

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

- Wi-Fi Optional: A Wireless Interface Adapter can be ordered as an accessory for field installation.
- Four Speed Fan: Adjust the fan between four speed settings to optimal comfort.
- Auto Changeover: The unit will automatically switch between heating and cooling modes to maintain your desired temperature.
- Condensate Lift Mechanism: Reduces the need for an additional pump to remove condensate. Units with a condensate lift mechanism also include an overflow safety switch.
- Light Commercial: Light commercial applications include small offices, restaurants, and retail.

OUTDOOR UNIT FEATURES

- Inverter Driven Compressor: Inverter technology uses only the precise amount of energy needed to keep a space comfortable.
- Blue Fin Coating: Anti-corrosion coating that protects the outdoor heat exchanger against salt, sulfur, and other airborne contaminants that impact the efficiency and performance of the outdoor units.
- Seacoast Protection: 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.
- Low Ambient Cooling: Low ambient cooling down to -40°F providing 100% capacity with front, side and rear wind baffle kit
- Low Ambient Cooling: Low ambient cooling down to 0°F providing 100% capacity with front wind baffle kit

SPECIFICATIONS: PEAD-AA42NL & PUY-AK42NL

Cooling at 95F ¹	Maximum Capacity	Btu/h	44000
	Rated Capacity	Btu/h	42000
	Minimum Capacity	Btu/h	14200
	Maximum Power Input	W	3970
	Rated Power Input	W	3760
	Moisture Removal	Pints/h	10.80
	Sensible Heat Factor		0.72
Efficiency	SEER2		18.70
	EER2 ¹		11.10
	ENERGY STAR® Certified		No
Electrical	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
	Recommended Wire Size [Indoor - Outdoor]	AWG	14
Indoor Unit	MCA	A	4.25
	Breaker Size	A	15
	Fan Motor Output	W	300
	Fan Motor Type		DC Motor
	Airflow Rate at Cooling, Dry	CFM	1042 , 1148 , 1254 , 1483
	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]
	Condensate Lift Mechanism, Max Height	inch [mm]	27-9/16 [700]
	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 [1400 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 [1670 x 900 x 330]
	Unit Weight	lbs [kg]	86 [39]
	Package Weight	lbs [kg]	101 [46]
IDU Operating Temp. Range	Cooling Intake Air Temp [Maximum / Minimum]	°FDB , °FWB / °FDB , °FWB	90 , 73 / 66 , 59
Outdoor Unit	MCA	A	34
	MOCP	A	56
	Fan Motor Output	W	74+74
	Airflow Rate Cooling	CFM	3910
	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]	// oz	RM68EH // 45
	External Finish Color		Munsell 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 [1050 x 355 x 1338]
	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 [1090 x 450 x 1480]
	Unit Weight	lbs [kg]	224 [102]
	Package Weight	lbs [kg]	251 [114]
ODU Operating Temp. Range	Cooling Intake Air Temp [Maximum / Minimum*]	°FDB	115 / 23
	Cooling Thermal Lock-out / Re-start Temperatures**	°FDB	N/A / N/A
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	Liquid Pipe Size O.D. [Flared]	inch [mm]	3/8 [9.52]
	Gas Pipe Size O.D. [Flared]	inch [mm]	5/8 [15.88]
	Maximum Piping Length	ft [m]	225 [69]

Notes

¹Cooling at 95°F (Indoor // Outdoor) °F 80 DB, 67 WB // 95 DB, 75 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.

³Nominal capacity only. Actual capacity output varies based on the system specific configuration

**Outdoor Unit Operating Temperature Range (Cooling Thermal Lock-out / Re-start Temperatures):

SPECIFICATIONS: PEAD-AA42NL & PUY-AK42NL

Piping	Maximum Height Difference	ft [m]	100 [30]
	Maximum Number of Bends		15
Notes ¹ Cooling at 95°F (Indoor // Outdoor) °F 80 DB, 67 WB // 95 DB, 75 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. ³ Nominal capacity only. Actual capacity output varies based on the system specific configuration ^{**} Outdoor Unit Operating Temperature Range (Cooling Thermal Lock-out / Re-start Temperatures):			

