## **M-SERIES**

# SUBMITTAL DATA: SVZ-KP24NA & SUZ-KA24NA2 24,000 BTU/H AIR HANDLER HEAT PUMP SYSTEMS



Job Name:	
System Reference:	Date:

Indoor Unit:	Outdoor Unit:
SVZ-KP24NA	SUZ-KA24NA2
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#### **INDOOR UNIT FEATURES**

- Ducted air handler provides a solution to cool and heat larger zones
- · Highly efficient completely enclosed EC motor
- Selectable external static pressure: 0.30, 0.50 and 0.80 in.WG with 3 fan speeds at each static setting
- 1 inch R4.2 fiberglass free insulation reduces condensation and increases efficiency
- · Positive pressure cabinet with air leakage of less than 2.0% at 1.0 in. w.g. (Tested per ASHRAE Standard 193)
- Unique blow through design allows simple coil cleaning when the blower is removed
- Multi-position installation: horizontal (left or right), vertical (upflow)
- · Optional electric heat kit for additional heating capacity
- · Optional humidifier control, ERV control and auxiliary heat control
- Optional downflow kit

#### **OUTDOOR UNIT FEATURES**

- · Variable speed INVERTER-driven compressor
- · Innovative Joint Lap DC Motor leads to high efficiency and reliability
- · Pulse Amplitude Modulation technology
- · High-performance grooved piping for increased heat exchange efficiency

## SPECIFICATIONS: SVZ-KP24NA & SUZ-KA24NA2

	Maximum Capacity	Btu/h	24,000	
	Rated Capacity	Btu/h	24,000	
	Minimum Capacity	Btu/h	12,400	
Cooling at 95°F <sup>1</sup>	Maximum Power Input	W	1,920	
	Rated Power Input	W	1,920	
	Moisture Removal	Pints/h	4.1	
	Sensible Heat Factor	Sensible Heat Factor		
	Power Factor (208/230V)	%	98	
	Maximum Capacity	Btu/h	25,300	
	Rated Capacity	Btu/h	25,300	
Cooling at 82°F	Minimum Capacity	Btu/h	13,300	
	Maximum Power Input	W	1,670	
	Rated Power Input	W	1,670	
	Maximum Capacity	Btu/h	28,000	
	Rated Capacity	Btu/h	25,000	
	Minimum Capacity	Btu/h	14,600	
Heating at 47°F <sup>2</sup>	Maximum Power Input	W	2,270	
	Rated Power Input	W	1,910	
	Power Factor	%	99	
	Maximum Capacity	Btu/h	14,600	
	Rated Capacity	Btu/h	14,600	
Heating at 17°F <sup>3</sup>	Maximum Power Input	W	1,590	
	Rated Power Input	W	1,590	
	SEER	18.0		
	EER <sup>1</sup>	12.5		
	HSPF (IV)	10.4		
Efficiency	COP at 47°F <sup>2</sup>	3.84		
	COP at 17°F in Maximum Capacity <sup>3</sup>	2.69		
	ENERGY STAR® Certified (ENERGY STAR products an an EPA-recognized Certification Body.)	Yes		
	Voltage, Phase, Frequency		208/230V, 1 phase, 60Hz	
	Guaranteed Voltage Range	V AC	187-253	
	Voltage: Indoor - Outdoor, S1-S2	V AC	208/230	
Electrical	Voltage: Indoor - Outdoor, S2-S3	V DC	24	
	Voltage: Indoor - Remote Controller	V DC	12	
	Recommended Fuse/Breaker Size	A	20	
	Recommended Wire Size (Indoor - Outdoor)	AWG	14	
	MCA	A	3	
	Fan Motor Full Load Amperage	A	2.4	
Indoor Unit	Fan Motor Output	W	121	
	Airflow Rate at Cooling, Dry	CFM	735-625-515	

