



FRIEDRICH ZONEAIRE® PREMIER

Featuring low GWP R-32 Refrigerant

Packaged Terminal Air Conditioners

The quietest PTAC you can buy. Improved performance and design enhancements combine to deliver our most efficient, reliable and quietest standard PTAC.

Features

- Tangential blower wheel for fast, powerful and even air distribution
 - Two permanently-lubricated fan motors for quiet operation
 - EERs up to 12.1; COPs up to 3.6
 - ✓ R-32 refrigerant with low global warming potential (GWP)
 - 2 heating and cooling fan speeds and AUTO mode
 - ✓ Adjustable high/low temperature range limits for reduced energy usage
 - Internal diagnostic program
 - Constant Fan Mode provides continuous fan operation in cooling and heating modes
 - Condensate removal system uses slinger ring technology to cool the coil and increase efficiency
 - Washable air filters
- FreshAir® 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.
 - ✓ Full line of energy management thermostats
 - ✓ Central desk control ready
 - ✓ Compatible with 3rd party energy management systems
 - Reversible indoor air louvers
 - Modular design ensures easy access to key components
 - Fits standard PTAC sleeve without the added cost of a baffle kit
 - 2 yr. parts and labor warranty; 5 yr. limited warranty. See warranty document for full details.

DIAMONBLUE™
Advanced Corrosion Protection



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



THE EXPERTS IN ROOM AIR CONDITIONING

PRODUCT FEATURES

DIGITAL TEMPERATURE READOUT	By digitally monitoring the desired room temperature, the room is controlled more precisely than conventional systems. The large, easy-to-read LED display can show either the setpoint or actual room temperature as selected by owner.
ONE-TOUCH OPERATION	When the unit is powered off, the unit can be returned directly to heating or cooling mode by pressing the 'Heat' or 'Cool' buttons without the confusing power up sequence of some controls. One-touch control takes the guesswork out of unit control, delivering a more enjoyable experience and eliminating front-desk calls.
FAN SPEED MODE	Friedrich PTAC/PTHP units feature two fan speeds and AUTO mode for the user to select from. This allows the user to properly select the amount of airflow for the desired comfort level and also deliver quiet performance.
CONSTANT FAN MODE	Pressing the Constant Fan Mode button will provide continuous fan operation in cooling or heating modes. The fan speed selection is made by pressing either "High" or "Low" fan speed button
INDIVIDUAL MODE & FAN CONTROL BUTTONS	By having separate control buttons and indicators for both fan and mode settings, the Friedrich digital control eliminates the confusion of previous digital PTACs. The accurate temperature setting provides greater guest comfort than other systems.
QUIET START/STOP FAN DELAY	The fan start and stop delays prevent abrupt changes in room acoustics due to the compressor energizing or stopping immediately. Upon call for cooling or heating, the unit fan will run for five seconds prior to energizing the compressor. Also, the fan-off delay allows for "free cooling" by utilizing the already cool indoor coil to its maximum capacity by running for 30 seconds after the compressor.
REMOTE THERMOSTAT OPERATION	Some applications require the use of a wall-mounted thermostat. All new Friedrich PTACs may be switched from unit control to remote thermostat control easily without the need to order a special model or accessory kit.
INTERNAL DIAGNOSTIC PROGRAM	The Friedrich digital PTAC features a self-diagnostic program that can alert maintenance to component failures or operating problems. The internal diagnostic program saves properties valuable time when diagnosing operating problems.
SERVICE ERROR CODE STORAGE	All Friedrich PTAC units have self-diagnostic features that will store trouble codes in the case of an event. Storing the codes allows the property to see the trouble codes at a future time after the condition may have corrected.
ROOM FREEZE PROTECTION	When the PTAC senses that the indoor room temperature has fallen to 40°F, the unit will cycle on the fan (high) and the electric strip heat to raise the room temperature to 46°F, and then cycle off again. This feature works regardless of the mode selected and can be turned off. The control will also store the Room Freeze cycle in the service code memory for retrieval at a later date. This feature ensures that unoccupied rooms do not reach freezing levels where damage can occur to plumbing and fixtures.
RANDOM COMPRESSOR RESTART	Multiple compressors starting at once can often cause electrical overloads and premature unit failure. The random restart delay eliminates multiple units from starting at once following a power outage or initial power up. The compressor delay will range from 180 to 240 seconds.
CONDENSATE REMOVAL SYSTEM	Condenser fan utilizes slinger ring technology to pick up condensate from the base pan and disperse it on to the condenser coil where it evaporates. This helps to cool the coil and increase the energy efficiency of the unit.

PRODUCT FEATURES

ELECTRONIC TEMPERATURE LIMITING	By limiting the operating range, the property can save energy by eliminating “max cool” or “max heat” situations common with older uncontrolled systems. The new electronic control allows owners to set operating ranges for both heating and cooling independently of one another.
DIAMONBLUE ADVANCED CORROSION PROTECTION®	Diamonblue Advanced Corrosion Protection® protects the outdoor coil from harsh environments. Standard on all models.
DIGITAL DEFROST THERMOSTAT	The PD Series uses a digital thermostat to accurately monitor the outdoor coil conditions to allow the heat pump to run whenever conditions are correct. Running the PTAC in heat pump mode saves energy and reduces operating costs. The digital thermostat allows maximization of heat pump run time.
INSTANT HEAT MODE FOR HEAT PUMPS	Heat pump models will automatically run the electric heater to quickly bring the room up to temperature when initially energized, then return to heat pump mode. This ensures that the room is brought up to temperature quickly without the usual delay associated with heat pump units.
EVEN HEAT MONITORING	The digital control monitors indoor conditions, ensuring room temperature is within 5°F of the setpoint. If needed, the unit will briefly cycle the electric heater to maintain temperature. This feature preserves the efficiency benefits of a heat pump while ensuring guest comfort.
SEPARATE HEAT/COOL FAN CYCLE CONTROL	Using the “Constant Fan” one may choose between fan cycling or fan continuous mode based on property preference. (Note: Even heat monitoring and quiet start/stop fan delay only operate in fan cycle mode) Fan continuous mode is used to keep constant airflow circulation in the room during all times the unit is ‘ON’. Fan cycle will conserve energy by only operating the fan while the compressor or electric heater is operating. The ability to set the fan cycling condition independently between heating and cooling mode will increase user comfort by allowing the choice of only constantly circulating air in the summer or winter time (unlike other PTAC brands that only allow one selection).
EMERGENCY HEAT OVERRIDE	In the event of a compressor failure in heat pump mode, the compressor may be locked out to provide heat through the resistance heater. This feature ensures that even in the unlikely event of a compressor failure, the room temperature can be maintained until the compressor can be serviced.
CENTRAL DESK CONTROL READY	All Friedrich digital PTACs have low voltage terminals ready to connect a desk control energy management system. Controlling the unit from a remote location like the front desk can reduce energy usage and requires no additional accessories on the PTAC unit.
INDOOR COIL FROST SENSOR	The frost sensor protects the compressor from damage in the event that airflow is reduced or low outdoor temperatures cause the indoor coil to freeze. When the indoor coil reaches 30°F, the compressor is disabled and the fan continues to operate based on demand. Once the coil temperature returns to 45°F, the compressor returns to operation.
ULTRAQUIET AIR SYSTEM	The PD Series units feature an indoor fan system design that reduces sound levels without lowering airflow or preventing proper air circulation.
HIGH EFFICIENCY	The Friedrich PTAC has been engineered so that all functional systems are optimized so that they work together to deliver the highest possible performance.
DUAL MOTOR	The dual-motor design means that the indoor motor can run at slower speeds which reduces sound levels indoors.
ROTARY COMPRESSOR	High efficiency rotary compressors are used on all Friedrich PTACs to maximize durability and efficiency.
STAINLESS STEEL ENDPLATES	Outdoor coil endplates made from stainless steel reduce corrosion on the outdoor coil common with other coil designs.
TOP-MOUNTED WASHABLE AIR FILTERS	All Friedrich PTAC return air filters feature top-mounted air filters. All filters are washable, reusable and easily accessed from the top of the unit without the removal of the front cover.
FILTERED FRESH AIR INTAKE	Friedrich PTAC units are capable of introducing up to 75 CFM of outside air into the conditioned space. The outdoor air passes through a washable mesh screen to prevent debris from entering the airstream.
R-32 REFRIGERANT	Friedrich PTAC units use low Global Warming Potential (GWP) environmentally-friendly refrigerant.
FRESH-AIRE® 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 optional FreshAire® IAQ accessories are added.







