

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

- Ducted air handler: Ducted air handler provides a solution to cool and heat large zones
- Enclosed ECM motor: Highly efficient totally enclosed ECM motor
- Fiberglass free insulation: 1 inch R4.2 fiberglass free insulation reduces condensation and boosts efficiency
- Light commercial: Units with this icon are suitable for light commercial applications such as small offices, restaurants, and retail.
- Multi-position installation: Multi-position installation: horizontal (left or right), vertical (up or down). For downflow configurations, the CMA-1 is recommended for proper management of condensate to prevent water blow-off in certain conditions
- Multiple control options, including the comfort app for remote access, third-party interfaces, and both wired and wireless controllers
- Optional electric heat kit: Optional electric heat kit for additional heat capacity
- Optional humidifier control and ERV control
- Positive pressure cabinet: Positive pressure cabinet with air leakage of less than 1.0% at 1.0 in.WG
- Selectable external static pressure: Selectable external static pressure: 0.30, 0.50 and 0.80 in.WG with 3 fan speeds at each static setting
- Single-zone: One outdoor unit connects to one indoor unit to control the comfort in a single space.
- Unique blow through design: Unique blow through design allows simple coil cleaning when the blower is removed

OUTDOOR UNIT FEATURES

- Built-in base pan heater
- High Speed Start-up: High speed heating at start up: Hyper-Heating INVERTER® reduces the time for heating at start up by about half compared to standard models
- Hyper-Heating INVERTER®: Variable speed INVERTER-driven compressor
- Pre-charged refrigerant: volume for piping length up to 100 ft
- Pressure/temp protection
- Wide Heating Range: Wide heating range: heating performance down to -13°F (average of 80% heating capacity)

SPECIFICATIONS: PVA-AA42NL & PUZ-AK42NLHZ

Cooling at 95F ¹	Maximum Capacity	Btu/h	43,000
	Rated Capacity	Btu/h	42,000
	Minimum Capacity	Btu/h	17,900
	Maximum Power Input	W	3,780
	Rated Power Input	W	3,660
	Moisture Removal	Pints/h	6.6
	Sensible Heat Factor	-	0.83
Heating at 47F ²	Power Factor [208V / 230V]	%	90 / 90
	Maximum Capacity	Btu/h	54,000
	Rated Capacity	Btu/h	54,000
	Minimum Capacity	Btu/h	16,100
	Maximum Power Input	W	4,400
	Rated Power Input	W	4,400
	Power Factor [208V / 230V]	%	92 / 92
Heating at 17F ³	Maximum Capacity	Btu/h	48,000
	Rated Capacity	Btu/h	32,200
	Maximum Power Input	W	7,160
	Rated Power Input	W	3,600
Heating at 5F ⁴	Maximum Capacity	Btu/h	48,000
	Maximum Power Input	W	7,815
Heating at -13F ⁵	Maximum Capacity	Btu/h	36,700
Efficiency	SEER2		18.7
	EER2 ¹		11.4
	HSPF2 [IV]		8.7
	COP at 47°F ²		3.6
	COP at 17°F at Maximum Capacity ³		1.9
	COP at 5°F at Maximum Capacity ⁴		1.8
	COP at -13°F at Maximum Capacity ⁵		1.86
Electrical	ENERGY STAR® Certified		Yes
	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
Indoor Unit	Recommended Wire Size [Indoor - Outdoor]	AWG	14
	MCA	A	5.63
	Fan Motor Output	W	430
	Airflow Rate at Cooling, Dry	CFM	1,040, 1,262, 1,485
	Airflow Rate at Heating, Dry	CFM	1,040, 1,262, 1,485
	Sound Pressure Level [Cooling]	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 1,511]
	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 1,682]
	Unit Weight	lbs [kg]	172 [78]
	Package Weight	lbs [kg]	198 [90]
	Fan Motor Type		Direct-driven DC Brushless Motor
IDU Operating Temp. Range	Cooling Intake Air Temp [Maximum / Minimum]	°FDB, °FWB / °FDB, °FWB	90, 72 / 66, 61
	Heating Intake Air Temp [Maximum / Minimum]	°FDB	77 / 59

NOTES

¹Cooling at 95°F (Indoor: 80°F DB, 67°F WB // Outdoor: 95°F DB, 75°F WB)

²Heating at 47°F (Indoor: 70°F DB, 60°F WB // Outdoor: 47°F DB, 43°F WB)

³Heating at 17°F (Indoor: 70°F DB, 60°F WB // Outdoor: 17°F DB, 15°F WB)

⁴Heating at 5°F (Indoor: 70°F DB, 60°F WB // Outdoor: 5°F DB, 4°F WB)

⁵Heating at -13°F (Indoor: 70°F DB, 60°F WB // Outdoor: -13°F DB, -14°F 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.

