

SVZ-AP48NL & SUZ-AK48NLHZ
48,000 BTU/H DUCTED AIR HANDLER INDOOR UNIT
48,000 BTU/H HYPER HEAT PUMP OUTDOOR UNIT



Job Name:

System Reference:

Date:



Indoor Unit.....SVZ-AP48NL

Outdoor Unit.....SUZ-AK48NLHZ

INDOOR UNIT FEATURES

- Unique blow through design: Unique blow through design allows simple coil cleaning when the blower is removed
- 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
- Positive pressure cabinet: Positive pressure cabinet with air leakage of less than 1.0% at 1.0 in.WG
- Optional humidifier control and ERV control
- Optional electric heat kit: Optional electric heat kit for additional heat capacity
- Multiple control options, including the comfort app for remote access, third-party interfaces, and both wired and wireless controllers
- Multi-zone: A multi-zone unit provides the temperature management of multiple zones within a building.
- 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
- Fiberglass free insulation: 1 inch R4.2 fiberglass free insulation reduces condensation and boosts efficiency
- Enclosed ECM motor: Highly efficient totally enclosed ECM motor
- Ducted air handler: Ducted air handler provides a solution to cool and heat large zones

OUTDOOR UNIT FEATURES

- 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.
- Built-in base pan heater
- Hot-Start Technology: Hot-Start Technology ensures the fan only activates once the heat exchanger is warm, preventing cold air blasts during start-up.
- Hyper-Heating INVERTER® (H2i®): 100% heating capacity down to 5° F with guaranteed heating down to -13° F.
- Joint Lap DC Motor: Innovative Joint Lap DC Motor leads to high efficiency and reliability
- 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
- 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.
- Quiet operation: Quiet operation units are as quiet as a typical conversation, and most indoor units are whisper quiet.

SPECIFICATIONS: SVZ-AP48NL & SUZ-AK48NLHZ

Cooling at 95F ¹	Maximum Capacity	Btu/h	52,000
	Rated Capacity	Btu/h	48,000
	Minimum Capacity	Btu/h	18,000
	Maximum Power Input	W	4,310
	Rated Power Input	W	4,640
	Moisture Removal	Pints/h	11.9
	Sensible Heat Factor	-	0.75
Heating at 47F ²	Power Factor [208V / 230V]	%	93 / 93
	Maximum Capacity	Btu/h	60,000
	Rated Capacity	Btu/h	60,000
	Minimum Capacity	Btu/h	12,800
	Maximum Power Input	W	5,170
	Rated Power Input	W	5,170
	Power Factor [208V / 230V]	%	94 / 94
Heating at 17F ³	Maximum Capacity	Btu/h	52,000
	Rated Capacity	Btu/h	30,800
	Maximum Power Input	W	6,130
	Rated Power Input	W	3,760
Heating at 5F ⁴	Maximum Capacity	Btu/h	52,000
	Maximum Power Input	W	7,940
Heating at -13F ⁵	Maximum Capacity	Btu/h	24,732
Efficiency	SEER2		18.1
	EER2 ¹		9.4
	HSPF2 [IV]		8.5
	COP at 47°F ²		3.4
	COP at 17°F at Maximum Capacity ³		2.48
	COP at 5°F at Maximum Capacity ⁴		1.9
	COP at -13°F at Maximum Capacity ⁵		1.12
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	40
Indoor Unit	Recommended Wire Size [Indoor - Outdoor]	AWG	14
	MCA	A	3.9
	Fan Motor Output	W	430
	Airflow Rate at Cooling, Dry	CFM	1,040, 1,262, 1,485
	Airflow Rate at Cooling, Wet	CFM	1,040, 1,262, 1,485
	Airflow Rate at Heating, Dry	CFM	1,040, 1,262, 1,485
	Sound Pressure Level [Cooling]	dB (A)	45, 48, 52
	Sound Pressure Level [Heating]	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		6.2PB 9/0.9
	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 1,511]
	Package Dimensions (W x D x H)	inch x inch x inch [mm x mm x mm]	26 x 28-3/4 x 66 [660 x 730 x 1,675]
	Unit Weight	lbs [kg]	172 [78]
	Package Weight	lbs [kg]	198 [90]
	Fan Motor Type		DC 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	82 / 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 -13°F (Indoor: 70°F DB, 60°F WB // Outdoor: -13°F DB, -14°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-AP48NL & SUZ-AK48NLHZ

