

**PEAD-A12AA9 & PUZ-A12NKA7
MID STATIC HORIZONTAL-DUCTED INDOOR UNIT
12,000 BTU/H HEAT PUMP UNIVERSAL OUTDOOR**



Job Name:

System Reference:

Date:



Indoor Unit.....PEAD-A12AA9

Outdoor Unit.....PUZ-A12NKA7



INDOOR UNIT FEATURES

- Unobtrusive ceiling-concealed design for short-run ductwork
- Wide ranging external static pressure (0.14-0.60 in. WG)
- Built-in condensate lift mechanism (up to 27-9/16")
- Auto fan speed mode
- Optional FB Series filter boxes for easy access and service
- Ideal for residential homes, retail shopping centers, larger classrooms, office complexes, conference rooms, ballrooms, fitness centers, and more
- Multiple control options available:
 - kumo cloud® smart device app for remote access
 - Third-party interface options
 - Wired or wireless controllers

OUTDOOR UNIT FEATURES

- Variable speed INVERTER-driven compressor
- Pre-charged with refrigerant volume for piping length up to 70 ft
- Low ambient cooling down to 0°F providing 100% capacity
- 24-hour continuous operation (cooling mode)
- High pressure protection
- Fast restart
- Superior energy and operational efficiency
- Seacoast protection*
 - External Outer Panel: Phosphate coating + Acrylic-Enamel coating
 - Fan Motor Support: Epoxy resin coating (at edge face)
 - Separator Assembly Valve Bed: Epoxy resin coating (at edge face)
 - Blue Fin treatment is an anti-corrosion treatment that is applied to the Heat exchanger coil to protect it against airborne contaminants.
 - Heat exchanger coil and base panel rated for 2,000 hours in accordance with ASTM B117 testing

*Seacoast protection standard from 2022 production

SPECIFICATIONS: PEAD-A12AA9 & PUZ-A12NKA7

Cooling at 95°F ¹	Maximum Capacity	BTU/H	12,000
	Rated Capacity	BTU/H	12,000
	Minimum Capacity	BTU/H	4,800
	Maximum Power Input	W	880
	Rated Power Input	W	880
	Moisture Removal	Pints/h	1.8
	Sensible Heat Factor		0.83
Heating at 47°F ²	Power Factor [208V / 230V]	%	91.0 / 91.0
	Maximum Capacity	BTU/H	18,000
	Rated Capacity	BTU/H	14,000
	Minimum Capacity	BTU/H	5,800
	Maximum Power Input	W	1,600
	Rated Power Input	W	1,090
Heating at 17°F ³	Power Factor [208V / 230V]	%	91.0 / 91.0
	Maximum Capacity	BTU/H	9,000
	Rated Capacity	BTU/H	9,000
	Maximum Power Input	W	840
Heating at 5°F ⁴	Rated Power Input	W	840
	Maximum Capacity	BTU/H	10,000
Heating at -4°F ⁵	Maximum Power Input	W	1,150
	Maximum Capacity	BTU/H	8,600
Efficiency	SEER2		21.8
	EER2 ¹		13.6
	HSPF2 [IV]		9.8
	COP at 47°F ²		3.7
	COP at 17°F at Maximum Capacity ³		3.1
	COP at 5°F at Maximum Capacity ⁴		2.5
	COP at -4°F at Maximum Capacity ⁵		2.4
	ENERGY STAR® Certified		Yes
Electrical	Voltage, Phase, Frequency		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	24
	Short-circuit Current Rating [SCCR]	kA	5
	Recommended Fuse/Breaker Size (Outdoor)	A	15
	Recommended Wire Size [Indoor - Outdoor]	AWG	14
	Power Supply		Indoor unit is powered by the outdoor unit
Indoor Unit	MCA	A	2.5
	Fan Motor Full Load Amperage	A	2.00
	Fan Motor Output	W	121
	Fan Motor Type		DC Motor
	Airflow Rate at Cooling, Dry	CFM	353-388-424-494
	Airflow Rate at Heating, Dry	CFM	353-388-424-494
	Sound Pressure Level [Cooling]	dB[A]	27-29-31-34
	Sound Pressure Level [Heating]	dB[A]	27-29-31-34
	External Static Pressure	in.WG	0.14-0.2-0.28-0.4-0.6
	Drain Pipe Size	In. [mm]	1-1/4 [32]
	Condensate Lift Mechanism, Maximum Distance	In. [mm]	27-9/16 [700]
	Coating on Heat Exchanger		—
	External Finish Color		Galvanized
	Unit Dimensions	W x D x H: In. [mm]	35-7/16 x 28-7/8 x 9-7/8 [900 x 732 x 250]
	Package Dimensions	W x D x H: In. [mm]	46-1/16 x 35-7/16 x 13 [1,170 x 900 x 330]
	Unit Weight	Lbs. [kg]	58 [26]
Package Weight	Lbs. [kg]	69 [31]	
Indoor Unit Operating Temperature Range	Cooling Intake Air Temp [Maximum / Minimum]*	°F	95 DB, 71 WB / 67 DB, 57 WB
	Heating Intake Air Temp [Maximum / Minimum]	°F	80 DB / 70 DB

