PVA-AA42NL & PUZ-AK42NLHZ
42,000 BTU/H MULTI-POSITION AIR HANDLER INDOOR UNIT
42,000 BTU/H HYPER HEAT PUMP OUTDOOR UNIT

Job Name:			
System Reference:		**Date:**	





INDOOR Unit ... PVA-AA42NL

OUTDOOR Unit ... PUZ-AK42NLHZ

INDOOR UNIT FEATURES

- Multi-Position Installation: Versatile installation options, including horizontal (left or right) and vertical (up or down) orientations, with included drain pans to facilitate easy setup for any configuration.
- Auto Changeover: The unit will automatically switch between heating and cooling modes to maintain your desired temperature.
- Three Speed Fan: Adjust the fan between three speed settings to optimal comfort.
- Blow Through Design: A unique blow-through design allows for easier cleaning and maintenance of the cabinet.

OUTDOOR UNIT FEATURES

- H2i® Hyper-Heating: 100% heating performance down to 5° F with guaranteed heating down to -13° F.
- Inverter Driven Compressor: Inverter technology uses only the precise amount of energy needed to keep a space comfortable.
- Blue Fin Coating: Anti-corrosion coating that protects the outdoor heat exchanger against salt, sulfur, and other airborne contaminants that impact the efficiency and performance of the outdoor units.
- Base Pan Heater: This advanced base pan heater helps to prevent interrupted operation due to water freezing after a defrost cycle, ensuring your warmth and comfort during colder weather.
- Seacoast Protection: Designed to protect against the corrosive effects of environments that are in close proximity to the sea.
- Flash Injection: Flash Injection enables optimum compressor performance when it is running at higher speeds to maintain indoor comfort during cold temperatures.

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SPECIFICATIONS: PVA-AA42NL & PUZ-AK42NLHZ

Cooling at 95F[1]	Maximum Capacity	Btu/h	43000
	Rated Capacity	Btu/h	42000
	Minimum Capacity	Btu/h	17900
	Maximum Power Input	W	3780
	Rated Power Input	W	3660
	Moisture Removal	Pints/h	6.60
	Sensible Heat Factor		0.83
	Power Factor [208V / 230V]	%	90 / 90
Heating at 47F[2]	Maximum Capacity	Btu/h	54000
	Rated Capacity	Btu/h	54000
	Minimum Capacity	Btu/h	16100
	Maximum Power Input	W	4400
	Rated Power Input	W	4400
	Power Factor [208V / 230V]	%	92 / 92
Heating at 17F[3]	Maximum Capacity	Btu/h	48000
	Rated Capacity	Btu/h	32200
	Maximum Power Input	W	7160
	Rated Power Input	W	3600
Heating at 5F[5]	Maximum Capacity	Btu/h	48000
	Maximum Power Input	W	7815
Heating at -13F[9]	Maximum Capacity	Btu/h	36700
Efficiency	SEER2		18.70
	EER2[1]		11.40
	HSPF2 [IV]		8.70
	COP at 47°F[2]		3.60
	COP at 17°F at Maximum Capacity[3]		1.90
	COP at 5°F at Maximum Capacity[5]		1.80
	COP at -13°F at Maximum Capacity[9]		1.86
	ENERGY STAR® Certified		Yes
Electrical	Voltage, Phase, Frequency	V AC / V AC , ø , Hz	208 / 230 , 1 , 60
	Guaranteed Voltage Range	V AC	198 - 253
	Voltage: Indoor - Outdoor, S1-S2	V AC	208/230
	Voltage: Indoor - Outdoor, S2-S3	V DC	12-24
	Short-circuit Current Rating [SCCR]	kA	5
	Recommended Fuse/Breaker Size (Outdoor)	A	40
	Recommended Wire Size [Indoor - Outdoor]	AWG	14
Indoor Unit	MCA	A	5.63
	Fan Motor Output	W	430
	Fan Motor Type		Direct-driven DC Brushless Motor
	Airflow Rate at Cooling, Dry	CFM	1040 , 1262 , 1485
	Airflow Rate at Heating, Dry	CFM	1040 , 1262 , 1485
	Sound Pressure Level [Cooling]	dB (A)	45 , 48 , 52
	Sound Pressure Level [Heating]	dB (A)	45 , 48 , 52
	External Static Pressure	in.WG	0.30 , 0.50 , 0.80
	Drain Pipe Size O.D.	inch [mm]	3/4 [19.05]
	External Finish Color		Galvanized steel cabinet-Powder coated Slate Gray
	Unit Dimensions (W x D x H)	inch x inch x inch [mm x mm x mm]	25 x 21-5/8 x 59-1/2 [635 x 548 x 1511]
	Package Dimensions (W x D x H)	inch x inch x inch [mm x mm x mm]	26 x 28-11/16 x 66-1/4 [660 x 728 x 1682]
	Unit Weight	lbs [kg]	172 [78]
	Package Weight	lbs [kg]	198 [90]
IDU Operating Temp. Range	Cooling Intake Air Temp [Maximum / Minimum]	deg F , deg F / deg F , deg F	90 , 72 / 66 , 61
	Heating Intake Air Temp [Maximum / Minimum]	deg F	77 / 59
Outdoor Unit	MCA	A	35
	MOCP	A	60
	Fan Motor Output	W	200+200

