

PVFY-P-E00A

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Ideal for closet or attic applications



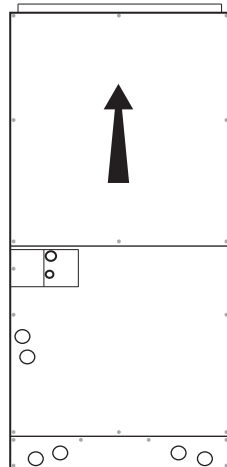
Other features include:

- An adjustable blower static pressure from a factory set 0.30" W.G. to 0.50" W.G.
- The blower includes three fan speeds selectable at the remote controller, allowing the occupant to fine tune the occupant's comfort.
- High efficiency DC motors and a forward curved blower provide quiet, efficient operation.
- A standard plug-in connection allows easy integration with auxiliary heat when using the optional relay kit.
- The control board allows an easy connection for a condensate overflow safety switch.
- The cabinets are constructed of heavy-gauge pre-printed steel with one inch insulation providing an R-4.2 insulating value.
- Linear expansion valve (LEV) modulates capacity to meet load requirements.

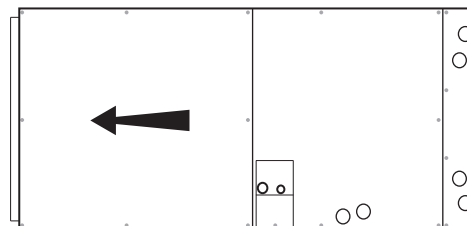
The vertical air handler is ideal for installations in closets or equipment rooms where space is limited. The air handler also has a side drain pan, allowing it to be installed in a horizontal left position. The vertical air handler can be connected to a system with all other CITY MULTI® indoor units for complete system design flexibility.

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Vertical Airflow



Horizontal Left Airflow



Vertical concealed		P06	P08	P12	P15	P18	P24	P27	P30	P36	P48	P54	P72	P96
		0.8HP	1.0HP	1.3HP	1.6HP	2.0HP	2.5HP	2.8HP	3.2HP	4.0HP	5.0HP	5.6HP	8.0HP	10.0HP
Nominal cooling cap. *1	BTU/h	6,000	8,000	12,000	15,000	18,000	24,000	24,000	30,000	36,000	48,000	54,000	72,000	96,000
Nominal heating cap. *2	BTU/h	6,700	9,000	13,500	17,000	20,000	27,000	30,000	34,000	40,000	54,000	60,000	80,000	100,000
PVFY-P-E00A				●		●	●		●	●	●	●		

* Nominal conditions *1, *2 are referred to in the Specification sheet.

1. SPECIFICATIONS

PVFY Specifications									
Model Name			PVFY-P12E00A	PVFY-P18E00A	PVFY-P24E00A	PVFY-P30E00A	PVFY-P36E00A	PVFY-P48E00A	PVFY-P54E00A
Power Source			208/230V, 1-phase, 60Hz						
Cooling Capacity		Btu/h *1	12,000	18,000	24,000	30,000	36,000	48,000	54,000
Heating Capacity		Btu/h *1	13,500	20,000	27,000	34,000	40,000	54,000	60,000
Power Consumption	Cooling	kW	0.07 / 0.07	0.18 / 0.18	0.14 / 0.14	0.25 / 0.25	0.20 / 0.20	0.21 / 0.21	0.27 / 0.27
	Heating	kW	0.07 / 0.07	0.18 / 0.18	0.14 / 0.14	0.25 / 0.25	0.20 / 0.20	0.21 / 0.21	0.27 / 0.27
Current	Cooling	A	0.45 / 0.40	1.22 / 1.10	1.11 / 1.00	2.00 / 1.80	1.67 / 1.50	1.78 / 1.60	2.11 / 1.90
	Heating	A	0.45 / 0.40	1.22 / 1.10	1.11 / 1.00	2.00 / 1.80	1.67 / 1.50	1.78 / 1.60	2.11 / 1.90
MCA (208 / 230V)			0.56 / 0.50	1.53 / 1.38	1.39 / 1.25	2.50 / 2.25	2.09 / 1.88	2.23 / 2.00	2.64 / 2.38
MOCP		A	15						
Dimensions	Height	Inches	42-3/4			48		58-3/4	
	Width	Inches	17-3/4			21		24-1/2	
	Depth	Inches	21					21-3/4	
Net Weight	Unit	Pounds	88	98	108	115	120	160	168
Heat Exchanger			Cross Fin (Aluminum Plate Fin and Copper Tube)						
Fan	Type x Qty.		Forward Curved Blower x 1						
	Airflow Rate *2	0.30 ESP	243-320-376	385-481-531	483-636-705	637-800-886	784-954-1,057	982-1,268-1,405	1,114-1,426-1,576
		0.50 ESP	202-249-346	402-485-520	560-632-713	725-815-873	880-991-1,033	1,162-1,303-1,438	1,360-1,497-1,570
	External Static Pressure	In. WG	0.30 / 0.50 (Selectable)						
	Motor Type		High-efficiency DC						
Air Filter			Filter and rack - field-supplied						
Refrigerant Pipe Dimensions	Low Pressure (Brazed)	Inches	1/2		5/8				
	High Pressure (Brazed)	Inches	1/4		3/8				
Drain Pipe Dimension	Primary	Inches	3/4 FPT						
	Secondary		3/4 FPT						