CHASSIS SPECIFICATIONS

MODEL		PDH09K3SGR3	PDH12K3SGR3	PDH09R3SGR3	PDH12R3SGR3
UPC		724587442212	724587442236	724587442229	724587442243
PERFORMANCE DATA:					
Cooling Capacity	Btu	9700/9400	12100/11900	9800	12000
Cooling Watts		800/780	1040/1000	810	1030
Energy Efficiency Ratio	EER	12.1/12.1	11.6/11.8	12.1	11.6
Reverse Heating Capacity	BTU	8500/8200	10900/10700	8600	10900
Heating Watts		690/670	940/900	690	940
COP		3.6/3.6	3.4/3.46	3.55	3.4
Moisture Removal	Pts.Hr.	2.11	2.75	2.11	2.75
Sensible Heat Ratio		75%	70%	75%	70%
ELECTRICAL DATA:					
Voltage (1 PHASE, 60 Hz)		230/208	230/208	265	265
Volt Range		253-187	253-187	292-239	292-239
Cooling	Amps	3.6/3.9	4.6/4.9	3.1	4
Reverse Heat	Amps	4.0/4.1	4.1/4.3	2.6	3.5
Power Factor		0.99	0.99	0.99	0.99
Compressor LRA		17	30	15	21
Compressor RLA		3.1	4	3.4	3.3
Outdoor Fan Motor	HP	1/14	1/12	1/14	1/12
AIRFLOW DATA:					
Indoor CFM, HIGH		330	341	330	341
Indoor CFM, LOW		282	306	282	306
Outdoor Air		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	119	115	119
Shipping Weight	Lbs.	134	141	134	141
R32 Charge	Oz.	24.7	28.92	24.7	28.9

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.

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



COOLING & HEATING PERFORMANCE

PDH 230V - Extended Cooling Performance

		OUTDOOR DRY BULB TEMP. (DEGREES F AT 40% R.H.)														
		75			85			95			105			110		
		INDOOR WET BULB TEMP. (DEGREES F AT 80 F D.B.)														
		72	67	62	72	67	62	72	67	62	72	67	62	72	67	62
PDH09	Btu	11054	10631	9842	10528	9926	9156	10114	9400	8319	9475	8413	7417	8432	7257	6411
	WATTS	632	642	649	689	696	704	775	775	775	838	837	839	914	914	918
	AMPS	3.1	3.1	3.1	3.3	3.3	3.3	3.7	3.7	3.7	4.0	4.0	4.0	4.3	4.3	4.4
	SHR	0.58	0.79	0.96	0.59	0.82	0.97	0.60	0.85	0.97	0.61	0.90	0.98	0.64	0.96	0.97
PDH12	Btu	13877	13346	12355	13216	12461	11493	12697	11800	10443	11894	10561	9310	10585	9110	8048
	WATTS	828	841	851	902	911	923	1015	1015	1015	1097	1096	1099	1197	1197	1202
	AMPS	4.1	4.1	4.1	4.4	4.4	4.4	4.9	4.9	4.9	5.3	5.3	5.3	5.8	5.8	5.8
	SHR	0.51	0.70	0.94	0.52	0.72	0.96	0.53	0.75	0.96	0.54	0.79	0.97	0.57	0.84	0.96
								RATING POINT ARI 310/380								

Extended Heating Performance

		OUTDOOR DRY BULB TEMP. (DEGREES F)				
		37	42	47	52	57
PDH09	Btu	6153	6557	8300	8860	9473
	WATTS	624	634	695	700	709
	AMPS	3.3	3.3	3.4	3.4	3.5
PDH12	Btu	7654	8451	10600	11172	12120
	WATTS	796	826	910	936	967
	AMPS	3.7	3.8	4.2	4.4	4.6
		RATING POINT ARI 310/380				

COOLING & HEATING PERFORMANCE

PDH 265V - Extended Cooling Performance

		OUTDOOR DRY BULB TEMP. (DEGREES F AT 40% R.H.)														
		75			85			95			105			110		
		INDOOR WET BULB TEMP. (DEGREES F AT 80 F D.B.)														
		72	67	62	72	67	62	72	67	62	72	67	62	72	67	62
PDH09	Btu	11054	10631	9842	10528	9926	9156	10114	9400	8319	9475	8413	7417	8432	7257	6411
	WATTS	632	642	649	689	696	704	775	775	775	838	837	839	914	914	918
	AMPS	2.7	2.7	2.8	2.9	3	3	3.3	3.3	3.3	3.6	3.6	3.6	3.9	3.9	3.9
	SHR	0.58	0.79	0.96	0.59	0.82	0.97	0.6	0.85	0.97	0.61	0.9	0.98	0.64	0.96	0.97
PDH12	Btu	13877	13346	12355	13216	12461	11493	12697	11800	10443	11894	10561	9310	10585	9110	8048
	WATTS	828	841	851	902	911	923	1015	1015	1015	1097	1096	1099	1197	1197	1202
	AMPS	3.5	3.5	3.5	3.7	3.8	3.8	4.2	4.2	4.2	4.5	4.5	4.5	4.9	4.9	4.9
	SHR	0.51	0.70	0.94	0.52	0.72	0.96	0.53	0.75	0.96	0.54	0.79	0.97	0.57	0.84	0.96
								RATING POINT ARI 310/380								