Notes

[1]Cooling (Indoor // Outdoor) °F 80 DB, 67 WB // 95 DB, 75 WB - test
[2]Heating at 47°F (Indoor // Outdoor) °F 70 DB, 60 WB // 47 DB, 43 WB
[3]Heating at 17°F (Indoor // Outdoor) °F 70 DB, 60 WB // 17 DB, 15 WB
[5]Heating at 5°F (Indoor // Outdoor) °F 70 DB, 60 WB // 5 DB, 4 WB
[9]Heating at -13°F (Indoor // Outdoor) °F 70 DB, 60 WB // -13 DB, -14 WB
[*]Indoor/Outdoor Unit Operating Temperature Range (Cooling Air Temp [Maximum / Minimum]): • Wind baffles required to operate below 23°F DB in cooling mode. • Heat pump system with wind baffle: 0°F - 115°F. • Refer to wind baffle documentation for further information.
[**]Outdoor Unit Operating Temperature Range (Cooling Thermal Lock-out / Re-start Temperatures; Heating Thermal Lock-out / Re-start Temperatures): • System cuts out in heating mode and automatically restarts at these temperatures.

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SPECIFICATIONS: PVA-AA42NL & PUZ-AK42NLHZ

Outdoor Unit	Airflow Rate Cooling	CFM	4020
	Airflow Rate Heating	CFM	4020
	Defrost Method		Reverse Cycle
	Coating on Heat Exchanger (Bluefin, Sea Coast)		Yes , Yes
	Sound Pressure Level, Cooling[1]	dB (A)	60
	Sound Pressure Level, Heating[2]	dB (A)	62
	Compressor Type		Twin Rotary
	Compressor Model		MRK53FFJMC-L
	Compressor Oil [Type // Charge]	// oz	RM68EH // 64
	External Finish Color		Munsell 3Y 7.8/1.1
	Base Pan Heater		Built-in
	Unit Dimensions (W x D x H)	inch x inch x inch [mm x mm x mm]	41-11/32 x 14 x 52-43/64 [1050 x 355 x 1338]
	Package Dimensions (W x D x H)	inch x inch x inch [mm x mm x mm]	42-15/16 x 17-3/4 x 58-5/16 [1090 x 450 x 1480]
	Unit Weight	lbs [kg]	271 [123]
	Package Weight	lbs [kg]	298 [135]
ODU Operating Temp. Range	Cooling Intake Air Temp [Maximum / Minimum*]	F	115 / 23
	Heating Intake Air Temp [Maximum / Minimum]	F , F / F , F	70 , 59 / -13 , -13
	Heating Thermal Lock-out / Re-start Temperatures**	F	-22 / -13
Refrigerant	Type		R454B
	Pre-Charged Refrigerant Amount	lbs , oz	11 , 7
	Maximum Pre-Charged Piping Length	ft [m]	100 [30]
	Additional Refrigerant Charge Per Additional Piping Length	oz/ft	0.6
Piping	Gas Pipe Size O.D. [Flared]	inch [mm]	5/8 [15.88]
	Liquid Pipe Size O.D. [Flared]	inch [mm]	3/8 [9.52]
	Maximum Piping Length	ft [m]	245 [75]
	Maximum Height Difference	ft [m]	100 [30]
	Maximum Number of Bends		15