SPECIFICATIONS: PVA-AA42NL & PUZ-AK42NLHZ

Outdoor Unit	MCA	A	35
	MOCP	A	60
	Fan Motor Output	W	200+200
	Airflow Rate Cooling	CFM	4,020
	Airflow Rate Heating	CFM	4,020
	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]	Type // oz	RM68EH // 60
	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 13-31/32 x 52-43/64 [1,050 x 355 x 1,338]
	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 [1,090 x 450 x 1,480]
ODU Operating Temp. Range	Unit Weight	lbs [kg]	271 [123]
	Package Weight	lbs [kg]	298 [135]
	Cooling Intake Air Temp [Maximum / Minimum*]	°FDB	115 / 23
Refrigerant	Heating Intake Air Temp [Maximum / Minimum]	°FDB, °FWB / °FDB, °FWB	70, 59 / -13, -13
	Heating Thermal Lock-out / Re-start Temperatures**	°FDB	-22 / -13
	Type		R454B
Piping	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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⁴Heating at 5°F (Indoor: 70°F DB, 60°F WB // Outdoor: 5°F DB, 4°F WB)

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*Indoor/Outdoor Unit Operating Temperature Range (Cooling Air Temp [Maximum / Minimum]):

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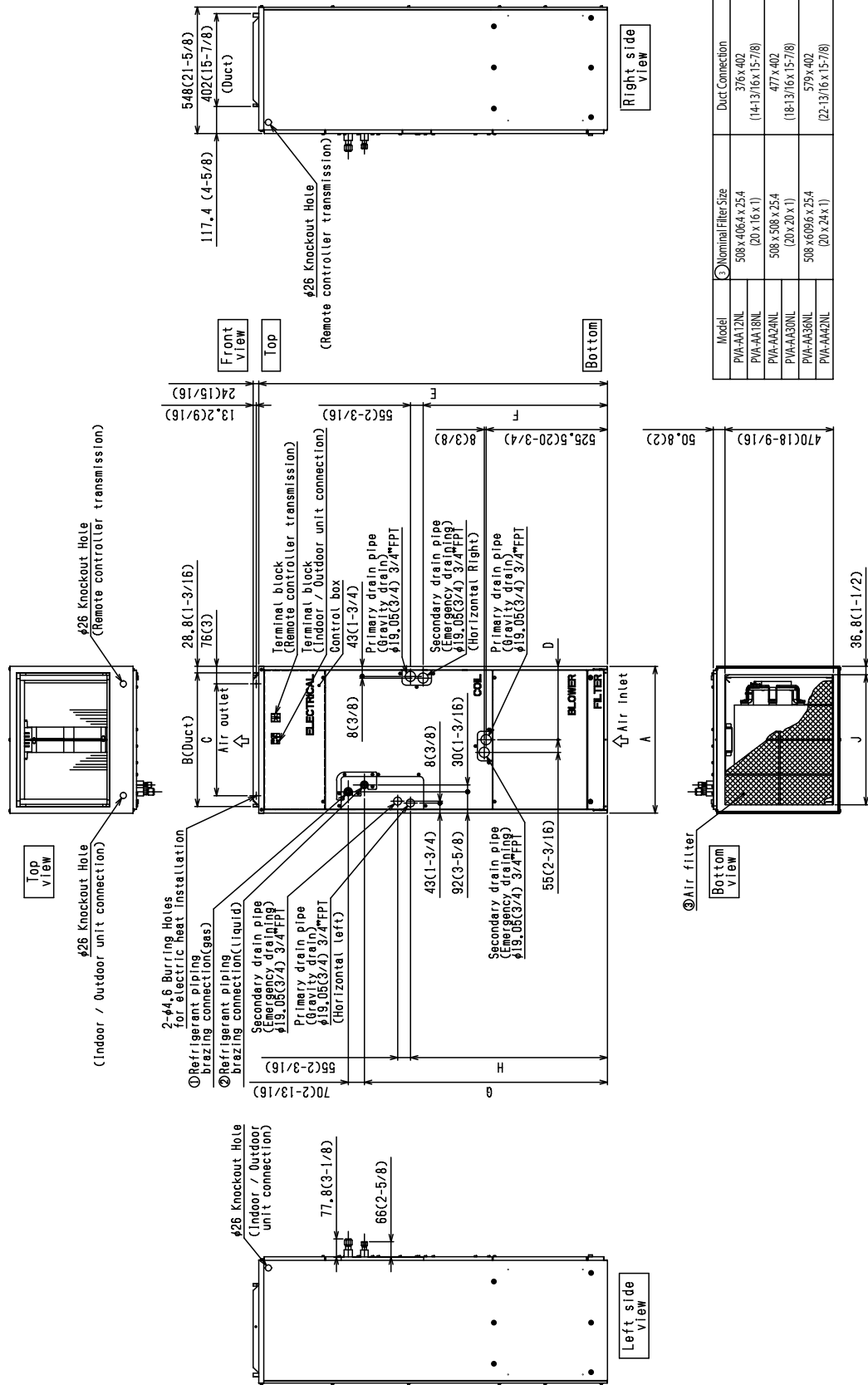
INDOOR UNIT ACCESSORIES: PVA-AA42NL

