

# PTAC SELECTION GUIDE

***DIRECT***  
**SUPPLY®**

72

# The Direct Supply Difference

## Why choose Direct Supply® for your PTACs?

Choosing the right PTACs for your community can be more complicated than it seems – daily operating expenses and projected equipment life spans need to be considered as well. Direct Supply is here to help you maximize every dollar, offering up-front selection assistance, ongoing maintenance support and more to keep your units running better for the long haul.



### UNMATCHED PRODUCT SELECTION

Complete Offering of  
HVAC Equipment

Top Brands in  
the Industry

Competitive Pricing

### SENIOR LIVING-SPECIFIC EXPERTISE

Expert Selection  
Assistance

Energy Efficiency  
Analysis

PTAC Selection Guide

PTAC Preventive  
Maintenance Guide

### STREAMLINED SERVICES

Delivery & Installation Logistics

Asset Tracking &  
Lifecycle Planning

Troubleshooting & Repair Calls

Maintenance Work Order  
Management

100% Satisfaction Guarantee



## WITH TELS READY, YOUR WORK IS DONE



Thousands of products from Direct Supply are automatically added to your TELS Building Platform for you! Available make, model, serial number, date of purchase and warranty information (if applicable) will automatically be at your fingertips for Asset Management made easier than ever. For more information, call us today at **1-800-634-7328** or visit **TELS.net**.

# PTAC Selection Process

## 1. SELECT THE RIGHT **TYPE**

PTACs are available in both heat pump and resistance heat models. Decide which one makes the most sense for your region of the country.

## 2. SELECT THE RIGHT **SIZE**

Determine the right BTU for the room it will heat and cool. This is normally determined by the square footage of the room.

## 3. SELECT THE RIGHT **VOLTAGE**

This is determined by existing electrical service in the building.

## 4. SELECT THE RIGHT **CUSTOM OPTIONS & FEATURES**

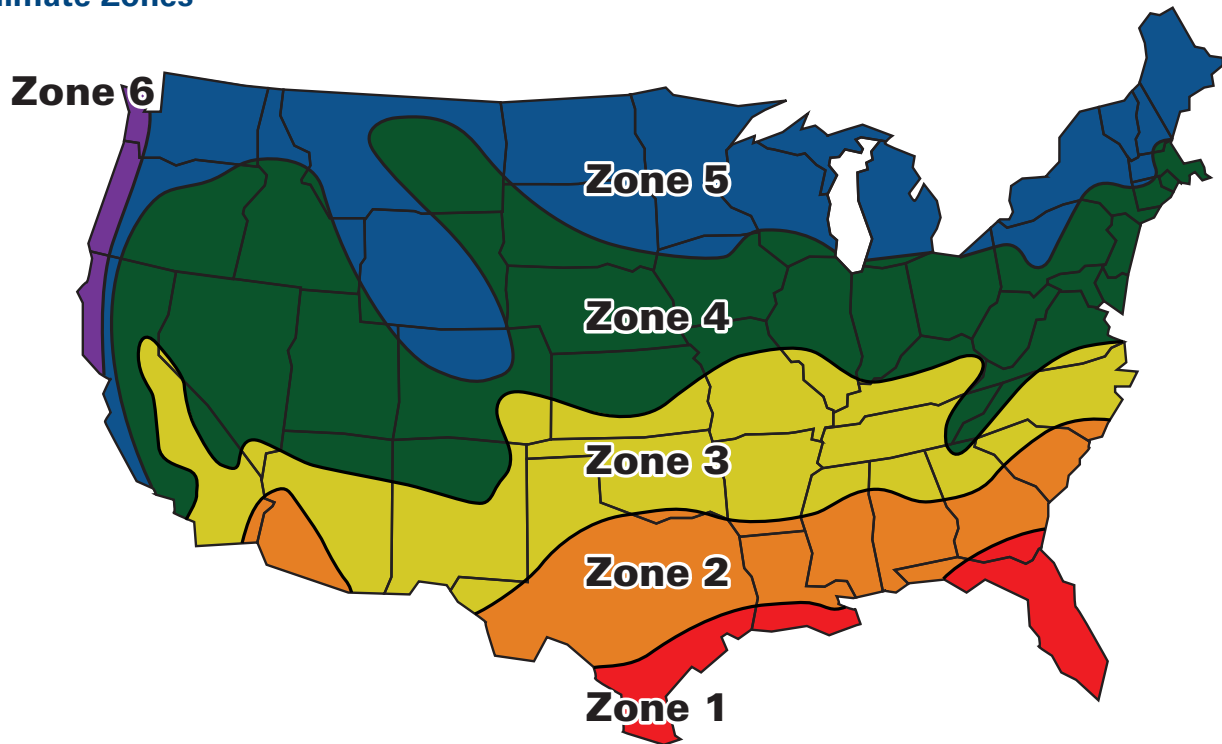
Depending on what climate zone you are in, you may need a special PTAC designed to withstand the weather and environmental conditions in that area.

