

SVZ-AP30NL & SUZ-AK30NLHZ
28,000 BTU/H DUCTED AIR HANDLER INDOOR UNIT
28,000 BTU/H HYPER HEAT PUMP OUTDOOR UNIT



Job Name:

System Reference:

Date:



INDOOR Unit.....SVZ-AP30NL

OUTDOOR Unit.....SUZ-AK30NLHZ

INDOOR UNIT FEATURES

- Auto Changeover: The unit will automatically switch between heating and cooling modes to maintain your desired temperature.
- Light Commercial: Light commercial applications include small offices, restaurants, and retail.
- Multi Zone: A multi-zone unit provides personalized comfort control to multiple spaces.
- Three Speed Fan: Adjust the fan between three speed settings to optimal comfort.

OUTDOOR UNIT FEATURES

- Inverter Driven Compressor: Inverter technology uses only the precise amount of energy needed to keep a space comfortable.
- Seacoast Protection: Designed to protect against the corrosive effects of environments that are in close proximity to the sea.
- Hot Start: The system will warm up before blowing air, preventing blasts of cold air at start-up.
- H2i[®] Hyper-Heating: 100% heating performance down to 5° F with guaranteed heating down to -13° F.
- Freeze Base Pan Heater: This advanced base pan heater helps to prevent interrupted operation due to water freezing after a defrost cycle, ensuring your warmth and comfort during colder weather.
- Flash Injection: Flash Injection enables optimum compressor performance when it is running at higher speeds to maintain indoor comfort during cold temperatures.
- 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.

SPECIFICATIONS: SVZ-AP30NL & SUZ-AK30NLHZ

Cooling at 95F ¹	Maximum Capacity	Btu/h	29,000
	Rated Capacity	Btu/h	28,000
	Minimum Capacity	Btu/h	12,700
	Maximum Power Input	W	2,250
	Rated Power Input	W	2,150
	Moisture Removal	Pints/h	5.40
	Sensible Heat Factor	-	0.79
Heating at 47F ²	Power Factor [208V / 230V]	% / %	91 / 91
	Maximum Capacity	Btu/h	34,000
	Rated Capacity	Btu/h	34,000
	Minimum Capacity	Btu/h	18,300
	Maximum Power Input	W	2,910
	Rated Power Input	W	2,910
Heating at 17F ³	Power Factor [208V / 230V]	% / %	94 / 94
	Maximum Capacity	Btu/h	32,000
	Rated Capacity	Btu/h	23,600
	Maximum Power Input	W	6,250
Heating at 5F ⁵	Rated Power Input	W	2,710
	Maximum Capacity	Btu/h	32,000
Heating at -13F ⁹	Maximum Power Input	W	5,210
	Maximum Capacity	Btu/h	21,300
Efficiency	SEER2		17.10
	EER2 ¹		13
	HSPF2 [IV]		9.20
	COP at 47°F ²		3.40
	COP at 17°F at Maximum Capacity ³		1.50
	COP at 5°F at Maximum Capacity ⁵		1.80
	COP at -13°F at Maximum Capacity ⁹		1.40
Electrical	ENERGY STAR [®] Certified		Yes
	Voltage, Phase, Frequency	V AC / V AC , ø , Hz	208 / 230 , 1 , 60
	Guaranteed Voltage Range	V AC - 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	4.13
	Fan Motor Output	W	244
	Fan Motor Type		Direct-driven DC Brushless Motor
	Airflow Rate at Cooling, Dry	CFM	613 , 744 , 875
	Airflow Rate at Heating, Dry	CFM	613 , 744 , 875
	Sound Pressure Level [Cooling]	dB (A)	36 , 45 , 49
	Sound Pressure Level [Heating]	dB (A)	36 , 45 , 49
	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]	21 x 21-5/8 x 43-7/8 [534 x 548 x 1,111]
	Package Dimensions (W x D x H)	inch x inch x inch [mm x mm x mm]	22 x 28-11/16 x 48-1/16 [558 x 728 x 1,220]
	Unit Weight	lbs [kg]	122 [55]
	Package Weight	lbs [kg]	141 [64]
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 / °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)

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

⁹Heating 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.