Control Interface	Airzone Wired Blueface Controller White	AZZBSBLUEZEROCN
	Airzone Wired Blueface Controller White	AZZBSBLUEZEROCB
	Airzone Wired Lite Controller White	AZZBSLITECB
	Airzone Wireless Lite Controller White	AZZBSLITERB
	Airzone Wireless Think Controller White	AZZBSTHINKRN
	Airzone Wireless Think Controller White	AZZBSTHINKRB
	IT Extender for kumo station	PAC-WHS01IE-E
	kumo station for the Comfort app	PAC-WHS01HC-E
	Operation and Error Status Output Adapter ¹	PAC-SF40RM-E
	Procon BACnet and Modbus Interface	PAC-UKPRC001-CN-1
	Thermostat Interface for 3rd Party Thermostats	PAC-US445CN-1
	Wireless Interface Adapter for the Comfort app	PAC-USWHS002-WF-2
Condensate	Blue Diamond Advanced Mini Condensate Pump w Reservoir Sensor 208230V recommended	X87-721
	Blue Diamond MaxiBlue Advanced Mini Condensate Pump w Reservoir Sensor 110V up to 48000 BTUH recommended	X87-711
	Blue Diamond MegaBlue Advanced Condensate Pump w Reservoir Sensor	X87-835
	Blue Diamond Sensor Extension Cable 15 Ft	C13-103
	Refco Condensate Pump 100-240 VAC up to 120000 BTUH	COMBI
Power Supplies and Auxiliary Components	Backup Heat Relay Kit Adapter for CN24 or CN152 Connector	CN24RELAY-KIT-CM3
Disconnect Switch	30A600VUL fits 2 X 4 utility box - Black	TAZ-MS303
	30A600VUL fits 2 X 4 utility box - White	TAZ-MS303W
Wireless Remote Controller	Deluxe Wired MA Remote Controller	PAR-42MAAUB
	Lockdown Bracket for Wireless Handheld Remote Controllers	RCMKP1CB
	RedLINK Wireless Remote Controller	MHK2
	Universal Wireless MA Handheld Remote Controller	PAR-FL32MA-E
	Universal Wireless Receiver for PAR-FL32MA-E	PAR-FA32MA-W
Lineset	10 x 3/8 x 10 x 5/8 Lineset Twin-Tube Insulation	MPLS385812T-10
	100 x 3/8 x 100 x 5/8 Lineset Twin-Tube Insulation	MPLS385812T-100
	15 x 3/8 x 15 x 5/8 Lineset Twin-Tube Insulation	MPLS385812T-15
	30 x 3/8 x 30 x 5/8 Lineset Twin-Tube Insulation	MPLS385812T-30
	50 x 3/8 x 50 x 5/8 Lineset Twin-Tube Insulation	MPLS385812T-50
	65 x 3/8 x 65 x 5/8 Lineset Twin-Tube Insulation	MPLS385812T-65
Power Supplies & Auxiliary Components	3-Pin Wiring Harness	PAC-715AD
	5-Pin Wiring Harness	PAC-725AD
	ERV On/Off Input Adapter for CNER on SVZ PEAD and PVA models	PAC-740
Electric Kit Heats	10kW Electric Heater	EH10-MPA-LB
	15kW Electric Heater	EH15-MPAS-LB
	17kW Electric Heater	EH17-MPAS-LB
Remote Sensor	Flush Mount Remote Temperature Sensor for SEZ SLZ SVZ and all P-Series models	PAC-USSEN002-FM-1
	Wall Mount Remote Temperature Sensor	PAC-SE41TS-E
	Wireless temperature and humidity sensor for the Comfort app	PAC-USWHS003-TH-1
Wired Remote Controller	Simple Direct Wired Remote Controller	PAC-SDW01RC-1
	Simple MA Remote Controller ¹	PAC-YT53CRAU-J
	Touch MA Wired Remote Controller ¹	PAR-CT01MAU-SB
Terminal Block	Separate Terminal Power Block	SPTB1
Control Wire	202PR 1PR shielded 1PR plenum wire for Airzone 100 ft reel	CW2042S2-100
	202PR shielded 1PR plenum wire for Airzone 500 ft reel	CW2042S2-500
Downflow Kit	Condensate Management Kit for downflow installation	CMA-1
Electric Heat Lockout	Electric Heat Lockout	ETC-211020-MIT
NOTES		
¹ Unable to use with Wireless Handheld Remote Controller		

