

# PACKAGED TERMINAL AIR CONDITIONERS

AIR CONDITIONERS | HEAT PUMPS | ELECTRIC HEAT

COMMERCIAL GRADE



FRIEDRICH

1883



QUIET  
PERFORMANCE

EASY TO  
FIELD MODIFY

POWERFUL  
AIRFLOW



3 fan speeds heating and cooling

QUIET  
PERFORMANCE

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## ENGINEERED FOR QUIETER PERFORMANCE. LARGE, TANGENTIAL FAN GENERATES POWERFUL, QUIET AIRFLOW.

### TWO MOTOR DESIGN

With separate indoor and outdoor motors, the indoor motor can run at slower speeds which reduces sound levels indoors.

### TANGENTIAL BLOWER WHEEL

Tangential blower wheel has nearly 5x the surface area of a typical fan used on other PTACS. The result is more uniform airflow over a wider path for faster, more even air distribution throughout the room and improved sound levels.

Air is blown over the entire length of the tangential wheel into the room in a uniform laminar airflow.



### 3 SPEED FAN

Friedrich soft-touch controls feature 3 fan speeds in cooling and heating mode for more comfort options. Soft start/stop fan delay feature reduces transitional noise that is usually associated with compressor start-up.



Easy-to-use digital controls with precise temperature readout and 3 fan speeds

## FEATURES

### Comfort & Dehumidification

- Removes up to 3.2 pts./hr. of moisture in cool mode to improve comfort and reduce the chance of mold and mildew growth
- Quieter operation carefully engineered into the design
- Intuitive unit controls are easy to operate and operate either set point or room temperature
- Owner configurable constant fan mode
- "Instant Heat" heat pump mode quickly heats a room to the desired temperature for increased comfort
- Even heat monitoring checks room temperature and automatically adds heat boost if necessary
- Separate thermostat settings (limiting) for cooling and heating modes allow for improved comfort
- The digital control panel will automatically run the fan to briefly sample the room temperature every nine minutes to ensure desired conditions are maintained

### Durability

- Faultless sure-hold front cover system securely attaches front each time
- 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 grille
- Durable, powder coat paint finish
- Stainless steel endplates on both the indoor and outdoor coil
- Indoor coil frost sensor protects the compressor to lengthen the life of the unit
- Diamonblue advanced corrosion protection protects against deterioration and extends the life of the unit, especially in harsh coastal environments

### Maintenance & Installation Features

- Universal heaters with heat capacities determined by the power cords; achieve up to 48 PTAC SKUs with 16 units by changing the power cord size
- 14 numeric service error codes stored in memory facilitate rapid unit diagnostics
- Remote thermostat pop-out wiring module allows easier wiring and unit changeout without rewiring thermostat
- May be installed flush with the floor
- Reversible indoor air louvers
- Condensate disposal system
- Improved weather barrier
- Emergency heat override ensures heat mode operation even in the unlikely event of compressor failure
- Modular product design ensures easy access to key components for cleaning and repairs- including washable, lift-out air filters
- Operating range 0°-115° F. (Field-supplied modifications to extend operating range. Contact FAC customer service)
- Backed by a nationwide service network, and U.S.-based Friedrich expert technical team
- Depth of front is 7 3/4 inches which preserves indoor floor space

  
**DIAMONBLUE**  
Advanced Corrosion Protection



Protects the outdoor coil against deterioration and extends the life of the unit especially in harsh coastal environments.

