

# FRESHAIRE® AND ZONEAIRE® Packaged Terminal Air Conditioners

Exceptional Line of PTACs



## FRESHAIRE®

The most advanced PTAC ever, with a fully-integrated make-up air system that helps meet ASHRAE 62.1-2013 requirements

## ZONEAIRE® PREMIER

Improved performance and design enhancements combine to deliver our most efficient, reliable, and quietest standard PTAC

## ZONEAIRE® SELECT

A truly exceptional PTAC value line with reliable performance backed by an outstanding warranty

# THE MOST ADVANCED PTAC EVER

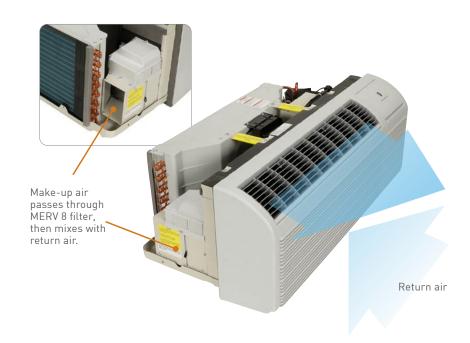
# FreshAire® PTAC delivers the best STC ratings\* in the industry of units with true make-up air capability

FreshAire system helps achieve ASHRAE 62.1-2013 requirements, and brings up to 52 CFM of conditioned, MERV 8 filtered, outside air into the space.

Patented technology uses the inverter compressor and main cooling system to optimize temperature and humidity level of incoming air.

By introducing make-up air directly into the guestroom, rooftop central fresh air systems can be considerably downsized to service only the common areas of the property.

This greatly reduces the cost and complexity of hotel design and construction. Unlike other PTACs, the FreshAire PTAC utilizes the main evaporator coil and Merv 8 filters to truly condition and filter the outside ventilation air.



\*With makeup air active (door open)

# The widest cooling & heating range in the industry with only two models

Variable speed technology gives you the flexibility of a full line of PTACs with only two models, and offers the highest available capacity of any 42 x 16 PTAC on the market at over 17000 Btus.

The Friedrich Inverter variable speed compressor matches the unit output to the actual demand of the space for increased comfort and lower energy consumption.

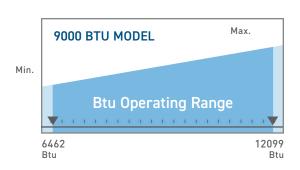
## 9000 BTU MODEL

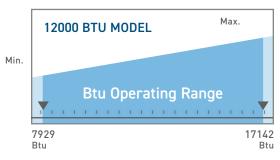
Can operate as low as 6462 Btus and as high as 12099 Btus.

## **12000 BTU MODEL**

Can operate as low as 7929 Btus and as high as 17142 Btus.

That's like getting multiple PTACs in one.





# Innovative design and quality components deliver performance unmatched by any other PTAC.

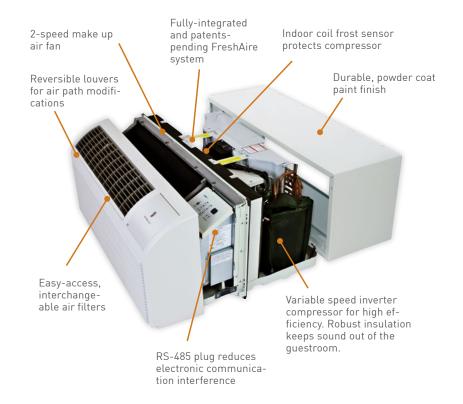


## The FreshAire® PTAC inverter compressor provides superior energy efficiency

FreshAire PTAC components can be easily accessed by your maintenance team so units can be removed, serviced and placed back in service faster.

Commercial grade components provide reliable performance in even the most extreme climates.





IMPORTANT NOTE: Sleeves are sold and shipped separately to accommodate new construction and replacement requirements. Fits other PTAC sleeves without the added expense of a baffle kit.

## FRESHAIRE PTAC EXTENDED CAPACITY RANGE

## 230/208V Inverter

## **COOLING**

PVH09K

STANDARD RATING 9600/9400 Btu 6,462 - 12099 Btu EXTENDED RATING

PVH12K

STANDARD RATING 12000/11800 Btu **EXTENDED RATING** 7,929 - 17142 Btu

Up to 12.9 EER

Up to 15.0 Equivalent SEER

## **HEAT PUMP**

PVH09K

STANDARD RATING 8200/8500 Btu 5606 - 11745 Btu **EXTENDED RATING** 

PVH12K

STANDARD RATING 11600/11800 Btu EXTENDED RATING 6995 - 16187 Btu

Up to 11.57 Application HSPF

## 265V Inverter

## **COOLING**

PVH09R STANDARD RATING 9600 Btu

**EXTENDED RATING** 6,462 - 12099 Btu

PVH12R

STANDARD RATING 12000 Btu **EXTENDED RATING** 7,929 - 17142 Btu

Up to 12.0 EER

## **HEAT PUMP**

PVH09R

STANDARD RATING 8500 Btu EXTENDED RATING 5606 - 11745 Btu

PVH12R

STANDARD RATING 11800 Btu **EXTENDED RATING** 6995 - 16187 Btu

Up to 3.57 COP

## **BACK UP ELECTRIC HEAT**

2.5 kw, 3.5 kw and 5.0 kw\* heater options

\*5.0 kw heater cannot be used on PV09K/PV09R







FreshAire units with inverter compressors deliver equivalent SEERs up to 15.0; application HSPFs up to 11.57, and offer many advantages over traditional PTACs.

- · Improved dehumidification
- · Quieter start-up and operation
- · Better efficiency during part load hours of cooling & heating
- · Reduced temperature swings improve guest comfort



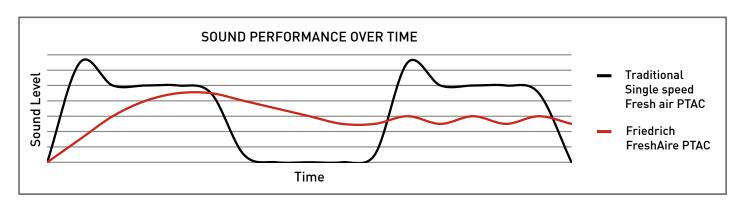


TRADITIONAL PTAC	FRESHAIRE INVERTER PTAC
At initial start up, a fixed capacity system slowly reaches the set temperature.	FASTER TO SETPOINT  At initial start up, utilizes variable capacity to quickly reach the set temperature.
Complete shutdown once set temperature is achieved.	MAXIMUM ENERGY SAVINGS Reduces capacity as set temperature is achieved.
Temperature within the space rises until 2nd system start up.  System works at full capacity to again reach the set temperature.	MAINTAINS PRECISE COMFORT  Variable capacity maintains set temperature keeping space comfortable with reduced energy consumption.
System cycles on and off continually to maintain the set temperature.	Variable capacity operation provides improved humidity control in the guestroom.

