

SVZ-AP12NL & SUZ-AA12NL
11,400 BTU/H DUCTED AIR HANDLER INDOOR UNIT
11,400 BTU/H HEAT PUMP OUTDOOR UNIT



Job Name:

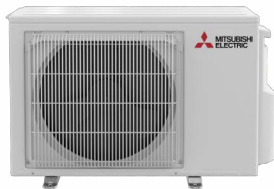
System Reference:

Date:



Indoor Unit.....SVZ-AP12NL

Outdoor Unit.....SUZ-AA12NL



INDOOR UNIT FEATURES

- Ducted air handler: Ducted air handler provides a solution to cool and heat large zones
- Enclosed ECM motor: Highly efficient totally enclosed ECM motor
- Fiberglass free insulation: 1 inch R4.2 fiberglass free insulation reduces condensation and boosts efficiency
- Multi-position installation: Multi-position installation: horizontal (left or right), vertical (up or down). For downflow configurations, the CMA-1 is recommended for proper management of condensate to prevent water blow-off in certain conditions
- Multi-zone: A multi-zone unit provides the temperature management of multiple zones within a building.
- Multiple control options, including the comfort app for remote access, third-party interfaces, and both wired and wireless controllers
- Optional electric heat kit: Optional electric heat kit for additional heat capacity
- Optional humidifier control and ERV control
- Positive pressure cabinet: Positive pressure cabinet with air leakage of less than 1.0% at 1.0 in.WG
- Selectable external static pressure: Selectable external static pressure: 0.30, 0.50 and 0.80 in.WG with 3 fan speeds at each static setting
- Unique blow through design: Unique blow through design allows simple coil cleaning when the blower is removed

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: SVZ-AP12NL & SUZ-AA12NL

Cooling at 95F ¹	Maximum Capacity	Btu/h	11,400
	Rated Capacity	Btu/h	11,400
	Minimum Capacity	Btu/h	2,800
	Maximum Power Input	W	940
	Rated Power Input	W	940
	Moisture Removal	Pints/h	1.5
	Sensible Heat Factor	-	0.85
	Power Factor [208V / 230V]	%	98 / 98
Heating at 47F ²	Maximum Capacity	Btu/h	15,100
	Rated Capacity	Btu/h	15,000
	Minimum Capacity	Btu/h	5,100
	Maximum Power Input	W	1,280
	Rated Power Input	W	1,280
	Power Factor [208V / 230V]	%	99 / 99
Heating at 17F ³	Maximum Capacity	Btu/h	9,700
	Rated Capacity	Btu/h	9,700
	Maximum Power Input	W	1,080
	Rated Power Input	W	1,080
Heating at 5F ⁴	Maximum Capacity	Btu/h	7,800
	Maximum Power Input	W	1,143
Heating at -4F ⁵	Maximum Capacity	Btu/h	6,500
Efficiency	SEER2		18.4
	EER2 ¹		12.1
	HSPF2 [IV]		9.7
	COP at 47°F ²		3.4
	COP at 17°F at Maximum Capacity ³		2.6
	COP at 5°F at Maximum Capacity ⁴		2
	COP at -4°F at Maximum Capacity ⁵		2
	ENERGY STAR® Certified		Yes
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	15
	Recommended Wire Size [Indoor - Outdoor]	AWG	14
	Fan Motor Output	W	121
Indoor Unit	Airflow Rate at Cooling, Dry	CFM	278, 381, 448
	Airflow Rate at Heating, Dry	CFM	278, 381, 448
	Sound Pressure Level [Cooling]	dB (A)	36, 41, 45
	Sound Pressure Level [Heating]	dB (A)	36, 41, 45
	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		Hot-dip coated steel (ZAM)
	Unit Dimensions (W x D x H)	inch x inch x inch [mm x mm x mm]	17 x 21-5/8 x 39-13/16 [432 x 548 x 1,011]
	Package Dimensions (W x D x H)	inch x inch x inch [mm x mm x mm]	18-1/8 x 28-11/16 x 44 [460 x 728 x 1,117]
	Unit Weight	lbs [kg]	97 [44]
	Package Weight	lbs [kg]	116 [53]
	Fan Motor Type		Direct-driven DC Brushless Motor
IDU Operating Temp. Range	Cooling Intake Air Temp [Maximum / Minimum]	°FDB, °FWB / °FDB, °FWB	90, 73 / 66, 59
	Heating Intake Air Temp [Maximum / Minimum]	°FDB	83 / 50