NOTES:

AHRI Rated Conditions

(Rated data is determined at a fixed compressor speed)

¹Cooling (Indoor // Outdoor)

²Heating at 47°F (Indoor // Outdoor)

³Heating at 17°F (Indoor // Outdoor)

°F 80 DB, 67 WB // 95 DB, 75 WB

°F 70 DB, 60 WB // 47 DB, 43 WB

°F 70 DB, 60 WB // 17 DB, 15 WB

Conditions

⁴Heating at 5°F (Indoor // Outdoor)

°F 70 DB, 60 WB // 5 DB, 4 WB

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

- Applications should be restricted to comfort cooling only; equipment cooling applications are not recommended for low ambient temperature conditions.
- » 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 to avoid thermistor error and automatically restarts at these temperatures.

***Blue Fin Coating Standard from 2022 production:

- PU(Y/Z)-A(12/18)NKA7 - Beginning with serial number 12U*****
- PU(Y/Z)-A(24/30/36/42)NKA7 - Beginning with serial number 12U*****

INDOOR UNIT ACCESSORIES: PEAD-A12AA9

Control Interface	Airzone Wired Blueface Controller (White)	AZZBSBLUEZEROCB
	Airzone Wired Lite Controller (White)	AZZBSLITECB
	Airzone Wireless Lite Controller (White)	AZZBSLITERB
	Airzone Wireless Think Controller (White)	AZZBSTHINKRB
	Backup Heat Relay Kit Adapter for CN24 or CN152 on ducted models	CN24RELAY-KIT-CM3
	IT Extender for kumo station™	PAC-WHS01IE-E
	kumo station™ for kumo cloud®	PAC-WHS01HC-E
	On/Off Input Adapter for CN32 and Forced Fan Operation Input Adapter for SWE	PAC-715AD
	Operation and Error Status Output Adapter	PAC-SF40RM-E
	Procon BACnet® and Modbus® Interface	PAC-UKPRC001-CN-1
	Thermostat Interface for 3rd Party Thermostats	PAC-US445CN-1
	USNAP Adapter for Demand Response	PAC-WHS01UP-E
	Wireless Interface for kumo cloud®	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 kumo cloud®	PAC-USWHS003-TH-1
Wired Remote Controller	Deluxe MA Wired Remote Controller†	PAR-41MAAU
	Simple Ductless Wired Remote Controller	PAC-SDW01RC-1
	Simple MA Remote Controller	PAC-YT53CRAU-J
	Touch MA Wired Remote Controller	PAR-CT01MAU-SB
Wireless Remote Controller	kumo touch™ RedLINK™ Wireless Controller & Receiver kit	MHK2
	Lockdown Bracket for Wireless Handheld Remote Controllers	RCMKP1CB
	Universal Wireless MA Handheld Remote Controller	PAR-FL32MA-E
	Universal Wireless Receiver for PAR-FL32MA-E	PAR-FA32MA-W
	Wireless Signal Receiver	PAR-SA9CA-E
Condensate	Blue Diamond (Advanced) Mini Condensate Pump w/ Reservoir & Sensor (208/230V) [recommended]	X87-721
	Blue Diamond (MicroBlue) Mini Condensate Pump (110/208/230V) up to 18,000 BTU/H	X86-003
	Blue Diamond Sensor Extension Cable — 15 Ft.	C13-103
	Refco Condensate Pump (100-240 VAC) up to 120,000 BTU/H	COMBI
Control Wire	20/2PR, 1PR shielded + 1PR plenum wire for Airzone, 100 ft reel	CW2042S2-100
	20/2PR, shielded + 1PR plenum wire for Airzone, 500 ft reel	CW2042S2-500
Disconnect Switch	(30A/600V/UL) [fits 2" X 4" utility box] - Black	TAZ-MS303
	(30A/600V/UL) [fits 2" X 4" utility box] - White	TAZ-MS303W
Filter Box	Filter Box with MERV 13 Filter	FBM2-2-A
Lineset	15' x 1/4" x 15' / 3/8" Lineset (Twin-Tube Insulation)	MLS143812T-15
	30' x 1/4" x 30' / 3/8" Lineset (Twin-Tube Insulation)	MLS143812T-30
	50' x 1/4" x 50' / 3/8" Lineset (Twin-Tube Insulation)	MLS143812T-50
	65' x 1/4" x 65' / 3/8" Lineset (Twin-Tube Insulation)	MLS143812T-65