## 5. SELECT THE RIGHT **BRAND**

Choose the brand that offers the features and benefits that best fit your PTAC needs.

# Select the Right Type

## U.S. Climate Zones



## PTAC Type

Though all PTACs cool a room the same way, there are two distinct ways a PTAC heats a room: via heat pump or via resistance heat. Your heating needs can help determine the unit that's right for you.

**Resistance (Electric) Heat** – Resistance heat units work by passing an electric current through wires to heat them. Resistance heat units require a smaller initial investment but can result in higher energy costs when used for prolonged periods of time.

**Heat Pump** – Heat pump units work in a similar manner to an air conditioner, except by reversing the cooling process to circulate warm air. Heat pumps use less energy than resistance heat models but require a larger initial investment. All packaged terminal heat pumps also incorporate resistance heat technology that can help maintain room temperature when the outside temperature drops below the minimum operating threshold for a heat pump.

**Heat pumps are suggested for cooler climates where the need for heat is greater;** you'll see a return on the initial higher investment in about a year. All climate zones within the U.S. will realize some energy cost savings by choosing a heat pump model, but the payback will vary by location.





## Heat Pump Payback Timeline

Payback timelines are calculated by comparing up-front purchase prices to the expected energy cost savings per unit in the first year of use.

Zone 1	~2 - 3 years
Zone 2	~1 year
Zone 3	< 1 year
Zone 4	< 1 year
Zone 5	< 1 year
Zone 6	< 1 year

# Select the Right Size



## BTU Output

BTU output measures how much space a PTAC can effectively heat and cool. It is important for every PTAC to be properly sized and situated in order to maintain desired temperature and humidity levels. There are a number of factors to consider when determining the right BTU output. These can be difficult to estimate, so Direct Supply recommends contacting an HVAC professional for help evaluating your specific air conditioning needs.

Factors that can affect heating and cooling include:

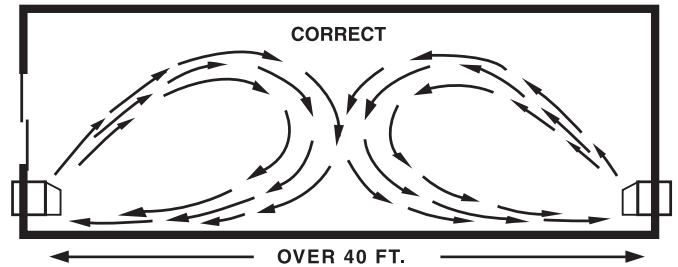
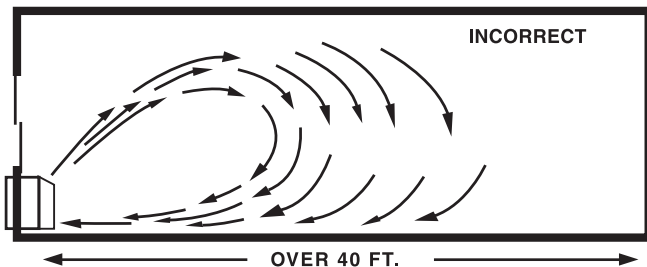
- **Room Size:** Multiply the room's square footage by 30 for a rough estimate of BTU needs.
- **Usage:** How many people typically occupy the room?
- **Room Characteristics:** How high are the ceilings? Is the room well-insulated?
- **Impact of Outside Weather:** How much sunlight does the room receive? Afternoon or morning sunlight? Which way does the room face?