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Outdoor Unit	MCA	A	29	
	MOCP	A	48	
	Fan Motor Output	W	74+74	
	Airflow Rate Cooling	CFM	3,740	
	Airflow Rate Heating	CFM	3,740	
	Defrost Method		Reverse Cycle	
	Coating on Heat Exchanger (Bluefin, Sea Coast)		Yes , Yes	
	Sound Pressure Level, Cooling ¹	dB (A)	52	
	Sound Pressure Level, Heating ²	dB (A)	53	
	Compressor Type		Twin Rotary	
	Compressor Model		MRK36FFGMC	
	Compressor Oil [Type // Charge]	Type // oz	RM68EH // 45	
	External Finish Color		Munsell No.3Y 7.8/1.1	
	Base Pan Heater		Built-in	
	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]	231 [105]	
	Package Weight	lbs [kg]	258 [117]	
	ODU Operating Temp. Range	Cooling Intake Air Temp [Maximum / Minimum*]	°FDB / °FDB	115 / 14
		Heating Intake Air Temp [Maximum / Minimum]	°FDB , °FWB / °FDB , °FWB	75 , 65 / -13 , -14
Heating Thermal Lock-out / Re-start Temperatures**		°FDB / °FDB	-22.5 / -14	
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	0.22	
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		10	

NOTES

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

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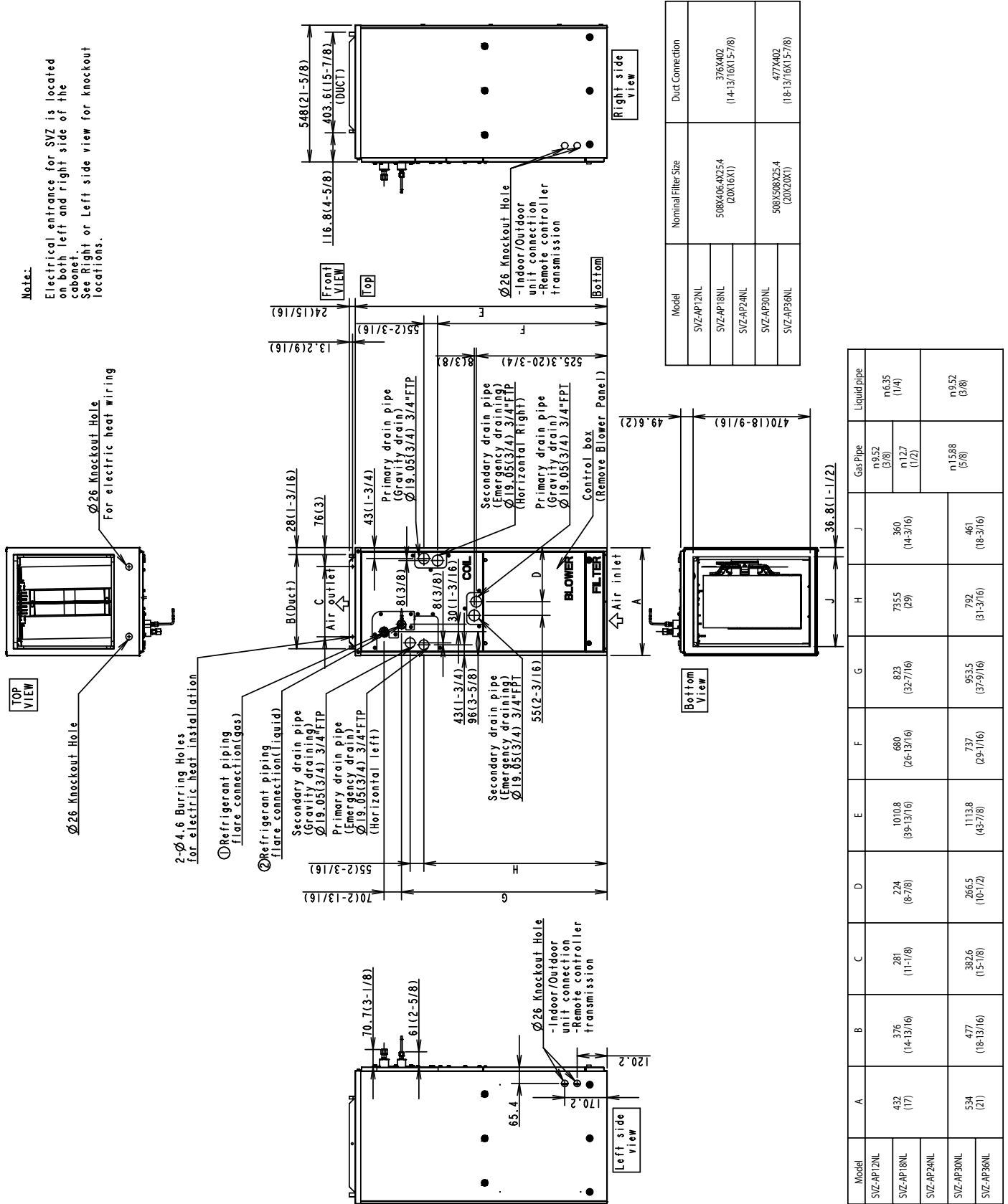
INDOOR UNIT ACCESSORIES: SVZ-AP30NL