Note:	*1 Nominal cooling conditions	*2 Nominal heating conditions	Unit converter
Indoor:	80degF D.B./ 67degF W.B.	70degF D.B.	kcal =kW x 860
	(26.7degC D.B./ 19.4degC W.B.)	(21.1degC D.B.)	BTU/h =kW x 3,412
Outdoor:	95degF D.B. (35degC D.B.)	47degF D.B./ 43degF W.B.	cfm =m ³ /min x 35.31
		(8.3degC D.B./ 6.1degC W.B.)	lb =kg / 0.4536
Pipe length:	25ft.(7.6m)	25ft.(7.6m)	* Above specification data is subject to rounding variation.
Level difference:	0ft.(0m)	0ft.(0m)	

* Due to continuing improvement, above specifications may be subject to change without notice.

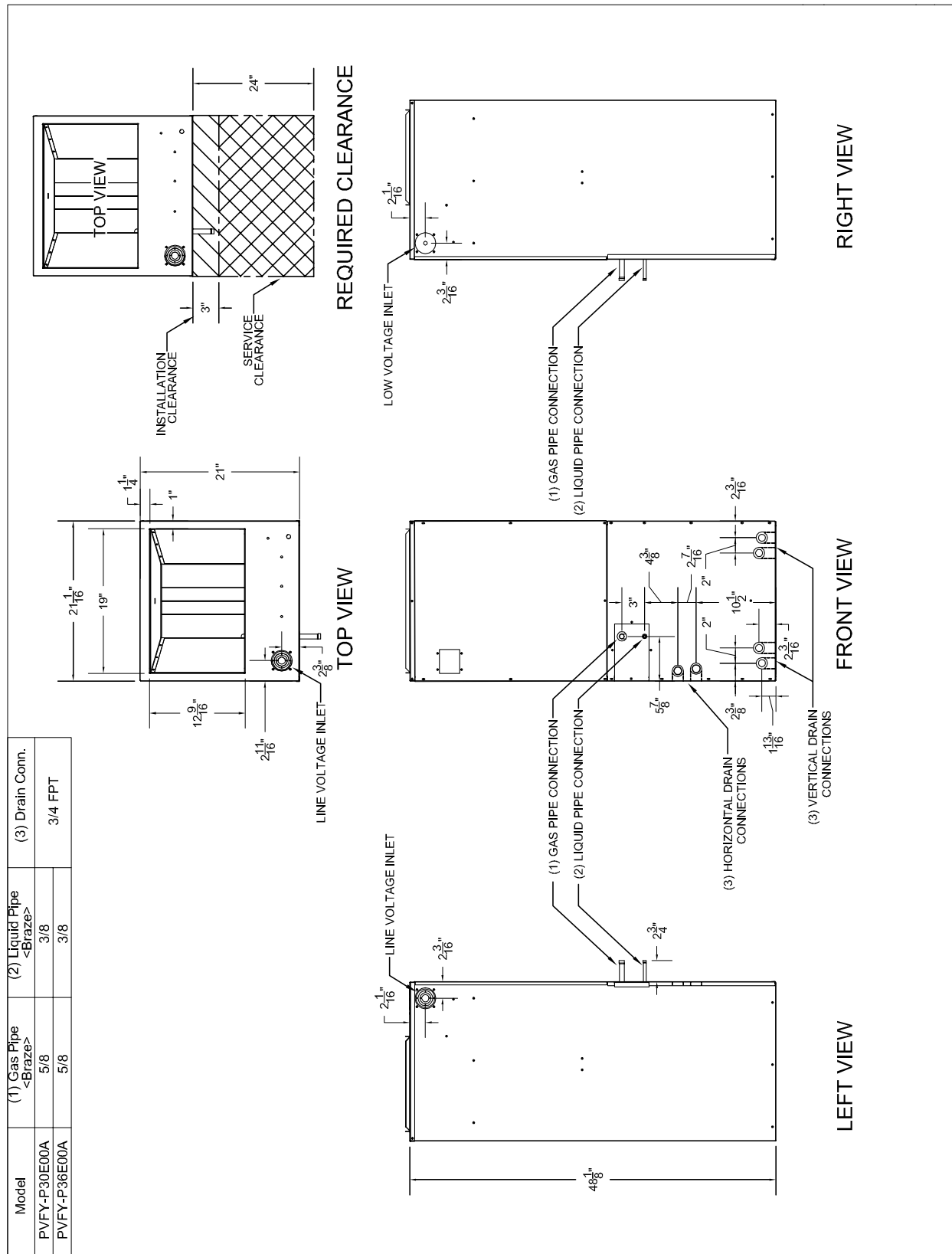
Ventilation Air: Providing sufficient ventilation air is an important part of every building design. ASHRAE standard 62 provides the minimum ventilation air requirements. Also check local codes.