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: SVZ-AP12NL & SUZ-AA12NL

Outdoor Unit	MCA	A	14
	MOCP	A	23
	Fan Motor Output	W	55
	Airflow Rate Cooling	CFM	1,229
	Airflow Rate Heating	CFM	1,172
	Defrost Method		Reverse Cycle
	Coating on Heat Exchanger (Bluefin, Sea Coast)		Yes, Yes
	Sound Pressure Level, Cooling ¹	dB (A)	49
	Sound Pressure Level, Heating ²	dB (A)	51
	Compressor Type		Twin Rotary
	Compressor Model		SRB092FQFMC
	Compressor Oil [Type // Charge]	Type // oz	RM68EH // 11.80
	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]	31-1/2 x 11-1/4 x 21-5/8 [800 x 285 x 550]
	Package Dimensions (W x D x H)	inch x inch x inch [mm x mm x mm]	37-1/64 x 15 x 24-51/64 [940 x 380 x 630]
	Unit Weight	lbs [kg]	81 [37]
	Package Weight	lbs [kg]	88.18 [40]
ODU Operating Temp. Range	Cooling Intake Air Temp [Maximum / Minimum*]	°FDB	115 / 14
	Cooling Thermal Lock-out / Re-start Temperatures**	°FDB	-1 / 3
	Heating Intake Air Temp [Maximum / Minimum]	°FDB, °FWB / °FDB, °FWB	75, 65 / -4, -5
	Heating Thermal Lock-out / Re-start Temperatures**	°FDB	-14 / -4
Refrigerant	Type		R454B
	Pre-Charged Refrigerant Amount	lbs	2
	Maximum Pre-Charged Piping Length	ft [m]	25 [7.60]
	Additional Refrigerant Charge Per Additional Piping Length	oz/ft	0
Piping	Gas Pipe Size O.D. [Flared]	inch [mm]	3/8 [9.52]
	Liquid Pipe Size O.D. [Flared]	inch [mm]	1/4 [6.35]
	Maximum Piping Length	ft [m]	65 [20]
	Maximum Height Difference	ft [m]	40 [12]
	Maximum Number of Bends		10
NOTES ¹ Cooling at 95°F (Indoor: 80°F DB, 67°F WB // Outdoor: 95°F DB, 75°F WB) ² Heating at 47°F (Indoor: 70°F DB, 60°F WB // Outdoor: 47°F DB, 43°F WB) ³ Heating at 17°F (Indoor: 70°F DB, 60°F WB // Outdoor: 17°F DB, 15°F WB) ⁴ Heating at 5°F (Indoor: 70°F DB, 60°F WB // Outdoor: 5°F DB, 4°F WB) ⁵ Heating 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.			

