PVA-AA42NL & PUY-AK42NL
42,000 BTU/H MULTI-POSITION AIR HANDLER INDOOR UNIT
42,000 BTU/H COOLING ONLY OUTDOOR UNIT

Job Name:			
System Reference:		**Date:**	

INDOOR Unit ... PVA-AA42NL

OUTDOOR Unit ... PUY-AK42NL

INDOOR UNIT FEATURES

- Multi-Position Installation: Versatile installation options, including horizontal (left or right) and vertical (up or down) orientations, with included drain pans to facilitate easy setup for any configuration.
- Wi-Fi Optional: A Wireless Interface Adapter can be ordered as an accessory for field installation.
- Three Speed Fan: Adjust the fan between three speed settings to optimal comfort.
- Blow-through design: Unique blow-through design allows simple coil cleaning when the blower is removed.
- Auto Changeover: The unit will automatically switch between heating and cooling modes to maintain your desired temperature.

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

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SPECIFICATIONS: PVA-AA42NL & PUY-AK42NL

Cooling at 95F[1]	Maximum Capacity	Btu/h	44000
	Rated Capacity	Btu/h	42000
	Minimum Capacity	Btu/h	14100
	Maximum Power Input	W	3970
	Rated Power Input	W	3760
	Moisture Removal	Pints/h	12.50
	Sensible Heat Factor		0.68
	Power Factor [208V / 230V]	%	91 / 91
Efficiency	SEER2		19.10
	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	5.63
	Breaker Size	A	15
	Fan Motor Output	W	430
	Fan Motor Type		Direct-driven DC Brushless Motor
	Airflow Rate at Cooling, Dry	CFM	1040 , 1262 , 1485
	Sound Pressure Level [Cooling]	dB (A)	45 , 48 , 52
	External Static Pressure	in.WG	0.30 , 0.50 , 0.80
	Drain Pipe Size O.D.	inch [mm]	3/4 [19.05]
	External Finish Color		Galvanized steel cabinet-Powder coated Slate Gray
	Unit Dimensions (W x D x H)	inch x inch x inch [mm x mm x mm]	25 x 21-5/8 x 59-1/2 [635 x 548 x 1511]
	Package Dimensions (W x D x H)	inch x inch x inch [mm x mm x mm]	26 x 28-11/16 x 66-1/4 [660 x 728 x 1682]
	Unit Weight	lbs [kg]	172 [78]
	Package Weight	lbs [kg]	198 [90]
IDU Operating Temp. Range	Cooling Intake Air Temp [Maximum / Minimum]	°FDB , °FWB / °FDB , °FWB	90 , 72 / 66 , 61
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]	41-15/16 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

[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.

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

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

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INDOOR UNIT ACCESSORIES: PVA-AA42NL