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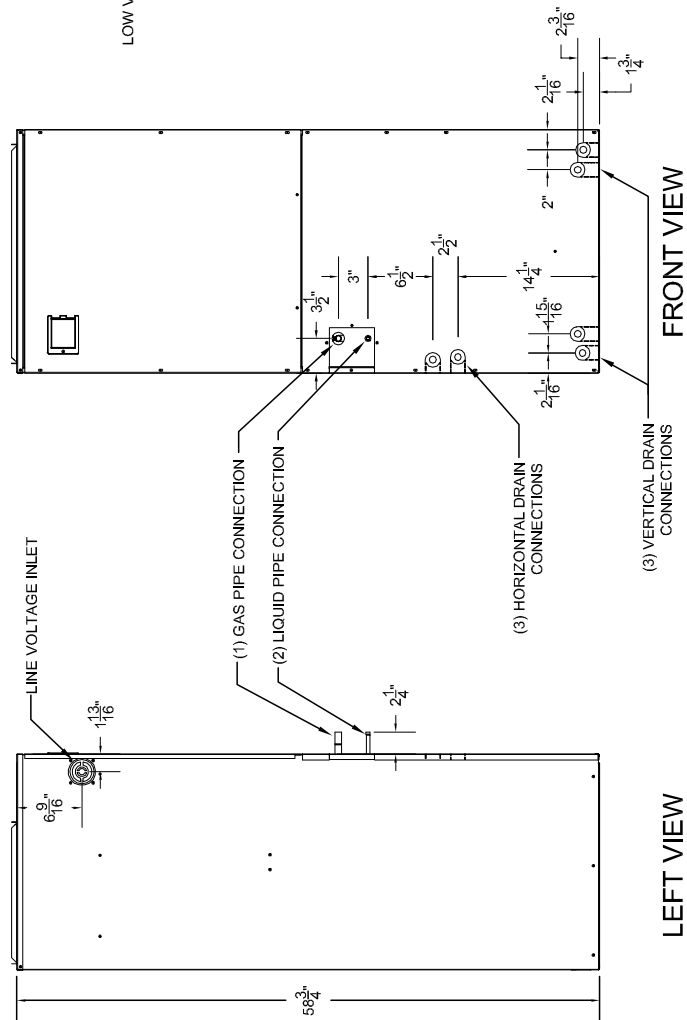
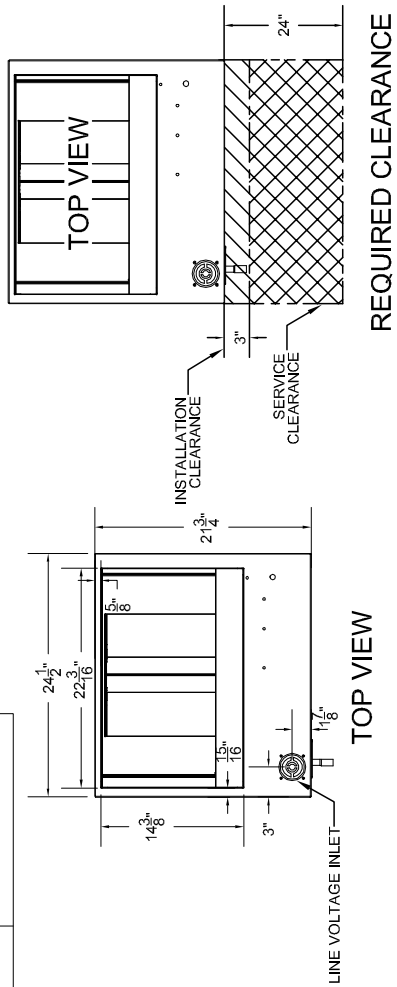
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PVFY-5

