



FRIEDRICH

FreshAir® Series PTACS Heat Pumps

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	
PDXWSEZ	Wall Sleeve	Qty	
PDXWSEXT18	Deep Wall Sleeve- For walls up to 17 1/2" 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	
PDXRTB	Remote Thermostat Escutcheon Kit	Qty	
PXDR10	Condensate Drain Kit (pkg/10)	Qty	
PXSBA	Sub Base	Qty	
PXCJA	Conduit Kit w/ Junction Box	Qty	
PDXDAA	Lateral Duct Adapter	Qty	
PDXDEA	Lateral Duct Extension	Qty	
PXFTA	Replacement Filters (Set of 10)	Qty	
APWM1	FreshAir® Purification iWaves Series M	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	
RT7	Wired Digital Thermostat	Qty	
RT7P	Wired Programmable Digital Thermostat	Qty	
EMRTA4	Wired Thermostat with Occupancy Sensor	Qty	
EMRTB4	Wired Thermostat with Occupancy Sensor	Qty	
EMWRTA4	Wireless Thermostat with Occupancy Sensor	Qty	
EMWRTB4	Wireless Thermostat with Occupancy Sensor	Qty	
VRPXEMRTA4	Wired 12v Intelligent Controller for FreshAir PTAC	Qty	
VRPXEMRTB4	Wired 12v Intelligent Controller for FreshAir PTAC	Qty	
VRPXEMWRTA4	Wireless 12v Intelligent Controller for FreshAir PTAC	Qty	
VRPXEMWRTB4	Wireless 12v Intelligent Controller for FreshAir PTAC	Qty	
WRT2	Wireless Digital Thermostat	Qty	
EMOCT	Online Connection Kit	Qty	
EMRAF	Remote Access Fee	Qty	
EMRHCF	Energy Management Remote Humidity Control Fee	Qty	
PXPCFA23015	LCDI 230V 15A Cord - 2.5 kW	Qty	
PXPCFA23020	LCDI 230V 20A Cord - 3.5 kW	Qty	
PXPCFA23030**	LCDI 230V 30A Cord - 5.0 kW	Qty	
PXPCFA26515	Non-LCDI 265V 15A Cord - 2.5 kW	Qty	
PXPCFA26520	Non-LCDI 265V 20A Cord - 3.5 kW	Qty	
PXPCFA26530**	Non-LCDI 265V 30A Cord - 5.0 kW	Qty	

*NOTE: The FreshAir® PTAC when paired with VRPXEMRT2 wired wall controller, or VRPXEMWRT2 wireless wall controller operates as a fully variable speed unit. When used with other compatible thermostats, the unit will operate at multiple speeds in either cooling or heating mode.

*Cannot be used with PVH09K3FA

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

Durable, powder coat paint finish

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

Separate heat and cool range limits

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

2-speed FreshAir fan

RS-385 Communication port

Condensate removal systems uses slinger ring technology

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

Washable, easy access air filters

Service error code memory storage

Emergency heat override

FreshAir® PTAC

The most advanced PTAC ever

A patented fresh air delivery system with industry leading adaptive make-up air control

US Patent: #10,436,457

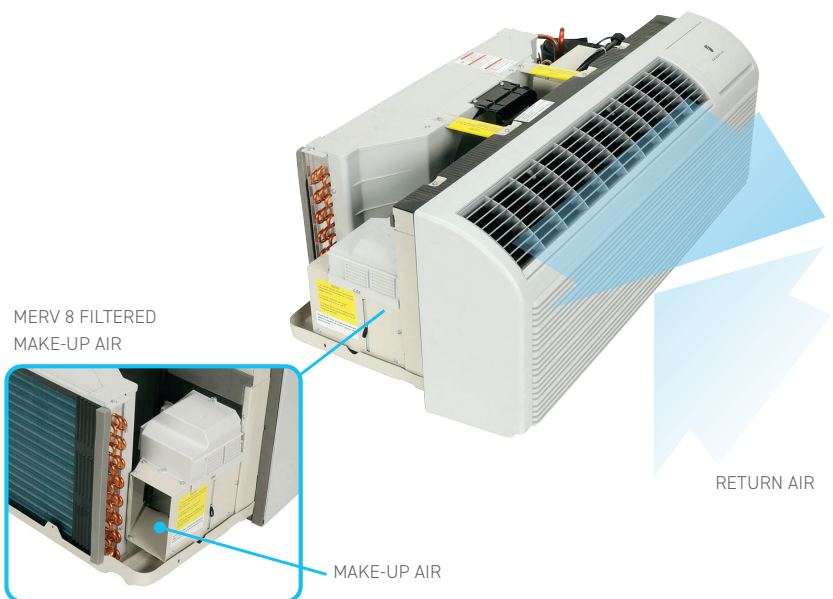
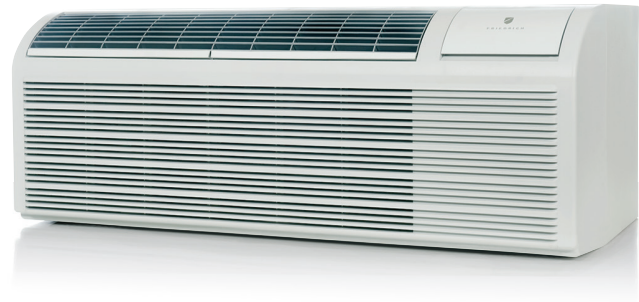
FreshAir®

FreshAir® 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, Dedicated Outdoor Air Systems (DOAS) 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 FreshAir® PTAC utilizes the main evaporator coil and MERV 8 filters to truly condition and filter the outside ventilation air. Pair with Friedrich's VRPX thermostat and maximize your indoor comfort with FreshAir adaptive make-up air control for humidity and occupancy.