Condensate	Blue Diamond Sensor Extension Cable — 15 Ft.	C13-103
	Blue Diamond (Advanced) Mini Condensate Pump w/ Reservoir & Sensor (208/230V) [recommended]	X87-721
	Blue Diamond (MaxiBlue Advanced) Mini Condensate Pump w/ Reservoir & Sensor (110V) up to 48,000 BTU/H [recommended]	X87-711
	Sauermann Condensate Pump	SI30-230
	Refco Condensate Pump 100-240V up to 120k BTU/h	COMBI
	Blue Diamond (MegaBlue Advanced) Condensate Pump w/ Reservoir & Sensor	X87-835
Control Interface	Airzone Wired Blueface Controller Black	AZZBSBLUEZEROCN
	Thermostat Interface for 3rd Party Thermostats	PAC-US445CN-1
	Airzone Wireless Lite Controller White	AZZBSLITERB
	Airzone Wireless Think Controller White	AZZBSTHINKRB
	Operation and Error Status Output Adapter	PAC-SF40RM-E
	IT Extender	PAC-WHS01IE-E
	Wireless Interface 2 for Comfrot app	PAC-USWHS002-WF-2
	kumo station® for Comfort app	PAC-WHS01HC-E
	Procon BACnet® and Modbus® Interface	PAC-UKPRC001-CN-1
	Airzone Wired Blueface Controller White	AZZBSBLUEZEROCB
	Airzone Wired Lite Controller White	AZZBSLITECB
	Airzone Wireless Think Controller Black	AZZBSTHINKRN
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 - Black	TAZ-MS303
	(30A/600V/UL) [fits 2" X 4" utility box] - White	TAZ-MS303W
Downflow Kit	Downflow Kit	DFK-M
Electric Heat Lockout	Electric Heat Lockout	ETC-211020-MIT
Electric Kit Heats	5kW Electric Heater	EH05-SVZ-M
	10kW Electric Heater	EH10-SVZ-M
	8kW Electric Heater	EH08-SVZ-M
Lineset	3/8 x 5/8 Lineset Twin-Tube Insulation - 30 feet	MPLS385812T-30
	3/8 x 5/8 Lineset Twin-Tube Insulation - 65 feet	MPLS385812T-65
	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 - 100 feet	MPLS385812T-100
	3/8 x 5/8 Lineset Twin-Tube Insulation - 50 feet	MPLS385812T-50
Power Supplies & Auxiliary Components	ERV On/Off Input Adapter for CNER on SVZ PEAD and PVA models	PAC-740
Remote Sensor	Wireless temperature and humidity sensor for Comfrot app	PAC-USWHS003-TH-1
	Wall Mounted Remote Temperature Sensor	PAC-SE41TS-E
	Flush Mount Remote Temperature Sensor for SEZ SLZ SVZ and all P-Series models	PAC-USSEN002-FM-1
Terminal Block	Separate Terminal Power Block	SPTB1
Terminal Signal Adapter	3-Pin Connector	PAC-715AD
	CN24 Relay Kit	CN24RELAY-KIT-CM3
	Connector and wire for Operation status/error using CN51	PAC-725AD
Wired Remote Controller	Simple MA Remote Controller	PAC-YT53CRAU-J
	Touch MA Controller†	PAR-CT01MAU-SB
	Simple Direct Wired Remote Controller	PAC-SDW01RC-1
	Deluxe MA Wired Remote Controller	PAR-42MAAUB
Wireless Remote Controller	Lockdown Bracket for Wireless Handheld Remote Controllers	RCMKP1CB
	Universal Wireless Receiver for PAR-FL32MA-E	PAR-FA32MA-W
	Wireless MA Remote Controller	PAR-FL32MA-E
	Wireless RedLINK™ Remote Controller	MHK2
	Wireless Remote Controller	PAR-SL101A-E
NOTES		
†Unable to use with Wireless Handheld Remote Controller		