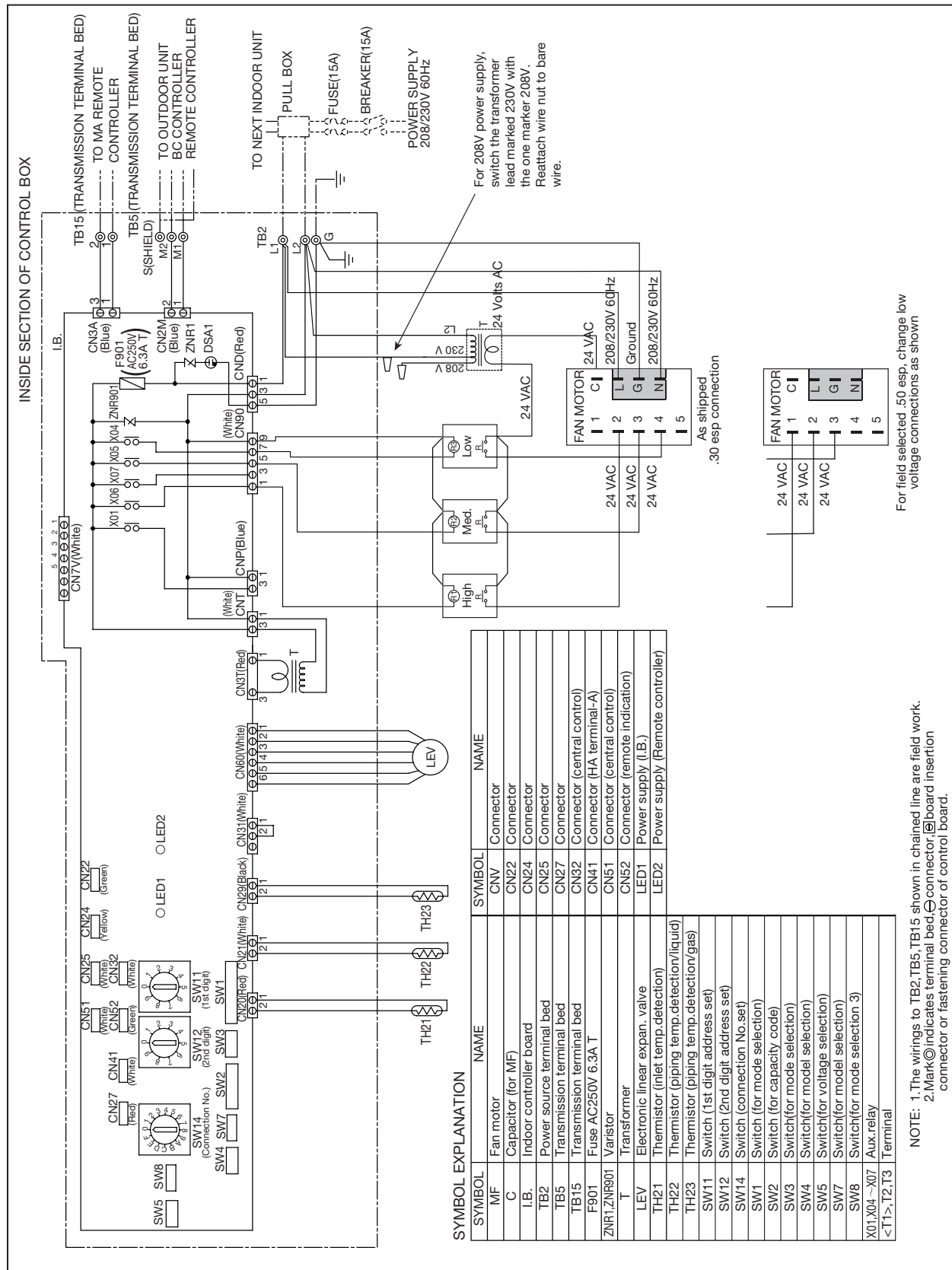
2. EXTERNAL DIMENSIONS

PVFX-P-E00A

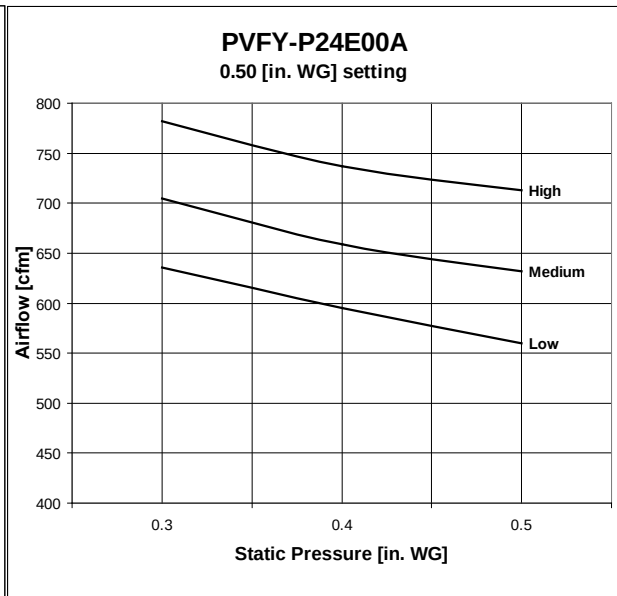
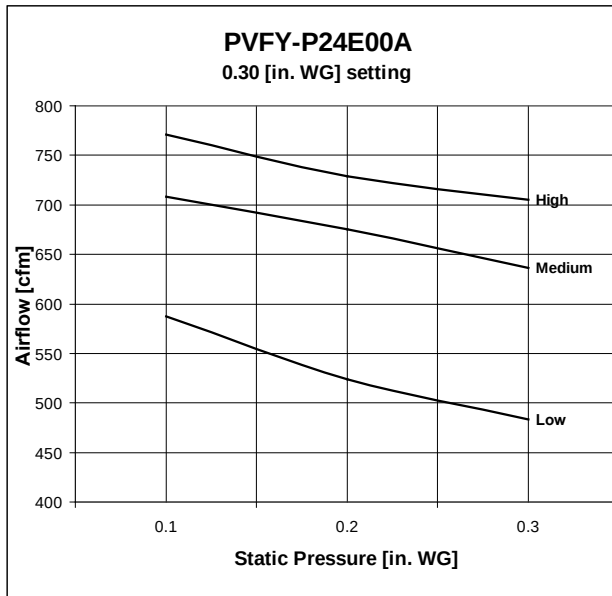
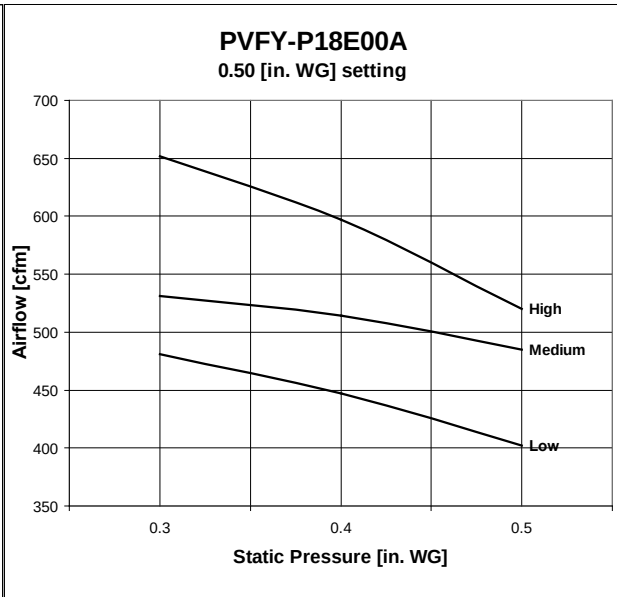
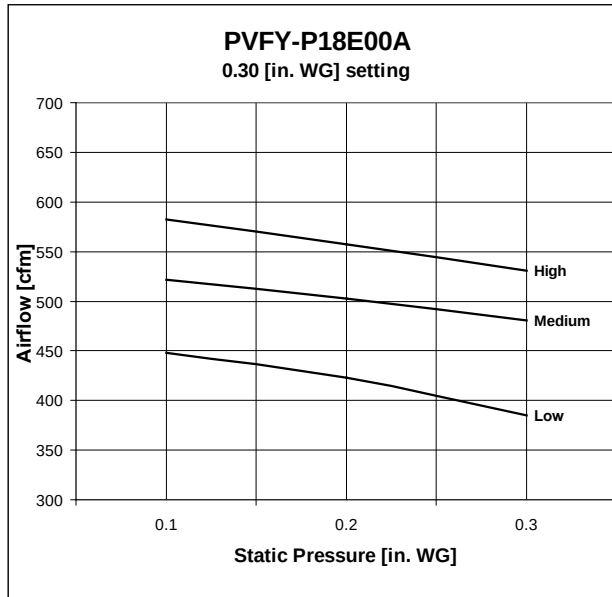