NOTES:

†PAC-SF40RM-E (Unable to use with wireless remote controller)

OUTDOOR UNIT ACCESSORIES: PUZ-A12NKA7

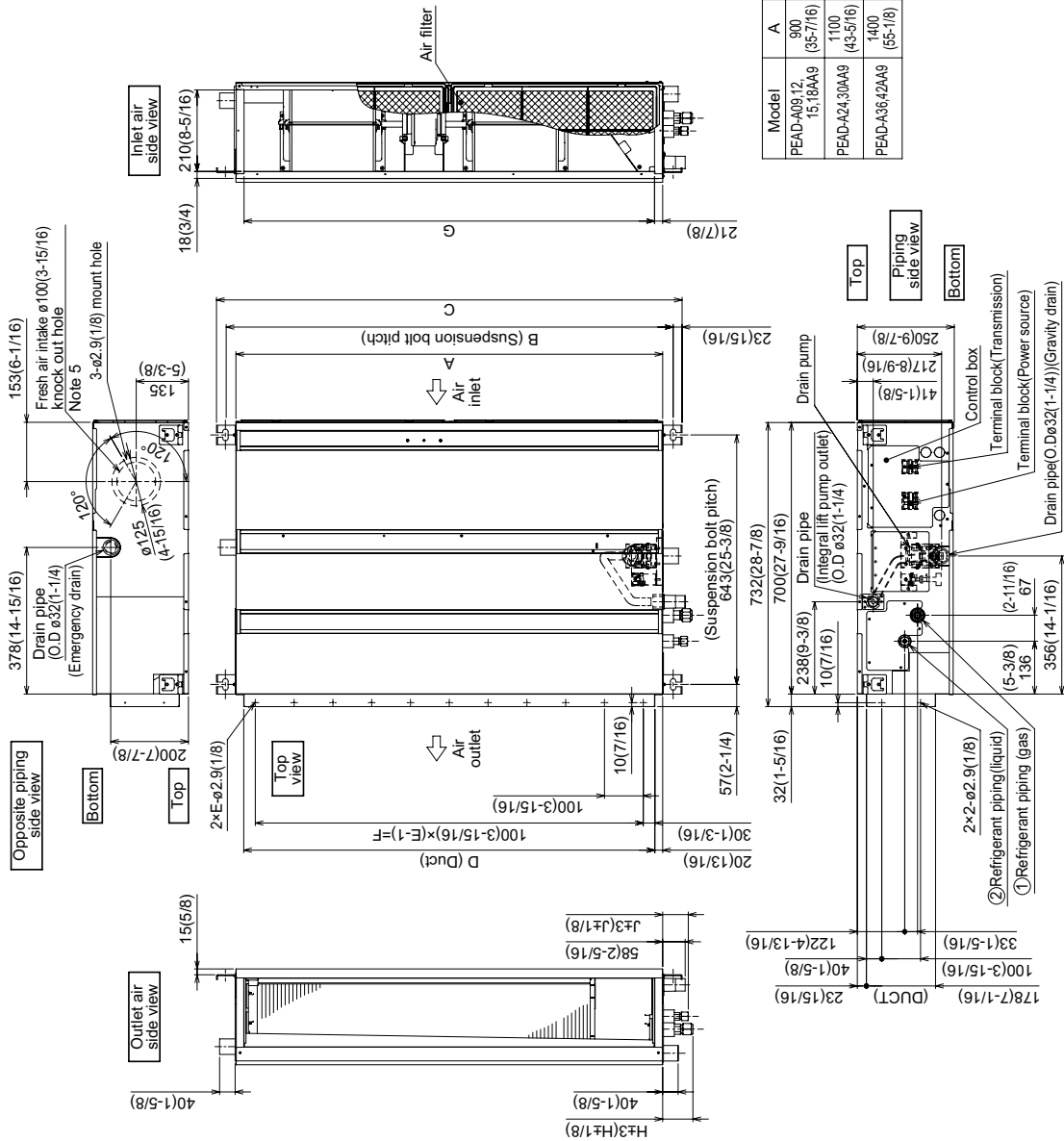
Air Outlet Guide	Air Outlet Guide	PAC-SJ07SG-E
Centralized Drain Pan	Centralized Drain Pan	PAC-SG63DP-E
Control/Service Tool	Control/Service Tool	PAC-SK52ST
	M- & P-Series Maintenance Tool Cable Set	M21EC0397
	USB Conversion Cable for PAC-USCMS-MN-1	M21EC1397
Drain Socket	Drain Socket	MAC-871DS
Hail Guards	Hail Guard	HG-A5
M-NET Converter	M-NET Interface for PUZ-A-NKA7 12 & 18 outdoor units	PAC-SJ96MA-E
Mini-Split Wire	14 Gauge, 4 wire MiniSplit Cable—250 ft. roll	S144-250
	14 Gauge, 4 wire MiniSplit Cable—250 ft. roll	SW144-250
	14 Gauge, 4 wire MiniSplit Cable—50 ft. roll	S144-50
	14 Gauge, 4 wire MiniSplit Cable—50 ft. roll	SW144-50
	16 Gauge, 4 wire MiniSplit Cable—250 ft. roll	S164-250
	16 Gauge, 4 wire MiniSplit Cable—250 ft. roll	SW164-250
	16 Gauge, 4 wire MiniSplit Cable—50 ft. roll	S164-50
	16 Gauge, 4 wire MiniSplit Cable—50 ft. roll	SW164-50
Mounting Pad	Condensing Unit Mounting Pad: 16" x 36" x 3"	ULTRILITE1
Snow/Rain Diverter	Snow/Rain Diverter	SRD-2
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 Stand — 12" High	QSMS1201M
Wind Baffle	Front Wind Baffle	WB-PA4
	Rear Wind Baffle	WB-RE4
	Side Advanced Wind Baffle	WB-SD4

