

PEAD-A24AA9 & SUZ-KA24NAHZ-R1
MID STATIC HORIZONTAL-DUCTED INDOOR UNIT
24,000 BTU/H HYPER-HEATING UNIVERSAL OUTDOOR UNIT



Job Name:

System Reference:

Date:



Indoor Unit.....PEAD-A24AA9

Outdoor Unit.....SUZ-KA24NAHZ-R1

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

- The outdoor unit powers the indoor unit, and should a power outage occur, the system is automatically restarted when power returns
- INVERTER-driven compressor and LEV provide high efficiency and comfort while using only the energy needed to maintain maximum performance
- Hyper-heating performance offers 100% heating capacity at 5° F
- Hot-Start Technology: no cold air rush at equipment startup or when restarting after Defrost Cycle
- Quiet operation
- Built-in base pan heater
- Innovative Joint Lap DC Motor leads to high efficiency and reliability
- Pulse Amplitude Modulation technology

SPECIFICATIONS: PEAD-A24AA9 & SUZ-KA24NAHZ-R1

Cooling at 95°F ¹	Maximum Capacity	BTU/H	24,000
	Rated Capacity	BTU/H	24,000
	Minimum Capacity	BTU/H	10,100
	Maximum Power Input	W	2,040
	Rated Power Input	W	2,040
	Moisture Removal	Pints/h	6.9
	Sensible Heat Factor		0.68
Heating at 47°F ²	Power Factor [208V / 230V]	%	93.0 / 93.0
	Maximum Capacity	BTU/H	28,000
	Rated Capacity	BTU/H	25,000
	Minimum Capacity	BTU/H	10,100
	Maximum Power Input	W	2,310
	Rated Power Input	W	1,940
Heating at 17°F ³	Power Factor [208V / 230V]	%	92.0 / 92.0
	Maximum Capacity	BTU/H	25,200
	Rated Capacity	BTU/H	18,200
	Maximum Power Input	W	3,550
Heating at 5°F ⁴	Rated Power Input	W	2,156
	Maximum Capacity	BTU/H	25,000
Heating at -4°F ⁵	Maximum Power Input	W	3,510
	Maximum Capacity	BTU/H	22,400
Efficiency	SEER2		16.7
	EER2 ¹		11.7
	HSPF2 [IV]		9.4
	COP at 47°F ²		3.7
	COP at 17°F at Maximum Capacity ³		2.0
	COP at 5°F at Maximum Capacity ⁴		1.75
	COP at -4°F at Maximum Capacity ⁵		1.83
	COP at -13°F at Maximum Capacity ⁷		1.63
Electrical	ENERGY STAR® Certified		Yes
	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	25
	Recommended Wire Size [Indoor - Outdoor]	AWG	14
Indoor Unit	Power Supply		Indoor unit is powered by the outdoor unit
	MCA	A	2.25
	Fan Motor Full Load Amperage	A	1.80
	Fan Motor Output	W	121
	Fan Motor Type		DC Motor
	Airflow Rate at Cooling, Dry	CFM	512-565-636-742
	Airflow Rate at Heating, Dry	CFM	512-565-636-742
	Sound Pressure Level [Cooling]	dB[A]	27-29-31-35
	Sound Pressure Level [Heating]	dB[A]	27-29-31-35
	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]	43-5/16 x 28-7/8 x 9-7/8 [1,100 x 732 x 250]
	Package Dimensions	W x D x H: In. [mm]	53-15/16 x 35-7/16 x 13 [1,370 x 900 x 330]
Indoor Unit Operating Temperature Range	Unit Weight	Lbs. [kg]	67 [30]
	Package Weight	Lbs. [kg]	78 [35]
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

*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.