Notes

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INDOOR UNIT ACCESSORIES: PVA-AA42NL

Condensate	Blue Diamond Sensor Extension Cable 15 Ft	C13-103
	Blue Diamond MaxiBlue Condensate Pump with Reservoir Sensor 115-230V up to 48k BTU/h	X88-721
	Blue Diamond (MaxiBlue Advanced) Mini Condensate Pump w/ Reservoir & Sensor (110V) up to 48,000 BTU/H [recommended]	X87-711
	Sauermann Condensate Pump 120-230V up to 60k BTU/h	SI30-230
	Blue Diamond MegaBlue Condensate Pump with Reservoir Sensor 115-230V up to 170k BTU/h	X87-835
	Refco Condensate Pump 100-240V up to 120k BTU/h	COMBI
Control Interface	Airzone Wireless Lite Controller White	AZZBSLITERB
	Wireless Interface 2 for Comfrot app	PAC-USWHS002-WF-2
	Airzone Wired Blueface Controller White	AZZBSBLUEZEROCB
	Airzone Wired Lite Controller White	AZZBSLITECB
	kumo station® for Comfort app	PAC-WHS01HC-E
	Procon BACnet® and Modbus® Interface	PAC-UKPRC001-CN-1
	Airzone Wireless Think Controller White	AZZBSTHINKRB
	Airzone Wireless Think Controller Black	AZZBSTHINKRN
	Airzone Wired Blueface Controller Black	AZZBSBLUEZEROCN
	Thermostat Interface for 3rd Party Thermostats	PAC-US445CN-1
	IT Extender	PAC-WHS01IE-E
	Operation and Error Status Output Adapter	PAC-SF40RM-E
Control Wire	202PR shielded 1PR plenum wire for Airzone 500 ft reel	CW2042S2-500
	202PR 1PR shielded 1PR plenum wire for Airzone 100 ft reel	CW2042S2-100
Disconnect Switch	30A600VUL fits 2 X 4 utility box - Black	TAZ-MS303
	(30A/600V/UL) [fits 2” X 4” utility box] - White	TAZ-MS303W
Downflow Kit	Condensate Management Kit for downflow installation	CMA-1
Electric Heat Lockout	Electric Heat Lockout	ETC-211020-MIT
Electric Kit Heats	15kW Electric Heater Module - Large Cabinet	EH15-MPAS-LB
	17.5kW Electric Heater Module - Large Cabinet	EH17-MPAS-LB
	10kW Electric Heater Module - Large Cabinet	EH10-MPA-LB
Lineset	3/8 x 5/8 Lineset Twin-Tube Insulation - 30 feet	MPLS385812T-30
	3/8 x 5/8 Lineset Twin-Tube Insulation - 15 feet	MPLS385812T-15
	3/8 x 5/8 Lineset Twin-Tube Insulation - 100 feet	MPLS385812T-100
	3/8 x 5/8 Lineset Twin-Tube Insulation - 65 feet	MPLS385812T-65
	3/8 x 5/8 Lineset Twin-Tube Insulation - 50 feet	MPLS385812T-50
	3/8 x 5/8 Lineset Twin-Tube Insulation - 10 feet	MPLS385812T-10
N/A		Unknown
Power Supplies & Auxiliary Components	ERV On/Off Input Adapter for CNER on SVZ PEAD and PVA models	PAC-740
Remote Sensor	Flush Mount Remote Temperature Sensor for SEZ SLZ SVZ and all P-Series models	PAC-USSEN002-FM-1
	Wireless temperature and humidity sensor for Comfort app	PAC-USWHS003-TH-1
	Wall Mounted Remote Temperature Sensor	PAC-SE41TS-E
Terminal Block	Separate Terminal Power Block	SPTB1
Terminal Signal Adapter	3-Pin Wiring Harness	PAC-715AD
	5-Pin Wiring Harness	PAC-725AD
	Backup Heat Relay Kit	CN24RELAY-KIT-CM3
Wired Remote Controller	Touch MA Remote Controller	PAR-CT01MAU-SB
	Simple Direct Wired Remote Controller	PAC-SDW01RC-1
	Deluxe MA Wired Remote Controller	PAR-42MAAUB
	Simple MA Remote Controller	PAC-YT53CRAU-J
Wireless Remote Controller	Wireless MA Handheld Remote Controller (requires PAR-FA32MA-E)	PAR-FL32MA-E
	Wireless Remote Contoller	PAR-SL101A-E
	Universal Wireless Receiver for PAR-FL32MA-E	PAR-FA32MA-W
	Wireless RedLINK™ Remote Controller	MHK2
Notes		

