

**SG SERIES**

PTACs



**FRIEDRICH**

1 8 8 3

# SG SERIES

## The durability & efficiencies you've come to expect from Friedrich, and more

Improved performance and design enhancements combine to deliver our most efficient and reliable PTAC yet

---

### ADVANCED DESIGN FOR GREATER ENERGY EFFICIENCY

- **Curved coil design** of the SG Series maximizes the internal surface area to deliver higher efficiencies
- **EERs** up to 13.0

---

### 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

---

### 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
- **Thick 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.



Friedrich reliability is backed by an industry-leading 2-year parts and labor and 5-year limited warranty.

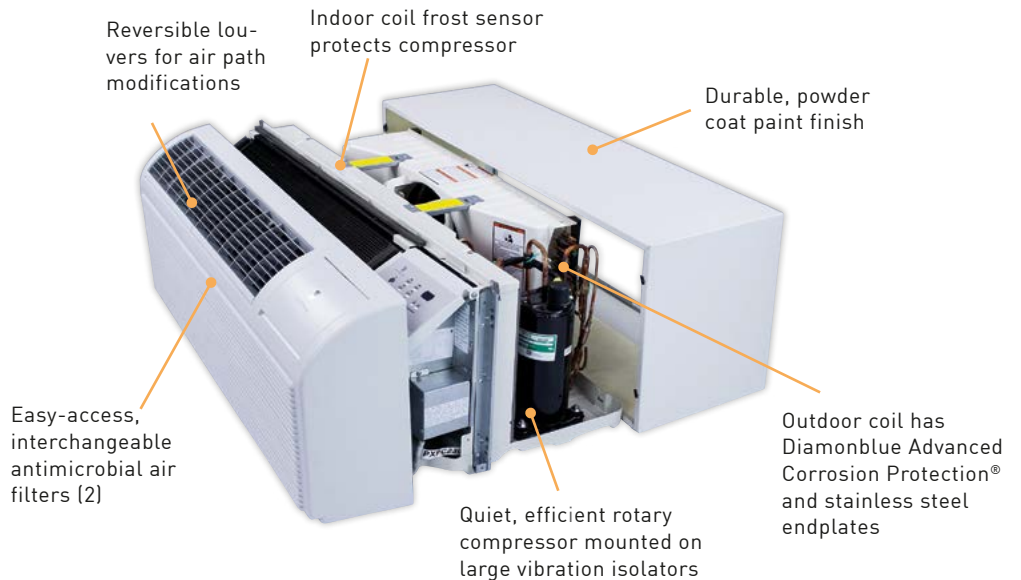


See warranty documentation for full details.

# Commercial grade PTAC utilizes a modular design that provides easy access to key components

Key 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.



Easy to read and use digital controls



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



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



## Friedrich offers a complete line of PTACs

- Available in electric heat and heat pump models
- 7000 to 15000 Btus
- All capacities have multiple heater options
- 230 and 265V

### Electric Heat

#### COOLING

7000-15000 Btu  
EERs up to 13.0

#### ELECTRIC HEAT

8300-17000 Btu  
EERs up to 13.0

### Heat Pump

#### COOLING

7000-15000 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

---

## 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.

---

## COMFORT, HEALTH & IAQ

**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.

**Anti-microbial 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 filters.

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

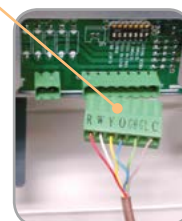
**Standard heat output power cord** comes attached to the unit.

**Compact front is designed to preserve indoor floor space** with a depth of 7¼ inches.

**Faultless Sure-hold front cover system** securely attaches the front each time.

**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.**



\* Energy management capability requires purchase of additional hardware and service fee.