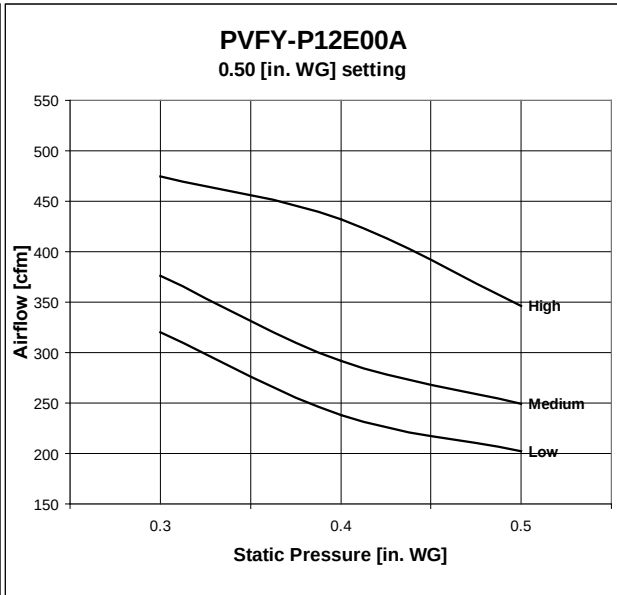
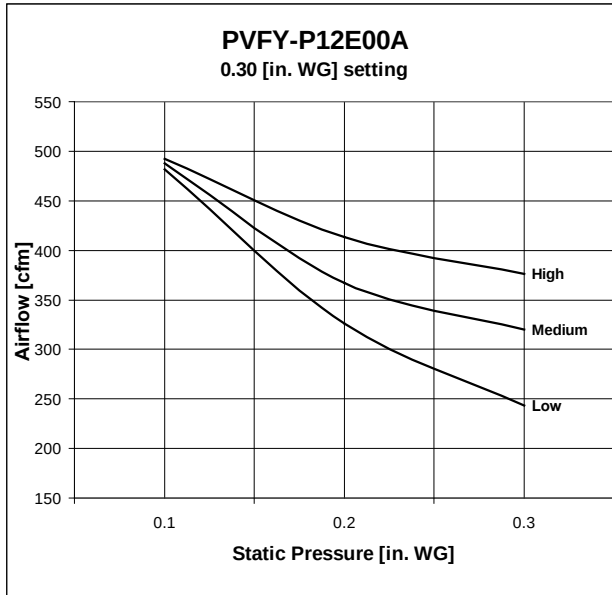
Model	(1) Gas Pipe <Brazing>	(2) Liquid Pipe <Brazing>	(3) Drain Conn.
PVFX-P48E00A	5/8	3/8	3/4 FPT
PVFX-P54E00A	5/8	3/8	3/4 FPT