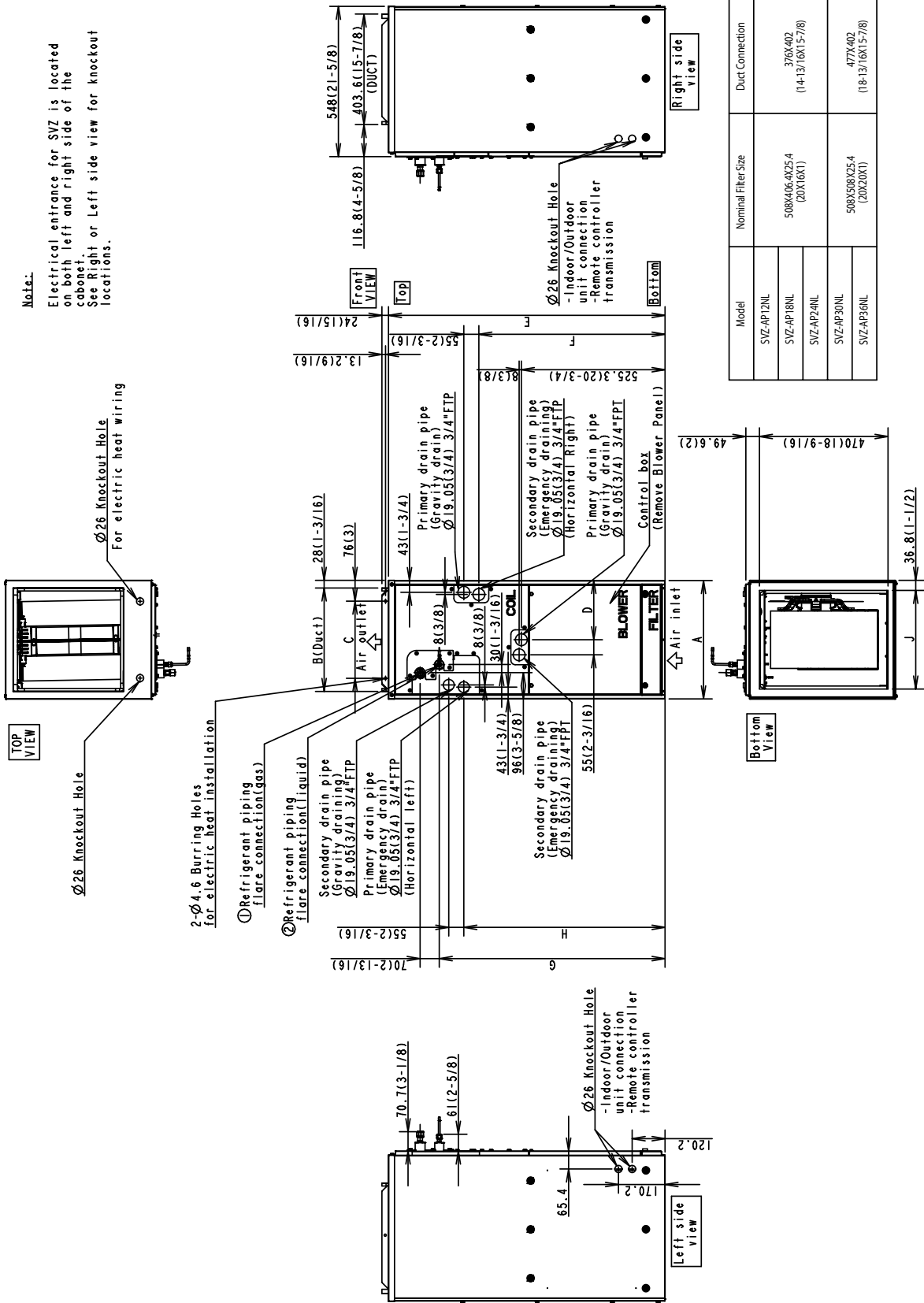
INDOOR UNIT ACCESSORIES: SVZ-AP12NL

Lineset	15 x 1/4 x 15 3/8 Lineset Twin-Tube Insulation	MLS143812T-15
	30 x 1/4 x 30 3/8 Lineset Twin-Tube Insulation	MLS143812T-30
	50 x 1/4 x 50 3/8 Lineset Twin-Tube Insulation	MLS143812T-50
	65 x 1/4 x 65 3/8 Lineset Twin-Tube Insulation	MLS143812T-65
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 MegaBlue Advanced Condensate Pump w Reservoir Sensor	SI30-230
	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
Terminal Block	Separate Terminal Power Block	SPTB1
Control Interface	Airzone Wired Blueface Controller White	AZZBSBLUEZEROCN
	Airzone Wired Blueface Controller White	AZZBSBLUEZEROCB
	Airzone Wired Lite Controller White	AZZBSLITECB
	Airzone Wireless Lite Controller White	AZZBSLITERB
	Airzone Wireless Think Controller White	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
Wired Remote Controller	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
Power Supplies & Auxiliary Components	3-Pin Wiring Harness	PAC-715AD
	5-Pin Wiring Harness	PAC-725AD
	ERV On/Off Input Adapter for CNER on SVZ PEAD and PVA models	PAC-740
Electric Heat Lockout	Electric Heat Lockout	ETC-211020-MIT
Disconnect Switch	30A600VUL fits 2 X 4 utility box - Black	TAZ-MS303
	30A600VUL fits 2 X 4 utility box - White	TAZ-MS303W
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
Electric Kit Heats	3kW Electric Heater	EH03-SVZ-S
	5kW Electric Heater	EH05-SVZ-S
Wireless Remote Controller	Deluxe Wired MA Remote Controller	PAR-42MAAUB
	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
Power Supplies and Auxiliary Components	Backup Heat Relay Kit Adapter for CN24 or CN152 Connector	CN24RELAY-KIT-CM3
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
Downflow Kit	Downflow Kit	DFK-S
NOTES ¹ Unable to use with Wireless Handheld Remote Controller		

OUTDOOR UNIT ACCESSORIES: SUZ-AA12NL

Optional Defrost Heater	Base Heater	MAC-640BH-U
	Base Heater	MAC-650BH-U
Centralized Drain Pan	Centralized Drain Pan	PAC-SG63DP-E
Stand	18 Single Fan Stand	QSMS1801M
	24 Single Fan Stand	QSMS2401M
	Condenser Wall Bracket - Stainless Steel Finish	QSWBSS
	Condenser Wall Bracket	QSWB2000M-1
	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
Muffler	Muffler	MAC-001MF-E
Air Outlet Guide	Air Outlet Guide	MAC-881SG-E
Port Adaptor	Adaptor 1/2 x 3/8	PAC-SK88RJ-E
Drain Socket	Drain Socket	MAC-871DS
Control/Service Tool	M- & P-Series Maintenance Tool Cable Set	M21EC0397
	Maintenance Tool Interface	PAC-USCMS-MN-1
Snow/Rain Diverter	SnowRain Diverter	SRD-1
Mounting Pad	Condensing Unit Mounting Pad 16 x 36 x 3	ULTRILITE1
Hail Guards	Hail Guard	HG-B4
NOTES		