Condensate	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
	Blue Diamond MegaBlue Condensate Pump with Reservoir Sensor 115-230V up to 170k BTU/h	X87-835
	Sauermann Condensate Pump 120-230V up to 60k BTU/h	SI30-230
Control Interface	Airzone Wired Lite Controller White	AZZBSLITECB
	IT Extender	PAC-WHS01IE-E
	Airzone Wireless Think Controller White	AZZBSTHINKRB
	Wireless Interface 2 for Comfrot app	PAC-USWHS002-WF-2
	Airzone Wired Blueface Controller White	AZZBSBLUEZEROCB
	Procon BACnet® and Modbus® Interface	PAC-UKPRC001-CN-1
	Airzone Wireless Think Controller Black	AZZBSTHINKRN
	Thermostat Interface for 3rd Party Thermostats	PAC-US445CN-1
	Airzone Wireless Lite Controller White	AZZBSLITERB
	kumo station® for Comfort app	PAC-WHS01HC-E
	Airzone Wired Blueface Controller Black	AZZBSBLUEZEROCN
	Operation and Error Status Output Adapter	PAC-SF40RM-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
Downflow Kit	Downflow Kit	CMA-1
Electric Heat Lockout	Electric Heat Lockout	ETC-211020-MIT
Electric Kit Heats	10kW Electric Heater	EH10-MPA-LB
	17kW Electric Heater	EH17-MPAS-LB
	15kW Electric Heater	EH15-MPAS-LB
Lineset	3/8 x 5/8 Lineset Twin-Tube Insulation - 15 feet	MPLS385812T-15
	3/8 x 5/8 Lineset Twin-Tube Insulation - 10 feet	MPLS385812T-10
	3/8 x 5/8 Lineset Twin-Tube Insulation - 50 feet	MPLS385812T-50
	3/8 x 5/8 Lineset Twin-Tube Insulation - 30 feet	MPLS385812T-30
	3/8 x 5/8 Lineset Twin-Tube Insulation - 100 feet	MPLS385812T-100
	3/8 x 5/8 Lineset Twin-Tube Insulation - 65 feet	MPLS385812T-65
Remote Sensor	Wall Mount Remote Temperature Sensor	PAC-SE41TS-E
	Flush Mount Remote Temperature Sensor for SEZ SLZ SVZ and all P-Series models	PAC-USSEN002-FM-1
	Wireless temperature and humidity sensor for Comfort app	PAC-USWHS003-TH-1
Terminal Block	Separate Terminal Power Block	SPTB1
Terminal Signal Adapter	Backup Heat Relay Kit	CN24RELAY-KIT-CM3
	Connector and wire for On/Off and Error status using CN51 and CN52	PAC-725AD
	ERV On/Off Input Adapter for CNER on SVZ PEAD and PVA models	PAC-740
	Connector and wire for On/Off and Fan command using CN32	PAC-715AD
Wired Remote Controller	Simple MA Remote Controller	PAC-YT53CRAU-J
	Touch MA Remote Controller	PAR-CT01MAU-SB
	Simple Direct Wired Remote Controller	PAC-SDW01RC-1
	Deluxe Wired MA Remote Controller	PAR-42MAAUB
Wireless Remote Controller	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 Remote Contoller	PAR-SL101A-E
	Wireless RedLINK™ Remote Controller	MHK2

Notes

[1]Requires MAC-334IF-E Interface to connect MA controller
[1]Unable to use with Wireless Handheld Remote Controller

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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			