3. ELECTRICAL WIRING DIAGRAM

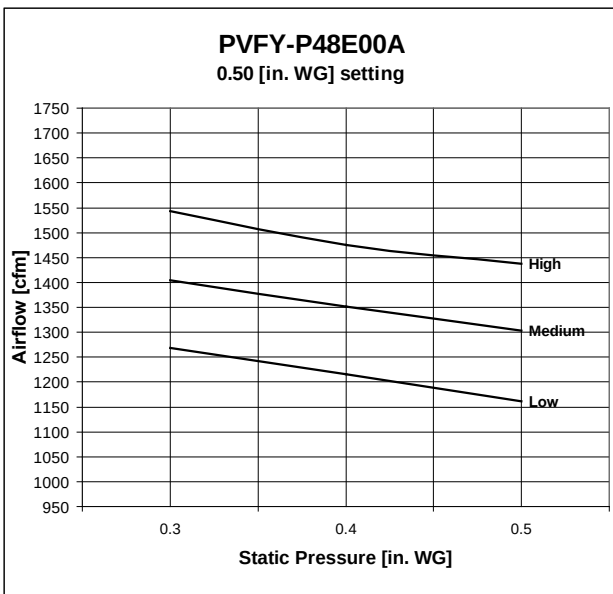
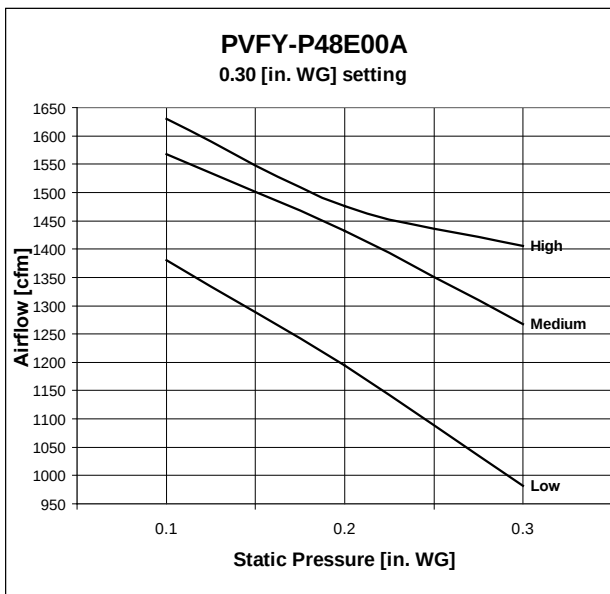
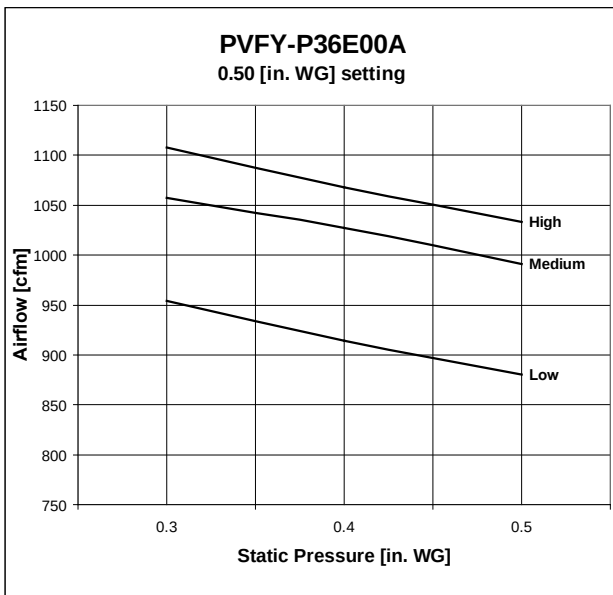
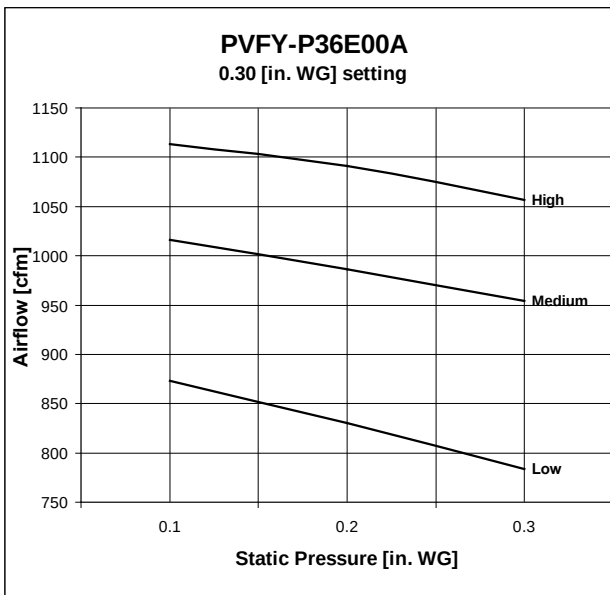
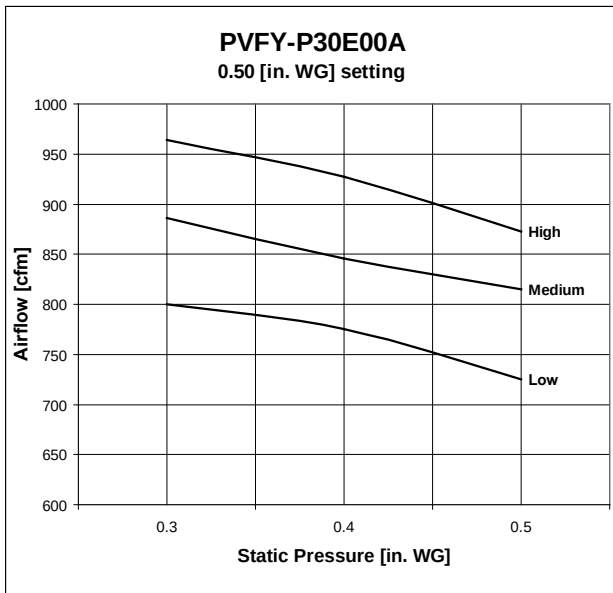
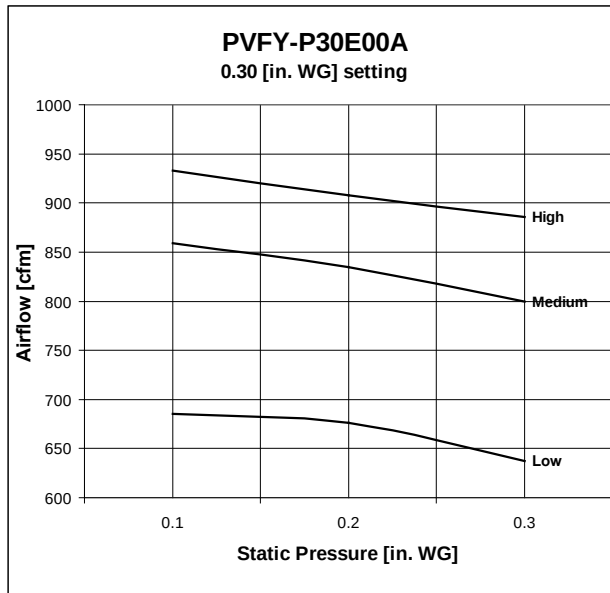