Extended Heating Performance

		OUTDOOR DRY BULB TEMP. (DEGREES F)				
		37	42	47	52	57
PDH09	Btu	6153	6557	8300	8860	9473
	WATTS	624	634	695	700	709
	AMPS	3.0	3.0	3.1	3.1	3.2
PDH12	Btu	7654	8451	10600	11172	12120
	WATTS	796	826	910	936	967
	AMPS	3.3	3.4	3.7	3.9	4.0
		RATING POINT ARI 310/380				

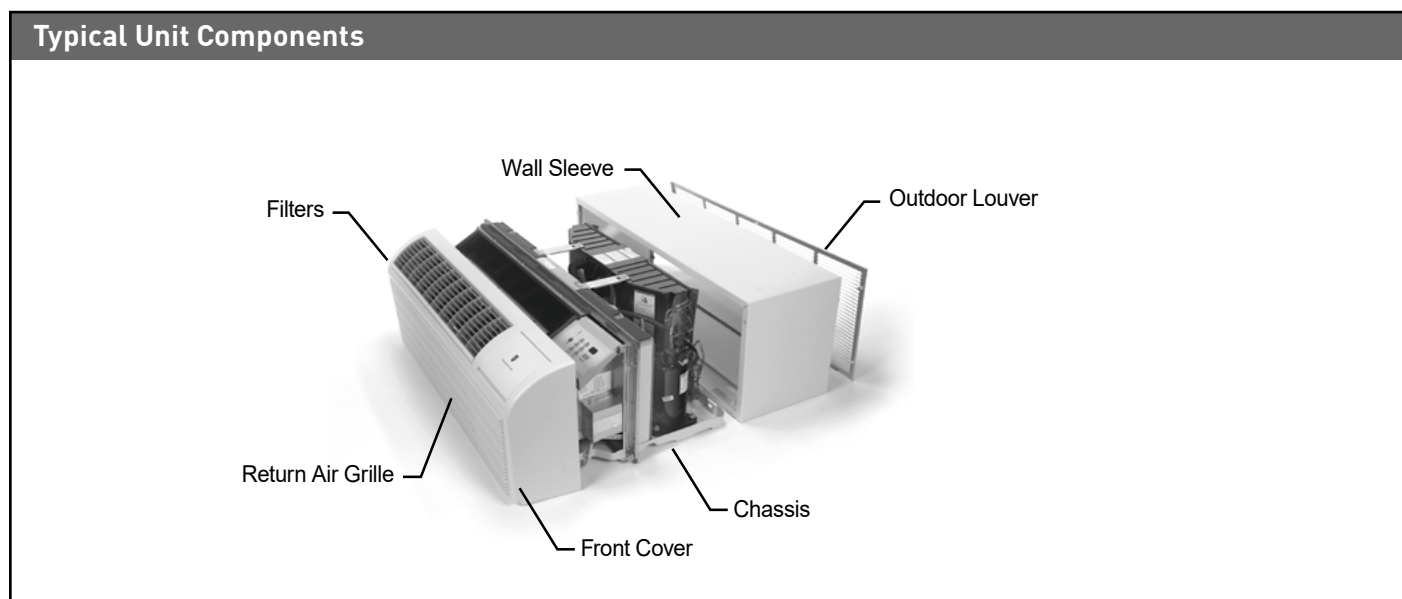
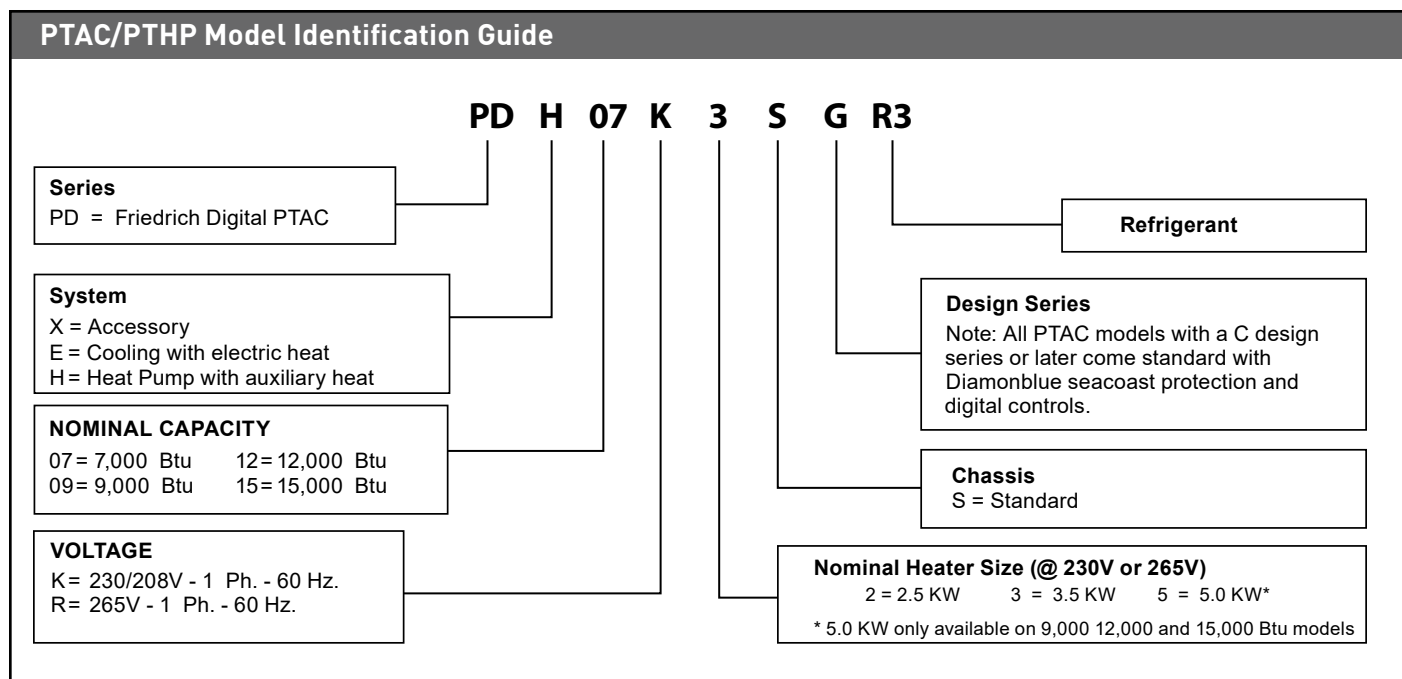
ELECTRIC HEAT DATA

Electric Heat Data

	PDH09K						PDH09R		
HEATER WATTS	2450	2003	3450	2821	5000	4089	2450	3450	5000
VOLTAGE	230	208	230	208	230	208	265		
HEATING BTU	8300	6800	11700	9600	17000	13900	8300	11700	17000
HEATING CURRENT (AMPS)	10.7	9.7	15.0	13.6	21.8	19.7	9.3	13.1	18.9
MINIMUM CIRCUIT AMPACITY	14.0	14.0	19.0	19.0	28.0	28.0	12.0	17.0	24.0
MAXIMUM OVER CURRENT PROTECTION (MOP/MOCP)/BRANCH CIRCUIT FUSE (AMPS)	15.0	15.0	20.0	20.0	30.0	30.0	15.0	20.0	25.0