# Soft-start technology provides the smoothest PTAC sound available

The variable-speed operation of the FreshAire PTAC allows the unit to work at the optimal speed to match the true load of the room. This not only provides the best energy consumption curve it also adds to guest comfort by eliminating the harsh start-ups associated with single speed compressors.

THE CURVES BELOW ILLUSTRATE THE DIFFERENT SOUND CHARACTERISTICS OF A SINGLE-SPEED PTAC VERSUS A FRESHAIRE MODEL PTAC.





FreshAire® PTAC— was honored by Engineering Systems magazine as Commercial Comfort Product of the Year for IAQ/Ventilation. The judges recognized that by introducing make-up air directly into the guestroom, rooftop dedicated outdoor air systems (DOAS) can be considerably downsized to service only the common areas of the property, greatly reducing the cost and complexity of hotel construction.

## FreshAire System

Dedicated 2-speed fan delivers up to 52 CFM of outside air into the

Merv 8 filter is washable and replaceable.

Does not rely on separate refrigeration system like competitor's

## **Durable Construction**

Aluminum endplates reduce outdoor coil corrosion.

Galvanized zinc coated steel wall sleeve and steel base pan undergo an 11-step preparation process, are powder coated with a polyester finish and cured in an oven for exceptional durability.

RS-485 communication plug, enables a better balanced communication signal which allows the FreshAire PTAC to communicate fully with the VRPXEMRT2 12V wired controller, and VRPXEMWRT2 12V wireless controller allowing full variable control of the inverter compressor and brings access to our feature rich energy management suite of options including room occupancy.

Factory run-tested units reduce problems in the field.

Internal diagnostic program can alert maintenance to component failures or operating problems. Fourteen numeric service error codes stored in memory facilitate rapid unit diagnostics.

Easy access filters simplify maintenance and extend the life of the product.

Room freeze protection initiates heat if temperature falls to 50°F in an unoccupied room

Random compressor restart protects electrical systems from overload when power is restored.

Tamper-resistant, anodized stamped aluminum grille withstands chalking and oxidation.

Break proof control door design maintains the integrity of the unit.

**Indoor coil frost sensor** protects the compressor to lengthen the life of the unit

DiamonBlue Advanced Corrosion Protection® comes standard on all PTACs for long life in harsh coastal environments. See note on the next page regarding coastal installation of FreshAire PTACs in coastal regions.

## **Energy Efficient & Energy Smart**

Variable speed Inverter compressor delivers EERs up to 12.9 at part load conditions (9000 Btu model operating at 6462 Btu).

Exceptional FriedrichLink® energy management thermostats available (wired & wireless) with integrated occupancy sensor, five distinct energy presets and comprehensive remote management capability.\*

Energy efficient heat pump models available in our complete line.

Electronic defrost control ensures more run time in efficient heat pump mode.

Electronic temperature limiting to adjust low/high temperature range limits for reduced energy usage.

Slinger ring technology in condensate removal system cools the coil and increases efficiency.

Central desk control ready to allow hotel owners to control units from a central location.

## FreshAire® IAQ Ready

A full complement of Indoor Air Quality Products has been certified through installation and testing to ensure exceptional air quality is achieved when FreshAir IAQ accessories are added.

## Comfort, Health & IAQ

Dehumidification removes moisture in cool mode to improve comfort and reduce the chance of mold and mildew growth.

Integrated Fresh air manifold effectively conditions outside air and meets ASHRAE 62.1 standard for IAQ

Intuitive unit controls are user friendly with easy-to-read LED display that can show either set-point or actual room temperature as selected by owner.

Standard power cord installed on each unit (7-12k-3.5KW), (15K-5.0

Air filters are easy to access and washable.

Instant Heat heat pump mode quickly heats a room to the desired temperature for increased comfort.

Automatic periodic sampling of room temperature to ensure desired conditions are maintained.

Reversible indoor air louvers to easily change direction of airflow.

## **Sound Reduction Features**

Two permanently lubricated fan motors for added durability and reduced sound levels indoors.

Quiet, efficient inverter compressor mounted with vibration isolators to keep the compressor running smoothly and quietly.

High-density insulation and steel inner wall block outdoor noise

Tangential blower wheel creates a wide path air flow that reaches the furthest corner of the guest room more quietly than conventional fans.

## Ease of Maintenance & Installation

Modular product design ensures easy access to key components for cleaning and repairs, including washable, lift-out air filters.

Surehold Front Cover System® securely attaches the front each

May be installed low on the floor.

## Warranty and Service

2 year full warranty on parts and labor and 5 year limited warranty. Nationwide service network and U.S.-based Friedrich expert technical team ensures you get fast, knowledgeable service.





See warranty documentation for full details

<sup>\*</sup> Energy management capability requires purchase of additional hardware and activation fee.

## **PVH SERIES COOLING WITH HEAT PUMPS**

Model		PVH09K	PVH12K	PVH09R	PVH12R
UPC		724587439212	724587439236	724587439229	724587439243
PERFORMANCE DATA:			<u>'</u>		
Cooling Capacity	Btu	9600/9400	12000/11800	9600	12000
Cooling Capacity Min./Max	Btu	6462-12099	7929-17142	6462-12099	7929-17142
Cooling Watts		790/775	1040/1025	800	1040
Energy Efficiency Ratio	EER	12.1/12.1	11.5/11.5	12.0	11.5
Reverse Heating Capacity	Btu	8200/8500	11600/11800	8500	11800
Reverse Heating Capacity Min./Max.	Btu	5606-11475	6995-16187	5606-11475	6995-16187
Heating Watts		710/685	970/950	710	970
COP		3.51/3.51	3.57/3.58	3.51	3.57
Moisture Removal	Pts./Hr.	1.4	1.9	1.23	2.43
Sensible Heat Ratio		80%	78%	82.7%	73.7%
ELECTRICAL DATA:					
Voltage (1 PHASE, 60 Hz)		230/208	230/208	265	265
Volt Range		253-187	253-187	292-239	292-239
Current	Amps	4.4/4.5	4.5/5.0	3.8	4.7
Reverse Heat	Amps	4.0/4.1	4.6/4.9	3.6	4.3
Power Factor		0.80	0.96	0.82	0.90
Compressor LRA		N/A	N/A	N/A	N/A
Compressor RLA		3.2	4.1	4.2	6.2
Outdoor Fan Motor	HP	1/14	1/12	1/14	1/12
AIRFLOW DATA:					
Indoor CFM, HIGH		400	470	400	470
Indoor CFM, LOW		250	360	290	360
Make-up Air CFM@0.05" wc		52	52	52	52
PHYSICAL DATA:					
Sleeve Dimensions H x W x D			16" x 42" x 13 3/	'4" (all models)	
Dimensions with front H x W x D			16" x 42" x 21'	' (all models)	
Cut Out Dimensions H x W			16 1/4"x 42 1/4	" (all models)	
Net Weight	Lbs.	115	120	115	120
Shipping Weight	Lbs.	137	142	137	142
R-410A Charge	Oz.	30.34	32.80	32.1	32.8