## SPECIFICATIONS: SVZ-KP24NA & SUZ-KA24NA2

	Airflow Rate at Heating, Dry	CFM	735-625-515	
	Sound Pressure Level (Cooling)	dB(A)	38-34-30	
	Sound Pressure Level (Heating)	dB(A)	38-34-30	
	External Static Pressure	in.WG	0.30-0.50-0.80	
	Drain Pipe Size	In. (mm)	3/4 (19)	
	Heat Exchanger Type		Plate fin coil	
	External Finish Color			
		W: In. (mm)	17 (432)	
	Unit Dimensions	D: In. (mm)	21-5/8 (549)	
		H: In. (mm)	39-13/16 (1,011)	
		W: In. (mm)	18 (460)	
	Package Dimensions	D: In. (mm)	28-3/4 (730)	
		H: In. (mm)	44-3/8 (1,130)	
	Unit Weight	Lbs. (kg)	93 (42)	
	Package Weight	Lbs. (kg)	106 (48)	
Indoor Unit Operating	Cooling Intake Air Temp (Maximum / Minimum)*	°F	90F D.B / 71F W.B // 67F D.B / 57F W.B	
Temperature Range	Heating Intake Air Temp (Maximum / Minimum)	°F	80F D.B // 70F D.B	
	MCA	A	17	
	MOCP	A	31	
	Fan Motor Full Load Amperage	A	1	
	Fan Motor Output	W	60	
	Airflow Rate	CFM	2,020 / 1,930	
	Refrigerant Control		LEV	
	Defrost Method		Reverse cycle	
	Heat Exchanger Type		Plate fin coil	
	Sound Pressure Level, Cooling <sup>1</sup>	dB(A)	55	
	Sound Pressure Level, Heating <sup>2</sup>	dB(A)	55	
	Compressor Type		DC INVERTER-driven	
	Compressor Model		SNB220FQGM1T	
Outdoor Unit	Compressor Rated Load Amps	А	13.0	
	Compressor Locked Rotor Amps	A	16.0	
	Compressor Oil Type // Charge	OZ.	FV50S // 15.6	
	External Finish Color	l	Ivory Munsell 3Y 7.8/1.1	
	Base Pan Heater		Optional	
		W: In. (mm)	33-1/16 (840)	
	Unit Dimensions	D: In. (mm)	13 (330)	
		H: In. (mm)	34-5/8 (880)	
		W: In. (mm)	38-9/16 (980)	
	Package Dimensions	D: In. (mm)	16-9/16 (420)	
		H: In. (mm)	39 (990)	
	Unit Weight	Lbs. (kg)	129 (59)	

#### SPECIFICATIONS: SVZ-KP24NA & SUZ-KA24NA2

	Package Weight	Lbs. (kg)	148 (67)
Outdoor Unit Operating Temperature Range	Cooling Air Temp (Maximum / Minimum)*	°F	115 / 14
	Cooling Thermal Lock-out / Re-start Temperatures**	°F	1/5
	Heating Air Temp (Maximum / Minimum)	°F	75 / 14
	Heating Thermal Lock-out / Re-start Temperatures**	°F	10 / 14
Defricerent	Туре	R410A	
Refrigerant	Charge	Lbs, oz	4, 14
	Gas Pipe Size O.D. (Flared)	In.(mm)	5/8 (12.88)
	Liquid Pipe Size O.D. (Flared)	In.(mm)	3/8 (9.52)
Piping	Maximum Piping Length	Ft. (m)	100
	Maximum Height Difference	Ft. (m)	100
	Maximum Number of Bends		10

#### Notes

AHRI Rated Conditions	<sup>1</sup> Cooling (Indoor // Outdoor)	°F	80 DB, 67 WB // 95 DB, 75 WB
(Rated data is determined at a fixed	<sup>2</sup> Heating at 47°F (Indoor // Outdoor)	°F	70 DB, 60 WB // 47 DB, 43 WB
compressor speed)	<sup>3</sup> Heating at 17°F (Indoor // Outdoor)	°F	70 DB, 60 WB // 17 DB, 15 WB

<sup>\*</sup>Applications should be restricted to comfort cooling only; equipment cooling applications are not recommended for low ambient temperature conditions.

\*\*System cuts out in heating mode to avoid thermistor error and automatically restarts at these temperatures.

