFN4 (C==  /\A/=+ C=: \	High	290	290	290	340	
CFM (Cool/Wet Coil)	Low	264	264	264	314	
CENA (Day Cail)	High	310	310	310	360	
CFM (Dry Coil)		282	282	282	332	
Ventilated Air, CFM (Fan Only)*		65*	65*	65*	65*	
Dehumidification (Pints/Hr.)		1.7	2.2	3.6	4.4	
Net Weight (lbs.)		108	112	115	126	
Ship Weight (lbs.)		123	127	132	143	

#### 265,277 Volts

MODEL 1, 6, 8		PTH 074E**AXXX	PTH 094E**AXXX	PTH 124E**AXXX	PTH 154E**AXXX
Voltage <sup>1, 3</sup>		265	265	265	265
Capacity (BTU/h)		7,500	9,000	11,500	14,000
Amps <sup>10</sup>		3.0	3.6	4.8	6.0
Watts <sup>10</sup>		635	780	1115	1430
EER		11.6	11.1	10.0	9.7
UNIT WITHOUT ELECTRIC HEATER					
Min. Circuit Amps <sup>2, 4, 10</sup>		3.6	4.4	5.9	7.3
CENA (Co. al (Mara), Co. 11)	High	290	290	290	340
CFM (Cool/Wet Coil)	Low	264	264	264	314
High		310	310	310	360
CFM (Dry Coil)		282	282	282	332
Ventilated Air, CFM (Fan Only)*		65*	65*	65*	65*
Dehumidification (Pints/Hr.)		1.7	2.2	3.6	4.4
Net Weight (lbs.)		108	112	115	125
Ship Weight (lbs.)		123	127	132	142

<sup>\*</sup> Approximately 95 CFM with optional power vent kit. Actual vent CFM performance will vary due to application and installation conditions. See Notes on previous page

# PRODUCT SPECIFICATIONS: PTH Models — Reverse-Cycle Heating Performance



#### 230/208 Volts

HEATING CAPACITY	PTH 073E**AXXX	PTH 093E**AXXX	PTH 123E**AXXX	PTH 153E**AXXX
Voltage <sup>3</sup>	230 / 208	230 / 208	230 / 208	230 / 208
BTU/h⁵	6,800 / 6,800	8,300 / 8,100	10,900 / 10,500	13,500 / 13,300
Amps <sup>10</sup>	3.5 / 3.5	4.1 / 4.1	5.6 / 5.6	7.0 / 7.0
Watts <sup>10</sup>	605 / 605	735 / 720	1040 /1020	1365 / 1345
COP <sup>5</sup>	3.3 / 3.3	3.3 / 3.3	3.1 / 3.1	2.9 / 2.9
CFM (Dry)	310	310	310	360

#### 265/277 Volts

HEATING CAPACITY	PTH 074E**AXXX	PTH 094E**AXXX	PTH 124E**AXXX	PTH 154E**AXXX
Voltage <sup>3</sup>	265	265	265	265
BTU/h⁵	6,800	8,200	11,000	13,500
Amps <sup>10</sup>	3.0	3.6	4.8	6.0
Watts <sup>10</sup>	585	730	1040	1365
COP 5	3.4	3.3	3.1	2.9
CFM (Dry)	310	310	310	360

COP = Coefficiency of Performance; per ARI test procedures, units are rated for capacities and efficiencies.

#### NOTES:

- l All 265-volt models must use an Amana® brand sub-base (PTSB4\*\*E) or an Amana® brand hard-wire kit (PTPWHWK4).
- <sup>2</sup> Minimum Circuit Ampacity (MCA) ratings conform to the National Electric Code; however, local codes should apply.
- Minimum voltage on 230/208-volt models is 197 volts; maximum is 253 volts. Minimum voltage on 265-volt models is 238.5 volts; maximum is 291.5 volts.
- Overcurrent protection for all units without electric heaters is 15 amps. Overcurrent protection on 265-volt models must be cartridge-style time-delay fuses (included and factory-installed on all Amana® brand 265-volt chassis). See heater performance for total MCA.
- <sup>5</sup> Heating capacity and efficiency based on unit operation without condensate pump; unit automatically switches to electric heat at approximately 24°F outdoor ambient.
- <sup>6</sup> Total watts for 12,000 and 15,000 BTU/h models; subtract 70 watts for PT07/09\*E\*\*A\*
- <sup>7</sup> Specify two-digit heater kW size to complete model number.
- Total amps for 12,000 and 15,000 BTU/h models; subtract 0.2 amps for PT07/09\*E\*A\*.
- 9 R-410A refrigerant used in all systems.
- <sup>10</sup> All units meet or exceed ASHRAE 90.1 standards.
- <sup>11</sup> All units less than 250 volts have a Leak Current Detector Interrupter (LCDI) power cord and meet UL 484 standards.
- 12 Refer to electric heat performance data for total MCA and recommended overcurrent protection. Amps and Watts notation refers to compressor only.