INDOOR UNIT ACCESSORIES: PEAD-AA42NL

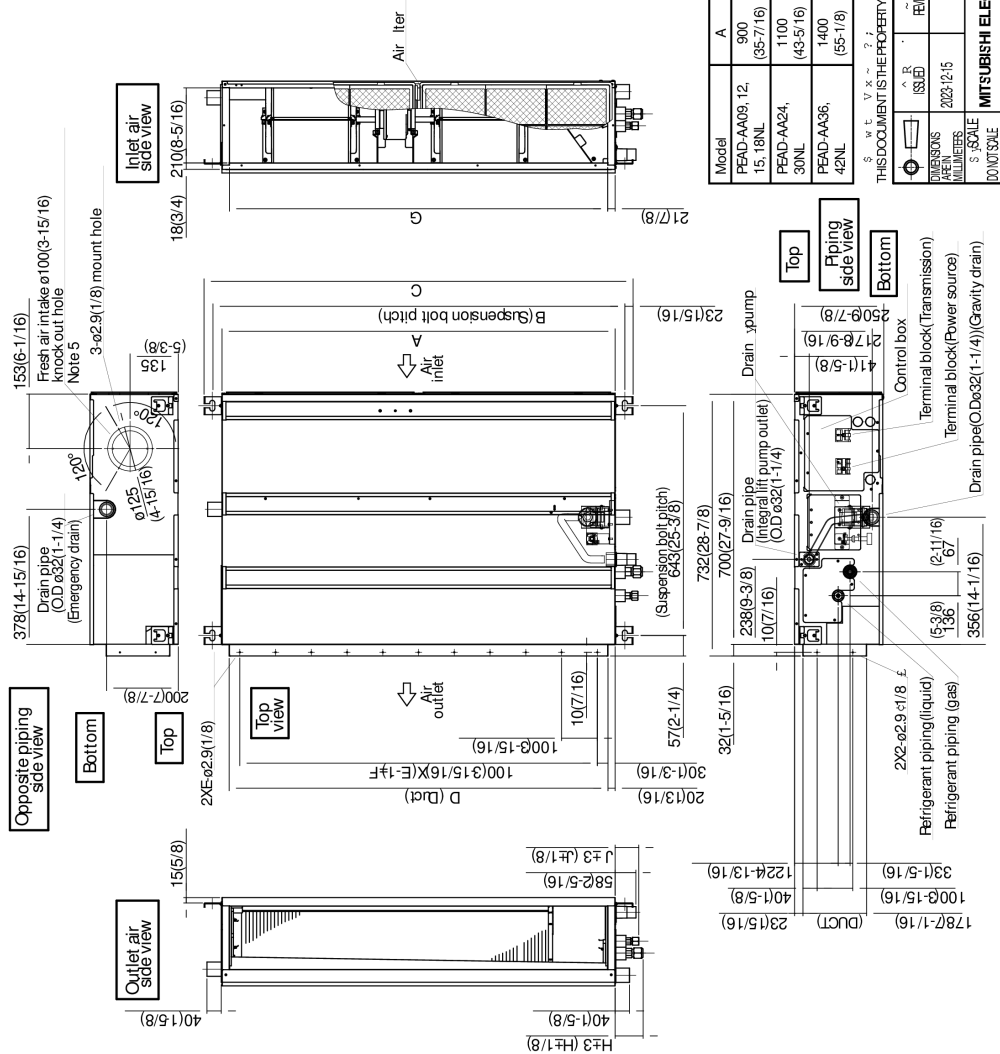
Condensate	Sauermann Condensate Pump 120-230V up to 60k BTU/h	☐ SI30-230
	Blue Diamond MegaBlue Condensate Pump with Reservoir Sensor 115-230V up to 170k BTU/h	☐ X87-835
	Blue Diamond Sensor Extension Cable 15 Ft	☐ C13-103
	Blue Diamond MaxiBlue Advanced Mini Condensate Pump w Reservoir Sensor 110V up to 48000 BTUH recommended	☐ X87-711
	Refco Condensate Pump 100-240V up to 120k BTU/h	☐ COMBI
	Blue Diamond MaxiBlue Condensate Pump with Reservoir Sensor 115-230V up to 48k BTU/h	☐ X88-721
Control Interface	Airzone Wireless Lite Controller White	☐ AZZBSLITERB
	Airzone Wireless Think Controller Black	☐ AZZBSTHINKRN
	Operation and Error Status Output Adapter	☐ PAC-SF40RM-E
	Wireless Interface 2 for Comfrot app	☐ PAC-USWHS002-WF-2
	Thermostat Interface for 3rd Party Thermostats	☐ PAC-US445CN-1
	Airzone Wireless Think Controller White	☐ AZZBSTHINKRB
	Airzone Wireless Lite Controller Black	☐ AZZBSLITERN
	Airzone Wired Blueface Controller White	☐ AZZBSBLUEZEROCB
	Procon BACnet® and Modbus® Interface	☐ PAC-UKPRC001-CN-1
	Airzone Wired Blueface Controller Black	☐ AZZBSBLUEZEROCN
	kumo station® for Comfort app	☐ PAC-WHS01HC-E
	IT Extender	☐ PAC-WHS01IE-E
Control Wire	202PR shielded 1PR plenum wire for Airzone 500 ft reel	☐ CW2042S2-500
	202PR 1PR shielded 1PR plenum wire for Airzone 100 ft reel	☐ CW2042S2-100
Disconnect Switch	30A600VUL fits 2 X 4 utility box - White	☐ TAZ-MS303W
	30A600VUL fits 2 X 4 utility box - Black	☐ TAZ-MS303
Filter Box	Filter Box with 2" thick pleated MERV 13 Filters	☐ FBM2-4-A
Remote Sensor	Wall Mount Remote Temperature Sensor	☐ PAC-SE41TS-E
	Wireless temperature and humidity sensor for Comfort app	☐ PAC-USWHS003-TH-1
	Flush Mount Remote Temperature Sensor for SEZ SLZ SVZ and all P-Series models	☐ PAC-USSEN002-FM-1
Terminal Signal Adapter	Connector and wire for On/Off and Error status using CN51 and CN52	☐ PAC-725AD
	Connector and wire for On/Off and Fan command using CN32	☐ PAC-715AD
	Backup Heat Relay Kit	☐ CN24RELAY-KIT-CM3
Wired Remote Controller	Simple MA Remote Controller	☐ PAC-YT53CRAU-J
	Deluxe Wired MA Remote Controller	☐ PAR-42MAAUB
	Touch MA Remote Controller	☐ PAR-CT01MAU-SB
	Simple Direct Wired Remote Controller	☐ PAC-SDW01RC-1
Wireless Remote Controller	Wireless Remote Controller	☐ PAR-SL101A-E
	Universal Wireless Receiver for PAR-FL32MA-E	☐ PAR-FA32MA-W
	Wireless MA Handheld Remote Controller (requires PAR-FA32MA-E)	☐ PAR-FL32MA-E
	Lockdown Bracket for Wireless Handheld Remote Controllers	☐ RCMKP1CB
	Wireless RedLINK™ Remote Controller	☐ MHK2
Notes ¹ Unable to use with Wireless Handheld Remote Controller ¹ Requires MAC-334IF-E Interface to connect MA controller		