## **ACCESSORIES: SVZ-KP24NA**

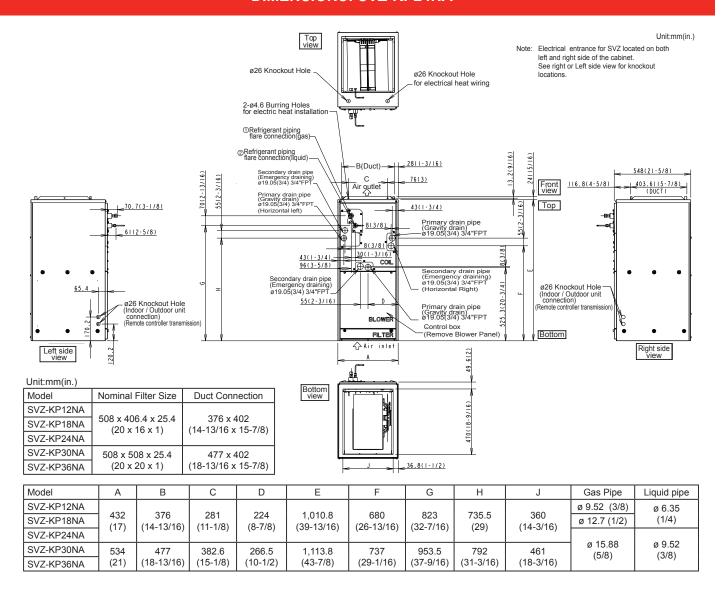
Wireless Signal Receiver	□ PAR-FA32MA-W
Wireless Signal Receiver	□ PAR-FA32MA-E
Wireless Remote Controller	□ PAR-FL32MA-E
Backlit, Wall-mounted, Wireless Controller	□ MHK1
Portable Central Controller	□ MCCH1
Wired MA Controller	□ PAR-33MAA
Simple MA Controller	□ PAC-YT53CRAU
Touch MA Controller	□ PAR-CT01MAU-SB
Airzone ZBS Wired Blueface Principal Controller White	□ AZZBSBLUEFACECB
Airzone ZBS Wired Think Controller White	□ AZZBSTHINKCB
Airzone ZBS Wireless Think Controller White	□ AZZBSTHINKRB
Airzone ZBS Wired Lite Controller White	□ AZZBSLITECB
Airzone ZBS Wireless Lite Controller White	□ AZZBSLITERB
Wired Remote Sensor	□ PAC-SE41TS-E
Wireless Temperature and Humidity Sensor	□ PAC-USWHS003-TH-1
Outside Air Sensor for MHK1	□ MOS1
Flush Mount Remote Temperature Sensor	□ PAC-USSEN001-FM-1
Wireless Interface	□ PAC-USWHS002-WF-1
Thermostat Interface	□ PAC-US444CN-1
kumo station®	□ PAC-WHS01HC-E
USNAP Interface	□ PAC-WHS01UP-E
IT Extender	□ PAC-WHS01IE-E
BACnet® and MODBUS® Interface	□ PAC-UKPRC001-CN-1
External Fan / Heater Control Relay Adapter	□ CN24RELAY-KIT-CM3
Connector cable for remote display	□ PAC-SA88HA-EP
Connector for CN32 (remote on/off)	□ PAC-SE55RA-E
Remote Operation Adapter <sup>1</sup>	□ PAC-SF40RM-E
MegaBlue Advanced Blue Diamond Condensate Pump w/ Reservoir & Sensor	□ X87-835 - 110 to 250V
MaxiBlue Advanced Blue Diamond Mini Condensate Pump w/ Reservoir & Sensor (110V) up to 48,000 Btu/h [recommended]	□ X87-711 - 110V
Advanced Blue Diamond Mini Condensate Pump w/ Reservoir & Sensor (208/230V) [recommended]	□ X87-721 - 208/230V
Drain Pan Level Sensor	□ DPLS2
(30A/600V/UL) [fits 2" X 4" utility box] - Black	□ TAZ-MS303
(30A/600V/UL) [fits 2" X 4" utility box] - White	□ TAZ-MS303W
Separate Power Terminal Block Kit	□ SPTB1
Electric Heat Lockout Control	□ ETC-211000-MIT
Downflow Kit	□ DFK-S
3kW Electric Heater	□ EH03-SVZ-S
5kW Electric Heater	□ EH05-SVZ-S
8kW Electric Heater	□ EH08-SVZ-S

<sup>&</sup>lt;sup>1</sup> Unable to use with wireless remote controller

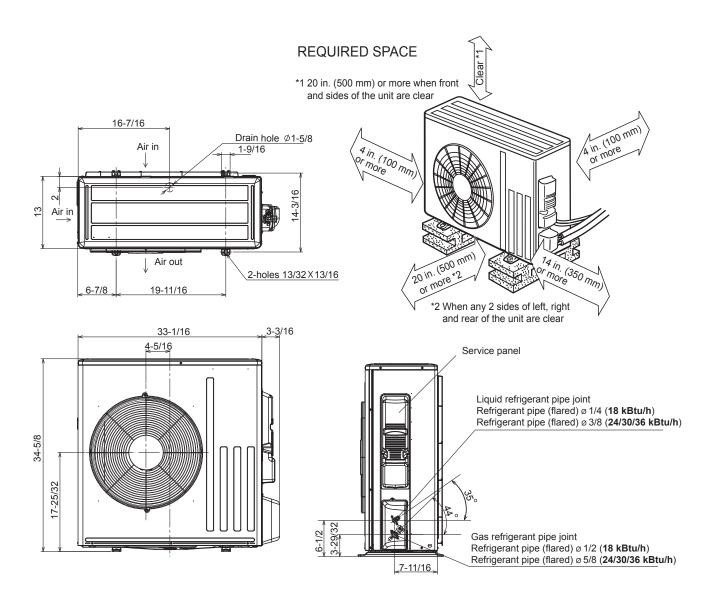
## **ACCESSORIES: SUZ-KA24NA2**

Air Outlet Guide	□ MAC-886SG-E
Optional Defrost Heater	□ MAC-642BH-U1
Hail Guard	□ HG-A7
Outdoor Unit 3-1/4 inch Mounting Base (Pair) - Plastic	□ DSD-400P
Condensing Unit Mounting Pad 16" x 36" x 3"	□ ULTRILITE1
Outdoor Unit Stand — 12" High	□ QSMS1201M
Outdoor Unit Stand — 18" High	□ QSMS1801M
Outdoor Unit Stand — 24" High	□ QSMS2401M
Heavy Duty Wall Mounting Bracket—Coated Steel	□ QSWB2000M-1
Heavy Duty Wall Mounting Bracket — 316 Series Stainless Steel	□ QSWBSS
10' x 3/8" x 10' x 5/8" Lineset (Twin-Tube Insulation)	□ MPLS385812T-10
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
100' x 3/8" x 100' x 5/8" Lineset (Twin-Tube Insulation)	□ MPLS385812T-100

#### **DIMENSIONS: SVZ-KP24NA**



Unit: inch





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FORM# SVZ-KP24NA / SUZ-KA24NA2 - 201901