	PDH12K						PDH12R		
HEATER WATTS	2450	2003	3450	2821	5000	4089	2450	3450	5000
VOLTAGE	230	208	230	208	230	208	265		
HEATING BTU	8300	6800	11700	9600	17000	13900	8300	11700	17000
HEATING CURRENT (AMPS)	10.7	9.7	15.0	13.6	21.8	19.7	9.3	13.1	18.9
MINIMUM CIRCUIT AMPACITY	14.0	14.0	19.0	19.0	28.0	28.0	12.0	17.0	24.0
MAXIMUM OVER CURRENT PROTECTION (MOP/MOCP)/BRANCH CIRCUIT FUSE (AMPS)	15.0	15.0	20.0	20.0	30.0	30.0	15.0	20.0	25.0

MODEL IDENTIFICATION / COMPONENTS



PURCHASER	P.O. #	DATE
PROJECT	LOCATION	
ENGINEER	ARCHITECT	
SUBMITTED BY	FOR APPROVAL	FOR REFERENCE

ITEM	PLAN DESIGNATION	QUANTITY	COOLING Btu	VOLTAGE	FRIEDRICH MODEL

Accessories

PDXWSA	Wall Sleeve	Qty	
PDXWSEXT18	Deep Wall Sleeve- For walls up to 17" deep	Qty	
PDXWSEXT24	Deep Wall Sleeve- For walls up to 23 1/2" deep	Qty	
PDXWSEXT	Custom Deep Wall Sleeve, For walls from 13 1/4" to 25 1/2" deep	Qty	
PXGA	Standard Outdoor Louver	Qty	
PXAA	Architectural Louver, clear	Qty	
PXBG	Architectural Louver, beige	Qty	
PXSC	Architectural Louver, color matched	Qty	
PDXRTA	Remote Thermostat Escutcheon Kit	Qty	
PXDR10	Condensate Drain Kit (pkg/10)	Qty	
UVT1	Friedrich UV Single Bulb Germicidal Kit	Qty	
APWM1	FreshAire® Purifier iWave Series M	Qty	
PXSBA	Sub Base	Qty	
PXCJA	Conduit Kit w/ Junction Box	Qty	
PDXDAA	Lateral Duct Adapter	Qty	
PDXDEA	Lateral Duct Extension	Qty	
PXDS	Sub Base Disconnect Switch	Qty	
PXFTA	Replacement Filters (Set of 10)	Qty	

PXSB23020	Electrical Subbase - 230V 15A and 20A	Qty	
PXSB23030	Electrical Subbase - 230V 30A	Qty	
PXSB26515	Electrical Subbase - 265V 15A	Qty	
PXSB26520	Electrical Subbase - 265V 20A	Qty	
PXSB26530	Electrical Subbase - 265V 30A	Qty	
PXPC23000	LCDI 230V 15A Cord, 0kW	Qty	
PXPC23015A	LCDI 230V 15A Cord, 2.5kW	Qty	
PXPC23020A	LCDI 230V 20A Cord, 3.5kW	Qty	
PXPC23030A	LCDI 230V 30A Cord, 5kW	Qty	
PXPC26515A	Non-LCDI 265V 15A Cord, 2.5kW	Qty	
PXPC26520A	Non-LCDI 265V 20A Cord, 3.5kW	Qty	
PXPC26530	Non-LCDI 265V 30A Cord, 5kW	Qty	
RT7	Wired Digital Thermostat	Qty	
RT7P	Wireless Digital Thermostat	Qty	
WRT2	Wireless Digital Thermostat	Qty	
EMRT2	Wired Thermostat with Occupancy Sensor	Qty	
EMWRT2	Wireless Thermostat with Occupancy Sensor	Qty	
EMOCT	Online Connection Kit	Qty	
EMRAF	Remote Access Fee	Qty	
EMRHCF	Energy Management Remote Humidity Control Fee	Qty	

Features

Constant room comfort monitoring

"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

Room freeze protection- heat initiated if temperature falls to 40°F in an unoccupied room, raising temperature to 46°F

Dual motors for quiet operation

FreshAire® IAQ Ready

Durable, powder coat paint finish

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

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

Separate heat and cool range limits

Desk control ready allowing hotel owners to control units from a central location

Condensate removal system uses slinger ring technology

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

Fresh air damper control to bring in fresh outside air when desired

Washable air filters

Service error code memory storage

Emergency heat override

INSTALLATION

Typical Wall Sleeve Installation (PDXWSA)

PDXWSA Wall Sleeve Dimensions:

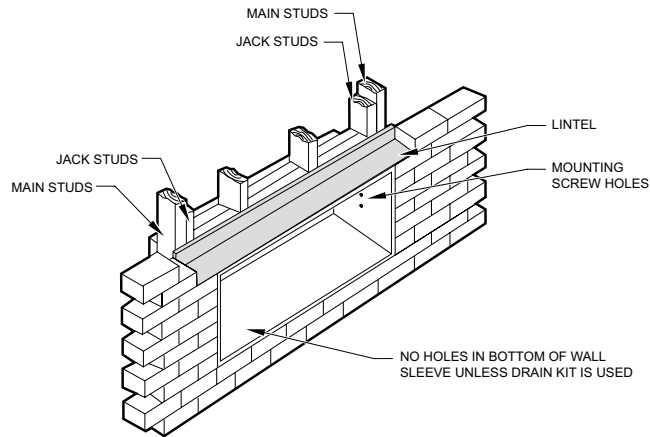
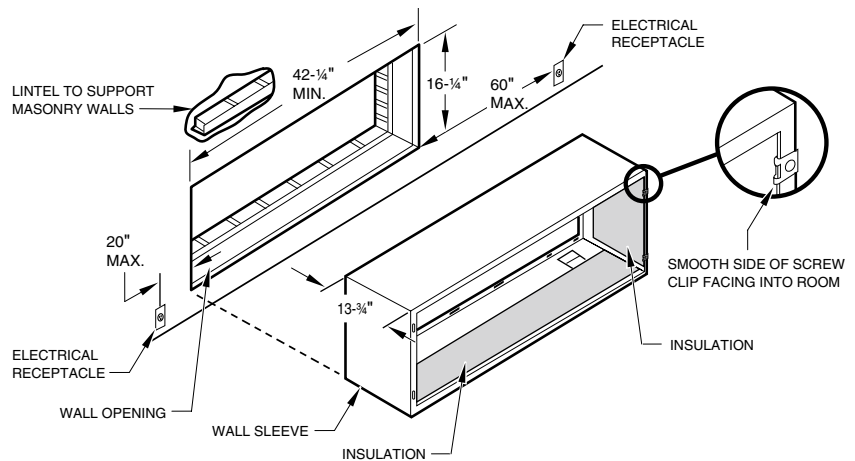
16" H x 42" W x 13³/₄" D

Front Cover Dimensions:

16" H x 42" W x 7³/₄" D

Cut-Out Dimensions:

16¹/₄" x 42¹/₄"

