

PLA-AE42NL & PUZ-AK42NLHZ  
42,000 BTU/H CEILING CASSETTE INDOOR UNIT  
42,000 BTU/H HYPER HEAT PUMP OUTDOOR UNIT



Job Name:

System Reference:

Date:



Indoor Unit.....PLA-AE42NL

Outdoor Unit.....PUZ-AK42NLHZ



#### INDOOR UNIT FEATURES

- 3D i-see Sensor®: The advanced sensor scans each room to produce a complete thermal profile that includes heat signatures based upon size, temperature and movement, then adjusts temperature and airflow based on user preference, and saves energy according to room occupancy.
- Available Knockouts: Knockouts for outside-air intake and branch-duct run
- Built-in condensate lift mechanism
- Easy-to-clean filter: Easy-to-clean, washable filter (optional high-efficiency filter available - requires multi-function casement)
- Filter indicator signal
- Ideal PLA spaces: Ideal for retail shops, classrooms, office spaces, conference centers, building lobbies, and more
- Individual vane settings: Individual vane settings for direct/indirect airflow control or variable airflow patterns
- Light commercial: Units with this icon are suitable for light commercial applications such as small offices, restaurants, and retail.
- Multiple control options, including the comfort app for remote access, third-party interfaces, and both wired and wireless controllers
- PLA Airflow settings: Airflow settings for high and low ceiling applications
- Space-efficient ductless installation
- Up and down swing-mode: An indoor unit with this capability can move air up and down throughout the room like an oscillating fan using the horizontal vanes.

#### 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: PLA-AE42NL & PUZ-AK42NLHZ

Cooling at 95F <sup>1</sup>	Maximum Capacity	Btu/h	43,000
	Rated Capacity	Btu/h	42,000
	Minimum Capacity	Btu/h	16,800
	Maximum Power Input	W	3,650
	Rated Power Input	W	3,530
	Moisture Removal	Pints/h	10
	Sensible Heat Factor	-	0.74
Heating at 47F <sup>2</sup>	Power Factor [208V / 230V]	%	98 / 98
	Maximum Capacity	Btu/h	54,000
	Rated Capacity	Btu/h	54,000
	Minimum Capacity	Btu/h	16,000
	Maximum Power Input	W	4,350
	Rated Power Input	W	4,350
Heating at 17F <sup>3</sup>	Power Factor [208V / 230V]	%	98 / 98
	Maximum Capacity	Btu/h	48,000
	Rated Capacity	Btu/h	32,400
	Maximum Power Input	W	7,360
Heating at 5F <sup>4</sup>	Rated Power Input	W	3,450
	Maximum Capacity	Btu/h	48,000
Heating at -13F <sup>5</sup>	Maximum Power Input	W	7,670
	Maximum Capacity	Btu/h	36,100
Efficiency	SEER2		20
	EER2 <sup>1</sup>		11.8
	HSPF2 [IV]		9.2
	COP at 47°F <sup>2</sup>		3.6
	COP at 17°F at Maximum Capacity <sup>3</sup>		1.9
	COP at 5°F at Maximum Capacity <sup>4</sup>		1.8
	COP at -13°F at Maximum Capacity <sup>5</sup>		1.88
ENERGY STAR <sup>®</sup> Certified		Yes	
Electrical	Voltage, Phase, Frequency	V AC / V AC, , 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	Fan Motor Output	W	120
	Airflow Rate at Cooling, Dry	CFM	740, 920, 1,060, 1,200
	Airflow Rate at Heating, Dry	CFM	740, 920, 1,060, 1,200
	Sound Pressure Level [Cooling]	dB (A)	34, 38, 42, 45
	Sound Pressure Level [Heating]	dB (A)	34, 38, 42, 45
	External Finish Color		1.0Y 9.2/0.2
	Unit Dimensions (W x D x H)	inch x inch x inch [mm x mm x mm]	33-1/16 x 33-1/16 x 11-3/4 [840 x 840 x 298]
	Package Dimensions (W x D x H)	inch x inch x inch [mm x mm x mm]	34-5/16 x 35-9/16 x 15 [871 x 903 x 381]
	Unit Weight	lbs [kg]	57 [26]
	Package Weight	lbs [kg]	82 [37]
Fan Motor Type		DC Motor	
IDU Operating Temp. Range	Cooling Intake Air Temp [Maximum / Minimum]	°FDB, °FWB / °FDB, °FWB	90, 73 / 66, 59
	Heating Intake Air Temp [Maximum / Minimum]	°FDB	82 / 50