OUTDOOR UNIT ACCESSORIES: PUZ-AK42NLHZ

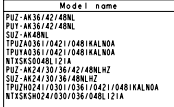
Power Supplies & Auxiliary Components	3-Pin Wiring Harness	PAC-715AD
	5-Pin Wiring Harness	PAC-725AD
Mounting Pad	Condensing Unit Mounting Pad 24 x 42 x 3	ULTRILITE2
Control/Service Tool	ControlService Tool	PAC-SK52ST
	M- & P-Series Maintenance Tool Cable Set	M21EC0397
	Maintenance Tool Interface	PAC-USCMS-MN-1
Mini-Split Wire	14 Gauge 4 wire Armored MiniSplit Cable250 ft roll	SW144-250
	14 Gauge 4 wire Armored MiniSplit Cable50 ft roll	SW144-50
	14 Gauge 4 wire MiniSplit Cable250 ft roll	S144-250
	14 Gauge 4 wire MiniSplit Cable50 ft roll	S144-50
Snow/Rain Diverter	SnowRain Diverter	SRD-5
Centralized Drain Pan	Centralized Drain Pan	PAC-SH97DP-E
Stand	18 Dual Fan Stand	QSMS1802M
	24 Dual Fan Stand	QSMS2402M
	Condenser Wall Bracket - Stainless Steel Finish	QSWBSS
	Condenser Wall Bracket	QSWB2000M-1
	Outdoor Unit 3-14 inch Mounting Base Pair - Plastic	DSD-400P
	Outdoor Unit Stand 12 High	QSMS1202M
Air Outlet Guide	Air Outlet Guide 1 Piece	PAC-SH96SG-E (two pieces are required)
Wind Baffle	Front Wind Baffle	WB-PA3 (two pieces are required)
Hail Guards	Hail Guard	HG-A2
M-NET Converter	M-Net Interface for P-Series	PAC-SJ95MA-E
Drain Socket	Drain Socket	PAC-SG61DS-E
NOTES		

INDOOR UNIT DIMENSIONS: PVA-AA42NL



	Model	Nominal Filter Size	Duct Connection
	PWA-AA12NL	508 x 406 x 254 (20 x 16 x 1)	376 x 402 (14-13/16 x 15/78)
	PWA-AA18NL		
	PWA-AA24NL	508 x 508 x 254 (20 x 20 x 1)	477 x 402 (18-13/16 x 15/78)
	PWA-A330NL		
	PWA-A36NL	508 x 609.6 x 254 (20 x 24 x 1)	579 x 402 (22-13/16 x 15/78)
	PWA-AA42NL		

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Specifications are subject to change without notice.

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