### Energy Usage & Management

- EERs up to 12.2; COPs up to 3.4 for increased energy savings
- Set separate heat and cool range limits
- Desk control ready allowing hotel owners to control units from a central location
- Energy management system compatible
- Electronic defrost control ensures more run time in efficient heat pump mode

### Health & IAQ

- Fresh air damper to bring in fresh outside air when desired
- Two, easy-access washable, antimicrobial air filters
- Up to 3.2 pts./hr. dehumidification

### Sound Reduction Technology

- Tangential blower wheel creates a wide air path that distributes air throughout the room with reduced sound levels
- 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 blanket blocks outdoor noise

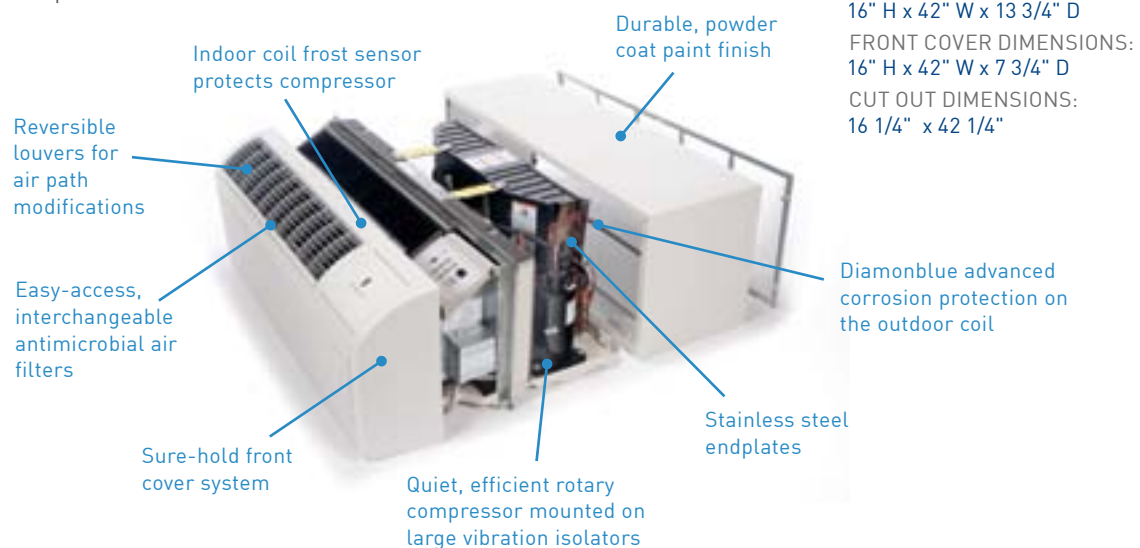


RECYCLABLE  
PACKAGING

R-410A  
OZONE FRIENDLY  
REFRIGERANT

## MODULAR DESIGN

Provides easy access to key components for simplified maintenance.



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

## REMOTE THERMOSTAT QUICK CONNECT WIRING MODULE

Pulls out and plugs in for easier wiring during initial installation. Easier unit change-out; no need to reconnect and tighten down thermostat wires.



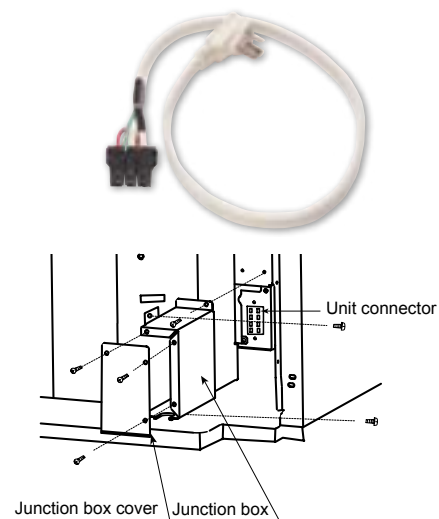
## UNIVERSAL HEATER / POWER CORD

All PTAC units ship complete with the standard power cord for that model (7K, 9K and 12K = 3.0 kW and 15K = 5.0 kW). If you want to adjust the heater size on any PTAC unit simply unplug the attached power cord and connect the desired size. It is important to ensure that all wiring and building connections are sized properly for the power cord as well.

Universal heater allows installers to change the heat output of the PTAC by changing the power cord, simplifying ordering and installation.

