

PEAD-AA18NL & SUZ-AA18NL
18,000 BTU/H HORIZONTAL-DUCTED INDOOR UNIT
18,000 BTU/H HEAT PUMP OUTDOOR UNIT



Job Name:

System Reference:

Date:



Indoor Unit.....PEAD-AA18NL

Outdoor Unit.....SUZ-AA18NL



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

- Single-zone: One outdoor unit connects to one indoor unit to control the comfort in a single space.
- Quiet operation: Quiet operation units are as quiet as a typical conversation, and most indoor units are whisper quiet.
- Pulse Amplitude Modulation technology: Pulse Amplitude Modulation technology enhances energy efficiency by adjusting the power supply to optimize compressor performance, ensuring precise capacity control and reduced energy consumption.
- Outdoor unit directed power: The outdoor unit powers the indoor unit, and should a power outage occur, the system is automatically restarted when power returns
- Joint Lap DC Motor: Innovative Joint Lap DC Motor leads to high efficiency and reliability
- INVERTER-driven compressor: An inverter-driven compressor generates the precise capacity needed to maintain a temperature set point.
- Hot-Start Technology: Hot-Start Technology ensures the fan only activates once the heat exchanger is warm, preventing cold air blasts during start-up.
- High-performance grooved piping : High-performance grooved piping for increased heat exchange 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-AA18NL & SUZ-AA18NL

Cooling at 95F ¹	Maximum Capacity	Btu/h	18,000
	Rated Capacity	Btu/h	18,000
	Minimum Capacity	Btu/h	5,500
	Maximum Power Input	W	1,410
	Rated Power Input	W	1,410
	Moisture Removal	Pints/h	2.9
	Sensible Heat Factor	-	0.82
Heating at 47F ²	Power Factor [208V / 230V]	%	95 / 95
	Maximum Capacity	Btu/h	23,500
	Rated Capacity	Btu/h	20,000
	Minimum Capacity	Btu/h	8,300
	Maximum Power Input	W	1,910
	Rated Power Input	W	1,542
	Power Factor [208V / 230V]	%	97 / 97
Heating at 17F ³	Maximum Capacity	Btu/h	13,100
	Rated Capacity	Btu/h	13,100
	Maximum Power Input	W	1,250
	Rated Power Input	W	1,250
Heating at 5F ⁴	Maximum Capacity	Btu/h	10,500
	Maximum Power Input	W	1,025
Heating at -4F ⁵	Maximum Capacity	Btu/h	8,500
Efficiency	SEER2		17.2
	EER2 ¹		12.7
	HSPF2 [IV]		10.4
	COP at 47°F ²		3.8
	COP at 17°F at Maximum Capacity ³		3
	COP at 5°F at Maximum Capacity ⁴		3
	COP at -4°F at Maximum Capacity ⁵		2.65
Electrical	ENERGY STAR® Certified		Yes
	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	30
Indoor Unit	Recommended Wire Size [Indoor - Outdoor]	AWG	14
	MCA	A	2.25
	Fan Motor Output	W	121
	Airflow Rate at Cooling, Dry	CFM	403, 424, 512, 600
	Airflow Rate at Heating, Dry	CFM	403, 424, 512, 600
	Sound Pressure Level [Cooling]	dB (A)	28, 29, 34, 37
	Sound Pressure Level [Heating]	dB (A)	28, 29, 34, 37
	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]	35-7/16 x 28-7/8 x 9-7/8 [900 x 732 x 250]
	Package Dimensions (W x D x H)	inch x inch x inch [mm x mm x mm]	46-1/8 x 35-7/16 x 13 [1,170 x 900 x 330]
	Unit Weight	lbs [kg]	60 [27]
	Package Weight	lbs [kg]	71 [32]
	Fan Motor Type		DC Motor
IDU Operating Temp. Range	Cooling Intake Air Temp [Maximum / Minimum]	°FDB, °FWB / °FDB, °FWB	95, 71 / 67, 57
	Heating Intake Air Temp [Maximum / Minimum]	°FDB	80 / 59

NOTES

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

²Heating at 47°F (Indoor: 70°F DB, 60°F WB // Outdoor: 47°F DB, 43°F WB)

³Heating at 17°F (Indoor: 70°F DB, 60°F WB // Outdoor: 17°F DB, 15°F WB)

⁴Heating at 5°F (Indoor: 70°F DB, 60°F WB // Outdoor: 5°F DB, 4°F WB)

⁵Heating at -4°F (Indoor: 70°F DB, 60°F WB // Outdoor: -4°F DB, -5°F 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 and automatically restarts at these temperatures.