Outdoor Unit	MCA	A	35
	MOCP	A	60
	Fan Motor Output	W	213+213
	Airflow Rate Cooling	CFM	4,020
	Airflow Rate Heating	CFM	4,020
	Defrost Method		Reverse Cycle
	Coating on Heat Exchanger (Bluefin, Sea Coast)		Yes, Yes
	Sound Pressure Level, Cooling ¹	dB (A)	60
	Sound Pressure Level, Heating ²	dB (A)	62
	Compressor Type		Twin Rotary
	Compressor Model		MRK53FFJMC-L
	Compressor Oil [Type // Charge]	Type // oz	RM68EH // 60
	External Finish Color		Munsell 3Y 7.8/1.1
	Base Pan Heater		Not applicable
	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]	271 [123]
	Package Weight	lbs [kg]	291 [135]
ODU Operating Temp. Range	Cooling Intake Air Temp [Maximum / Minimum*]	°FDB	115 / 23
	Heating Intake Air Temp [Maximum / Minimum]	°FDB, °FWB / °FDB, °FWB	70, 59 / -13, -13
	Heating Thermal Lock-out / Re-start Temperatures**	°FDB	-22 / -13
Refrigerant	Type		R454B
	Pre-Charged Refrigerant Amount	lbs, oz	11, 7
	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]	245 [75]
	Maximum Height Difference	ft [m]	100 [30]
	Maximum Number of Bends		15

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 -13°F (Indoor: 70°F DB, 60°F WB // Outdoor: -13°F DB, -14°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.