For distributors, this means stocking one PTAC model and the 2 optional cords in place of 3 separate PTACs.

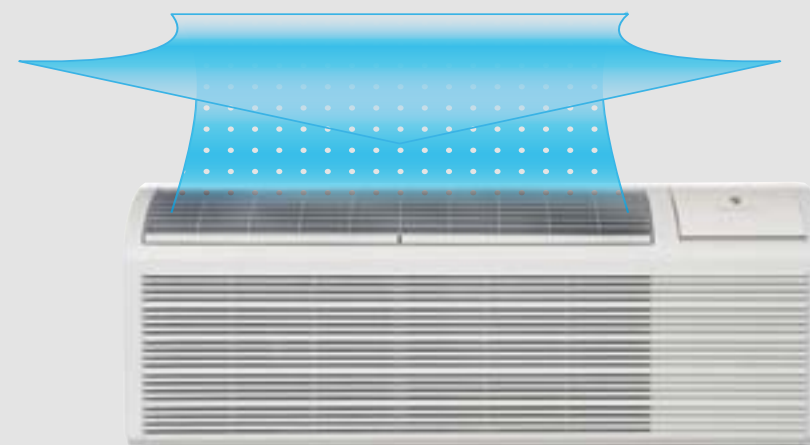
POWER CORD IS AS EASY TO CONNECT AS A PHONE JACK



"We actually did quite a lot of research before we picked Friedrich. We visited several installations in cold climates and talked with the maintenance people.

We asked about reliability, noise, accessibility of spare parts in rural locations, ease of maintenance, etc., and Friedrich came out on top."

Steve Gardner  
 Associate VTBS Architects  
 Denver, Colorado



TANGENTIAL BLOWER WHEEL PROVIDES UNIFORM LAMINAR AIRFLOW OVER A WIDE PATH FOR FASTER, MORE EVEN AIR DISTRIBUTION THROUGHOUT THE ROOM WITH IMPROVED SOUND LEVELS.

RECEPTACLES AND FUSE TYPES						
Voltage	230V			265V		
	15	20	30	15	20	30
Amps	15	20	30	15	20	30
Heater Size	0, 2.0 kW	3.0 kW	5.0 kW	2.0 kW	3.0 kW	5.0 kW
Receptacles						

QUIET PERFORMANCE

EASY TO FIELD MODIFY

POWERFUL AIRFLOW

Easy-to-clean antimicrobial air filters are top-mounted for quick access and protect against fungal and bacterial growth.



## OPTIONAL ACCESSORIES

### WALL SLEEVE PDXWS

Galvanized steel is prepared in a state-of-the-art, multistep 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. 16" H x 42" W x 13 3/4" D

### 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 a 11 1/2" deep T-series sleeve.

### 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 for walls from 13 1/4" to 25 1/2" deep are available by special order.

### DIGITAL REMOTE THERMOSTAT RT6

Single stage cool, single stage heat for PDE models or single stage cool, dual stage heat for PDH model thermostat features high/low fan speed switch. thermostat is hard wired and can be battery powered or unit powered. Features backlit display and multiple configuration modes.

### REMOTE THERMOSTAT ESCUTCHEON KIT PDXRTA

Kit contains ten escutcheons that can be placed over the factory control buttons when a remote wall mounted thermostat is used. The escutcheon directs the user to the wall thermostat for operation and retains the LED window to display error codes and diagnostic information.

### PXFTA

10 pack of antimicrobial air filters

### CONDUIT KIT /JUNCTION BOX PXCJA

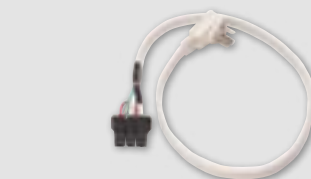
Hard wire conduit kit with junction box for 208/230V and 265V units (subbase not required). Kit includes a means of quick disconnect for easy removal of the chassis.