SPECIFICATIONS: PEAD-AA18NL & SUZ-AA18NL

Outdoor Unit	MCA	A	25
	MOCP	A	42
	Fan Motor Output	W	50
	Airflow Rate Cooling	CFM	2,193
	Airflow Rate Heating	CFM	1,949
	Defrost Method		Reverse Cycle
	Coating on Heat Exchanger (Bluefin, Sea Coast)		Yes, Yes
	Sound Pressure Level, Cooling ¹	dB (A)	54
	Sound Pressure Level, Heating ²	dB (A)	55
	Compressor Type		Twin Rotary
	Compressor Model		SRB172FQHMT
	Compressor Oil [Type // Charge]	Type // oz	RM68EH // 14.5
	External Finish Color		Munsell No.3Y 7.8/1.1
	Base Pan Heater		Optional
	Unit Dimensions (W x D x H)	inch x inch x inch [mm x mm x mm]	33-1/16 x 13 x 34-11/16 [840 x 330 x 880]
	Package Dimensions (W x D x H)	inch x inch x inch [mm x mm x mm]	38-5/8 x 16-9/16 x 39 [980 x 420 x 990]
ODU Operating Temp. Range	Unit Weight	lbs [kg]	115 [52.16]
	Package Weight	lbs [kg]	133 [60.33]
	Cooling Intake Air Temp [Maximum / Minimum*]	°FDB	115 / 14
	Cooling Thermal Lock-out / Re-start Temperatures**	°FDB	-1 / 3
Refrigerant	Heating Intake Air Temp [Maximum / Minimum]	°FDB, °FWB / °FDB, °FWB	75, 65 / -4, -5
	Heating Thermal Lock-out / Re-start Temperatures**	°FDB	-14 / -4
	Type		R454B
	Pre-Charged Refrigerant Amount	lbs	3
Piping	Maximum Pre-Charged Piping Length	ft [m]	25 [7.60]
	Additional Refrigerant Charge Per Additional Piping Length	oz/ft	0.22
	Gas Pipe Size O.D. [Flared]	inch [mm]	1/2 [12.72]
	Liquid Pipe Size O.D. [Flared]	inch [mm]	1/4 [6.35]
	Maximum Piping Length	ft [m]	100 [30]
	Maximum Height Difference	ft [m]	50 [15]
	Maximum Number of Bends		10

NOTES

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³Heating at 17°F (Indoor: 70°F DB, 60°F WB // Outdoor: 17°F DB, 15°F WB)

⁴Heating at 5°F (Indoor: 70°F DB, 60°F WB // Outdoor: 5°F DB, 4°F WB)

⁵Heating at -4°F (Indoor: 70°F DB, 60°F WB // Outdoor: -4°F DB, -5°F WB)

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

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** 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 and automatically restarts at these temperatures.