# CONTRACTOR'S BID SHEET

Furnish and install air-cooled through-the-wall package terminal air conditioners amd heat pumps (assembled in the USA). Units are rated in accordance with the ARI (Air Conditioning & Refrigeration Institute) Standards 310/380-93, CSA (Canadian Standards Association) EEV certification programs and listed by U. L. (Underwriters Laboratories).

# RATINGS Each unit must meet the following specifications: ARI rating of \_\_\_\_\_BTUH cooling (and \_\_\_\_\_BTUH reverse cycle heating with a COP of \_\_\_\_\_at 47° F O.D.) Electric resistance heat of \_\_\_\_\_BTUH. Total Amp draw must be of \_\_\_\_\_and \_\_\_Watts at \_\_\_\_volts. The unit must remove a minimum of \_\_\_\_\_pints of moisture per hour when operated at rating conditions. The EER must be a minimum of \_\_\_\_\_EER.

#### **Unit Chassis**

Each unit must be slide out design shipped with room cabinet front installed. Unit chassis must have the ability to be installed with 0 clearance from finished floor. An electrical power cord must be included with chassis and installed by the manufacturer to assure proper NEMA 6 or 7 configuration and UL-approved length. Units less than 250 volts must also have a LCDI power cord. Unit must be tested for conformance to ASTME water infiltration specification ASTME 331-86, which ensures no water infiltration when tested at 8" rain per hour at 63 mph wind for 15 minutes.

#### ROOM CABINET

The monochromatic front of the room cabinet must be able to be field-secured to chassis to inhibit tampering. Filter must be accessible without removing room front. Cabinet depth must not exceed 75%" to minimize unit's impact on room space.

#### Colls

Unit's coils must have rifled copper tubing expanded into rippled-edge louvered aluminum fins. Exterior coil must be of a two-row bent coil design with removable shroud top to allow easy-access for cleaning of the exterior coil.

#### HEAT PHMPS

Each unit must include a change-over thermistor that senses an outside ambient switch-over temperature as low as 24°F, lock-open refrigerant reversing valve during heat pump operation, temperature-activated defrost drain and automatic emergency heat operation to override the heat pump's change-over thermostat and bring on electric resistance heaters in the event of a sealed system failure. Unit must not operate compressor and electric heaters simultaneously.

#### COMPRESSOR

The compressor must be hermetically sealed, internally isolated, rotary-type and permanently mounted on rubber isolators. No removal or adjustment of compressor hold-down bolts is to be required during installation.

#### WARRANTY

The warranty is for Full One Year on the entire unit; Full 2nd through 5th Year on the entire sealed refrigerant system components; Limited Second through Fifth Year on functional parts only.

#### Unit Digital Controls

The unit's control must be completely wired and accessible from the top of the chassis. Controls shall be a LED touch-pad design with seven large, easy-to-read and use buttons: Heat – Cool – Off – Fan – Temp+ (plus) – Temp- (minus) and two red seven-segment LED temperature displays. Unit shall have a green status LED to advise owner of operational diagnostic messages. Unit shall have one-button activation via membrane touch-pad. Unit control board shall have an 18-pin low-voltage connector to allow for easy connection to remote wired devices. Unit shall have two serial-port connectors for easy connection to wired or wireless EMS (Energy Management Systems).