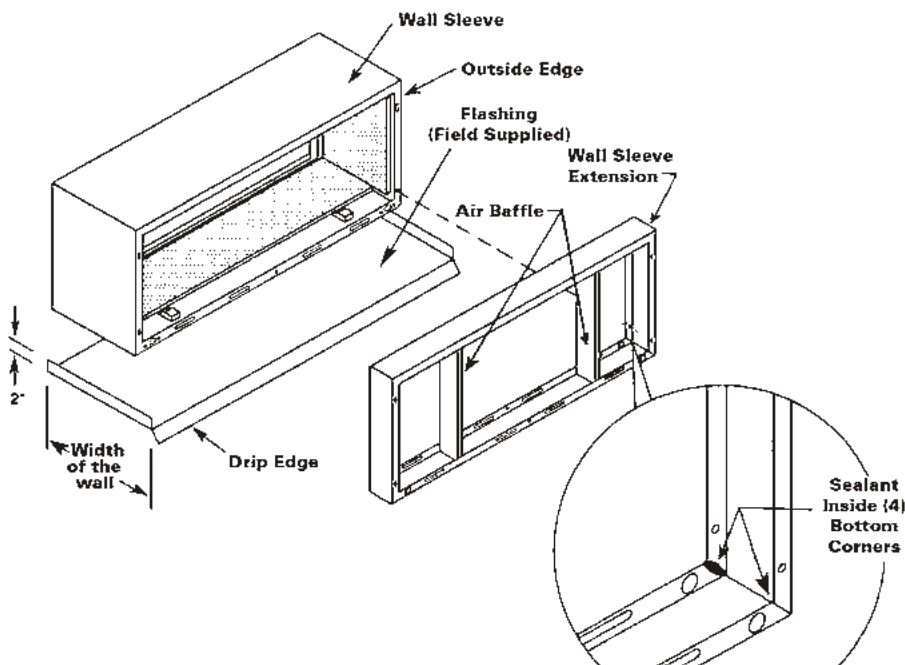


NOTE: Construct wall opening to comply with all applicable building codes.

Note the use of a lintel under the first course of bricks above the wall sleeve. Do not use the wall sleeve as a lintel. The mounting screw holes shown are to be made by the installer.

Note: All 230/208V units are manufactured with a 60" power cord and all 265V units with an 18" power cord. The receptacle locations above must be followed to ensure proper connections.

Deep Wall Sleeve Installation



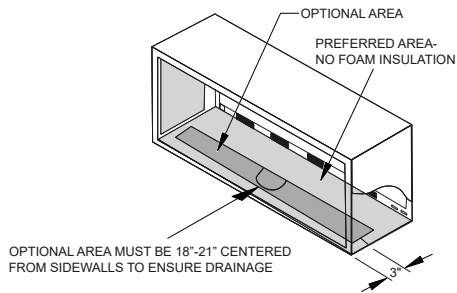
Seal condensate drip pan to wall sleeve with sealant on all (4) bottom corners.

IMPORTANT NOTE:

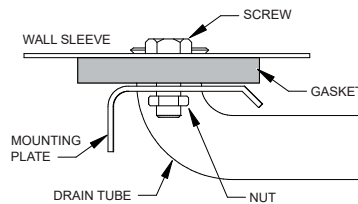
The silicone bead **MUST** extend up the side of the two flanges to prevent condensate from leaking.

ACCESSORY INSTALLATION

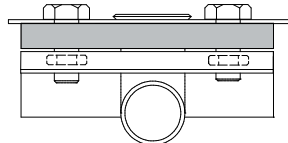
Internal Drain Kit Location and Installation (PXDR10)



NOTE: IF THE DRAIN MUST BE LOCATED IN THE OPTIONAL AREA, THE FOAM INSULATION MUST BE CUT AWAY AND REMOVED TO ALLOW ACCESS TO THE DRAIN.



SIDE VIEW



FRONT VIEW



PXDR10 DRAIN KIT

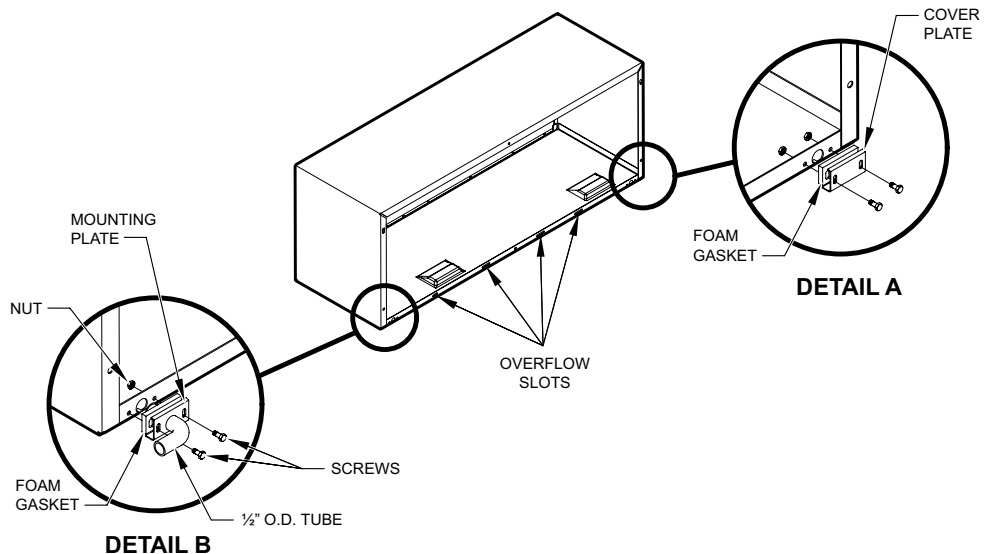
FRP011

External Drain

When using an external drain system, the condensate is removed through either of two drain holes on the back of the wall sleeve. Select the drain hole which best meets your drainage situation and install the drain kit. Seal off the other with a cover plate.

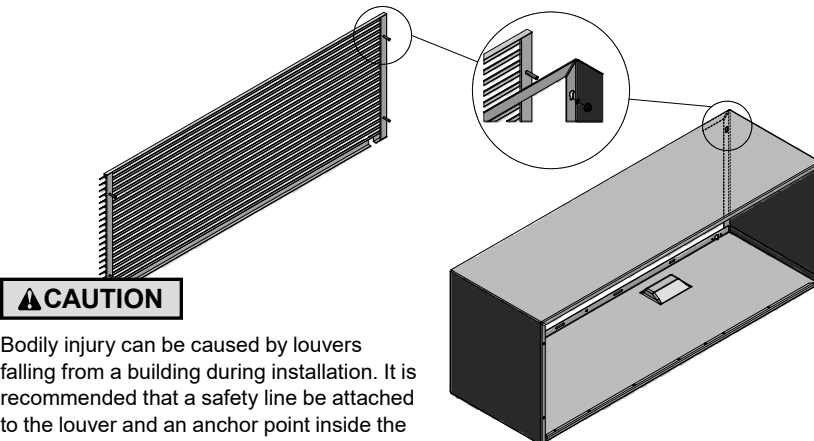
Place the drain tube through the gasket and the mounting plate with the flange toward the wall sleeve.

