

PLA-AE12NL & PUZ-AK12NL
12,000 BTU/H CEILING CASSETTE INDOOR UNIT
12,000 BTU/H HEAT PUMP OUTDOOR UNIT



Job Name:

System Reference:

Date:



Indoor Unit.....PLA-AE12NL

Outdoor Unit.....PUZ-AK12NL



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

- Blue Fin Coating: An anti-corrosion treatment applied to the aluminum fins of the heat exchanger of the outdoor unit to protect against corrosion caused by salt, sulfur, and other airborne contaminants, especially in coastal and industrial areas.
- Continuous operation: 24-hour continuous operation (cooling mode)
- Fast restart
- High pressure protection
- High pressure/temperature protection
- INVERTER-driven compressor: An inverter-driven compressor generates the precise capacity needed to maintain a temperature set point.
- Low ambient cooling : Low ambient cooling down to 0°F providing 100% capacity
- Pre-charged refrigerant: 12k -30k BTU/h come pre-charged for ease of installation. 24k – 30k BTU/h are pre-charged to maximum line length of 225 feet. 12k – 18k BTU/h are pre-charged for up to 165 feet of line length. For units with a capacity of 36,000 BTU/h and above, additional refrigerant charges will be required.
- Seacoast protection: Seacoast Protection, made standard in the 2022 production, features a robust anti-corrosion system with phosphate and acrylic-enamel coated external panels, epoxy resin-coated fan motor support and separator assembly valve beds, and Blue Fin treatment for the heat exchanger coil. These components are rated for 2,000 hours of durability under ASTM B117 testing standards, ensuring longevity in corrosive coastal environments.
- Superior energy and operational efficiency

SPECIFICATIONS: PLA-AE12NL & PUZ-AK12NL

Cooling at 95F ¹	Maximum Capacity	Btu/h	12,400
	Rated Capacity	Btu/h	12,000
	Minimum Capacity	Btu/h	4,900
	Maximum Power Input	W	730
	Rated Power Input	W	700
	Moisture Removal	Pints/h	1.1
	Sensible Heat Factor	-	0.9
	Power Factor [208V / 230V]	%	85 / 85
Heating at 47F ²	Maximum Capacity	Btu/h	20,000
	Rated Capacity	Btu/h	20,000
	Minimum Capacity	Btu/h	4,200
	Maximum Power Input	W	1,540
	Rated Power Input	W	1,542
	Power Factor [208V / 230V]	%	97 / 97
Heating at 17F ³	Maximum Capacity	Btu/h	10,700
	Rated Capacity	Btu/h	10,700
	Maximum Power Input	W	1,100
	Rated Power Input	W	1,100
Heating at 5F ⁴	Maximum Capacity	Btu/h	8,800
	Maximum Power Input	W	1,120
Heating at -4F ⁵	Maximum Capacity	Btu/h	7,800
Efficiency	SEER2		24.8
	EER2 ¹		17.1
	HSPF2 [IV]		10.9
	COP at 47°F ²		3.8
	COP at 17°F at Maximum Capacity ³		2.8
	COP at 5°F at Maximum Capacity ⁴		2.3
	COP at -4°F at Maximum Capacity ⁵		2.12
	ENERGY STAR [®] Certified		Yes
Electrical	Voltage, Phase, Frequency	V AC / V AC, , Hz	208 / 230, 1, 60
	Guaranteed Voltage Range	V AC	198 - 264
	Voltage: Indoor - Outdoor, S1-S2	V AC	208/230
	Voltage: Indoor - Outdoor, S2-S3	V DC	27
	Short-circuit Current Rating [SCCR]	kA	5
	Recommended Fuse/Breaker Size (Outdoor)	A	20
	Recommended Wire Size [Indoor - Outdoor]	AWG	14
Indoor Unit	Fan Motor Output	W	50
	Airflow Rate at Cooling, Dry	CFM	370, 460, 490, 530
	Airflow Rate at Heating, Dry	CFM	370, 460, 490, 530
	Sound Pressure Level [Cooling]	dB (A)	26, 27, 29, 30
	Sound Pressure Level [Heating]	dB (A)	26, 27, 29, 30
	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 10-3/16 [840 x 840 x 258]
	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]	46 [21]
	Package Weight	lbs [kg]	71 [32]
	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

- 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 -4°F (Indoor: 70°F DB, 60°F WB // Outdoor: -4°F DB, -5°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-AE12NL & PUZ-AK12NL