FRESHHAIRE® PTAC EXTENDED CAPACITY RANGE

230/208V Inverter

COOLING

PVH09K

STANDARD RATING R-32	9,800/9,700 Btu
EXTENDED RATING R-32	5,800 - 12,000 Btu

PVH12K

STANDARD RATING R-32	12,000/11,800 Btu
EXTENDED RATING R-32	6,100 - 15,500 Btu

HEAT PUMP

PVH09K

STANDARD RATING R-32	8,500/8,400 Btu
EXTENDED RATING R-32	5,500 - 10,800 Btu

PVH12K

STANDARD RATING R-32	11,500/11,500 Btu
EXTENDED RATING R-32	6,000 - 14,000 Btu

265V Inverter

COOLING

PVH09R

STANDARD RATING R-32	9,800 Btu
EXTENDED RATING R-32	6,100 - 15,500 Btu

PVH12R

STANDARD RATING R-32	12,000 Btu
EXTENDED RATING R-32	6,100 - 15,500 Btu

HEAT PUMP

PVH09R

STANDARD RATING R-32	8,500 Btu
EXTENDED RATING R-32	5,500 - 10,800 Btu

PVH12R

STANDARD RATING R-32	11,600 Btu
EXTENDED RATING R-32	6,000 - 14,000 Btu

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® PTAC

SPECIFICATIONS

PTHP (HEAT PUMP) WITH INVERTER AND MUA (MAKE-UP AIR), R-32 REFRIGERANT

Model	PVH09K3FC	PVH09R3FC	PVH12K3FC	PVH12R3FC
PERFORMANCE DATA				
Cooling Btu	9,800/9,700	9,800	12,000/11,800	12,000
Cooling Capacity Min./Max (Btu)	5,800-12,000	5,800-12,000	6,100-15,500	6,100-15,500
Cooling Watts	815/805	815	1,040/1,025	1,040
Energy Efficiency Ratio, EER	12.0/12.0	12.0	11.5/11.5	11.5
Heater Size (kW)	3.5	3.5	3.5	3.5
Reverse Heating Btu	8,500/8,400	8,500	11,500/11,500	11,600
Reverse Heating Capacity Min./Max. (Btu)	5,500-10,800	5,500-10,800	6,000-14,000	6,000-14,000
Heating Watts	710/700	710	940/940	940
COP	3.51/3.51	3.51	3.65/3.65	3.65
Moisture Removal (pints/hr.)	1.4	1.2	1.9	2.4
Sensible Heat Ratio	77%	78%	77%	78%
ELECTRICAL DATA				
Voltage (1 Phase, 60 Hz)	230/208	265	230/208	265
Volt Range	253-187	292-239	253-187	292-239
Current (Amps)	3.56/3.95	3.09	4.55/4.99	3.86
Electric Heater (Amps)	15.3	13.3	15.3	13.3
Reverse Heat (Amps)	3.4/3.1	2.77	4.5/4.1	3.5
Power Factor	0.97	0.936	0.98	0.90
Compressor LRA	N/A	N/A	N/A	N/A
Compressor RLA	3.2	2.8	4.1	3.5
Outdoor Fan Motor, HP	0.071	0.14	0.08	0.14
AIRFLOW DATA				
Indoor CFM, HIGH	700	700	750	780
Indoor CFM, LOW	535	535	560	560
Make-up Air CFM@0.05" wc Min/Max	25/52	25/52	25/52	25/52
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.)	120	109.9	136	136
Shipping Weight (lbs.)	141	132.45	157	157
R-32 Charge (oz.)	24.3	24.3	27.2	24.3

		230/208V ELECTRIC HEATER RATING			
		(CONFIGURATION BASED ON POWER CORD)			
POWER CORD #	VOLTAGE	BRANCH CKT AMPS	MCA	WATTS	
PXPCFA23015A	230/208	15	13.9	2,500	
PXPCFA23020A	230/208	20	19.9	3,600	
PXPCFA23030A	230/208	30	27.5	5,000	
PXPCFA26515A	265V	15	12.0	2,500	
PXPCFA26515A ¹	265V	15	7.3	1,500	
PXPCFA26520	265V	20	16.8	3,500	
PXPCFA26530	265V	25	23.8	5,000	

¹ Data for Model PVH09R.

PXPCFA23020A comes standard on 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.

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

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.



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PTAC FRESHAIRES SUBMITTAL (REV 05-16-25)

Receptacles and Fuse Types

Voltage	230V			265V			
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