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INDOOR UNIT ACCESSORIES: PVA-AA42NL

Wireless Remote Controller	Lockdown Bracket for Wireless Handheld Remote Controllers	☐ RCMKP1CB
Notes		

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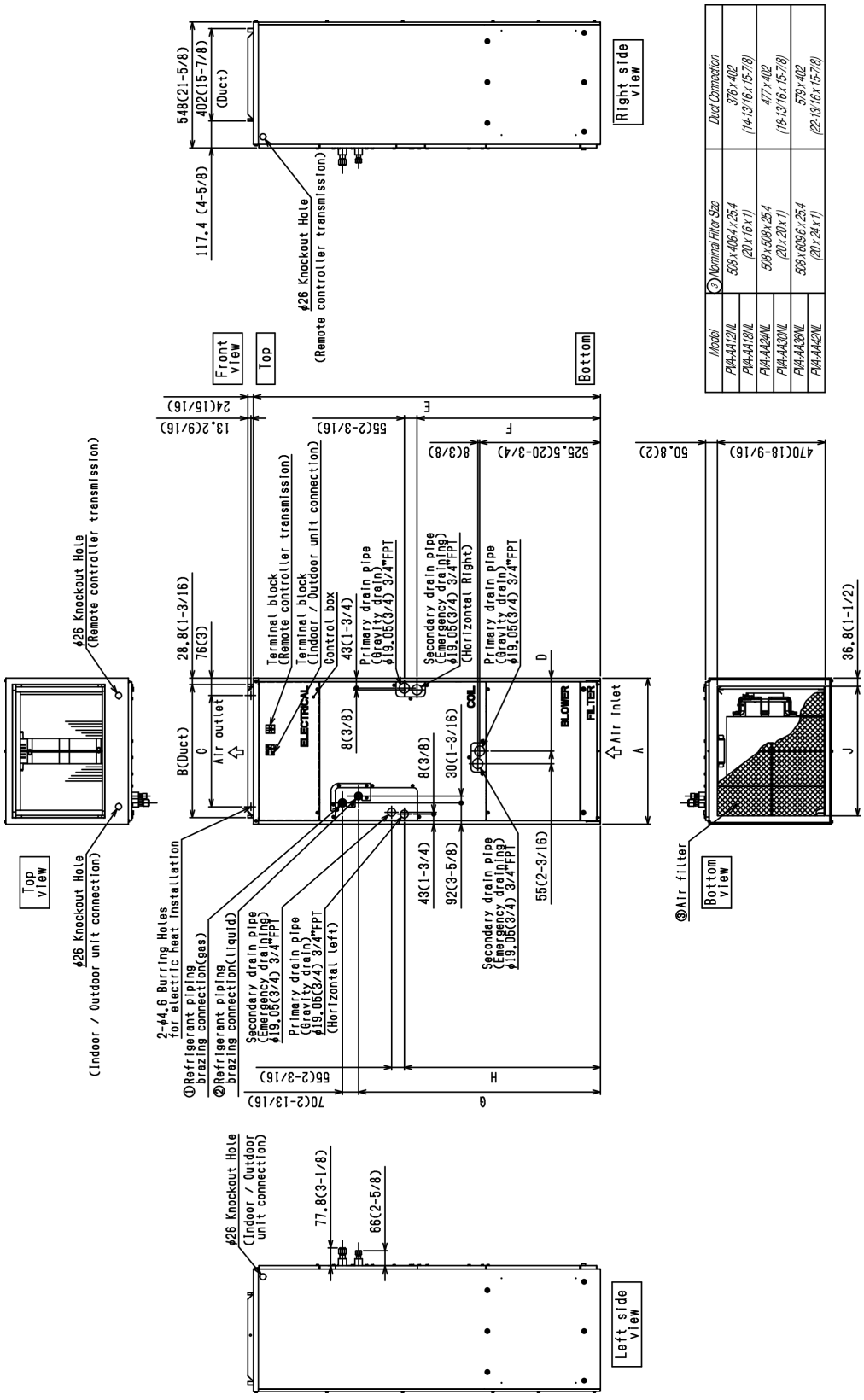
OUTDOOR UNIT ACCESSORIES: PUZ-AK42NLHZ

