

PEAD-AA42NL & PUY-AK42NL
42,000 BTU/H HORIZONTAL-DUCTED INDOOR UNIT
42,000 BTU/H COOLING ONLY OUTDOOR UNIT



Job Name:

System Reference:

Date:



Indoor Unit.....PEAD-AA42NL

Outdoor Unit.....PUY-AK42NL



INDOOR UNIT FEATURES

- Auto fan speed mode
- Built-in condensate lift mechanism (up to 27-9/16")
- Multiple control options including: comfort app, third-party interfaces and both wired and wireless controllers
- Optional FB Series filter boxes for easy access and service
- Unobtrusive ceiling-concealed design for short-run ductwork
- Wide ranging external static pressure (0.14-0.60 in. WG)

OUTDOOR UNIT FEATURES

- Continuous operation: 24-hour continuous operation (cooling mode)
- Fast restart
- High pressure 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 -40°F providing 100% capacity (with wind baffles)
- 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
- 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.

SPECIFICATIONS: PEAD-AA42NL & PUY-AK42NL

Cooling at 95F ¹	Maximum Capacity	Btu/h	44,000
	Rated Capacity	Btu/h	42,000
	Minimum Capacity	Btu/h	14,200
	Maximum Power Input	W	3,970
	Rated Power Input	W	3,760
	Moisture Removal	Pints/h	10.8
	Sensible Heat Factor	-	0.72
Efficiency	Power Factor [208V / 230V]	%	95 / 95
	SEER2		18.7
	EER2 ¹		11.1
Electrical	ENERGY STAR® Certified		No
	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	35
Indoor Unit	Recommended Wire Size [Indoor - Outdoor]	AWG	14
	MCA	A	4.25
	Fan Motor Output	W	300
	Airflow Rate at Cooling, Dry	CFM	1,042, 1,148, 1,254, 1,483
	Sound Pressure Level [Cooling]	dB (A)	37, 39, 41, 45
	External Static Pressure	in.WG	0.14, 0.20, 0.28, 0.40, 0.60
	Drain Pipe Size O.D.	inch [mm]	1-1/4 [32]
	Unit Dimensions (W x D x H)	inch x inch x inch [mm x mm x mm]	55-1/8 x 28-7/8 x 9-7/8 [1,400 x 732 x 250]
	Package Dimensions (W x D x H)	inch x inch x inch [mm x mm x mm]	65-3/4 x 35-7/16 x 13 [1,670 x 900 x 330]
	Unit Weight	lbs [kg]	86 [39]
IDU Operating Temp. Range	Package Weight	lbs [kg]	101 [46]
	Fan Motor Type		DC Motor
Outdoor Unit	Cooling Intake Air Temp [Maximum / Minimum]	°FDB, °FWB / °FDB, °FWB	90, 73 / 66, 59
	MCA	A	34
	MOCP	A	56
	Fan Motor Output	W	74+74
	Airflow Rate Cooling	CFM	3,910
	Coating on Heat Exchanger (Bluefin, Sea Coast)		Yes, Yes
	Sound Pressure Level, Cooling ¹	dB (A)	52
	Compressor Type		Twin Rotary
	Compressor Model		MRB36FEGMC
	Compressor Oil [Type // Charge]	Type // oz	RM68EH // 45
	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]	41-11/32 x 14 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]	224 [102]
	Package Weight	lbs [kg]	251.33 [114]
	ODU Operating Temp. Range	Cooling Intake Air Temp [Maximum / Minimum*]	°FDB
Refrigerant	Type		R454B
	Pre-Charged Refrigerant Amount	lbs, oz	9, 14
	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]	225 [69]
	Maximum Height Difference	ft [m]	100 [30]
NOTES	Maximum Number of Bends		15

NOTES

- ¹Cooling at 95°F (Indoor: 80°F DB, 67°F WB // Outdoor: 95°F DB, 75°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.
 • Cooling-only system with advanced wind baffle: -40°F - 115°F.
 • Refer to wind baffle documentation for further information.
 ** Outdoor Unit Operating Temperature Range (Cooling Thermal Lock-out / Re-start Temperatures):