### POWER CORDS

PXPC23000	LCDI 230V 15A Cord - 00 kW (for use PDE models only)
PXPC23015	LCDI 230V 15A Cord - 2.0 kW
PXPC23020	LCDI 230V 20A Cord - 3.0 kW
PXPC23030	LCDI 230V 30A Cord - 5.0 kW
PXPC26515	Non-LCDI 265V 15A Cord - 2.0 kW
PXPC26520	Non-LCDI 265V 20A Cord - 3.0 kW
PXPC26530	Non-LCDI 265V 30A Cord - 5.0 kW



Deep wall sleeve extension PDXWSEXT18 shown with weather panel in place



## OPTIONAL ACCESSORIES

### STANDARD GRILLE PXGA

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

### ARCHITECTURAL GRILLES

Architectural grilles that 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 a 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

### 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. Packaged in quantities of ten.

### 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 3.5 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 3.5 H" x 7" W x 47" L plenum for use with the LATERAL DUCT ADAPTER. A maximum of 3 duct extensions total may be used. Note: Ducted airflow is reduced as duct length is increased.



PXAA



PDXDAA and PDXDEA ship together



# SPECIFICATIONS

## PDE Series

Model		PDE07K	PDE07R	PDE09K	PDE09R	PDE12K	PDE12R	PDE15K	PDE15R
<b>PERFORMANCE DATA:</b>									
Cooling Btu		7700/7600	7700	9000/8800	9000	12000/11800	12000	15000/14600	15000
Cooling Watts		640/620	640	800/770	800	1120/1120	1120	1530/1510	1530
Energy Efficiency Ratio	EER	12.0/12.2	12.0	11.3/11.4	11.3	10.7/10.5	10.7	9.8/9.7	9.8
Moisture Removal	Pts./Hr.	1.7	1.7	2.2	2.2	2.7	2.7	3.2	3.2
Sensible Heat Ratio		0.84	0.84	0.81	0.81	0.67	0.67	0.65	0.65
<b>ELECTRICAL DATA:</b>									
Voltage (1 PHASE, 60 Hz)		230/208	265	230/208	265	230/208	265	230/208	265
Current	Amps	2.8/3.0	2.4	3.7/3.9	3.7	5.1/5.3	4.8	6.7/7.5	5.9
Power Factor		0.97	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Compressor LRA		19.0	12.0	17.0	18.0	27.0	23.0	32.6	27.8
Compressor RLA		2.8	2.4	3.7	2.9	5.0	4.3	6.6	5.6
Outdoor Fan Motor	HP	0.024	0.024	0.029	0.029	0.031	0.031	0.031	0.031
<b>AIRFLOW DATA:</b>									
Indoor CFM, HIGH		345/315	345	360/345	360	360/350	360	385/375	385
Indoor CFM, MED		320/290	320	330/305	330	330/310	330	360/330	360
Indoor CFM, LOW		295/265	295	300/270	300	310/280	310	320/290	320
Vent CFM		75	75	75	75	75	75	75	75
<b>PHYSICAL DATA:</b>									
Sleeve Dimensions H x W x D	In.	16"x42"x13 3/4"	16"x42"x13 3/4"	16"x42"x13 3/4"	16"x42"x13 3/4"	16"x42"x13 3/4"	16"x42"x13 3/4"	16"x42"x13 3/4"	16"x42"x13 3/4"
Dimensions with front H x W x D	In.	16"x42"x21 1/2"	16"x42"x21 1/2"	16"x42"x21 1/2"	16"x42"x21 1/2"	16"x42"x21 1/2"	16"x42"x21 1/2"	16"x42"x21 1/2"	16"x42"x21 1/2"
Cut Out Dimensions H x W	In.	16 1/4"x42 1/4"	16 1/4"x42 1/4"	16 1/4"x42 1/4"	16 1/4"x42 1/4"	16 1/4"x42 1/4"	16 1/4"x42 1/4"	16 1/4"x42 1/4"	16 1/4"x42 1/4"
Net Weight	Lbs.	106	106	111	111	116	116	119	119
Shipping Weight	Lbs.	126	126	131	131	136	136	139	139
R-410A Charge	Oz.	23.63	24.69	33.51	33.51	35.27	35.98	38.10	40.21
Dimensions with Packaging	In.	19.75"x23"x43.5" (all models)							