INDOOR UNIT ACCESSORIES: PEAD-AA18NL

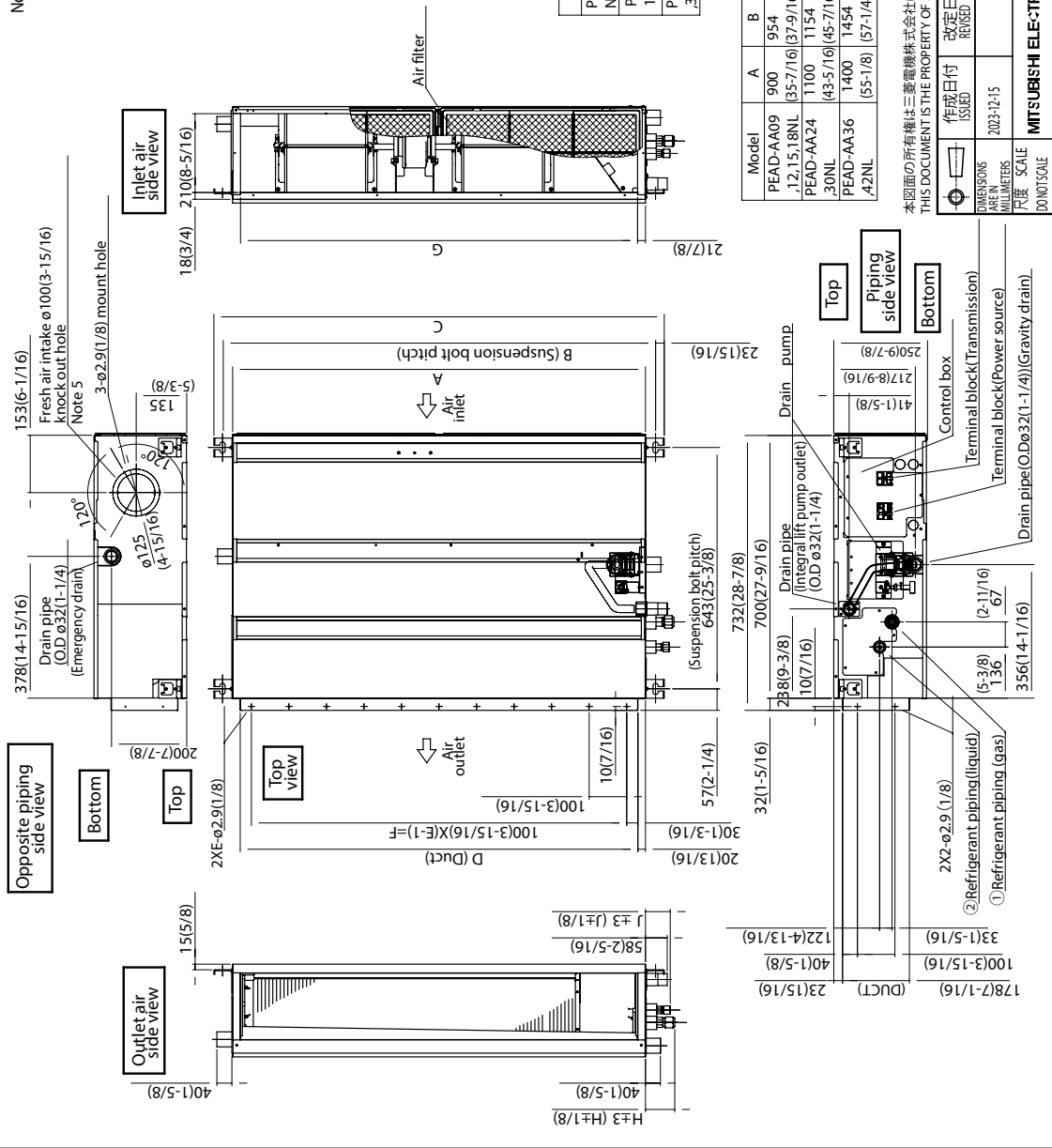
Control Wire	202PR 1PR shielded 1PR plenum wire for Airzone 100 ft reel	CW2042S2-100
	202PR shielded 1PR plenum wire for Airzone 500 ft reel	CW2042S2-500
Control Interface	3-Pin Wiring Harness	PAC-715AD
	5-Pin Wiring Harness	PAC-725AD
	Airzone Wired Blueface Controller Black	AZZBSBLUEZEROCN
	Airzone 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
Lineset	100 x 1/4 x 100 1/2 Lineset Twin-Tube Insulation	MLS141212T-100
	15 x 1/4 x 15 1/2 Lineset Twin-Tube Insulation	MLS141212T-15
	30 x 1/4 x 30 1/2 Lineset Twin-Tube Insulation	MLS141212T-30
	50 x 1/4 x 50 1/2 Lineset Twin-Tube Insulation	MLS141212T-50
	65 x 1/4 x 65 1/2 Lineset Twin-Tube Insulation	MLS141212T-65
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
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
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 MicroBlue Mini Condensate Pump 110208230V up to 18000 BTUH	X86-003
	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
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
Filter Box	Filter Box with MERV 13 Filter	FBM2-2-A
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: SUZ-AA18NL

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 3-14 inch Mounting Base Pair - Plastic	DSD-400P
	Outdoor Unit Stand 12 High	QSMS1201M
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
Snow/Rain Diverter	SnowRain Diverter	SRD-3
Optional Defrost Heater	Base Heater	MAC-642BH-U1
	Base Heater	MAC-660BH-U
Air Outlet Guide	Air Outlet Guide	MAC-886SG-E
Control/Service Tool	M- & P-Series Maintenance Tool Cable Set	M21EC0397
	Maintenance Tool Interface	PAC-USCMS-MN-1
Muffler	Muffler for Connection to MFZ-KX	MAC-002MF-E
Drain Socket	Drain Socket	MAC-871DS
Mounting Pad	Condensing Unit Mounting Pad 16 x 36 x 3	ULTRILITE1
NOTES		

INDOOR UNIT DIMENSIONS: PEAD-AA18NL

- 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)	ø9.52 (3/8)	ø6.35 (1/4)
PEAD-AA12, 15, 18NL	66 (2-5/8)	ø12.7 (1/2)	ø9.52 (3/8)