			_	
		230/208V ELECTRIC HEATER RATING		
		(CONFIGURATION BASED ON		
		POWER CORD)		
POWER CORD #	VOLTAGE	BRANCH CKT AMPS	MCA	WATTS
PXPCFA23015A	230/208	15	13.9	2500
PXPCFA23020A	230/208	20	19.9	3600
PXPCFA23030A	230/208	30	27.5	5000
PXPCFA26515A	265V	15	12.0	2500
PXPCFA26515A <sup>1</sup>	265V	15	7.3	1500
PXPCFA26520	265V	20	16.8	3500
PXPCFA26530	265V	25	23.8	5000

## RECEPTACLES AND FUSE TYPES

Voltage		230V			265V			
Amps	15	20	30	15	15	20	25	
Heater Size	2.5 kW	3.5 kW	5.0 kW	1.5 kW	2.5 kW	3.5 kW	5.0 kW	
Receptacles	•	•						
NEMA# Receptacle	6-15R	6-20R	6-30R	7-15R	7-15R	7-20R	7-30R	
NEMA# Plug	6-15P	6-20P	6-30P	7-15P	7-15P	7-20P	7-30P	

PXPCFA23020A power cord comes standard on FreshAire® PTAC

Warning: Coastal Region Installations.

Friedrich Air Conditioning recommends that owners take necessary precautions to protect the interior space, furnishings, and hardware from corrosion when installing make-up air products in coastal applications. Our FreshAire PTAC delivers up to 52 CFM of direct outside make-up air into the space. If installed within 2 miles of a body of salt water, due to the high salt content of coastal air and the high latent load of the make-up air, premature corrosion will occur naturally on non-protected items. Friedrich Air Conditioning is not responsible for premature corrosion resulting from the use of make-up air products.

Due to continuing research in new energy-saving technology, specifications are subject to change without notice. Warranty limited to installations in the United States, Puerto Rico, Mexico and Canada only. See warranty documentation for full details.

FreshAire PTAC may be covered under one or more of the following patents: 10,408,504 and 10,436,457. Additional patents pending.









<sup>&</sup>lt;sup>1</sup> Data for Model PVH09R

# THE QUIETEST\* PTAC YOU CAN BUY

Improved performance and design enhancements combine to deliver our most efficient, reliable, and quietest standard PTAC





## Advanced design for greater energy efficiency

- EERs up to 13.0 reduces operating costs versus lower efficiency models
- Curved coil design of the Premier Series maximizes the internal surface area to deliver higher efficiencies

## QuietMaster® technology

- Precision engineering delivers maximum airflow and air dispersion at lowest sound levels
- · Quietest standard PTAC available
- Quiet rotary compressor mounted on sound isolation grommets

## Engineered for maximum guest comfort

- Tangential fan provides quiet, yet powerful airflow that quickly reaches all corners of the room
- Two motor design for quieter indoor sound levels
- Dense insulation on the inner walls reduce sound transfer into the room
- Constant Fan mode produces a steady stream of white noise in both cooling and heating modes that masks sound level changes when the compressor cycles on and off, and also masks outdoor noise.

## Dependable performance begins with the highest quality materials and components

- Stainless steel endplates on the coils for better corrosion resistance
- Galvanized, zinc-coated steel wall sleeves brought together with durable construction and rigorous testing





See warranty documentation for full details

<sup>\*</sup> Independent 3rd party indoor testing against leading competitive brands.

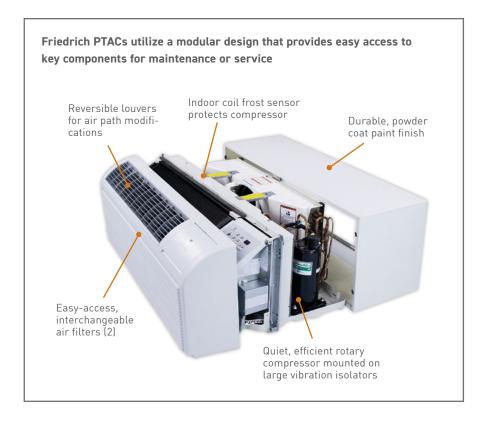
# Designed to deliver quiet, energy-efficient operation and dependable performance backed by an exceptional warranty

## ZoneAire Premier features advanced coil design to deliver exceptional energy efficiency

The curved coil design of the Premier Series maximizes the internal surface area to deliver higher efficiencies

Key components can be easily accessed by your maintenance team so units can be removed, serviced and placed back in service faster.







Easy to read and use digital



Large tangential fan provides smooth, powerful airflow

## **CAPACITY RANGE**

**Electric Heat** Heat Pump

**COOLING** 

**COOLING** 7000-15000 Btu 7000-15000 Btu EERs up to 13.0 EERs up to 13.0

**ELECTRIC HEAT** 

8300-17000 Btu EERs up to 13.0 **REVERSE HEATING** 

6000-13300 Btu Up to 3.6 COP

**AUXILIARY ELECTRIC HEAT** 

8300-17000 Btu

Receptacles and Fuse Types									
Voltage		230V			265V				
Amps	15	20	30	15	20	30			
Heater Size	2.5 kW	3.5 kW	5.0 kW	2.5 kW	3.5 kW	5.0 kW			
Receptacles	•								
NEMA# Receptacle	6-15R	6-20R	6-30R	7-15R	7-20R	7-30R			
NEMA# Plug	6-15P	6-20P	6-30P	7-15P	7-20P	7-30P			

## **70NFAIRF® PREMIFR FFATURES**

## **Durable & Reliable Construction**

Stainless steel endplates reduce outdoor coil corrosion.