## PDH Series

Model		PDH07K	PDH07R	PDH09K	PDH09R	PDH12K	PDH12R	PDH15K	PDH15R
<b>PERFORMANCE DATA:</b>									
Cooling	Btu	7700/7600	7700	9000/8800	9000	12000/11800	12000	14500/14200	14500
Cooling Watts		640/620	640	800/770	800	1120/1120	1120	1480/1460	1480
Energy Efficiency Ratio	EER	12.0/12.2	12	11.3/11.4	11.3	10.7/10.5	10.7	9.8/9.7	9.8
Reverse Heating	Btu	6300/6100	6300	8100/7900	8100	10700/10500	10700	13300/13000	13300
Heating Watts		540/530	540	720/770	720	1010/990	1010	1300/1270	1300
COP		3.4/3.4	3.4	3.3/3.3	3.3	3.1/3.1	3.1	3.0/3.0	3.0
Moisture Removal	Pts./Hr.	1.7	1.7	2.2	2.2	2.7	2.7	3.2	3.2
Sensible Heat Ratio		0.84	0.84	0.81	0.81	0.67	0.67	0.65	0.65
<b>ELECTRICAL DATA:</b>									
Voltage (1 PHASE, 60 Hz)		230/208	265	230/208	265	230/208	265	230/208	265
Current	Amps	2.8/3.0	2.4	3.7/3.9	3.7	5.1/5.3	4.8	6.7/7.5	5.7
Reverse Heat	Amps	2.4/2.5	2.1	3.4/3.8	3.4	4.5/4.7	4.5	5.8/6.2	5.0
Power Factor		0.97	0.99	0.99	0.99	0.99	0.99	0.98	0.98
Compressor LRA		19.0	12.0	18.5	19.0	27.0	23.0	36.0	26.0
Compressor RLA		2.8	2.4	3.6	3.2	5.0	4.3	6.5	5.3
Outdoor Fan Motor	HP	0.024	0.024	0.029	0.029	0.031	0.031	0.031	0.031
<b>AIRFLOW DATA:</b>									
Indoor CFM, HIGH		345/315	345	360/345	360	360/350	360	420/390	385
Indoor CFM, MED		320/290	320	330/305	330	330/310	330	410/380	360
Indoor CFM, LOW		295/265	295	300/270	300	310/280	310	380/350	320
Vent CFM		75	75	75	75	75	75	75	75
<b>PHYSICAL DATA:</b>									
Sleeve Dimensions H x W x D	In.	16"x42"x13 3/4"	16"x42"x13 3/4"	16"x42"x13 3/4"	16"x42"x13 3/4"	16"x42"x13 3/4"	16"x42"x13 3/4"	16"x42"x13 3/4"	16"x42"x13 3/4"
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Cut Out Dimensions H x W	In.	16 1/4"x42 1/4"	16 1/4"x42 1/4"	16 1/4"x42 1/4"	16 1/4"x42 1/4"	16 1/4"x42 1/4"	16 1/4"x42 1/4"	16 1/4"x42 1/4"	16 1/4"x42 1/4"
Net Weight	Lbs.	108	108	113	113	118	118	121	121
Shipping Weight	Lbs.	128	128	133	133	138	138	141	141
R-410A Charge	Oz.	23.63	24.69	33.51	35.27	35.27	35.98	39.86	36.33
Dimensions with Packaging	In.	19.75"x23"x43.5" (all models)							

Operating range 0°-115°F. Field-supplied modifications can extend operating range. For additional information contact Friedrich. 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.



**FRIEDRICH**

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