Unit must have the ability to easily configure owner-selectable and programmable functions:

- Fan-cycle operation
- · Electronic temperature limiting for cooling
- Electronic temperature limiting for heating
- Enhanced dehumidification cooling operation
- Unoccupied 18-hour temperature set-back
- Un-rented temperature set-back
- · Multiple unit twinning to one wired thermostat
- Load-shedding operation
- Front-desk on-off or temperature set-back

Unit must be able to connect to approved remote devices:

- · Wired thermostat
- Wired door motion sensor
- Wired room motion sensor
- Wired room-to-room transfer fan
- Front Desk Control
- · Future RF wireless communications devices

Unit must be able to acquire and display operational temperature data from up to six installed thermistors to include:

- IAT—Indoor air temperature (black)
- ICT—Indoor coil temperature (red )
- IDT—Indoor discharge temperature (yellow)
- OCT—Outdoor coil temperature (blue) (heat pumps & Wireless cooler models)
- OAT Outdoor Air Temperature (Wireless-ready models only)
- Orange—Miscellaneous thermistor or analog device (optional)

#### Evaporator/Condenser Fans

Direct drive with a permanent, split-capacitor, two-speed indoor motor. Condensate must be directed onto the back and sides of the coil to aid in evaporation and removal.

#### Air Discharge

Must be a sloped surface so that obstructions cannot be placed on the unit. Discharge conditioned air can be directed into the room at an angle of 16 or 56 degrees from the vertical position. The discharge grille must be of polycarbonate material to resist bending, cracking, rusting and corrosion.

New installations typically require a minimum of WS900D wall sleeve and an outdoor grille.

#### WALL SLEEVES (WS900E)

The wall sleeve must be industry-accepted dimensions: 14%" depth x 42" width x 16/ $_{16}$ " height and constructed of G90 HDG galvanized steel with a baked corrosion-inhibiting urethane primer and baked-polyester topcoat enamel. Sleeve must be insulated and shipped with a weather resistant rear closure panel installed.

#### **OUTDOOR GRILLES**

Outdoor grille must be architecturally extruded, louvered aluminum (AGK01\*B), one-piece polymer-blend injection molded louver (PGK01\*B) or standard stamped aluminum (SGK\*\*B). All other grilles must be submitted to the PTAC manufacturer for feasibility, airflow characteristics and compliance with UL regulations, where necessary.

The optional accessories listed below perform specific functions required in some installations.

#### CONDENSATE DRAIN KIT (DK900D)

Attaches to the bottom of the wall sleeve for directionalcontrolled internal or external disposal of condensate, defrost or rain water.

#### SUBBASE KIT (PTSB\*\*\*E)

Necessary for UL listing requirements for 265V units (Hard Wire Kit may be substituted for Subbase kit). Optional for 230/208V units. Must be pre-wired to facilitate field-electrical connections and include an NEMA 6 or 7 configuration electrical receptacle. It must have two leveling screws for sleeve support and accurate unit leveling during installation. Locations for field installation of physical disconnect switches, cartridge-style fuse holders and circuit breakers must be provided. Side-skirts must be provided with subbases. (PTSB000E Non-Electrical Subbase available.)

#### Power Vent & Damper

Must be provided to maximize ventilation air intake to up to approximately 95 CFM. Power vent must be off and damper door closed when unit fan is de-energized.

#### Fuse Holder (included in 265V chassis)

Must be installed either in the unit or the subbase and must match the electrical requirements of the chassis.

#### SECURITY KEY LOCKS (KLO3E)

Must be installed to prevent tampering of the unit controls. Unit room cabinet must also be secured to the chassis with field supplied screws. UL-approved for institutional use only.

#### **DISCONNECT SWITCH**

Power disconnect switch must be installed in subbase for use as a physical disconnect, where required by local codes.

#### DUCT KITS (MDK01E, EDK02B, TDK02B, PTDK01E, DDK01E)

Three kits must be supplied to provide ducted, conditioned air into a second room: a main duct kit, an extension duct kit and a terminal duct kit.

#### HYDRONIC HEAT KIT

Is required for heating functions instead of electric resistance heaters. Unit must retain complete service access with the kit installed. Proper water or steam valves must be used.

#### CONDENSATE REMOVAL PUMP (HEAT PUMPS ONLY)

Must be installed to assist in removing the condensate developed by the heat pump operation and transfer it to the indoor coil to dissipate into the room, adding humidity to the room.

#### CIRCUIT BREAKER KIT

Must be installed in subbase to provide overcurrent protection for proper 230/208V amperage. Can also be used as a physical disconnect where local codes permit for 230/208 voltage.

#### HARD WIRE KIT

Must be used to permanently wire chassis for hard wire purposes. (For 265V units, Hard Wire Kit may be substituted with Subbase Kit.)

#### **THERMOSTATS**

A manufacturer-approved manual, auto changeover or programmable traditionally wired thermostat must be installed to provide full remote operation of the chassis. A Remote Escutcheon Kit must be used to indicate remote operation.