**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.

SPECIFICATIONS: PEAD-A24AA9 & SUZ-KA24NAHZ-R1

Outdoor Unit	MCA	A	17.0
	MOCP	A	27
	Fan Motor Output	W	74
	Airflow Rate [Cooling / Heating]	CFM	1940 / 1940
	Refrigerant Control		Linear expansive valve
	Defrost Method		Reverse Cycle
	Sound Pressure Level, Cooling ¹	dB(A)	52
	Sound Pressure Level, Heating ²	dB(A)	53
	Compressor Type		scroll
	Compressor Model		DNB28FBAMT
	Compressor Rated Load Amps	A	9
	Compressor Locked Rotor Amps	A	18.0
	Compressor Oil [Type // Charge]	oz.	FVC68D // 34
	External Finish Color		Ivory Munsell 3Y 7.8/1.1
	Base Pan Heater		Built-in
	Unit Dimensions	W x D x H: In. [mm]	37-13/32 x 13 (+1-3/16) x 37-1/8 [950 x 360 x 943]
	Package Dimensions	W x D x H: In. [mm]	41 x 18 x 41 [1040 x 450 x 1033]
	Unit Weight	Lbs. [kg]	190 [86]
	Package Weight	Lbs. [kg]	210 [95]
Outdoor Unit Operating Temperature Range	Cooling Air Temp [Maximum / Minimum]*	°F	115 DB / 23 DB
	Heating Air Temp [Maximum / Minimum]	°F	70 DB, 59 WB / -13 DB, -13 WB
	Heating Thermal Lock-out / Re-start Temperatures**	°F	-22 / -13
Refrigerant	Type		R410A
	Pre-Charged Refrigerant Amount	Lbs, oz	7.0, 11.0
	Maximum Pre-Charged Piping Length	Ft. [m]	70.0 [21.0]
	Additional Refrigerant Charge Per Additional Piping Length	oz./Ft. [g/m]	0.7 [65]
Piping	Gas Pipe Size O.D. [Flared]	In.[mm]	5/8 [15.88]
	Liquid Pipe Size O.D. [Flared]	In.[mm]	3/8 [9.52]
	Maximum Piping Length	Ft. [m]	165 [50]
	Maximum Height Difference	Ft. [m]	100 [30]
	Maximum Number of Bends		15

NOTES:

AHRI Rated Conditions

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°F 80 DB, 67 WB // 95 DB, 75 WB

²Heating at 47°F (Indoor // Outdoor)

°F 70 DB, 60 WB // 47 DB, 43 WB

³Heating at 17°F (Indoor // Outdoor)

°F 70 DB, 60 WB // 17 DB, 15 WB

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INDOOR UNIT ACCESSORIES: PEAD-A24AA9

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 (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 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	FBM2-3-A
Lineset		Lineset 3/8x5/8
	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

NOTES:

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

OUTDOOR UNIT ACCESSORIES: SUZ-KA24NAHZ-R1

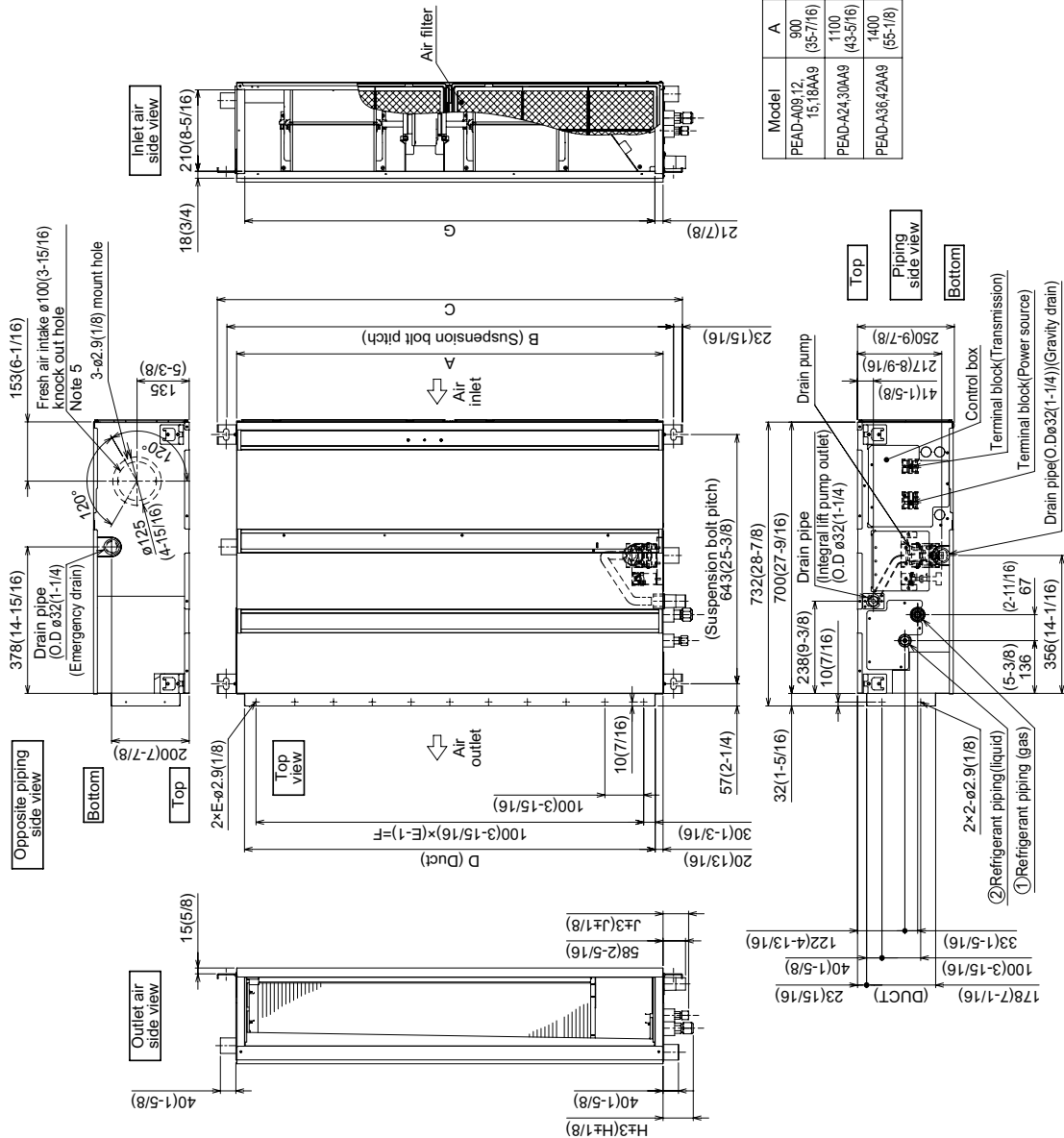
Air Outlet Guide	Air Outlet Guide (1 Piece)	PAC-SG59SG-E
Centralized Drain Pan	Drain Pan	PAC-SG64DP-E
Control/Service Tool	M- & P-Series Maintenance Tool Cable Set	M21EC0397
Drain Socket	Drain Socket	PAC-SH71DS-E
Hail Guards	Hail Guard	HG-A6
Mini-Split Wire	14 Gauge, 4 wire MiniSplit Cable—250 ft. roll	S144-250
	14 Gauge, 4 wire MiniSplit Cable—50 ft. roll	S144-50
	16 Gauge, 4 wire MiniSplit Cable—250 ft. roll	S164-250
	16 Gauge, 4 wire MiniSplit Cable—50 ft. roll	S164-50
Mounting Pad	Condensing Unit Mounting Pad: 24" x 42" x 3"	ULTRILITE2
Snow/Rain Diverter	Snow/Rain Diverter	SRD-4
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 3-1/4 inch Mounting Base (Pair) - Plastic	DSD-400P
	Outdoor Unit Stand — 12" High	QSMS1201M

INDOOR UNIT DIMENSIONS: PEAD-A24AA9

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.