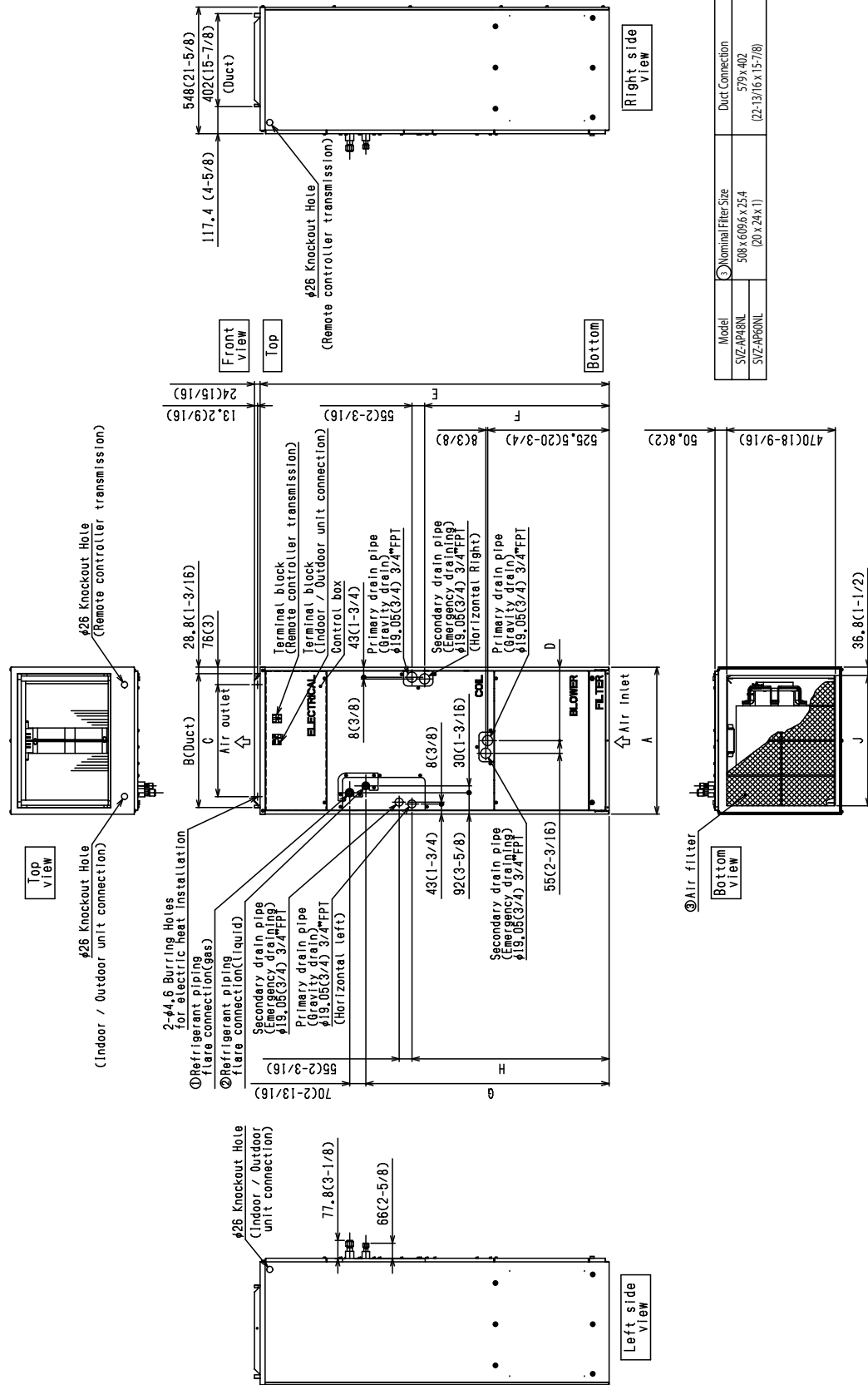
INDOOR UNIT ACCESSORIES: SVZ-AP48NL

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
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
Lineset	10 x 3/8 x 10 x 5/8 Lineset Twin-Tube Insulation	MPLS385812T-10
	100 x 3/8 x 65 x 5/8 Lineset Twin-Tube Insulation	MPLS385812T-100
	15 x 3/8 x 15 x 5/8 Lineset Twin-Tube Insulation	MPLS385812T-15
	30 x 3/8 x 30 x 5/8 Lineset Twin-Tube Insulation	MPLS385812T-30
	50 x 3/8 x 50 x 5/8 Lineset Twin-Tube Insulation	MPLS385812T-50
	65 x 3/8 x 65 x 5/8 Lineset Twin-Tube Insulation	MPLS385812T-65
Electric Heat Lockout	Electric Heat Lockout	ETC-211020-MIT
Control Interface	Airzone Wired Blueface Controller Black	AZZBSBLUEZEROCN
	Airzone Wired Blueface Controller White	AZZBSBLUEZEROCB
	Airzone Wired Lite Controller White	AZZBSLITECB
	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
Electric Kit Heats	10kW Electric Heater	EH10-MPA-LB
	15kW Electric Heater	EH15-MPAS-LB
	17kW Electric Heater	EH17-MPAS-LB
Disconnect Switch	30A600VUL fits 2 X 4 utility box - Black	TAZ-MS303
	30A600VUL fits 2 X 4 utility box - White	TAZ-MS303W
Downflow Kit	Condensate Management Kit for downflow installation	CMA-1
Wired Remote Controller	Deluxe Wired MA Remote Controller	PAR-42MAAUB
	Simple Direct Wired Remote Controller	PAC-SDW01RC-1
	Simple MA Remote Controller	PAC-YT53CRAU-J
	Touch MA Wired Remote Controller	PAR-CT01MAU-SB
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
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
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
Power Supplies and Auxiliary Components	Backup Heat Relay Kit Adapter for CN24 or CN152 Connector	CN24RELAY-KIT-CM3
Terminal Block	Separate Terminal Power Block	SPTB1
NOTES		

OUTDOOR UNIT ACCESSORIES: SUZ-AK48NLHZ

Control/Service Tool	ControlService Tool	PAC-SK52ST
	M- & P-Series Maintenance Tool Cable Set	M21EC0397
	Maintenance Tool Interface	PAC-USCMS-MN-1
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
Power Supplies & Auxiliary Components	3-Pin Wiring Harness	PAC-715AD
	5-Pin Wiring Harness	PAC-725AD
Centralized Drain Pan	Centralized Drain Pan	PAC-SH97DP-E
Stand	18 Dual Fan Stand	QSMS1802M
	24 Dual Fan Stand	QSMS2402M
	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	QSMS1202M
Wind Baffle	Front Wind Baffle	WB-PA3 (two pieces are required)
Drain Socket	Drain Socket	PAC-SG61DS-E
Hail Guards	Hail Guard	HG-A2
Snow/Rain Diverter	SnowRain Diverter	SRD-5
M-NET Converter	M-Net Interface for P-Series	PAC-SJ95MA-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		