Galvanized zinc coated steel wall sleeve and steel base pan undergo an 11-step preparation process, are powder coated with a polyester finish and cured in an oven for exceptional durability.

Additional heating element bottom plate above an improved heat shield provides extra thermal protection.

Additional thermistor on the blower scroll outlet regulates internal temperature.

Factory run-tested units reduce problems in the field.

Internal diagnostic program can alert maintenance to component failures or operating problems. Fourteen numeric service error codes stored in memory facilitate rapid unit diagnostics.

Easy access filters simplify maintenance and extend the life of the product.

Room freeze protection initiates heat if temperature falls to 40°F in an unoccupied room.

Random compressor restart protects electrical systems from overload when power is restored.

Tamper-resistant, anodized stamped aluminum grille withstands chalking and oxidation.

Break-proof control door design maintains the integrity of the unit.

Indoor coil frost sensor protects the compressor to lengthen the life of the unit.

Diamonblue Advanced Corrosion Protection® protects the outdoor coil from harsh environments.

## **Warranty and Support**

Industry leading warranty features 2-year full warranty on parts and labor and 5-year limited warranty.

Nationwide service network and U.S. based Friedrich expert technical team ensures you get fast, knowledgeable service.

## **Energy Efficient & Energy Smart**

Super-efficient refrigeration design with EERs up to 13.0 and COP up to 3.6.

Exceptional FriedrichLink® energy management thermostats available (wired & wireless) with integrated occupancy sensor, five distinct energy presets and comprehensive remote management capability.\*

Advanced coil design adds more surface area leading to higher efficiencies.

Thicker steel inner-wall and foam construction decreases thermal transfer and energy loss.

Energy efficient heat pump models available in our complete line.

Electronic defrost control ensures more run time in efficient heat pump mode.

Electronic temperature limiting to adjust low/high temperature range limits for reduced energy usage.

Slinger ring technology in condensate removal system cools the coil and increases efficiency.

**Desk control ready** to allow hotel owners to control units from a central location.

## Sound Reduction Technology

Two permanently lubricated fan motors for added durability and reduced sound levels indoors.

Quiet, efficient rotary compressor mounted with vibration isolators to keep the compressor running smoothly and quietly.

High-density insulation and steel inner wall block outdoor noise.

Tangential blower wheel creates a wide path air flow that reaches the furthest corner of the guest room more quietly than conventional fans.

## FreshAire® IAQ Ready

A full complement of Indoor Air Quality Products has been certified through installation and testing to ensure exceptional air quality is achieved when FreshAir IAQ accessories are added

**Dehumidification** removes up to 3.1 pints/hour of moisture in cool mode to improve comfort and reduce the chance of mold and mildew growth.

Constant Fan mode provides continuous fan operation in cooling or heating modes to create a steady stream of white noise that masks sound level changes when the compressor cycles on/off.

Fresh air damper brings in fresh outside air when desired.

Intuitive unit controls are user friendly with easy-to-read LED display that can show either set-point or actual room temperature as selected by owner.

Air filters are easy to access and washable.

Instant Heat on heat pump models quickly heats a room to the desired temperature for increased comfort.

**Even-heat monitoring** checks room temperature and automatically adds heat boost if necessary.

Automatic periodic sampling of room temperature to ensure desired conditions are maintained.

Reversible indoor air louvers to easily change direction of airflow.

## Ease of Maintenance & Installation

Modular product design ensures easy access to key components for cleaning and repairs; including washable, lift-out air

Remote thermostat pop-out wiring module allows easier wiring and unit change out without rewiring thermostat.

Standard power cord installed on each unit (7-12k-3.5KW), (15K-5.0 KW)

Compact front is designed to preserve indoor floor space with a depth of 7% inches.

Surehold Front Cover System® securely attaches the front each

Inner wall service plate provides service access to tangential blower bearing without having to open up the entire inner wall.

Unit may be installed flush with the floor.



<sup>\*</sup> Energy management capability requires purchase of additional hardware and activation fee.

# **ZONEAIRE® PREMIER** | SPECIFICATIONS

## PTAC Electric Heat models

## Models ending in 'K' are 230/208V, models ending in 'R' are 265V

	PDE07K	PDE07R	PDE09K	PDE09R	PDE12K	PDE12R	PDE15K	PDE15R
PERFORMANCE DATA:	<u>'</u>		'					
Cooling Btu	7200/7000	7200	9400/9200	9400	11800/11600	11800	14500/14200	14500
Cooling Watts	550/535	550	775/760	775	1015/1000	1015	1390/1365	1390
Energy Efficiency Ratio, EER	13.0/13.0	13.0	12.1/12.1	12.1	11.6/11.6	11.6	10.4/10.4	10.4
Moisture Removal (pints/hr.)	1.7	1.7	2.1	2.1	2.7	2.7	3.1	3.1
Sensible Heat Ratio	0.86	0.86	0.85	0.85	0.75	0.75	0.67	0.67
ELECTRICAL DATA:								
Voltage (1 PHASE, 60 Hz)	230/208	265	230/208	265	230/208	265	230/208	265
Volt Range	253-187	292-239	253-187	292-239	253-187	292-239	253-187	292-239
Current (Amps)	2.7/2.9	2.4	3.7/3.9	3.3	4.9/5.1	4.2	6.2/6.7	5.4
Power factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Compressor LRA	13.0	12.5	19.5	13.5	21.5	19.0	28.9	21.6
Compressor RLA	2.5	2.2	3.5	3.0	4.7	3.9	5.9	5.05
Outdoor Fan Motor, HP	0.080	0.080	0.080	0.080	0.086	0.086	0.086	0.086
AIRFLOW DATA:								
Indoor CFM, HIGH	345/315	345	355/325	355	400/390	400	400/390	400
Indoor CFM, LOW	270/255	270	300/275	300	325/310	325	325/310	325
Vent CFM	75	75	75	75	75	75	75	75
PHYSICAL DATA:								
Sleeve Dimensions (H x W x D)				16" x 42" x 13 3	/4" (all models)			
Dimensions with Front (H x W x D)				16"x 42"x 21 1/	'2" (all models)			
Cut Out Dimensions (H x W x D)		16 1/4" x 42 1/4" (all models)						
Net Weight (lbs.)	106	107	115	115	119	118	121	121
Shipping Weight (lbs.)	126	127	135	135	139	138	140	140
R-410A CHARGE (oz.)	23	23	24	24	36	36	36	36
Dimensions with Packaging (inches)				17 7/8" x 45" x 25	1/4" (all models)			