Air Outlet Guide	Air Outlet Guide 1 Piece	☐ PAC-SH96SG-E (two pieces required)
Centralized Drain Pan	Centralized Drain Pan	☐ PAC-SH97DP-E
Control/Service Tool	M- & P-Series Maintenance Tool Cable Set	☐ M21EC0397
	ControlService Tool	☐ PAC-SK52ST
	Maintenance Tool Interface	☐ PAC-USCMS-MN-1
Drain Socket	Drain Socket	☐ PAC-SG61DS-E
Hail Guards	Hail Guard	☐ HG-A2
M-NET Converter	M-Net Interface for P-Series	☐ PAC-SJ95MA-E
Mini-Split Wire	14 Gauge 4 wire MiniSplit Cable250 ft roll	☐ S144-250
	14 Gauge 4 wire Armored MiniSplit Cable250 ft roll	☐ SW144-250
	14 Gauge 4 wire MiniSplit Cable50 ft roll	☐ S144-50
	14 Gauge 4 wire Armored MiniSplit Cable50 ft roll	☐ SW144-50
Mounting Pad	Condensing Unit Mounting Pad 24 x 42 x 3	☐ ULTRILITE2
Snow/Rain Diverter	SnowRain Diverter	☐ SRD-5
Stand	24 Dual Fan Stand	☐ QSMS2402M
	Outdoor Unit Stand 12 High	☐ QSMS1202M
	18 Dual Fan Stand	☐ QSMS1802M
	Outdoor Unit 3-14 inch Mounting Base Pair - Plastic	☐ DSD-400P
Terminal Signal Adapter	3-Pin Wiring Harness	☐ PAC-715AD
	5-Pin Wiring Harness	☐ PAC-725AD
Wind Baffle	Front Wind Baffle	☐ WB-PA3 (two pieces required)
Notes		

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INDOOR UNIT DIMENSIONS: PVA-AA42NL