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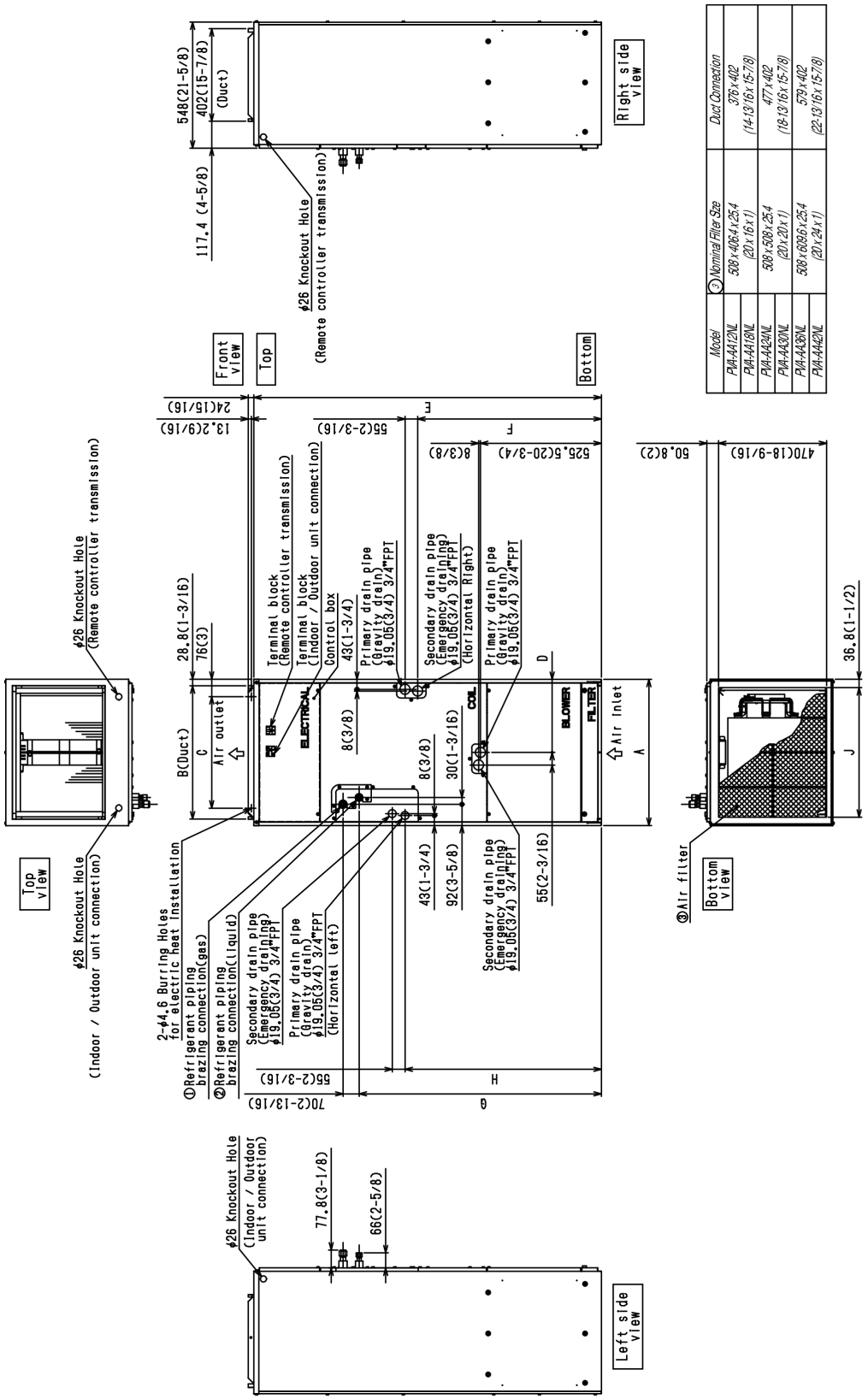
INDOOR UNIT DIMENSIONS: PVA-AA42NL



Model	A	B	C	D	E	F	G	H	J	① Gas Pipe	② Liquid Pipe
PVA-AA12NL	432(17)	378(14-13/16)	281(11-1/8)	224(8-7/8)	1275(50-1/4)	680(26-13/16)	823(32-7/16)	735.5(29)	380(14-3/16)	12.7(1/2)	6.35(1/4)
PVA-AA18NL											
PVA-AA24NL	534(21)	477(18-13/16)	382.6(15-1/8)	286.5(10-1/2)	1378(54-1/4)	737(29-1/16)	953.5(37-9/16)	792(31-3/16)	461(18-3/16)	15.88(5/8)	9.52(3/8)
PVA-AA30NL											
PVA-AA36NL	635(25)	579(22-13/16)	484.6(19-1/8)	317.5(12-1/2)	1511(59-1/2)	798.5(31-7/16)	1053(41-1/2)	853.5(33-5/8)	563(22-3/16)		
PVA-AA42NL											

Model	③ Nominal Filter Size	Duct Connection
PVA-AA12NL	508 x 406.4 x 25.4 (20 x 16 x 1)	376 x 402 (14-13/16 x 15-7/8)
PVA-AA18NL		
PVA-AA24NL	508 x 508 x 25.4 (20 x 20 x 1)	477 x 402 (18-13/16 x 15-7/8)
PVA-AA30NL		
PVA-AA36NL	508 x 609.6 x 25.4 (20 x 24 x 1)	579 x 402 (22-13/16 x 15-7/8)
PVA-AA42NL		