## PTAC Heat Pump models

#### Models ending in 'K' are 230/208V, models ending in 'R' are 265V

	PDH07K	PDH07R	PDH09K	PDH09R	PDH12K	PDH12R	PDH15K	PDH15R
PERFORMANCE DATA:								
Cooling Btu	7200/7000	7200	9400/9200	9400	11800/11600	11800	14500/14200	14500
Cooling Watts	550/535	550	775/760	775	1015/1000	1015	1390/1365	1390
Energy Efficient Ratio, EER	13.0/13.0	13.0	12.1/12.1	12.1	11.6/11.6	11.6	10.4/10.4	10.4
Reverse Heating Btu	6000/5800	6000	8300/8100	8300	10600/10400	10600	13300/13000	13300
Heating Watts	485/470	485	695/675	695	910/895	910	1255/1225	1255
COP	3.6/3.6	3.6	3.5/3.5	3.5	3.4/3.4	3.4	3.1/3.1	3.1
Moisture Removal (pints/hr.)	1.7	1.7	2.1	2.1	2.7	2.7	3.1	3.1
SENSIBLE HEAT RATIO	0.86	0.86	0.85	0.85	0.75	0.75	0.67	0.67
ELECTRICAL DATA:								
Voltage(1 PHASE, 60 Hz)	230/208	265	230/208	265	230/208	265	230/208	265
Volt Range	253-187	292-239	253-187	292-239	253-187	292-239	253-187	292-239
Current (Amps)	2.7/2.9	2.4	3.7/3.9	3.3	4.9/5.1	4.2	6.2/6.7	5.4
Reverse Heat. Amps	2.4/2.6	2.2	3.4/3.2	3.1	4.2/4.7	3.7	6.2/6.7	5.0
Power Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Compressor LRA	13.0	12.5	19.5	13.5	21.5	19.0	28.9	21.6
Compressor RLA	2.5	2.2	3.5	3.0	4.7	3.9	5.9	5.05
Outdoor Fan Motor, HP	0.080	0.080	0.080	0.080	0.086	0.086	0.086	0.086
AIRFLOW DATA:								
Indoor CFM, HIGH	345/315	345	355/325	355	400/390	400	400/390	400
Indoor CFM, LOW	270/255	270	300/275	300	325/310	325	325/310	325
VENT CFM	75	75	75	75	75	75	75	75
PHYSICAL DATA:								
Sleeve Dimensions (H x W x D)				16" x 42" x 13 3	/4" (all models)			
Dimensions with Front (H x W x D)				16"x 42"x 21 1/	'2" (all models)			
Cut Out Dimensions (H x W x D)				16 1/4"x 42 1/4	4" (all models)			
Net Weight (lbs.)	113	112	119	119	122	119	124	122
Shipping Weight (lbs.)	133	132	139	139	141	139	144	144
R-410A CHARGE (oz.)	34	34	34	34	36	36	39	39
Dimensions with Packaging (inches)				17 7/8" x 45" x 25	1/4" (all models)			

Due to continuing research in new energy-saving technology, specifications are subject to change without notice.

Warranty limited to installations in the United States, Puerto Rico, Mexico and Canada only. See warranty documentation for full details.





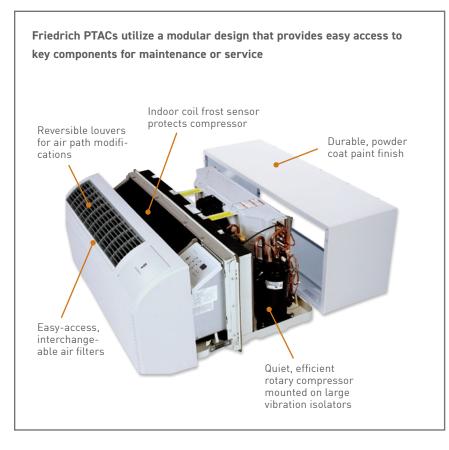


# **EXCELLENT EFFICIENCY & OUTSTANDING QUALITY**

A truly exceptional PTAC value line with reliable performance backed by an outstanding warranty







## IMPORTANT NOTE:

Sleeves are sold and shipped separately to accommodate new construction and replacement requirements.

Fits standard PTAC sleeves without the added expense of a baffle kit.

## **Durable Construction**

Superior materials and design reduce sound levels and improve overall guest satisfaction

Aluminum endplates reduce corrosion of the outdoor coil.

Galvanized zinc coated steel wall sleeve and steel base pan undergo an 11-step preparation process, are powder coated with a polyester finish, and are oven-cured at high temperature for exceptional durability.

Factory run-tested units reduce problems in the field

Internal diagnostic program can alert maintenance to component failures or operating

Easy access filters simplify maintenance and extend the life of the product.

Room freeze protection initiates heat if the temperature falls to 50°F inside an unoccupied quest room.

Random compressor restart protects electrical systems from overload when power is restored.

Tamper-resistant, anodized stamped aluminum grille withstands chalking and oxidation.

Break proof control door design maintains the integrity of the unit.

Indoor coil frost sensor protects the compressor to lengthen the life of the unit.

DiamonBlue Advanced Corrosion Protection® comes standard on all PTACs for long life in harsh coastal environments.

## **ZONEAIRE® SELECT FEATURES**

## **Energy Efficient & Energy Smart**

Super-efficient refrigeration design with EERs up to 12.0 and COP up to 3.55.

Exceptional FriedrichLink® energy management thermostats available (wired & wireless) with integrated occupancy sensor, five distinct energy presets and comprehensive remote management capability.\*

Energy efficient heat pump models available in our complete line.

Electronic defrost control ensures more run time in efficient heat pump mode.

Electronic temperature limiting to adjust low/ high temperature range limits for reduced energy usage.

Slinger ring technology in condensate removal system cools the coil and increases efficiency.

Central desk control ready to allow hotel owners to control units from a central location.

## FreshAire® IAQ Ready

A full complement of Indoor Air Quality Products has been certified through installation and testing to ensure exceptional air quality is achieved when FreshAir IAQ accessories are added

Dehumidification removes up to 3.0 pints/hour of moisture in cool mode to improve comfort and reduce the chance of mold and mildew growth.

Fresh air damper brings in fresh outside air when desired.

Intuitive unit controls are user friendly with easy-to-read LED display that can show either set-point or actual room temperature as selected by owner.