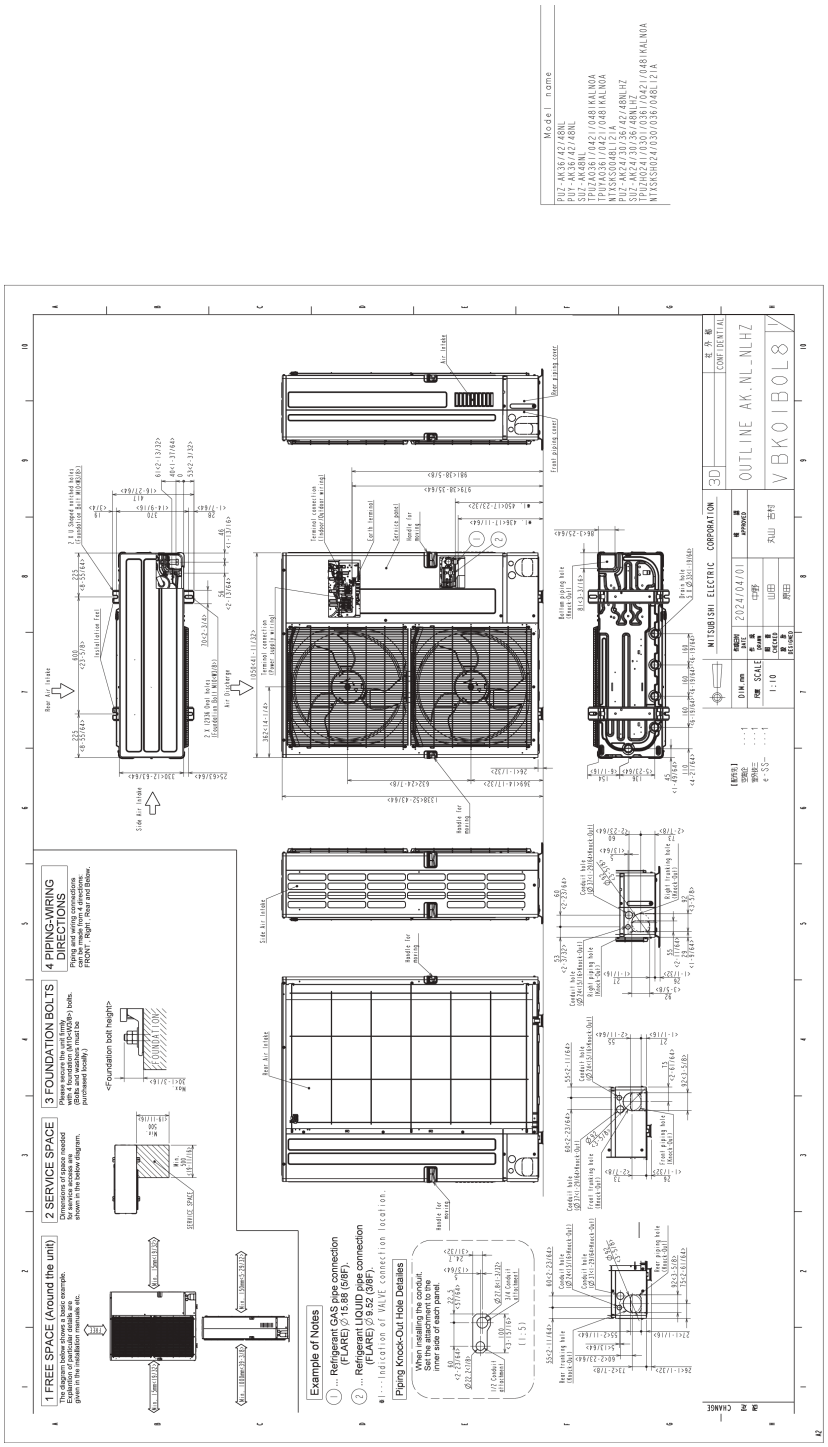


Model	③ Nominal Filter Size	Duct Connection
PVA-AA12NL	508×406.4×25.4 (20×16×1)	376×402 (14-13/16×15-7/8)
PVA-AA18NL		
PVA-AA24NL	508×508×25.4 (20×20×1)	477×402 (18-13/16×15-7/8)
PVA-AA30NL		
PVA-AA36NL	508×609.6×25.4 (20×24×1)	579×402 (22-13/16×15-7/8)
PVA-AA42NL		

Model	A	B	C	D	E	F	G	H	J	① Gas Pipe	② Liquid Pipe
PVA-AA12NL	422(17)	376(14-13/16)	281(11-1/8)	224(8-7/8)	1275(50-1/4)	680(26-13/16)	823(32-7/16)	735.5(29)	380(14-3/16)	12.7(1/2)	6.35(1/4)
PVA-AA18NL											
PVA-AA24NL	534(21)	477(18-13/16)	382.6(15-1/8)	286.5(10-1/2)	1378(54-1/4)	737(29-1/16)	953.5(37-9/16)	782(31-3/16)	461(18-3/16)	15.88(5/8)	9.52(3/8)
PVA-AA30NL											
PVA-AA36NL	635(25)	579(22-13/16)	484.6(19-1/8)	317.5(12-1/2)	1511(59-1/2)	798.5(31-7/16)	1053(41-1/2)	853.5(33-5/8)	563(22-3/16)		
PVA-AA42NL											

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OUTDOOR UNIT DIMENSIONS: PUZ-AK42NLHZ



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