Outdoor Unit	MCA	A	16
	MOCP	A	27
	Fan Motor Output	W	51
	Airflow Rate Cooling	CFM	1,590
	Airflow Rate Heating	CFM	1,590
	Defrost Method		Reverse Cycle
	Coating on Heat Exchanger (Bluefin, Sea Coast)		Yes, Yes
	Sound Pressure Level, Cooling ¹	dB (A)	44
	Sound Pressure Level, Heating ²	dB (A)	46
	Compressor Type		Twin Rotary
	Compressor Model		SRB140FQHMC□L1
	Compressor Oil [Type // Charge]	Type // oz	RM68EH // 16
	External Finish Color		Munsell No.3Y 7.8/1.1
	Unit Dimensions (W x D x H)	inch x inch x inch [mm x mm x mm]	34-19/64 x 11-13/16 x 24-13/16 [871 x 300 x 630]
	Package Dimensions (W x D x H)	inch x inch x inch [mm x mm x mm]	37-1/16 x 16-3/16 x 32-1/4 [941 x 411 x 819]
	Unit Weight	lbs [kg]	99 [45]
Package Weight	lbs [kg]	112.44 [51]	
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 / -4, -4
	Heating Thermal Lock-out / Re-start Temperatures**	°FDB	-13 / -4
Refrigerant	Type		R454B
	Pre-Charged Refrigerant Amount	lbs, oz	4, 6
	Maximum Pre-Charged Piping Length	ft [m]	100 [30]
	Additional Refrigerant Charge Per Additional Piping Length	oz/ft	0
Piping	Gas Pipe Size O.D. [Flared]	inch [mm]	1/2 [12.7]
	Liquid Pipe Size O.D. [Flared]	inch [mm]	1/4 [6.35]
	Maximum Piping Length	ft [m]	100 [30]
	Maximum Height Difference	ft [m]	100 [30]
	Maximum Number of Bends		15

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 -4°F (Indoor: 70°F DB, 60°F WB // Outdoor: -4°F DB, -5°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.

INDOOR UNIT ACCESSORIES: PLA-AE12NL

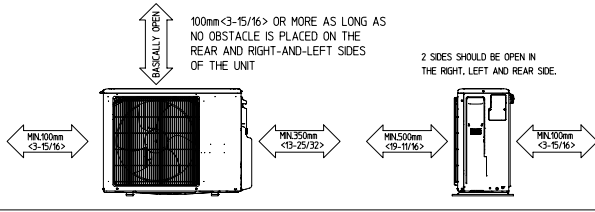
Shutter Plate	Shutter Plate	PAC-SJ37SP-E
Wired Remote Controller	Deluxe Wired MA Remote Controller ¹	PAR-42MAAUB
	Simple Direct Wired Remote Controller	PAC-SDW01RC-1
	Simple MA Remote Controller ¹	PAC-YT53CRAU-J
	Touch MA Wired Remote Controller ¹	PAR-CT01MAU-SB
Power Supplies & Auxiliary Components	3-Pin Wiring Harness	PAC-715AD
	5-Pin Wiring Harness	PAC-725AD
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 MicroBlue Mini Condensate Pump 110208230V up to 18000 BTUH	X86-003
	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
Lineset	100 x 1/4 x 100 1/2 Lineset Twin-Tube Insulation	MLS141212T-100
	15 x 1/4 x 15 1/2 Lineset Twin-Tube Insulation	MLS141212T-15
	30 x 1/4 x 30 1/2 Lineset Twin-Tube Insulation	MLS141212T-30
	50 x 1/4 x 50 1/2 Lineset Twin-Tube Insulation	MLS141212T-50
	65 x 1/4 x 65 1/2 Lineset Twin-Tube Insulation	MLS141212T-65
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 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	
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	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
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
Casement	Multi-function Casement	PAC-SJ41TM-E
Filter	High Efficiency Filter Element	PAC-SH59KF-E
Space Panel	Space Panel	PAC-SJ38AS-E
Power Supplies and Auxiliary Components	Backup Heat Relay Kit Adapter for CN24 or CN152 Connector	CN24RELAY-KIT-CM3
i-see Sensor [®] Panel	Grille with 3D i-see Sensor (required)	PLP-41EAEU
NOTES ¹ Unable to use with Wireless Remote Controller		

OUTDOOR UNIT ACCESSORIES: PUZ-AK12NL

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
Stand	18 Single Fan Stand	QSMS1801M
	24 Single Fan Stand	QSMS2401M
	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	QSMS1201M
Air Outlet Guide	Air Outlet Guide	PAC-SJ07SG-E
Control/Service Tool	ControlService Tool	PAC-SK52ST
	M- & P-Series Maintenance Tool Cable Set	M21EC0397
	Maintenance Tool Interface	PAC-USCMS-MN-1
Power Supplies & Auxiliary Components	3-Pin Wiring Harness	PAC-715AD
	5-Pin Wiring Harness	PAC-725AD
Wind Baffle	Front Wind Baffle	WB-PA4
	Rear Wind Baffle	WB-RE4
	Side Advanced Wind Baffle	WB-SD4
Hail Guards	Hail Guard	HG-A5
Drain Socket	Drain Socket	MAC-871DS
Mounting Pad	Condensing Unit Mounting Pad 16 x 36 x 3	ULTRILITE1
Snow/Rain Diverter	SnowRain Diverter	SRD-2
Centralized Drain Pan	Centralized Drain Pan	PAC-SG63DP-E
M-NET Converter	M-Net Interface for P-Series	PAC-SJ96MA-E
NOTES		

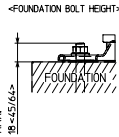
OUTDOOR UNIT DIMENSIONS: PUZ-AK12NL

FREE SPACE AROUND THE OUTDOOR UNIT (BASIC EXAMPLE)



FOUNDATION BOLTS

PLEASE SECURE THE BASE OF THE UNIT FIRMLY USING M10-W3/8 FOUNDATION BOLTS AT FOUR PLACES WITH A NUT. (BOLTS, WASHERS AND NUT MUST BE PURCHASED LOCALLY).



PIPING-WIRING DIRECTION

PIPING AND WIRING CONNECTION CAN BE MADE FROM THE REAR DIRECTION ONLY.