Sometimes you can't find a PTAC with a BTU output that matches your heating and cooling needs. In that case, you need to decide whether to use an undersized or oversized unit for the space.

**Slightly undersized PTAC units** operating continuously provide more comfort and savings in a smaller room than oversized units operating intermittently. In larger rooms, two smaller units can cool the room more efficiently than one large unit. In milder weather, you can save money by running a single unit.

A significantly undersized unit can't cool down the room to the desired temperature nor remove enough moisture from the air, resulting in an uncomfortably warm and possibly humid space.

**Oversized PTAC units** with a cooling capacity greater than required for the room will typically cool down the room too quickly, causing the compressor to cycle on and off. Since dehumidification only takes place when the compressor is operating, this typically results in a cool but humid space.





# Select the Right Voltage



## PLUG STYLES



230/208V  
15 Amp  
tandem



230/208V  
20 Amp  
perpendicular



230/208V  
30 Amp  
large tandem

*For 265V models, call your account manager  
at 1-800-634-7328.*

## Efficiency

PTACs with high energy-efficiency ratings help save energy costs. When measuring energy efficiency for a resistance heat unit, consult the Energy Efficiency Rating (EER). For heat pump units, the Coefficient of Performance (COP) is the standard measure of energy efficiency. A higher number for both EER and COP reflects a higher efficiency and lower energy usage. EERs typically range from 9.2 to 13.2, while COPs typically range from 2.5 to 4.0.





### **Electrical Needs**

PTAC models can have different voltage (230/208V or 265V) and amperage requirements (15, 20 or 30 Amps; see diagram to left). Choose a model designed for the existing electrical service in your building.

### **Fan Motors**

PTACs use either a single-motor fan or a two-motor fan. A single-motor fan uses one motor to pull air from the outside and move the treated air into the room. Single motors have fewer moving parts.

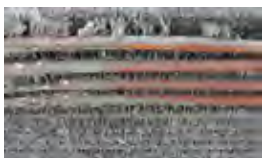
Two-motor fans use separate motors to run intake and exhaust fans and move the air through the room. Additionally, the fan directing air through the room is a cross-flow blower with a cylindrical shape, which causes the air to move and respond with equal power but with less noise than traditional fans.

# Select the Right Custom Options & Features

## Buy Smarter in Different Regions of the Country



**Seacoast Units:** Along coastal regions, PTACs should have corrosion protection to combat the abundance of contaminants found in the air. Adding corrosion protection is normally significantly less expensive than replacing coils or entire units and prevents operation inefficiencies.



*Corroded Coil*



**Dry-Air Units:** Models designed to remove a higher percentage of humidity from a room are ideal for high-humidity areas.



**Internal Condensate Removal Units:** During heat pump operation, the ICR system utilizes a small pump to lift the water from the base pan and pump it into a collector tray positioned above the indoor coil. The water drains from the collector tray and drips onto the warm indoor coil, where it then evaporates into the room's atmosphere. If an excess amount of water is pumped to the indoor side, it is routed back to the outdoor portion of the base pan. The ICR system has proven to be an effective means of minimizing the amount of heat pump condensate dripping from the unit.



## Temperature Limiting

A reliable PTAC does more than create a comfortable community for residents and staff; it's also a critical component for regulatory compliance. Electronic temperature controls allow users to preset cooling and heating limits, saving energy costs and keeping buildings within the temperatures outlined in F-Tag 257.

F-Tag 257 requires all Skilled Nursing communities certified after October 1, 1990 to maintain temperatures between 71° and 81°F. State and local health agencies may have even more stringent requirements.

Although temperature limiting is available on some PTAC models, the feature is not required. Models without this feature are still able to meet F-Tag regulations.