OUTDOOR UNIT ACCESSORIES: SUZ-AK30NLHZ

Air Outlet Guide	Air Outlet Guide 1 Piece	PAC-SH96SG-E (two pieces required)
Centralized Drain Pan	Centralized Drain Pan	PAC-SH97DP-E
Control/Service Tool	USB Conversion Cable for PAC-USCMS-MN-1	M21EC1397
	M- & P-Series Maintenance Tool Cable Set	M21EC0397
Drain Socket	Drain Socket	PAC-SG61DS-E
Hail Guards	Hail Guard	HG-A2
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
	16 Gauge 4 wire MiniSplit Cable250 ft roll	S164-250
	14 Gauge 4 wire MiniSplit Cable50 ft roll	S144-50
	14 Gauge 4 wire MiniSplit Cable250 ft roll	S144-250
	16 Gauge 4 wire MiniSplit Cable50 ft roll	S164-50
Mounting Pad	Condensing Unit Mounting Pad 24 x 42 x 3	ULTRILITE2
Snow/Rain Diverter	SnowRain Diverter	SRD-5
Stand	Condenser Wall Bracket - Stainless Steel Finish	QSWBSS
	Outdoor Unit 3-14 inch Mounting Base Pair - Plastic	DSD-400P
	24" Dual Fan Stand	QSMS2402M
	12" Dual Fan Stand	QSMS1202M
	Condenser Wall Bracket	QSWB2000M-1
	18" Dual Fan Stand	QSMS1802M
Wind Baffle	Front Wind Baffle	WB-PA3 (two pieces required)
NOTES		

INDOOR UNIT DIMENSIONS: SVZ-AP30NL



Notes:
 Electrical entrance for SVZ is located on both left and right side of the cabinet.
 See Right or Left side view for Knockout locations.

Model	Normal Filter Size	Duct Connection
SVZ-AP12NL	508X406X425.4 (20X16X1)	376X402 (14-13/16X15-7/8)
SVZ-AP18NL	508X406X425.4 (20X16X1)	376X402 (14-13/16X15-7/8)
SVZ-AP24NL	508X406X425.4 (20X16X1)	376X402 (14-13/16X15-7/8)
SVZ-AP30NL	508X508X25.4 (20X20X1)	477X402 (18-13/16X15-7/8)
SVZ-AP36NL	508X508X25.4 (20X20X1)	477X402 (18-13/16X15-7/8)

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)	755.5 (29)	360 (14-3/16)	n5.52 (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)	755.5 (29)	360 (14-3/16)	n5.52 (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)	755.5 (29)	360 (14-3/16)	n5.52 (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)	n1E88 (5/8)	n6.52 (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)	n1E88 (5/8)	n6.52 (3/8)

OUTDOOR UNIT DIMENSIONS: SUZ-AK30NLHZ