4. FAN CHARACTERISTIC CURVES



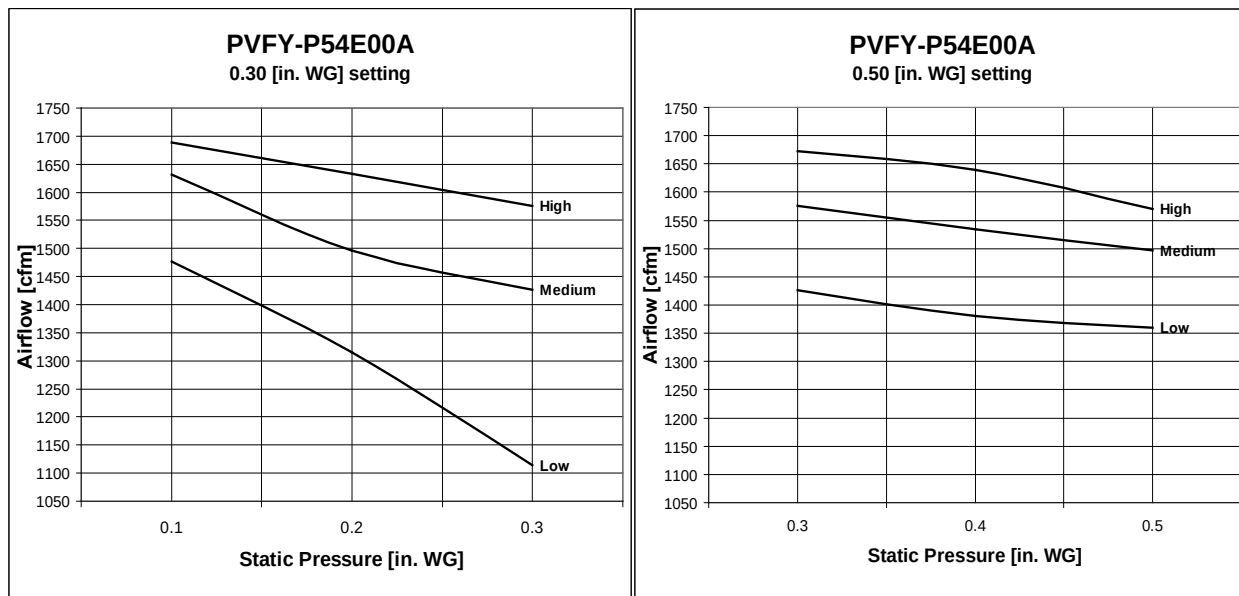
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4. FAN CHARACTERISTIC CURVES