Air filters are easy to access and washable.

Instant Heat heat pump mode quickly heats a room to the desired temperature for increased comfort

Automatic periodic sampling of room temperature every nine minutes to ensure desired conditions are maintained.

Reversible indoor air louvers to easily change direction of airflow.

## Ease of Maintenance & Installation

Modular product design ensures easy access to key components for cleaning and repairs, including washable, lift-out air filters.

Remote thermostat pop-out wiring module allows easier wiring and unit change out without rewiring thermostat.

Surehold Front Cover System® securely attaches the front each time..

May be installed flush with the floor.

## Sound Reduction Features

Two permanently lubricated fan motors for added durability and reduced sound levels indoors.

Quiet, efficient rotary compressor mounted with vibration isolators to keep the compressor running smoothly and quietly.

High-density insulation and steel inner wall block outdoor noise

Tangential blower wheel creates a wide path air flow that reaches the furthest corner of the guest room more quietly than conventional fans.

## Warranty and Service

2 year full warranty on parts and labor and 5 year limited warranty.

Nationwide service network and U.S.-based Friedrich expert technical team ensures you get fast, knowledgeable service.





See warranty documentation for full details.

## CAPACITY RANGE

**Electric Heat** 

COOLING

6800-14500 Btu Up to 12.0 EER

## Heat Pump

## **COOLING**

6800-14500 Btu Up to 12.0 EER

#### **REVERSE HEAT**

6300-13600 Btu Up to 3.55 COP



tangential fan provides optimum airflow



Diamonblue Advanced Corrosion Protection® on indoor and outdoor coils for added protection against rust in coastal areas



<sup>\*</sup> Energy management capability requires purchase of additional hardware and activation fee.

Receptacles and Fuse Types										
Voltage	23	0V	265V							
Amps	20	30	20							
Heater Size	3.6 kW	5.0 kW	3.6 kW							
Receptacles										
NEMA# Receptacle	6-20R	6-30R	7-20R							
NEMA# Plug	6-20P	6-30P	7-20P							

# **ZONEAIRE® SELECT** | SPECIFICATIONS

## PZE Series with Electric Heat

Model	PZE07K3SB	PZE09K3SB	PZE09R3SB	PZE12K3SB	PZE12R3SB	PZE15K5SB	
PERFORMANCE DATA:							
Cooling Btu	7200/6800	9600/9400	9200	12000/11800	12000	14500/14300	
Cooling Watts	600/565	815/800	800	1050/1035	1130	1420/1400	
Energy Efficient Ratio, EER	12.0	11.8/11.8	11.5	11.4/11.4	10.6	10.2/10.2	
Heater Size (kW)	3.6	3.6	3.6	3.6	3.6	5.0	
Moisture Removal (pints/hr.)	0.7	1.2	1.6	2.1	3.2	3.0	
Sensible Heat Ratio	0.87	0.82	0.82	0.77	0.72	0.72	
ELECTRICAL DATA:							
Voltage(1 PHASE, 60 Hz)	230/208	230/208	265	230/208	265	230/208	
Volt Range	253-187	253-187	292-239	253-187	292-239	253-187	
Current (Amps)	2.6/2.7	3.5/3.8	4.2	4.5/5.0	5.92	6.2/6.7	
Power Factor	0.99	0.99	0.99	0.96	0.99	0.99	
Compressor LRA	13.0	20.0	18.2	28.5	25.9	34.5	
Compressor RLA	2.5	3.3	3.0	5.3	4.3	6.4	
Outdoor Fan Motor, HP	0.07	0.07	0.1	0.07	0.1	0.09	
AIRFLOW DATA:							
Indoor CFM, HIGH	335	400	400	470	470	470	
Indoor CFM, LOW	250	250	290	360	360	360	
Vent CFM	75	75	75	75	75	75	
PHYSICAL DATA:							
Sleeve Dimensions (H x W x D)			16" x 42" x 13 3/4	(ALL MODELS)			
Dimensions with Front (H x W x D)			16" x 42" x 21 1/2	" (ALL MODELS)			
Cut Out Dimensions (H x W x D)	16 1/4" x 42 1/4" (ALL MODELS)						
Net Weight (lbs.)	104	108	113	113	115	115	
Shipping Weight (lbs.)	126	130	136	135	137	137	
R-410A Charge (oz.)	30.0	32.1	31.4	30.7	30.0	34.2	
Dimensions with Packaging (inches)			19" 3/4 x 43 1/2" x 2	23" (ALL MODELS)			

## PZH Series Heat Pump

Model	PZH07K3SB	PZH09K3SB	PZH09R3SB	PZH12K3SB	PZH12R3SB	PZH15K5SB	
PERFORMANCE DATA:							
Cooling Btu	7200/6800	9600/9400	9200	12000/11800	12000	14500/14300	
Cooling Watts	600/565	815/800	800	1050/1035	1130	1420/1400	
Energy Efficient Ratio, EER	12.0/12.0	11.8/11.8	11.5	11.4/11.4	10.6	10.2/10.2	
Reverse Heating Btu	6400/6300	8500/8200	8500	11000/10800	11400	13600/13200	
Heating Watts	530/520	710/685	710	930/920	1000	1180/1150	
COP	3.55/3.54	3.51/3.51	3.51	3.47/3.44	3.34	3.38/3.36	
Moisture Removal (pints/hr.)	0.7	1.2	1.6	2.1	3.2	3.0	
Sensible Heat Ratio	0.87	0.82	0.82	0.77	0.72	0.72	
ELECTRICAL DATA:							
Voltage(1 PHASE, 60 Hz)	230/208	230/208	265	230/208	265	230/208	
Volt Range	253-187	253-187	292-239	253-187	292-239	253-187	
Current (Amps)	2.6/2.7	3.5/3.8	4.2	4.5/5.0	5.9	6.2/6.7	
Reverse Heat. Amps	2.3/2.5	3.0/3.3	2.7	4.0/4.4	3.8	5.1/5.5	
Power Factor	0.99	0.99	0.99	0.96	0.99	0.99	
Compressor LRA	13.0	20.0	18.2	28.5	25.9	34.5	
Compressor RLA	2.5	3.3	3.1	5.3	4.3	6.4	
Outdoor Fan Motor, HP	0.07	0.07	0.1	0.07	0.1	0.09	
AIRFLOW DATA:							
Indoor CFM, HIGH	335	400	400	470	470	470	
Indoor CFM, LOW	250	250	290	360	360	360	
Vent CFM	75	75	75	75	75	75	
PHYSICAL DATA:							
Sleeve Dimensions (H x W x D)			16" x 42" x 13 3/4	" (ALL MODELS)			
Dimensions with Front (H x W x D)			16" x 42" x 21 1/2	" (ALL MODELS)			
Cut Out Dimensions (H x W x D)			16 1/4" x 42 1/4"	(ALL MODELS)			
Net Weight (lbs.)	105	109	113	114	115	116	
Shipping Weight (lbs.)	127	131	136	136	137	139	
R-410A Charge (oz.)	30.0	32.1	31.4	30.7	30.0	34.2	
Dimensions with Packaging (inches)	ons with Packaging (inches) 19" 3/4 x 43 1/2" x 23" (ALL MODELS)						

Operating range 0°-115°F.

