**M-SERIES** 

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



Job Name:	
System Reference:	Date:



#### 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
- · Built-in 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
Cooling at 95°F1	Rated Capacity	BTU/H	24,000
	Minimum Capacity	BTU/H	12,400
		W	
	Maximum Power Input	W	1,920
	Rated Power Input		1,920
	Moisture Removal	Pints/h	4.1
	Sensible Heat Factor		0.81
	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
Heating at 47°F <sup>2</sup>	Minimum Capacity	BTU/H	14,600
	Maximum Power Input	W	2,270
	Rated Power Input	W	1,910
	Power Factor	%	99
	Maximum Capacity	BTU/H	14,600
Heating at 17°F <sup>3</sup>	Rated Capacity	BTU/H	14,600
Heating at 17 F	Maximum Power Input	W	1,590
	Rated Power Input	W	1,590
	SEER		18.0
	EER1		12.5
	HSPF (IV)		10.4
Efficiency	COP at 47°F <sup>2</sup>		3.80
	COP at 17°F in Maximum Capacity <sup>3</sup>		2.69
	ENERGY STAR® certified units (ENERGY STAR products are third-party certified 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
	Short-circuit Current Rating (SCCR)	kA	5
	Recommended Fuse/Breaker Size (Outdoor)	А	20
	Recommended Wire Size (Indoor - Outdoor)	AWG	14
	MCA	Α	3
	Fan Motor Full Load Amperage	А	2.4
	Fan Motor Output	W	121
	Airflow Rate at Cooling, Dry	CFM	735-625-515
Indoor Unit	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		Black
		W: In. (mm)	17 (432)
	Unit Dimensions	D: In. (mm)	21-5/8 (549)
		H: In. (mm)	39-13/16 (1,011)
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## SPECIFICATIONS: SVZ-KP24NA & SUZ-KA24NA2

		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	Α	17
	MOCP	Α	31
	Fan Motor Full Load Amperage	A	1
	Fan Motor Output	W	60
	Airflow Rate	CFM	2,020 / 1,930
	Refrigerant Control	1	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	А	16.0
	Compressor Oil Type // Charge	OZ.	FV50S // 15.6
	External Finish Color	1	Ivory Munsell 3Y 7.8/1.1
	Base Pan Heater		Optional
	Unit Dimensions	W: In. (mm)	33-1/16 (840)
		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)
	Package Weight	Lbs. (kg)	148 (67)
	Cooling Air Temp (Maximum / Minimum)*	°F	115 / 14
Outdoor Unit Operating	Cooling Thermal Lock-out / Re-start Temperatures**	°F	1/5
Temperature Range	Heating Air Temp (Maximum / Minimum)	°F	75 / 14
	Heating Thermal Lock-out / Re-start Temperatures**	°F	10 / 14
Refrigerant	Туре	1	R410A
	Charge	Lbs, oz	4, 14
Piping	Gas Pipe Size O.D. (Flared)	In.(mm)	5/8 (12.88)
	Liquid Pipe Size O.D. (Flared)	In.(mm)	3/8 (9.52)
	Maximum Piping Length	Ft. (m)	100
	Maximum Height Difference	Ft. (m)	100
	Maximum Number of Bends	()	10
	Transfer Humber of Bonds		10

#### Notes

AHRI Rated Conditions (Rated data is determined at a fixed compressor speed)	<sup>1</sup> Cooling (Indoor // Outdoor)	°F	80 DB, 67 WB // 95 DB, 75 WB
	<sup>2</sup> Heating at 47°F (Indoor // Outdoor)	°F	70 DB, 60 WB // 47 DB, 43 WB
	<sup>3</sup> Heating at 17°F (Indoor // Outdoor)	°F	70 DB, 60 WB // 17 DB, 15 WB
*Applications should be restricted to comfort cooling only equipment cooling applications are not recommended for low ambient temperature conditions			

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

## **ACCESSORIES: SVZ-KP24NA**

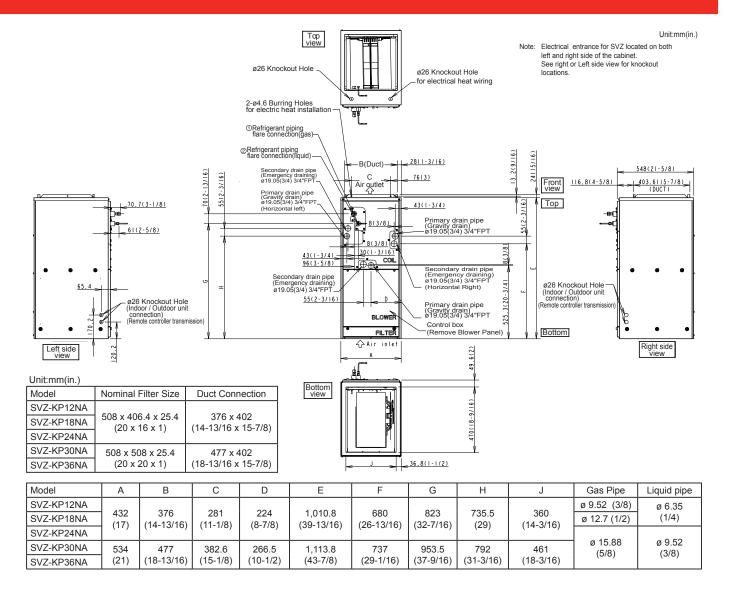
Wireless Signal Receiver	□ PAR-FA32MA-W
Wireless Remote Controller	□ PAR-FL32MA-E
kumo touch™ RedLINK™ Wireless Controller	□ MHK2
Deluxe MA Remote Controller	□ PAR-40MAAU
Simple MA Controller	□ PAC-YT53CRAU-J
Touch MA Controller	□ PAR-CT01MAU-SB
Airzone ZBS Wired Blueface Principal Controller White	□ 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
Flush Mount Remote Temperature Sensor	□ PAC-USSEN001-FM-1
Wireless Interface 2	□ PAC-USWHS002-WF-2
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
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
(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

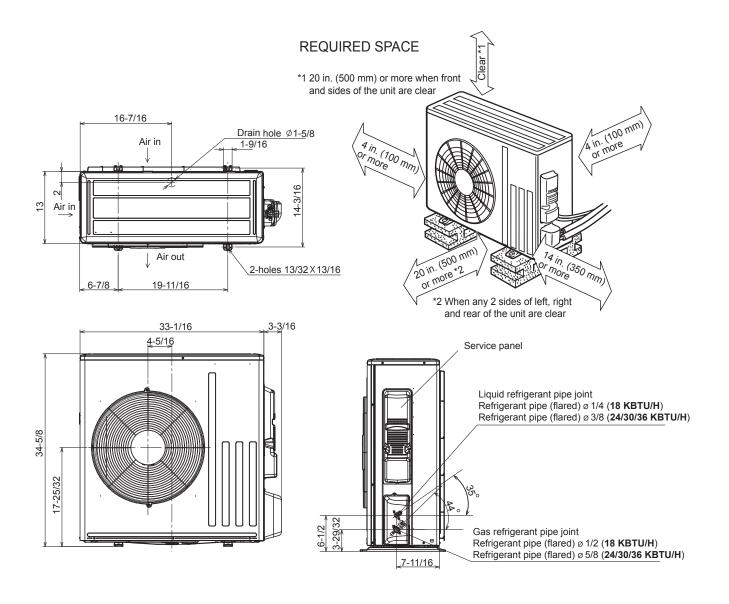
## **ACCESSORIES: SUZ-KA24NA2**

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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