INDOOR UNIT DIMENSIONS: PEAD-A12AA9

INDOOR UNIT

PEAD-A09, 12, 15, 18, 24, 30, 36, 42AA9

- Notes
1. Use an M10 screw for the suspension bolt (field supply).
 2. Keep the service space for maintenance at the bottom.
 3. This drawing is for PEAD-A09-12-15-18-24-30AA9 models, which have 2 fans. PEAD-A36-42AA9 models have 3 fans. 4. If the inlet duct is used, remove the air filter (supplied with the unit), then install the filter (field supply) at the suction side.
 5. Heat air to 0°C(32°F) or higher when taking fresh air with a fresh air intake.



Model	J	① Gas pipe		② Liquid pipe	
		ø9.52 (3/8)	ø12.7 (1/2)	ø6.35 (1/4)	ø9.52 (3/8)
PEAD-A09AA9	62 (2-1/2)				
PEAD-A12, 15, 18AA9					
PEAD-A24, 30AA9	66 (2-5/8)				
PEAD-A36, 42AA9					

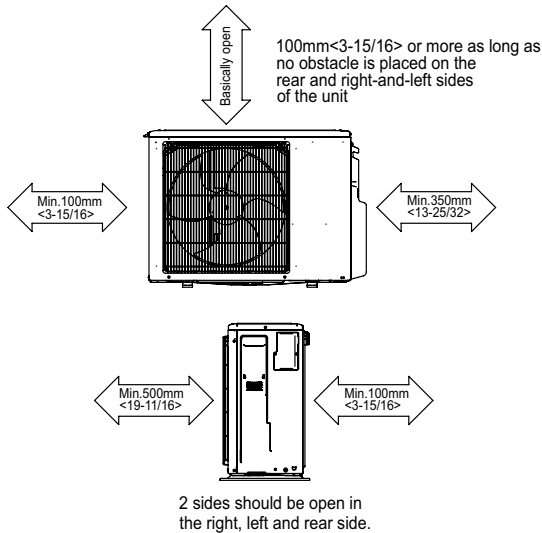
Model	Unit:mm(in.)													
	A	B	C	D	E	F	G	H						
PEAD-A09, 12, 15, 18AA9	900 (35-7/16)	954 (37-9/16)	1000 (39-3/8)	860 (33-7/8)	9 (31-1/2)	800 (31-13/16)	858 (33-13/16)	72 (2-7/8)						
PEAD-A24, 30AA9	1100 (43-3/8)	1154 (45-7/16)	1200 (47-1/4)	1080 (41-3/4)	11 (39-3/8)	1000 (41-11/16)	1058 (41-11/16)	78 (3-1/8)						
PEAD-A36, 42AA9	1400 (65-1/8)	1454 (67-1/4)	1500 (68-11/16)	1360 (63-9/16)	14 (51-3/16)	1300 (51-3/16)	1358 (53-1/2)							

OUTDOOR UNIT DIMENSIONS: PUZ-A12NKA7

Unit: mm<in>



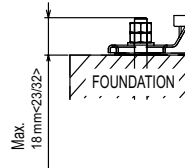
Free space around the outdoor unit (basic example)



FOUNDATION BOLTS

Please secure the unit firmly with 4 foundation (M10<W3/8>) bolts. (Bolts, washers and nut must be purchased locally).

<Foundation bolt height>



PIPING-WIRING DIRECTION

Piping and wiring connection can be made from the rear direction only.