*Temperature control panel*

# Select the Right Brand

## Brand Choices



**GE:** Industry-leading performance in efficiency and durability

- Leaders in quality and durability, and lowest noise levels
- Industry's most efficient units
- Access to anticorrosion and dry-air units
- Assembled in the U.S.
- Nationwide service network
- 1-year parts and labor warranty, 5-year functional parts warranty and AHRI Certified



**Amana:** Leaders in brand recognition and support

- Leaders in reliability
- Best in PTAC management systems with Digismart technology
- Assembled in the U.S.
- Nationwide service network
- 1-year parts and labor warranty, 5-year functional parts warranty and AHRI Certified



**Direct Supply PTAC:** High efficiency, quiet and great warranty

- Great value at an affordable price point
- Large control panel with simple operation
- Fits industry standard 42" x 16" sleeves
- Nationwide service network
- 3-year parts and labor warranty, 5-year functional parts
- AHRI Certified



**Friedrich:** Feature-rich, quiet PTACs

- Seacoast protection (anticorrosion) standard on all models
- Competitive pricing for a quality product
- Multiple product lines available for average and higher-end efficiency and cost
- Nationwide service network
- 2-year parts and labor warranty and AHRI Certified



**Islandaire:** Price competitive and source for custom units

- Affordable, reliable PTACs
- More than 110 custom solutions available
- Nationwide service network
- 1-year parts and labor warranty





Now that you know what to look for in a PTAC, you can use the following comparison charts to quickly identify the right model for your needs. If you have any questions, don't hesitate to call.

**And once you've identified the PTAC you need, please contact us so we can discuss how you can place the right PTAC in your community.** Call us for a quote. Direct Supply makes it easy for you to place your order with delivery and installation services, budget-friendly financing options and a 100% satisfaction guarantee.

# PTAC Comparison Chart

Manufacturer						
	GE	Amana	DS PTAC	Friedrich ZoneAire	Friedrich G Series	Islandaire
Dimensions	16"H x 42"W x 13¾"D	16½"H x 42"W x 14⅞"D	16"H x 42"W x 14"D	16"H x 42"W x 13¾"D	16"H x 42"W x 13¾"D	16"H x 42"W x 13¾"D
BTU Options	7K, 9K, 12K, 15K (some exclusions apply with Friedrich)					
Amps	15, 20, 30	15, 20, 30	20, 30	20, 30	15, 20, 30	15, 20, 30
Voltage	208/230 or 265/277 (some exclusions apply with Friedrich and Direct Supply PTACs)					
"Claim to Fame"	Most Energy Efficient PTACs	Assembled in America	Industry's Best Warranty	Modern Design, Quiet Operation	Modern Design, Quiet Operation	OPP options and anything custom
EER	10.5 - 13.4	9.7 - 12.0	9.5 - 11.9	9.8 - 12.0	9.7 - 13.0	10.0 - 12.0
COP (for Heat Pumps)	3.3 - 3.9	3.0 - 3.5	3.0 - 3.4	3.0 - 3.4	3.1 - 3.6	3.0 - 3.3
Heat Pump Threshold*	Down to 25°	Down to 24°	Down to 40°	Down to 35°	Down to 35°	Down to 35°
Anticorrosion	Optional	Optional	None	Standard	Standard	Optional
Remote Thermostat	Wired/Wireless Available	Wired/Wireless Available	Wired/Wireless Available	Wired/Wireless Available	Wired/Wireless Available	Wired/Wireless Available
Controls	Digital					
Temperature Limiting	Yes	Yes	Yes	Yes	Yes	Yes
Freeze Protection	Standard					
Dehumidification	Standard					
Drain Kit Available	Yes					
Centrally Controlled	Optional	Optional	Optional	Optional	Optional	No

\* Heat Pumps on a PTAC will operate down to a certain temperature before switching over to the less energy efficient resistant heat strip.

# Save Money with Preventive Maintenance



## **Extend the life of your PTAC and maximize the value of your purchase.**

A properly maintained PTAC unit can save on energy costs, runs more quietly and reduces the need for replacement parts and expensive service calls. Direct Supply has access to the best brands in PTAC maintenance products and the resources to help you use them. Call 1-800-634-7328 today to get pricing on these products, or request our free Preventive Maintenance Guide.





*DirectSupply.com*

---

*APTURA / EQUIPMENT & FURNISHINGS / DSSI / TELS*

---