### NOTES

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

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

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

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

<sup>5</sup>Heating 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: PLA-AE42NL & PUZ-AK42NLHZ

Outdoor Unit	MCA	A	35
	MOCP	A	60
	Fan Motor Output	W	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 <sup>1</sup>	dB (A)	60
	Sound Pressure Level, Heating <sup>2</sup>	dB (A)	62
	Compressor Type		Twin Rotary
	Compressor Model		MRK53FFJMC-L
	Compressor Oil [Type // Charge]	Type // oz	RM68EH // 60
	External Finish Color		Munsell No.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]
	Unit Weight	lbs [kg]	271 [123]
Package Weight	lbs [kg]	297.62 [135]	
ODU Operating Temp. Range	Cooling Intake Maximum Air Temp [Maximum / Minimum*]	°FDB	115 / 23
	Heating Air Temp [Maximum / Minimum]	°FDB, °FWB / °FDB, °FWB	70, 59 / -13, -13
	Heating Thermal Lock-out / Re-start Temperatures**	°FDB	-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

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## INDOOR UNIT ACCESSORIES: PLA-AE42NL

Wireless Remote Controller	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
	Wireless Handheld Remote Controller for SLZ PLA and PLFY models	PAR-SL101A-E
	Wireless Receiver for PAR-SL101A-E on PLA-NL and PLFY-ELNEMU models	PAR-SR4LU-E
	Wireless Remote Receiver Panel	PAR-SR3LA-E
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
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
	Sauermann Condensate Pump	SI30-230
Wired Remote Controller	Deluxe Wired MA Remote Controller <sup>1</sup>	PAR-42MAAUB
	Simple Direct Wired Remote Controller	PAC-SDW01RC-1
	Simple MA Remote Controller <sup>1</sup>	PAC-YT53CRAU-J
	Touch MA Wired Remote Controller <sup>1</sup>	PAR-CT01MAU-SB
Power Supplies and Auxiliary Components	Backup Heat Relay Kit Adapter for CN24 or CN152 Connector	CN24RELAY-KIT-CM3
Control Interface	Airzone Wired Blueface Controller Black	AZZBSBLUEZEROCN
	Airzone Wired Blueface Controller White	AZZBSBLUEZEROCB
	Airzone Wireless Lite Controller Black	AZZBSLITERN
	Airzone Wireless Lite Controller White	AZZBSLITERB
	Airzone Wireless Think Controller Black	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 <sup>1</sup>	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
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
Disconnect Switch	30A600VUL fits 2 X 4 utility box - Black	TAZ-MS303
	30A600VUL fits 2 X 4 utility box - White	TAZ-MS303W
Casement	Multi-function Casement	PAC-SJ41TM-E
Filter	High Efficiency Filter Element	PAC-SH59KF-E
Shutter Plate	Shutter Plate	PAC-SJ37SP-E
Space Panel	Space Panel	PAC-SJ38AS-E
Power Supplies & Auxiliary Components	3-Pin Wiring Harness	PAC-715AD
	5-Pin Wiring Harness	PAC-725AD
i-see Sensor® Panel	Grille with 3D i-see Sensor (required)	PLP-41EAEU
<b>NOTES</b> <sup>1</sup> Unable to use with Wireless Remote Controller		

## OUTDOOR UNIT ACCESSORIES: PUZ-AK42NLHZ

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



# OUTDOOR UNIT DIMENSIONS: PUZ-AK42NLHZ