INDOOR UNIT DIMENSIONS: SVZ-AP12NL

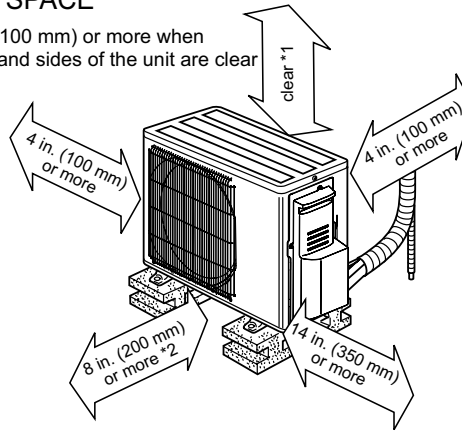


Model	A	B	C	D	E	F	G	H	J	Gas Pipe	Liquid pipe
SVZ-AP12NL	432 (17)	376 (14-13/16)	281 (11-1/8)	224 (8-7/8)	1010.8 (39-13/16)	680 (26-13/16)	823 (32-7/16)	735.5 (29)	360 (14-3/16)	n9.52 (3/8)	n6.35 (1/4)
SVZ-AP18NL	432 (17)	376 (14-13/16)	281 (11-1/8)	224 (8-7/8)	1010.8 (39-13/16)	680 (26-13/16)	823 (32-7/16)	735.5 (29)	360 (14-3/16)	n9.52 (3/8)	n6.35 (1/4)
SVZ-AP24NL	432 (17)	376 (14-13/16)	281 (11-1/8)	224 (8-7/8)	1010.8 (39-13/16)	680 (26-13/16)	823 (32-7/16)	735.5 (29)	360 (14-3/16)	n9.52 (3/8)	n6.35 (1/4)
SVZ-AP30NL	534 (21)	477 (18-13/16)	382.6 (15-1/8)	266.5 (10-1/2)	1113.8 (43-7/8)	737 (29-1/16)	953.5 (37-9/16)	792 (31-3/16)	461 (18-3/16)	n15.88 (5/8)	n9.52 (3/8)
SVZ-AP36NL	534 (21)	477 (18-13/16)	382.6 (15-1/8)	266.5 (10-1/2)	1113.8 (43-7/8)	737 (29-1/16)	953.5 (37-9/16)	792 (31-3/16)	461 (18-3/16)	n15.88 (5/8)	n9.52 (3/8)

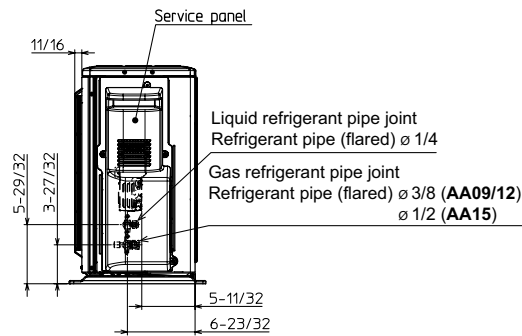
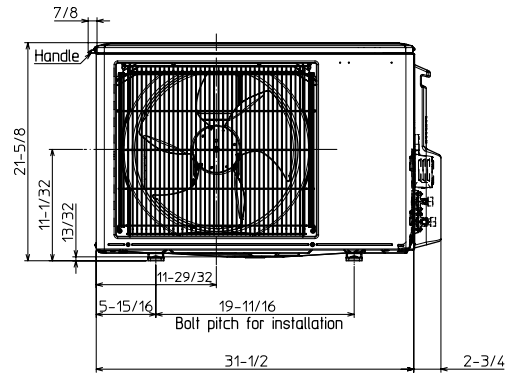
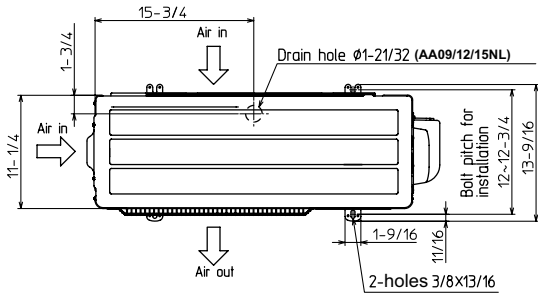
OUTDOOR UNIT DIMENSIONS: SUZ-AA12NL

REQUIRED SPACE

*1 4 in. (100 mm) or more when front and sides of the unit are clear



*2 When any 2 sides of left, right and rear of the unit are clear



Drain hole ϕ 1-5/16 (KA09/12/15NAH)