Attach the drain tube assembly to one of the two drain holes at the rear of the wall sleeve. The large flange on the mounting plate is positioned at the bottom of the sleeve facing toward the sleeve. When the drain tube is positioned at the desired angle, tighten the screws.



FRP012

Architectural Louver Installation (PXAA)



CAUTION

Bodily injury can be caused by louvers falling from a building during installation. It is recommended that a safety line be attached to the louver and an anchor point inside the building during installation.

INSTALLATION

1. Screw a threaded metal stud into each of the holes at the four corners of the louver.
2. From inside the building, grasp the louver at the vertical supports and maneuver the louver through the wall sleeve. Pull towards you until the threaded studs are inserted into the four holes of the wall sleeve.
3. While holding the louver with one hand, start washers and nuts on each of the four studs. Tighten the nuts securely.

HVAC Engineering Specifications

Digital Packaged Terminal Air Conditioners & Heat Pumps

Cooling: 7000 – 14500 Btu

Heating: 5800 – 13300 Btu (Heat Pump)
6800 – 17000 Btu (Electric Heat)

Friedrich Models: ZoneAire Premier PDE – Cooling with electric heat
PDH – Heat Pump with electric heat

All units shall be factory assembled, piped, wired and fully charged with R-410A. All units shall be certified in accordance with ARI Standard 310 for air conditioners and ARI standard 380 for heat pumps. Units shall be UL listed and carry a UL label. All units shall be factory run-tested to check operation and be Friedrich or equivalent.

The basic unit shall not exceed 16" high x 42" wide. Overall depth of the unit from the rear of the Friedrich wall sleeve to the front of the decorative front cover shall not exceed 21 1/4". The unit shall be designed so that room intrusion may be as little as 7 1/2". Installations in walls deeper than 13 1/4" may be accomplished with the use of a deep wall sleeve (PDXWSEXT). Unit shall draw in ambient air through both sides of an outdoor architectural louver or grille measuring 42" wide x 16" high and shall exhaust air out middle portion of the louver. The architectural louver and wall sleeve shall be designed so that the louver may be installed from the inside of the building.

REFRIGERATION SYSTEM – The refrigeration system shall be hermetically sealed and consist of a rotary compressor that is externally mounted on vibration isolators no smaller than 1 3/8" dia. x 1 1/2" high; condenser and evaporator coils constructed of copper tubes and aluminum plate fins; and capillaries as expansion devices. Unit shall have a fan slinger ring to increase efficiency and condensate disposal and have a drain pan capable of retaining 1 1/2 gallons of condensate. A tertiary condensate removal system shall also be incorporated for back up and shall overflow through the wall sleeve and to the outside of the building as a safeguard against damage to the interior room.

INDOOR AIR HANDLING SECTION – The indoor air handling section shall consist of a tangential blower wheel direct driven by a totally enclosed motor. The air handling system shall be designed to minimize airflow noise and provide smooth and consistent airflow. The indoor fan must have three fan speeds that may be selected by the user.

The indoor discharge grille shall be designed to maximize airflow throughout the room. The grille shall be reversible to allow a change in the airflow directions. The grille openings shall be sized to prevent personal injury or damage to the unit.

The front cover shall incorporate dual air filters conveniently mounted in the front of the unit. The filters must be accessible without the removal of the front cover. The filters shall be washable and reusable by cleaning with water or by vacuuming.

The chassis shall have a built-in damper capable of providing at least 75 CFM of fresh air into the conditioned area. A fine mesh screen shall filter the incoming fresh air. There must be a provision for locking the damper closed to ensure a proper seal.

OUTDOOR AIR HANDLING SECTION – The outdoor air section shall consist of a single injection molded fan shroud that incorporates the outdoor motor mount into a single piece for ease of service and assembly. The outdoor motor shall be totally enclosed, ball-bearing, permanently lubricated and directly drive the outdoor fan/slinger ring.

CONTROLS – Covered controls shall be accessible in a compartment at least 7 1/2" wide with the controls no deeper than 1 1/4" in the opening to facilitate easy operation of the unit.

The unit controls shall feature a soft blue LED readout that can display either room temperature or setpoint temperature. The unit shall receive input from the digital control panel through push buttons labeled: 'Cool', 'Heat', 'Constant Fan', 'High Fan', 'Low Fan', 'Auto Fan', '▲', '▼' and 'Power'. When 'Off', the unit may be put directly into cooling or heating mode by pressing the 'Cool' or 'Heat' button.

The unit must have the following energy saving and convenience features built-in:

- Quiet start/stop fan delay
- Fan cycle control for cooling and heating independently
- Room freeze protection
- Random compressor restart
- Electronic temperature limiting

The PTAC must also offer the ability to be controlled by a remote wall-mounted thermostat without additional accessories. Low voltage inputs will include: C (common), R (24V power), Y (cooling), GL (fan low), GH (fan high), W (heat) and O (reversing valve on PDH heat pumps only).

PTAC models shall use a single stage cool/single stage heat thermostat. PTHP models shall use a single stage cool/two-stage heat thermostat. An accessory thermostat must be available from the manufacturer, RT7/RT7P or equivalent. The RT7/RT7P thermostat will provide temperature setpoint, mode selection from cool, heat and fan modes. The thermostat must also allow the selection of fan speed between high and low speed.

Other controls accessible without removal of the chassis shall include fan cycle switch, fresh air vent control and emergency heat override switch (heat pump only).

ELECTRICAL CONNECTION – All PTAC/PTHP units shall come from the factory with a power cord installed. All 230/208V power cords shall feature a leakage current detection device on the plug head. All units shall feature a 6-pin connector for removal of the power cord. The power cord shall be interchangeable to allow changes to the heater output based on the property/electrical requirements.










GENERAL CONSTRUCTION – The wall sleeve shall be constructed of 18-gauge Galvanized zinc-coated steel. It shall be prepared by a process where it is zinc phosphate pretreated and sealed with a chromate rinse, then powder coated with a polyester finish and oven cured for durability. The sleeve shall be shipped with a protective weatherboard and a structural center support, and be insulated for sound absorption and thermal efficiency. The grille or louver shall be shipped separately and made from stamped or extruded anodized aluminum. All louvers shall be in the horizontal plane.

The front panel shall attach firmly to the chassis by two hidden spring clips. As an option the cover may be attached by two screws to prevent tampering. The front panel will feature a contoured discharge with no sharp corners.









CORROSION PROTECTION – The unit shall have corrosion-resistant fans, fan shroud and drain pan for corrosion protection and to prevent rust on the side of the building below the outdoor louver. The unit shall feature corrosion resistant materials and finishes to help prevent deterioration. The outdoor coil shall have Diamonblue corrosion protection consisting of hydrophilic coated fins to prolong the life of the coil in all applications including seacoast environments. All outdoor coils shall also have stainless steel endplates to eliminate rusting of the endplates.