Due to continuing research in new energy-saving technology, specifications are subject to change without notice.

Five-year warranty limited to installations in the United States, Puerto Rico, Mexico and Canada only. See warranty documentation for full details.









## PTAC | ACCESSORIES

#### WALL SLEEVE PDXWSA

Galvanized steel is prepared in a multi-step process for stronger paint adhesion, then powder coated with a polyester finish and cured in an oven for exceptional durability. The wall sleeve is insulated for thermal efficiency and noise reduction.

SLEEVE DIMENSIONS: 16" H x 42" W x 13 <sup>3</sup>/<sub>4</sub>" D CUT OUT DIMENSIONS: 16 <sup>1</sup>/<sub>4</sub>" H x 42 <sup>1</sup>/<sub>4</sub>" W FRONT COVER DIMENSIONS: 16" H x 42" W x 7 <sup>3</sup>/<sub>4</sub>" D



PDXWSEXT18 PDXWSEXT24

For walls up to  $17^{1/2}$ " deep. For walls up to  $23^{1/2}$ " deep.

## PDXWSEXT (Custom depth wall sleeve)

One-piece, extended wall sleeve with built-in baffle for walls from 13  $^{1}/_{4}$ " to 25  $^{1}/_{2}$ " deep are available by special order.

#### DIGITAL REMOTE THERMOSTAT

#### RT7P

24v, Wired (7 Std), single stage, wall-mounted, 7-day programmable thermostat, three fan speeds (auto/low/high), and an easy-to-read large backlight display.

#### RT7

24v, Wired (7 Std), non-programmable, wall-mounted thermostat (unit powered capable). three fan speeds (auto/low/high), and an easy-to-read backlight display.

#### WRT2

Wireless wall-mounted thermostat (battery powered). Wireless transmitter (24v), 7-day programmable, three fan speeds (auto/low/high), and an easy to read large backlight display.

## FRIEDRICHLINK® ENERGY MANAGEMENT THERMOSTATS

#### VRPXEMRT2 VRPXEMWRT2 (FRESHAIRE CONTROLLERS)

VRPXEMRT2 wired wall controller, and VRPXEMWRT2 wireless controller with occupancy sensor designed for VRP and FreshAire PTAC control. Built-in RH control to maximize VRP and FreshAire PTAC capabilities. Used with EMOCT for HVAC energy management

## EMWRT2

Wireless thermostat with occupancy sensor. Built in RH control to maximize FreshAire capabilities. Used with EMOCT for HVAC energy management

#### FMRT2

Wired thermostat with occupancy sensor.

EMOCT EMRAF

Online connection kit for Energy Management Remote access fee.

#### EMRHCF

Remote humidity control fee.

## REMOTE THERMOSTAT ESCUTCHEON KIT

## PDXRTA For use with ZoneAire Premier only (10 pack)

## PDXRTB for use with ZoneAire Select and FreshAire PTACs (10 pack)

Kit contains escutcheons that can be placed over the factory control buttons (recommended when a remote wall mounted thermostat is used as controls become inoperable). The escutcheon directs the user to the wall thermostat for operation and retains the LED window to display error codes and diagnostic information. 10 pack.

## CONDUIT KIT /JUNCTION BOX PXCJA

Hard wire conduit kit with junction box for 208/230V and 265V units (subbase not required). Kit includes a means of quick disconnect for easy removal of the chassis.



PDXWSA



Deep wall sleeve extension PDXWSEXT18 shown with weather panel in place





RT7P

RT7





WRT2





EMWRT2, EMRT2, VRPXEMRT2, VRPXEMWRT2

EMOCT







PDXRTB



**PXCJA** 

<sup>\*</sup>NOTE: **The FreshAire PTAC** when paired with 12v wall controller **VRPXEMRT2** or **VRPXEMWRT2** will operate as a fully variable speed unit. When used with other compatible 24v thermostats, the unit will operate at multiple speeds in either cooling or heating mode.

## PTAC | ACCESSORIES

#### STANDARD GRILLE PXGA

Standard, stamped, anodized aluminum to resist chalking and oxidation.

#### ARCHITECTURAL GRILLES

Architectural grilles consist of heavy gauge 6063-T5 aluminum alloy.

PXAA Clear extruded aluminum.

PXBG Beige acrylic enamel.

PXSC Available in custom colors.

#### DECORATIVE SUBBASE (black) PXSBA

Provides unit support for walls less than six inches thick. Includes leveling legs, side filler panels and mounting brackets for electrical accessories. Accepts circuit breaker, power disconnect switch and conduit kit.

#### **ELECTRICAL SUBBASE**

Provides unit support for walls less than six inches thick. Includes leveling legs, side filler panels, mounting brackets, a plug-in receptacle and field-wiring access. The subbase also includes electrical knockouts for power disconnect switch or circuit breaker.

PXSB23020	Electrical Subbase - 230V 15 & 20A
PXSB23030	Electrical Subbase - 230V 30A
PXSB26515	Electrical Subbase - 265V 15A
PXSB26520	Electrical Subbase - 265V 20A
PXSB26530	Electrical Subbase - 265V 30A



PXGA



PXAA



#### SUBBASE DISCONNECT SWITCH PXDS

#### POWER CORDS

Universal power cords enable properties to select the appropriate heater size. Reference the adjacent table for power cord options.

ZONEAIRE PREMIER	FRESHAIRE		Length
PXPC23015A	PXPCFA23015	LCDI 230V 15A Cord - 2.5 kW	67 in.
PXPC23020A	PXPCFA23020	LCDI 230V 20A Cord - 3.5 kW	67 in.
PXPC23030A	PXPCFA23030	LCDI 230V 30A Cord - 5.0 kW	67 in.
PXPC26515A	PXPCFA26515	Non-LCDI 265V 15A Cord - 2.5 kW	27 1/2 in.
PXPC26520A	PXPCFA26520	Non-LCDI 265V 20A Cord - 3.5 kW	27 1/2 in.
PXPC26530	PXPCFA26530	Non-LCDI 265V 30A Cord - 5.0 kW	27 1/2 in.