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4. FAN CHARACTERISTIC CURVES



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5. OPTIONAL PARTS

Optional Parts Line Up for the Indoor Unit

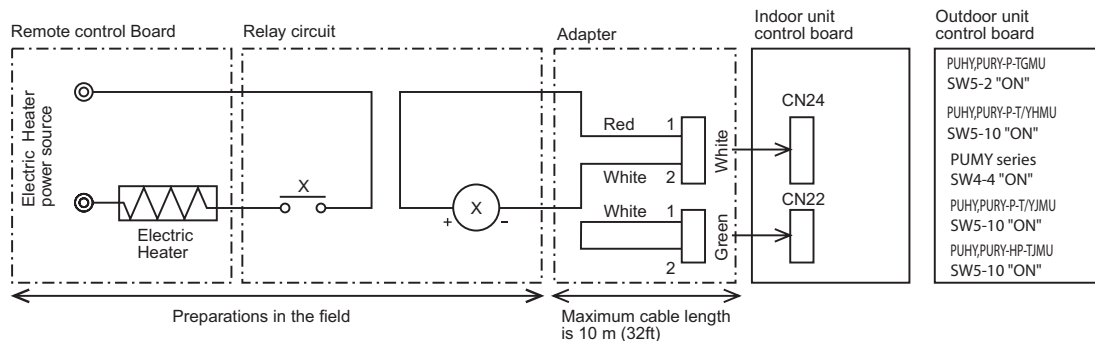
Model	External Heat Adapter	Downflow Conversion Kits
PVFY-P12~54E00A	CN24RELAY-KIT-CM	DFK Series

5-1. External Heat Adapter PAC-YU25HT

External heater adaptor CN24RELAY-KIT-CM3 is a set of special wiring parts for controlling the electric heater* with the air conditioner system.

*The electric heater should be designed and prepared at the site.

A basic connection method is shown as follows:(For details, refer to its Installation Manual.)



For relay X use the specifications given below Operation coil

Rated voltage : 12VDC

Power consumption : 0.9W or less

The length of the electrical wiring for the CN24RELAY-KIT-CM3 is 2 meters (6-1/2 ft)

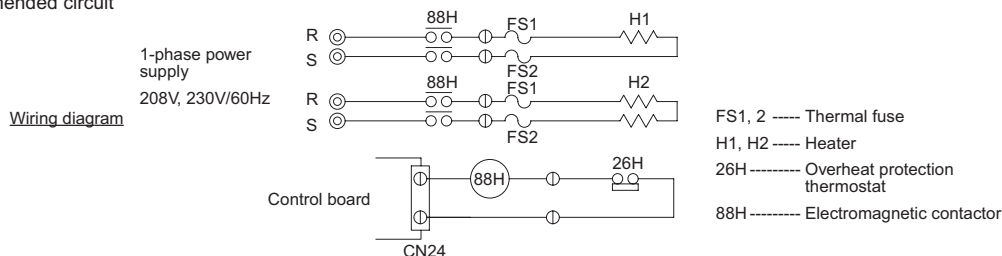
To extend this length, use sheathed 2-core cable.

Control cable type : CVV, CVS, CPEV or equivalent.

Cable size : 0.5 mm² ~ 1.25 mm² (16 to 22 AWG)

Don't extend the cable more than 10 meters (32ft)

Recommended circuit



Item	① External output cable	② Fan speed setting cable with resistance
Quantity	2	2
Shape		

Refer to the Installation Manual for wiring and installation details.

5-2. DFK Series Downflow Conversion Kits

Converts CITY MULTI PVFY vertical air handlers to a downflow configuration.

Return Plate Model	Description	Carton Dimensions	Shipping Weight
DFK-1	Downflow Kit P12,P18,P24	20L x 20W x 2H	8 lbs.
DFK-2	Downflow Kit P30, P36, P48	22L x 24W x 2H	10 lbs.
DFK-3	Downflow Kit P54	25L x 32W x 2H	13 lbs.