INDOOR UNIT ACCESSORIES: PEAD-AA42NL

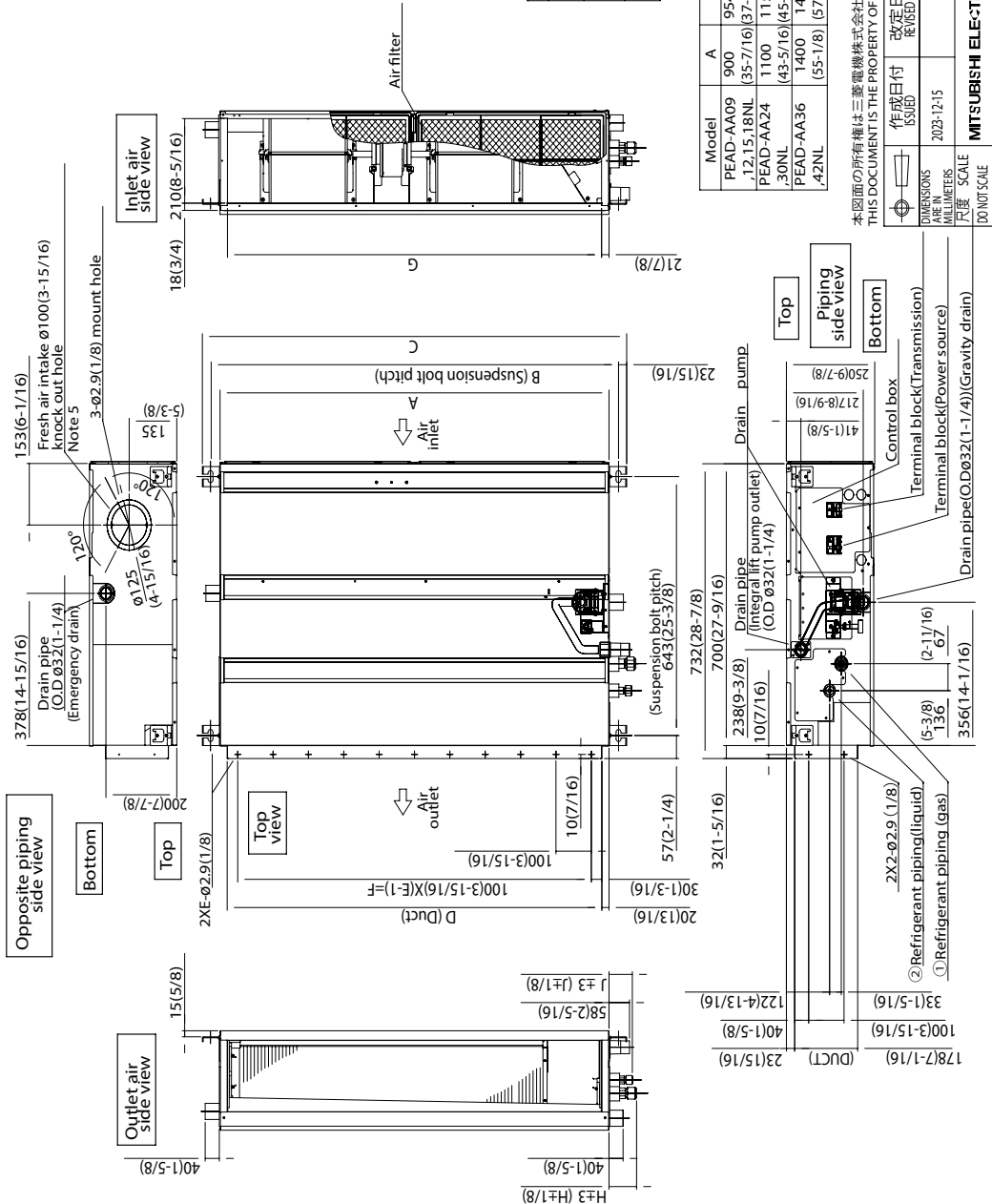
Control Interface	3-Pin Wiring Harness	PAC-715AD
	5-Pin Wiring Harness	PAC-725AD
	Airzone Wired Blueface Controller Black	AZZBSBLUEZEROCN
	Airzone Wired Blueface Controller White	AZZBSBLUEZEROCB
	Airzone Wireless Lite Controller Black	AZZBSLITERN
	Airzone Wireless Lite Controller White	AZZBSLITERB
	Airzone 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
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
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
Filter Box	Filter Box with MERV 13 Filter	FBM2-4-A
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
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 MA Wired 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
Disconnect Switch	30A600VUL fits 2 X 4 utility box - Black	TAZ-MS303
	30A600VUL fits 2 X 4 utility box - White	TAZ-MS303W
Power Supplies and Auxiliary Components	Backup Heat Relay Kit Adapter for CN24 or CN152 Connector	CN24RELAY-KIT-CM3
NOTES		

OUTDOOR UNIT ACCESSORIES: PUY-AK42NL

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
Control/Service Tool	ControlService Tool	PAC-SK52ST
	M- & P-Series Maintenance Tool Cable Set	M21EC0397
	Maintenance Tool Interface	PAC-USCMS-MN-1
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
Wind Baffle	Front Wind Baffle	WB-PA3 (two pieces are required)
	Rear Wind Baffle	WB-RE6
	Side Advanced Wind Baffle	WB-SD6
Control Interface	3-Pin Wiring Harness	PAC-715AD
	5-Pin Wiring Harness	PAC-725AD
M-NET Converter	M-Net Interface for P-Series	PAC-SJ95MA-E
Snow/Rain Diverter	SnowRain Diverter	SRD-5
Drain Socket	Drain Socket	PAC-SG61DS-E
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
NOTES		

INDOOR UNIT DIMENSIONS: PEAD-AA42NL

- 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-AA09-12-15-18-24-30NL models, which have 2 fans.
PEAD-AA36-42NL 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-AA09 NL	62 (2-1/2)	φ9.52 (3/8)	φ6.35 (1/4)
PEAD-AA12, 15, 18NL	66	φ12.7 (1/2)	φ9.52 (3/8)
PEAD-AA24, 30, 36, 42NL	66	φ15.88 (5/8)	φ9.52 (3/8)

Model	A	B	C	D	E	F	G	H
PEAD-AA09	900 (35-7/16)	954 (37-9/16)	1000 (39-3/8)	860 (33-7/8)	9	800 (31-1/2)	858 (33-13/16)	72 (2-7/8)
PEAD-AA12, 15, 18NL	1100 (43-5/16)	1154 (45-7/16)	1200 (47-1/4)	1060 (41-3/4)	11	1000 (39-3/8)	1058 (41-11/16)	78 (3-1/8)
PEAD-AA24, 30NL	1400 (55-1/8)	1454 (57-1/4)	1500 (59-1/16)	1360 (53-9/16)	14	1300 (51-3/16)	1358 (53-1/2)	

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2023-12-15

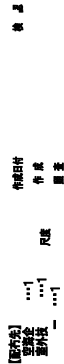
改定日付
2023-12-15

EXTERANAL DIMENSION
PEAD-AA09-12-15-18-24-30-36-42NL

MITSUBISHI ELECTRIC CO., LTD. K894C86N

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Unitary Small AC
AHRI Standard 210/240

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