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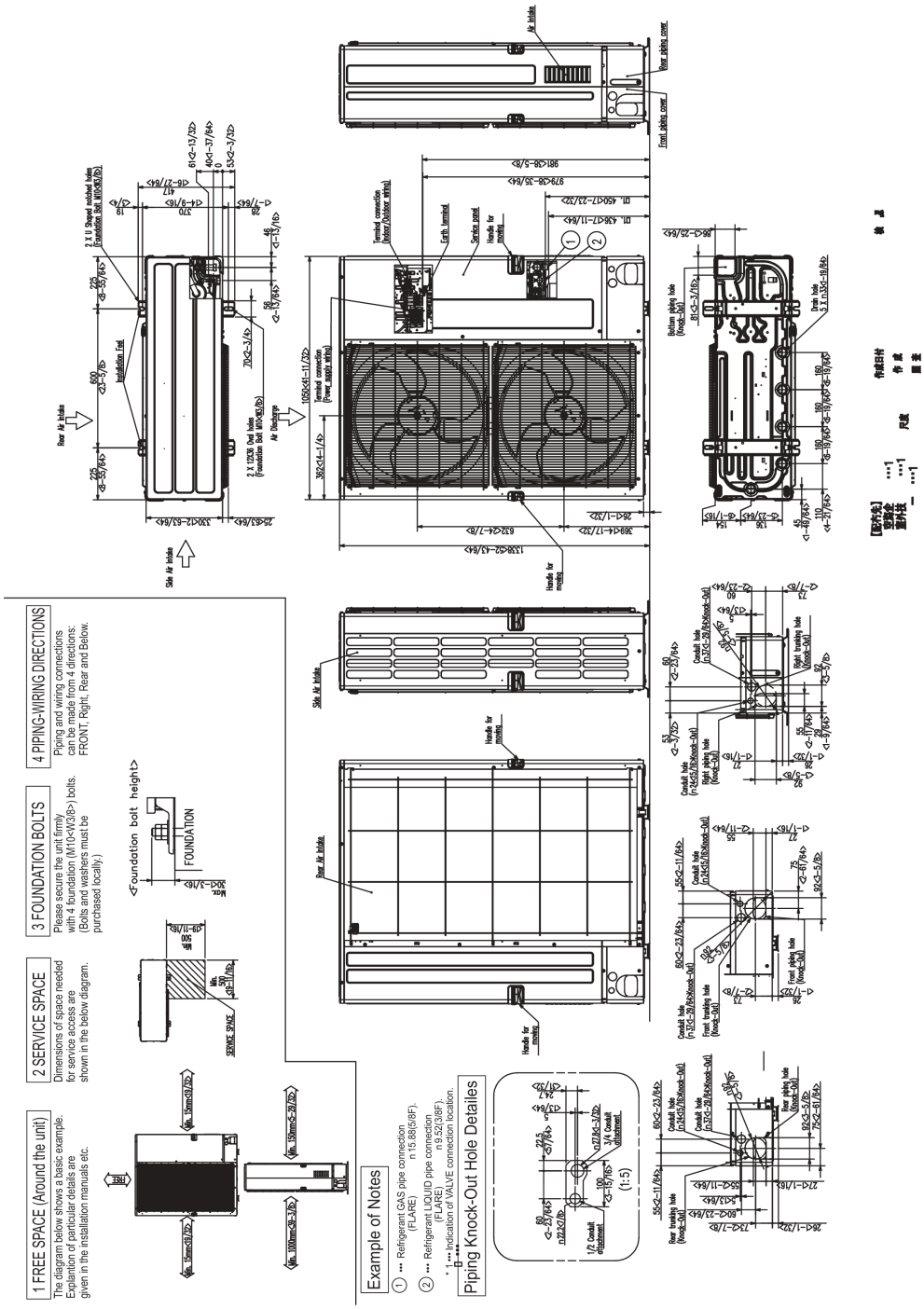
OUTDOOR UNIT DIMENSIONS: PUY-AK42NL



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