WARRANTY – The warranty is two years on all parts and labor and five years on the sealed system, parts and labor, including compressor, indoor and outdoor coils and refrigerant tubing.

ACCESSORIES

New Construction Accessories		
PDXWSA	WALL SLEEVE Galvanized zinc coated steel is prepared in an 11-step process, then powder coated with a polyester finish and cured in an oven for exceptional durability. The wall sleeve is insulated for sound absorption and thermal efficiency, 16" H x 42" W x 13 ³ / ₄ " D.	PDXWSA 
PDXWSEXT18	DEEP WALL SLEEVE For walls up to 17 ¹ / ₂ " deep.	
PDXWSEXT24	DEEP WALL SLEEVE For walls up to 23 ¹ / ₂ " deep.	
PDXWSEXT	CUSTOM DEEP WALL SLEEVE One piece extended wall sleeve for walls from 13 ¹ / ₄ " to 25 ¹ / ₂ " deep are available by special order.	 Deep wall sleeve PDXWSEXT18 shown with weather panel
PXGA	GRILLE Standard, stamped aluminium, anodized to resist chalking and oxidation.	
PXAA PXBG PXSC	ARCHITECTURAL GRILLES Consist of heavy-gauge 6063-T5 aluminum alloy: 42" W x 16" H x 1 ¹ / ₈ " D. PXAA – Clear, extruded aluminum PXBG – Beige acrylic enamel PXSC – Also available in custom colors.	PXGA  PXAA 
PXDR10	CONDENSATE DRAIN KIT Attaches to the bottom of the wall sleeve for internal draining of condensate or to the rear wall sleeve flange for external draining. Recommended on all units to remove excess condensate. Packaged in quantities of ten.	
PXCJA	CONDUIT KIT WITH JUNCTION BOX 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. *Required for 265V installations.	
PXFTA	REPLACEMENT FILTER PACK These are original equipment return air filters. They are reusable and can be cleaned by vacuuming, washing, or blowing out, and are sold in convenient ten-packs. (Two filters per chassis).	
PXDS	SUBBASE DISCONNECT SWITCH	

ACCESSORIES

New Construction Accessories		
PDXDAA	LATERAL DUCT ADAPTER 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.	
PDXDEA	LATERAL DUCT EXTENSION Additional 3 1/2" 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.	
PXSBA	DECORATIVE SUBBASE 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, or conduit kit.	
PXSB	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. <div><div>PXSB23020</div>Electrical Subbase - 230V 20A<div>PXSB23030</div>Electrical Subbase - 230V 30A<div>PXSB26515</div>Electrical Subbase - 265V 15A<div>PXSB26520</div>Electrical Subbase - 265V 20A<div>PXSB26530</div>Electrical Subbase - 265V 30A</div>	
RT7 RT7P	DIGITAL REMOTE THERMOSTATS 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 DIGITAL REMOTE THERMOSTAT 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.	
PDXRTA	REMOTE THERMOSTAT ESCUTCHEON KIT This 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 guest to the wall thermostat for operation and retains the LED window to display error codes and diagnostic information.	
EMRT2 EMWRT2	ENERGY MANAGEMENT THERMOSTATS EMRT2 Wired thermostat with occupancy sensor. EMWRT2 Wireless thermostat with occupancy sensor. EMOCT EMRAF EMRHCF Online connection kit. Remote access fee. Remote humidity control fee.	

ACCESSORIES

Friedrich PTAC with *FreshAir*® 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, FreshAir® IAQ solutions - a suite of indoor air quality accessories for use with Friedrich Air Conditioners, all with one dedicated purpose - healthy indoor air. FreshAir® 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

FreshAir® Purifier APWM1

FreshAir 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

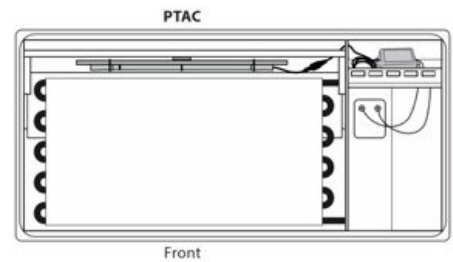


ACCESSORY INSTALLATION FreshAire® IAQ

FreshAire® UV Single Bulb Germicidal UV Light Kit (UVT1)

Step 1: PTAC Installation

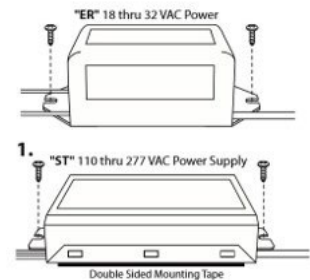
1. Remove decorative front cover, remove (6) screws holding wire mesh fan guard in place
2. Remove (6) screws on each side of the metal plate above the cooling coil.
3. Install lamp with magnetic shield on the backside of metal plate. Lamp should shine down between coil and blower. Lamp will be in front of coil on PZ & PD models. Lamp cord to be fed through existing fan wire chase.
4. Remove control panel screws to access incoming power source. PV & PD models; install power supply under control panel using double sided tape. PZ models: install power supply inside the control box
5. Using the spade and/or piggyback connectors, connect directly to a constant power source terminals. Use a split loom to protect wires.
6. Connect power supply to lamp cord. Connect lamp cord to lamp. Use Zip-tie and Zip-tie base to bundle and secure excess wire and lamp cord. (see wiring diagram)
7. Apply warning/replacement sticker to the inside of the control panel cover.



Step 2: Power Supply Installation

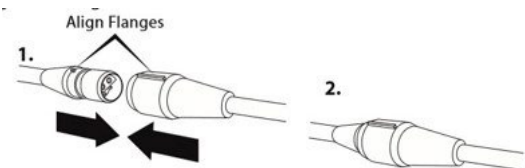
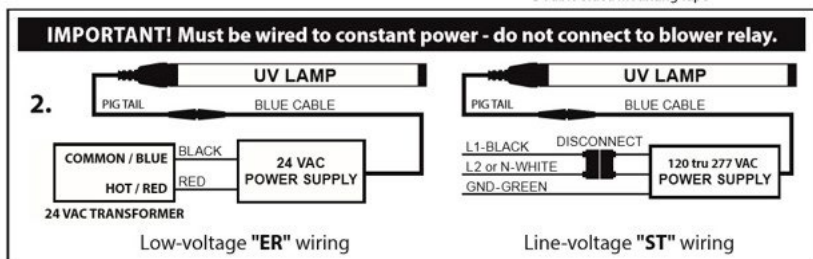
IMPORTANT! Turn off main power source before starting PTAC installation.

1. Find a suitable location for the power supply. Friedrich recommends the front panel of the control box area (see step 1 diagram). Install using the self-tapping screws or double sided tape (recommended)
2. Use the wiring diagram below to connect to power. The high voltage (120-277 VAC) power supply is marked "ST" (See ST diagram below)
3. Connect to power. The low voltage power supply (18 thru 32 VAC) is marked "ER". The high voltage (120-277 VAC) power supply is marked "ST"



Step 3: UV Lamp Connection

1. When all the other components are properly installed, connect the UV lamp cable to the power supply cable.
2. Make sure the flanges are aligned and then push the connection firmly together. A tight connection ensures a proper water-resistant seal.