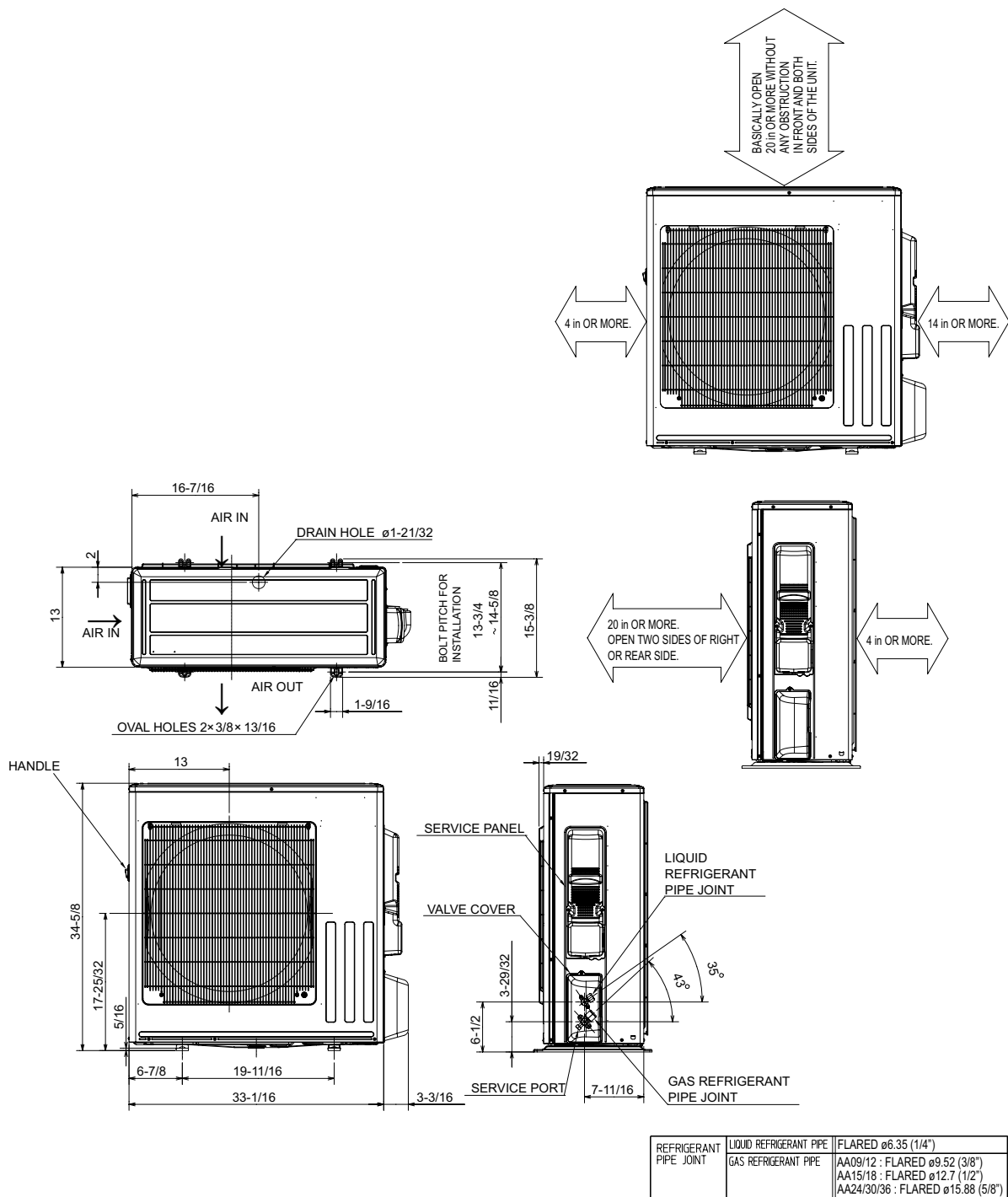
Model	A	B	C	D	E	F	G	H
PEAD-AA09, 12, 15, 18NL	900 (35-7/16)	954 (37-9/16)	1000 (39-3/8)	860 (33-7/8)	9 (31-1/2)	800 (31-13/16)	858 (33-13/16)	72 (2-7/8)
PEAD-AA24, 30NL	1100 (43-3/8)	1154 (45-7/16)	1200 (47-1/4)	1060 (41-3/4)	11 (39-3/8)	1000 (41-11/16)	1058 (41-11/16)	78 (3-1/8)
PEAD-AA36, 42NL	1400 (55-1/8)	1454 (57-1/4)	1500 (59-1/16)	1360 (53-9/16)	14 (51-3/16)	1300 (51-3/16)	1358 (53-1/2)	

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作成年月 2023.12.15	改定日付 REVISED	図名 EXTERNAL DIMENSION PEAD-AA09-12-15-18-24-30-36-42NL
MITSUBISHI ELECTRIC CO., LTD. RPT-RAT-N		図番 KB94C86N
SCALE DO NOT SCALE		PAGE 1/2

OUTDOOR UNIT DIMENSIONS: SUZ-AA18NL

REQUIRED SPACE



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