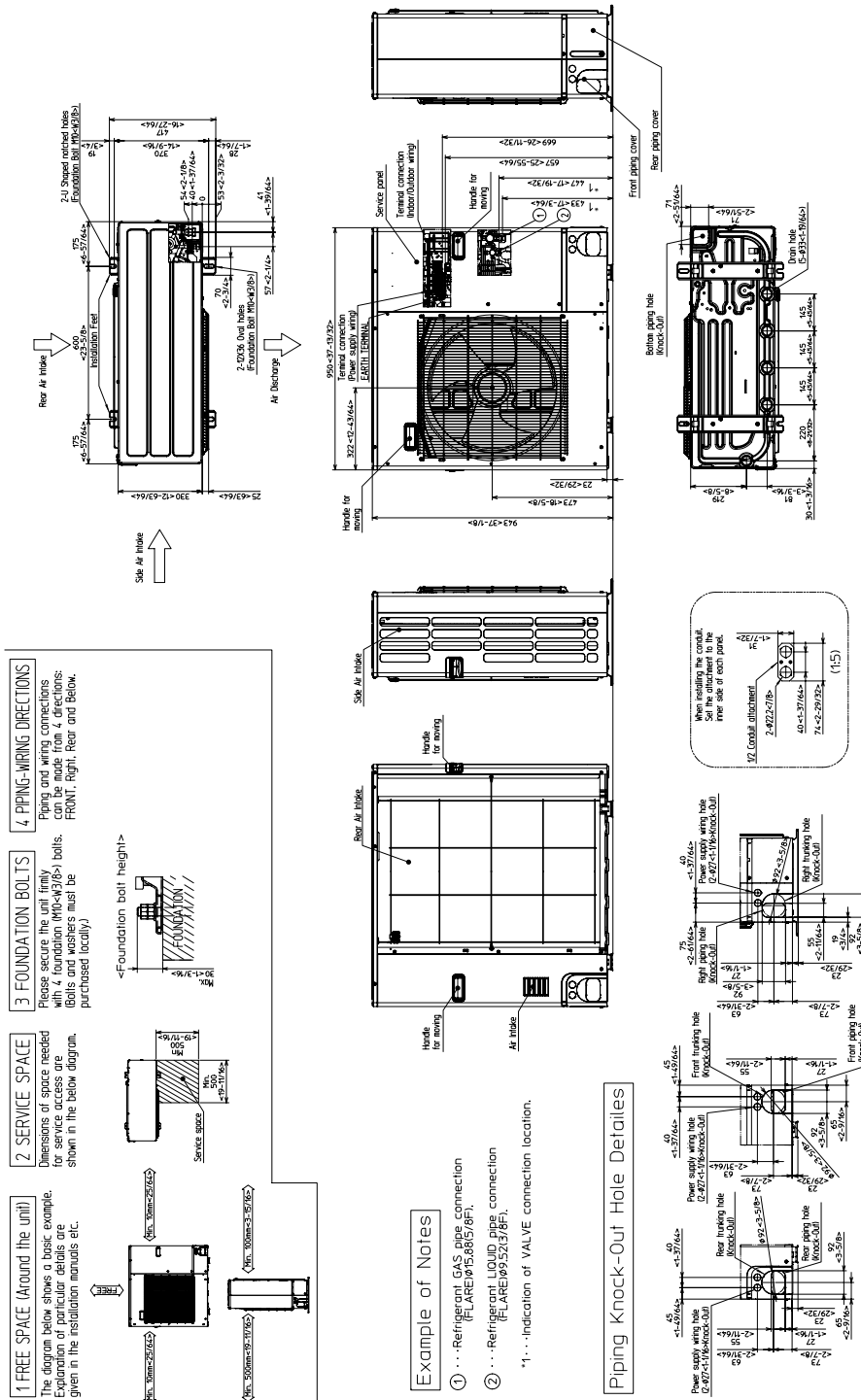


Model	J	① Gas pipe	② Liquid pipe
PEAD-A09AA9	62	ø9.52 (3/8)	ø6.35 (1/4)
PEAD-A12, 15, 18AA9	62	ø12.7 (1/2)	ø6.35 (1/4)
PEAD-A24, 30AA9	66	ø15.88 (5/8)	ø9.52 (3/8)
PEAD-A36, 42AA9	66	ø15.88 (5/8)	ø9.52 (3/8)

Model	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 (39-3/8)	1058 (41-11/16)	78 (3-1/8)
PEAD-A36, 42AA9	1400 (55-1/8)	1454 (57-1/4)	1500 (59-1/16)	1360 (53-9/16)	14 (51-3/16)	1300 (51-3/16)	1358 (53-1/2)	78 (3-1/8)

OUTDOOR UNIT DIMENSIONS: SUZ-KA24NAHZ-R1

Unit: mm<in>



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