Future Lamp Replacement

REMINDER! The germicidal UV lamp in UVT1 must be replaced every 2 years

NOTE: UV lamps will continue to emit visible light but lose germicidal effectiveness over time

1. Remove lamp from lamp clips one side at a time.
2. Replace with a new lamp and snap lamp into clips on each side
3. UV lamps contain small amounts of mercury. Dispose of lamps in accordance with local environmental regulations

ACCESSORY INSTALLATION FreshAire® IAQ

FreshAire® Purifier: iWave M Series (APWM1)

iWave-M PTAC Installation Instructions: The iWave-M is a highly versatile ion generating device that is designed to be typically installed at the cooling coil; but the device can be installed in supply air as well. The iWave-M is an ideal, no replacement part device for air purification in all Friedrich PTAC's.



PTAC Installation (PZ/PD/PV)

1. Turn off power to the unit
2. Remove PTAC decorative front cover
3. Affix iWave ionizer bar to the solid surface (front surface) of coil. The ionizer bar should be centered on the coil. (see image above) Simply use the hook and loop backing on the power pack and ionization bar and stick it across the width of the coil so the iWave-M treats the coil as well as the breathing zone.
4. Mount power bank and wiring. Positioned on the side closest to control box assembly. Typically affixed with hook & loop to the control box assembly cover (see image above)
5. Run wires into the control box compartment to hook up to 110VAC to 240VAC power source to where iWave-M will power on with the indoor fan. For 110/120VAC and 208/240VAC input, connect black wire (hot) and white wire (neutral or other AC phase) to applicable electrical terminal block.
6. Trim wires to preferred length and connect to appropriate terminals. Harness/secure wires within the equipment as necessary.
7. Reassemble the unit, reattach front cover, and turn power on.
8. Apply installation notification sticker to the outside of the control panel cover

IMPORTANT!

Turn off main power source before starting PTAC installation.

Cleaning: If required, use a wet wipe or damp cloth to clean the ionizer bar. A soft bristle brush can also be used to clean debris from the ion emitter. Do Not expose the iWave-M to corrosive cleaners.

PTAC Power Cord Selection (PDE/PDH/PVH)

POWER CORDS

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

ZONEAIRE® PREMIER	FRESH-AIRE®		Length
PXPCZ23015A	PXPCFA23015	LCDI 230V 15A Cord - 2.5 kW	67 in.
PXPCZ23020A	PXPCFA23020	LCDI 230V 20A Cord - 3.5 kW	67 in.
PXPCZ23030A	PXPCFA23030*	LCDI 230V 30A Cord - 5.0 kW	67 in.
PXPCZ26515A	PXPCFA26515	Non-LCDI 265V 15A Cord - 2.5 kW	27 1/2 in.
PXPCZ26520A	PXPCFA26520	Non-LCDI 265V 20A Cord - 3.5 kW	27 1/2 in.
PXPCZ26530	PXPCFA26530*	Non-LCDI 265V 30A Cord - 5.0 kW	27 1/2 in.



Friedrich Air Conditioning Co.

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800.541.6645

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ZONEAIRE® • PREMIER SERIES PACKAGED TERMINAL AIR CONDITIONERS LIMITED WARRANTY

SAVE THIS CERTIFICATE. It gives you specific rights. You may also have other rights which may vary from state to state and province to province

In the event that your unit needs servicing, contact your nearest authorized service center. If you do not know the nearest service center, ask the company that installed your unit or contact us - see address and telephone number above. To obtain service and/or warranty parts replacement, you must notify an authorized FRIEDRICH Air Conditioning Co. service center, distributor, dealer, or contractor of any defect within the applicable warranty period.

When requesting service: please have the model and serial number from your unit readily available.

Unless specified otherwise herein, the following applies:

FRIEDRICH PACKAGED TERMINAL AIR CONDITIONERS AND HEAT PUMPS

LIMITED WARRANTY - TWO YEARS (Twenty-four (24) months from the date of installation). Any part found to be defective in the material or workmanship will be repaired or replaced free of charge by our authorized service center during the normal working hours; and

LIMITED WARRANTY - THIRD THROUGH FIFTH YEAR (Sixty (60) months from the date of installation). ON THE SEALED REFRIGERATION SYSTEM. Any part of the sealed refrigeration system that is defective in material or workmanship will be repaired or replaced free of charge (excluding freight charges) by our authorized service center during normal working hours. The sealed refrigeration system consists of the compressor, metering device, evaporator, condenser, reversing valve, check valve, and the interconnecting tubing.

These warranties apply only while the unit remains at the original site and only to units installed inside the continental United States, Alaska, Hawaii, Puerto Rico, Mexico and Canada. The warranty applies only if the unit is installed and operated in accordance with the printed instructions and in compliance with applicable local installation and building codes and good trade practices. For international warranty information, contact the Friedrich Air Conditioning Company - International Division.

Any defective part to be replaced must be made available to FRIEDRICH in exchange for the replacement part. Reasonable proof must be presented to establish the date of install, otherwise the beginning date of this certificate will be considered to be our shipment date plus sixty days. Replacement parts can be new or remanufactured. Replacement parts and labor are only warranted for any unused portion of the unit's warranty.

We will not be responsible for and the user will pay for:

1. Service calls to:

- A) Instruct on the unit operation. B) Replace house fuses or correct house wiring. C) Clean or replace filters. D) Remove the unit from its installed location when not accessible for service required. E) Correct improper installations.

2. Parts or labor provided by anyone other than an authorized service center.

3. Damage caused by:

- A) Accident, abuse, negligence, misuse, riot, fire, flood, or acts of God. B) Operating the unit where there is a corrosive atmosphere containing Chlorine, Fluorine, or any damaging chemicals (other than in a normal residential environment). C) Unauthorized alteration or repair of the unit, which in turn affects its stability or performance. D) Failing to provide proper maintenance and service. E) Using an incorrect power source. F) Faulty installation or application of the unit. **G) Operation of the unit during construction.**

We shall not be liable for any incidental, consequential, or special damages or expenses in connection with any use or failure of this unit. We have not made and do not make any representation or warranty of fitness for a particular use or purpose and there is no implied condition of fitness for a particular use or purpose. We make no expressed warranties except as stated in this certificate. No one is authorized to change this certificate or to create for us any other obligation or liability in connection with this unit. Any implied warranties shall last for one year after the original purchase date. Some states and provinces do not allow limitations on how long an implied warranty or condition lasts, so the above limitations or other rights and remedies provided by law.

Performance of Friedrich's Warranty obligation is limited to one of the following methods:

- 1. Repair of the unit
- 2. A refund to the customer for the prorated value of the unit based upon the remaining warranty period of the unit.
- 3. Providing a replacement unit of equal value

The method of fulfillment of the warranty obligation is at the sole discretion of Friedrich Air Conditioning.

In case of any questions regarding the provisions of this warranty, the English version will govern.

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