# Save big on energy without compromising guest comfort

FriedrichLink® thermostats, the energy management solution for Friedrich PTAC



## 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.

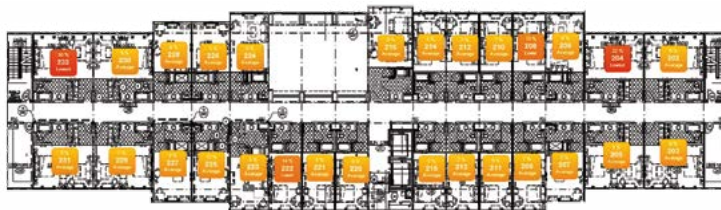
## 5 ENERGY SAVINGS PRESETS

**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 **EMRT1** and **EMWRT1** 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. Optional Humidity Control Feature available through Remote Management. See accessories page 6.

## 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.

**Set point 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.

The logo features a blue curved line above the text "FriedrichLink®".

*FriedrichLink® For Lodging*



## OPTIONAL 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 3/4" D

CUT OUT DIMENSIONS: 16 1/4" H x 42 1/4" W

FRONT COVER DIMENSIONS: 16" H x 42" W x 7 3/4" D



PDXWSA

### DEEP WALL SLEEVES

#### PDXWSEXT18

For walls up to 17 1/2" deep.

#### PDXWSEXT24

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.



Deep wall sleeve extension PDXWSEXT18 shown with weather panel in place

### SLEEVE EXTENSION RETROFIT KIT

#### PXSE

2 1/4" sleeve extension attached to the room side of the sleeve to allow for the installation of a PD-series Friedrich PTAC in an 11 1/2" deep T-series sleeve.



PXSE

### DIGITAL REMOTE THERMOSTAT

#### Wall-mounted digital thermostats with two fan speeds.

Single stage cool / heat for PDE models.

Single stage cool / dual stage heat for PDH models

Features backlit display and multiple configuration modes, available in wired and wireless options.

#### RT6P

Wired, single stage, wall-mounted programmable thermostat has two fan speeds and backlight.

#### RT6

Wired wall-mounted thermostat (can be unit powered).

#### WRT1

Wireless wall-mounted thermostat (battery powered).



RT6P, RT6



WRT1



EMRT1, EMWRT1



EMOCT

### FRIEDRICHLINK® ENERGY MANAGEMENT THERMOSTATS

#### EMRT1

Wired thermostat with occupancy sensor.

#### EMWRT1

Wireless thermostat with occupancy sensor.

#### EMOCT

Online connection kit.

#### EMRAF

Remote access fee.

#### EMRHCF

Remote humidity control fee.

### REMOTE THERMOSTAT ESCUTCHEON KIT

#### PDXRTA

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.



PDXRTA

### 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.



PXCJA

### SUBBASE DISCONNECT SWITCH

#### PXDS



PXDS

## OPTIONAL 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 sub-base 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

### POWER CORDS

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

		Length
PXPC23015A	LCDI 230V 15A Cord - 2.5 kW	67 in.
PXPC23020A	LCDI 230V 20A Cord - 3.5 kW	67 in.
PXPC23030A	LCDI 230V 30A Cord - 5.0 kW	67 in.
PXPC26515A	Non-LCDI 265V 15A Cord - 2.5 kW	27 1/2 in.
PXPC26520A	Non-LCDI 265V 20A Cord - 3.5 kW	27 1/2 in.
PXPC26530	Non-LCDI 265V 30A Cord - 5.0 kW	27 1/2 in.

### PXFTA

Antimicrobial air filters. 10 pack. Each PTAC requires 2 filters.

### 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.



PXGA



PXAA



PXSBA



PXSB



PXPC



PXFTA



PXDR10



PDXDAA and PDXDEA ship together

# 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
<b>PERFORMANCE DATA:</b>								
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
<b>ELECTRICAL DATA:</b>								
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
<b>AIRFLOW DATA:</b>								
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
<b>PHYSICAL DATA:</b>								
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
<b>PERFORMANCE DATA:</b>								
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
<b>ELECTRICAL DATA:</b>								
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
<b>AIRFLOW DATA:</b>								
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
<b>PHYSICAL DATA:</b>								
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.)	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.



Friedrich Air Conditioning Co. | 10001 Reunion Place, Suite 500 | San Antonio, TX 78216 | 877.599.5665 www.friedrich.com