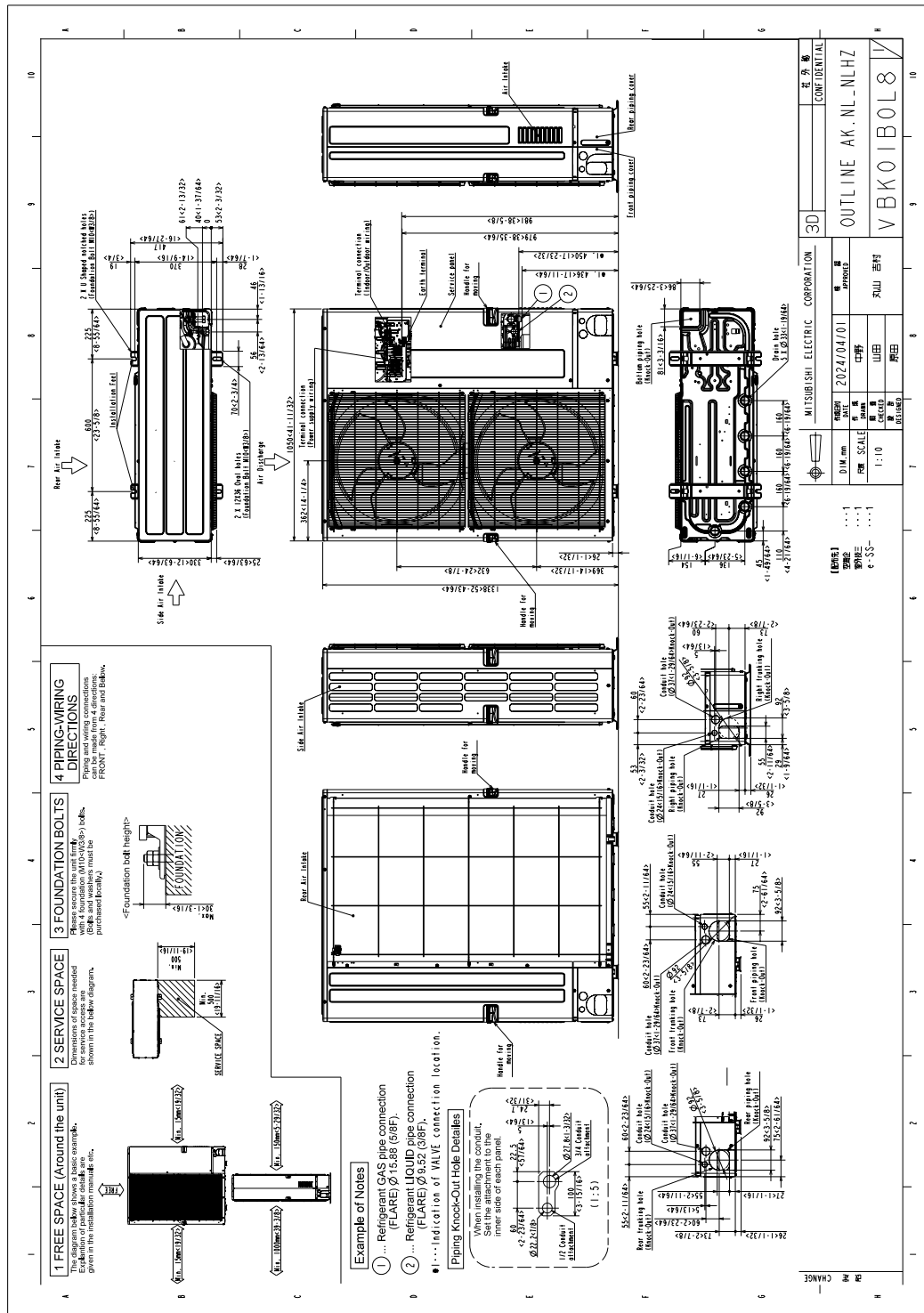
INDOOR UNIT DIMENSIONS: SVZ-AP48NL



Model	③ Nominal Filter Size	Duct Connection
SVZ-AP48NL	508 x 609.6 x 25.4	579 x 402
SVZ-AP60NI	(20 x 24 x 1)	(22-13/16 x 15-7/8)

Model	A	B	C	D	E	F	G	H	J	① Gas Pipe	② Liquid Pipe
SVZ-APARIL	635 (25)	579 (22-33/16)	4846 (19-18)	317.5 (12-12)	1511 (59-12)	798.5 (31-7/16)	1053 (41-1/2)	853.5 (33-5/8)	563 (22-3/16)	15.88 (5/8)	9.52 (3/8)
SVZ-ARGON										10.67 (3/4)	

OUTDOOR UNIT DIMENSIONS: SUZ-AK48NLHZ



1340 Satellite Boulevard Suwanee, GA 30024
 Toll Free: 800-433-4822 <https://mitsubishicomfort.com>