OUTDOOR UNIT ACCESSORIES: PUY-AK42NL

Air Outlet Guide	Air Outlet Guide 1 Piece	☐ PAC-SH96SG-E (two pieces required)
Control/Service Tool	Maintenance Tool Interface	☐ PAC-USCMS-MN-1
	ControlService Tool	☐ PAC-SK52ST
	M- & P-Series Maintenance Tool Cable Set	☐ M21EC0397
Drain Socket	Drain Socket	☐ PAC-SG61DS-E
Hail Guards	Hail Guard	☐ HG-A2
M-NET Converter	M-Net Interface for P-Series	☐ PAC-SJ95MA-E
Mini-Split Wire	14 Gauge 4 wire MiniSplit Cable50 ft roll	☐ S144-50
	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 Armored MiniSplit Cable250 ft roll	☐ SW144-250
Mounting Pad	Condensing Unit Mounting Pad 24 x 42 x 3	☐ ULTRILITE2
Snow/Rain Diverter	SnowRain Diverter	☐ SRD-5
Stand	Outdoor Unit 3-14 inch Mounting Base Pair - Plastic	☐ DSD-400P
	18 Dual Fan Stand	☐ QSMS1802M
	24 Dual Fan Stand	☐ QSMS2402M
	Outdoor Unit Stand 12 High	☐ QSMS1202M
Terminal Signal Adapter	Connector and wire for On/Off and Fan command using CN32	☐ PAC-715AD
	Connector and wire for On/Off and Error status using CN51 and CN52	☐ PAC-725AD
Wind Baffle	Rear Wind Baffle	☐ WB-RE6
	Side Advanced Wind Baffle	☐ WB-SD6
	Front Wind Baffle	☐ WB-PA3 (two pieces required)
Notes		

INDOOR UNIT DIMENSIONS: PEAD-AA42NL

- Notes 1. Use an M10 screw for the suspension bolt (old 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 (old 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	Gas pipe	Liquid pipe
PEAD-AA09 NL	62 (2-1/2)	ø9.52 (3/8)	ø6.35 (1/4)
PEAD-AA12, 15, 18NL	66	ø12.7 (1/2)	ø9.52 (3/8)
PEAD-AA24, 30, 36, 42NL	66	ø15.88 (5/8)	ø9.52 (3/8)

Model	A	B	C	D	E	F	G	H
PEAD-AA09, 12, 15, 18NL	900 (35-7/16)	954 (37-9/16)	1000 (39-3/8)	860 (33-7/8)	9	800 (31-1/2)	888 (33-13/16)	72 (2-7/8)
PEAD-AA24, 30NL	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-AA36, 42NL	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)	78 (3-1/8)

THIS DOCUMENT IS THE PROPERTY OF MITSUBISHI ELECTRIC CORPORATION.

Model	ISSUED	REVISED	EXTERNAL DIMENSION
PEAD-AA09 12 15 18 24 30 36 42NL	2023.12.15		
DIMENSIONS IN MILLIMETERS			
SCALE			
DOWN SIDE			
MITSUBISHI ELECTRIC C-RP-RAT-N			
DATE			
1/2			

METUS_2026-09_PROPIN