PXDS

**PXSB** 

## PXFTA ZONEAIRE PREMIER

PXFTB ZONEAIRE SELECT AND FRESHAIRE MODELS

Air filters. 10 pack. Each PTAC requires 2 filters.

## **PXFAFT10 (FRESHAIRE MODELS)**

Replacement Merv 8 filters. 10 pack. Each PTAC requires 1 filter.

## CONDENSATE DRAIN KIT PXDR10

Attaches to the bottom of the wall sleeve for internal draining of condensate, or to the rear wall sleeve flange for external draining. Recommended for all units to remove excess condensate. 10 pack.

## LATERAL DUCT ADAPTER PDXDAA

Attaches to the Friedrich PTAC/PTHP unit to direct up to 35% of the total airflow to a second room. The unit-mounted duct plenum features a front-mounted aluminum grille that has two positions to provide the most optimal air direction. The air may be directed to either the left or the right of the unit through the supplied 3  $^1/^2$  H x 7" W x 47" L plenum. Plenum may be cut to length by the installer. Kit includes duct plenum, front grille, 47" duct extension, duct discharge grille, duct end cap and all necessary mounting hardware.

## LATERAL DUCT EXTENSION PDXDEA

Additional 3  $^{1}/^{2}$ " H x 7" W x 47" L plenum used with the LATERAL DUCT ADAPTER. A maximum of three duct extensions may be used together. Note: Ducted airflow is reduced as duct length is increased.





PXFAFT10



PXDR10



PDXDAA and PDXDEA ship together

# Friedrich PTAC with FreshAire IAQ

The COVID-19 global pandemic transformed the way the lodging industry meets the comfort and safety needs for guests. As your room air experts, Friedrich remains committed to improving guest comfort and safety with our newest innovation, FreshAire® IAQ solutions - a suite of indoor air quality accessories for use with Friedrich Air Conditioners, all with one dedicated purpose - healthy indoor air. FreshAire® IAQ solutions incorporate ASHRAE-recommended protocol\* to address indoor air quality and airborne transmissions.

This suite of products include industry-leading air quality technologies such as MERV 13 filtration, UV germicidal light and bi-polar ionization. Together, they represent a major leap forward in integrated HVAC air purification and rebuilding confidence for indoor environments.

\*Based on ASHRAE Guidance for Building Operations During the COVID-19 Pandemic

## FRESHAIRE® MAKE UP AIR (MUA) & FILTRATION

Award-winning FreshAire MUA system helps achieve ASHRAE 62.1-2013 requirements, and brings up to 52 CFM of conditioned, MERV 8 filtered, outside air into the space. Patented FreshAire technology uses the Precision Inverter compressor and main cooling system to optimize temperature and humidity level of incoming air while MERV 8 filtration traps particles and pollutants.

Standard on FreshAire PTAC

## FRESHAIRE® PURIFIER APWM1

FreshAire Purifier by iWaves features needlepoint bi-polar ionization to address any mold, bacteria, virus, allergens, and VOC's that may be in your air stream to ensure delivery of healthy, clean, purified air.

## FRIEDRICH® UV UVT1

Germicidal UV light kits have been tested and certified for use on Friedrich PTACs. The UV kit can be installed on the fan coil and is designed to disinfect surfaces and the air as it circulates through the ventilation system. UV light can kill airborne bacteria, viruses, mold, reduce maintenance costs and extend the life of an HVAC system







# Save big on energy without compromising guest comfort

FriedrichLink® thermostats are the advanced energy management solution for Friedrich PTACs

## Real Time Motion and Thermal Occupancy Sensor

Integrated Occupancy Sensor uses a combination of **motion and thermal sensing technologies** for accurate occupancy detection at all times-no need to install additional devices such as door switches or sensors.

## Wired or Wireless Installation

**Wired or wireless connectivity** with extensive configuration options deliver full compatibility and easy integration with virtually any packaged HVAC system.

## **5 Energy Savings Presets**

**5 distinct energy saving modes** make it easy to choose the optimal energy saving settings for any property.

# Remote Management\*

**Web-based remote management** provides expansive solutions for remote monitoring and configuration from any computer connected to the Internet.

Built-in Wireless Networking enables remote management without using or interfering with property's existing wireless infrastructure. True mesh networking eliminates the need for additional networking equipment such as signal repeaters or multiple data collection boxes.



Friedrich's EMRT2, EMWRT2, VRPXEMRT2 and VRPXEMWRT2 thermostats use real-time motion and thermal occupancy detection to save energy.

When the room is unoccupied, the thermostat automatically adjusts the temperature to eliminate unnecessary heating and cooling.

**Monitor room status** and see the operation, occupancy and energy efficiency status of each room.



\*Requires an optional "Online Connection Kit" and a one-time license fee.

## **Advanced Energy Saving Features**

Fully configurable energy saving modes maximize energy savings without compromising guest comfort.

## Temperature setback

automatically adjusts the temperature when the room is unoccupied in order to save energy.

## Temperature recovery

calculates the setback temperature so that the desired temperature can be restored within specified time.

## Setback optimization

continuously monitors temperature recovery rate in the room and adjusts setback temperature to maximize energy savings.

Setback limits allow maximum and minimum room temperature to be set when the room is unoccupied.

**Setpoint limits** prevent guests from setting room temperature to extreme, energy-wasting levels.

**Room status** displays operation, occupancy and energy efficiency status of each room.

**Room detail** displays temperature and occupancy changes in a room.

**Energy reports** monitor energy use and can even evaluate the performance of energy saving features.

**Intuitive interface** makes it easy to apply different settings to different rooms.

**User management** allows configuration of custom access permissions and alert notification settings for different users.

Built-in diagnostic tools

automatically send email alert notifications to hotel staff.



FriedrichLink® For Lodging

## LINKS TO INSTALLATION/OPERATION MANUALS



FRESHAIRE® PTAC
ZONEAIRE® PREMIER
ZONEAIRE® SELECT
RT7 Thermostat
RT7P Thermostat
WRT2 Thermostat

## LINK TO CASE STUDY



FRESHAIRE® PTAC - ENEREF INSTITUTE

