# SVZ-KP12NA & SUZ-KA12NAHZ 12,000 BTU/H MULTI-POSITION AIR HANDLER 12,000 BTU/H HYPER-HEATING UNIVERSAL OUTDOOR UNIT



Job Name:	
System Reference:	Date:



Indoor Unit SVZ-KP12NA

Outdoor Unit SUZ-KA12NAHZ

#### INDOOR UNIT FEATURES

- · Ducted air handler provides a solution to cool and heat large zones
- · Highly efficient totally enclosed ECM 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 boosts efficiency
- · Positive pressure cabinet with air leakage of less than 2.0% at 1.0 In.WG (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 (up or down)
- · Optional electric heat kit for additional heat capacity
- · Optional humidifier control and ERV control
- · Built-in humidifier control, ERV control and auxiliary heat control
- · Optional downflow kit
- · Multiple control options available:
  - o kumo cloud® smart device app for remote access
  - $\circ \ \ \, \text{Third-party interface options}$
  - o Wired or wireless controllers

#### **OUTDOOR UNIT FEATURES**

- · The outdoor unit powers the indoor unit, and should a power outage occur, the system is automatically restarted when power returns
- · INVERTER-driven compressor and LEV provide high efficiency and comfort while using only the energy needed to maintain maximum performance
- H2i® hyper heat performance offers 100% heating capacity at 5° F
- · Hot-Start Technology: no cold air rush at equipment startup or when restarting after Defrost Cycle
- Quiet operation
- · Blue Fin anti-corrosion treatment applied to the outdoor unit heat exchanger for increased coil protection and longer life
- · Built-in base pan heater
- · Innovative Joint Lap DC Motor leads to high efficiency and reliability
- · Pulse Amplitude Modulation technology

### SPECIFICATIONS: SVZ-KP12NA & SUZ-KA12NAHZ

	Maximum Capacity	BTU/H	12,000	
	Rated Capacity	BTU/H	12,000	
	Minimum Capacity	BTU/H	5,600	
	Maximum Power Input	W	860	
Cooling at 95°F1	Rated Power Input	W	860	
	Moisture Removal	Pints/h	0.8	
	Sensible Heat Factor	FIIIIS/II	0.0	
		%		
	Power Factor [208V / 230V]	BTU/H	95.0 / 95.0	
	Maximum Capacity		18,000	
	Rated Capacity	BTU/H	15,000	
Heating at 47°F2	Minimum Capacity	BTU/H	7,700	
-	Maximum Power Input	W	1,420	
	Rated Power Input	W	1,130	
	Power Factor [208V / 230V]	%	97.0 / 97.0	
	Maximum Capacity	BTU/H	15,000	
Heating at 17°F3	Rated Capacity	BTU/H	8,900	
	Maximum Power Input	W	1,690	
	Rated Power Input	W	1,000	
Heating at 5°F4	Maximum Capacity	BTU/H	15,000	
	Maximum Power Input	W	2,600	
	SEER   SEER2		19.0   20.0	
	EER1   EER21		13.9   13.9	
	HSPF [IV]   HSPF2 [IV]		10.2   9.5	
Efficiency	COP at 47°F <sup>2</sup>		3.8	
	COP at 17°F at Maximum Capacity <sup>3</sup>		2.6	
	COP at 5°F at Maximum Capacity <sup>4</sup>		1.69	
	ENERGY STAR® Certified		Yes	
	Voltage, Phase, Frequency		208/230, 1, 60	
	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	
Liectrical	Short-circuit Current Rating [SCCR]	kA	5	
	Recommended Fuse/Breaker Size (Oudoor)	A	15	
	Recommended Wire Size [Indoor - Outdoor]	AWG	14	
	Power Supply		Indoor unit is powered by the outdoor unit	
	MCA	A	3.0	
	Fan Motor Full Load Amperage	A	2.4	
	Fan Motor Type		DC Motor	
	Airflow Rate at Cooling, Dry	CFM	278–381–448	
	Airflow Rate at Heating, Dry	CFM	278–381–448	
	Sound Pressure Level [Cooling]	dB[A]	29–36–39	
	Sound Pressure Level [Heating]	dB[A]	29–36–39	
Indoor Unit	External Static Pressure	in.WG	0.30-0.5-0.8	
	Drain Pipe Size	In. [mm]	3/4 [19.05]	
	Coating on Heat Exchanger		<del>-</del>	
	External Finish Color		Hot-dip coated steel (ZAM)	
	Unit Dimensions	W x D x H: In. [mm]	17 x 21-5/8 x 39-13/16 [432 x 549 x 1,011]	
	Package Dimensions	W x D x H: In. [mm]	17 x 28-3/4 x 44-3/8 [460 x 730 x 1,011]	
	Unit Weight	Lbs. [kg]	93 [42]	
	Package Weight	Lbs. [kg]	106 [48]	
Indoor Unit Operating Temperature	Cooling Intake Air Temp [Maximum / Minimum]*	°F	90 DB, 72 WB / 68 DB, 61 WB	

NOTES: AHRI Rated Conditions

(Rated data is determined at a fixed compressor speed)

<sup>1</sup>Cooling (Indoor // Outdoor) <sup>2</sup>Heating at 47°F (Indoor // Outdoor) <sup>3</sup>Heating at 17°F (Indoor // Outdoor)

80 DB, 67 WB // 95 DB, 75 WB 70 DB, 60 WB // 47 DB, 43 WB 70 DB, 60 WB // 17 DB, 15 WB

70 DB, 60 WB // 5 DB, 4 WB

<sup>4</sup>Heating at 5°F (Indoor // Outdoor)

\*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.

<sup>\*\*</sup>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 to avoid thermistor error and automatically restarts at these temperatures.

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	MCA	A	14.0
	MOCP	A	24
	Fan Motor Full Load Amperage	A	0.7
	Fan Motor Output	W	77
	Airflow Rate [Cooling / Heating]	CFM	1,691 / 1,691
	Refrigerant Control		LEV
	Defrost Method		Reverse Cycle
	Coating on Heat Exchanger		Blue Fin Coating
	Sound Pressure Level, Cooling <sup>1</sup>	dB(A)	54
	Sound Pressure Level, Heating <sup>2</sup>	dB(A)	55
Outdoor Unit	Compressor Type		DC INVERTER-driven Twin Rotary
	Compressor Model		SNB130FHBM2T
	Compressor Rated Load Amps	A	10
	Compressor Locked Rotor Amps	A	12.5
	Compressor Oil [Type // Charge]	OZ.	FV50S // 22
	External Finish Color		Ivory Munsell 3Y 7.8/1.1
	Base Pan Heater		Built-in
	Unit Dimensions	W x D x H: In. [mm]	33-1/16 x 13 x 34-5/8 [840 x 330 x 880]
	Package Dimensions	W x D x H: In. [mm]	38-3/4 x 16-3/4 x 39 [980 x 420 x 990]
	Unit Weight	Lbs. [kg]	129 [58.5]
	Package Weight	Lbs. [kg]	148 [67]
	Cooling Air Temp [Maximum / Minimum]*	°F	115 DB / 14 DB
Outdoor Unit Operating Temperature	Cooling Thermal Lock-out / Re-start Temperatures**	°F	-1 / 3
Range	Heating Air Temp [Maximum / Minimum]	°F	75 DB, 65 WB / -13 DB, -14 WB
	Heating Thermal Lock-out / Re-start Temperatures**	°F	-25 / -14
	Туре		R410A
Refrigerant	Maximum Charge Quantity	Lbs, oz	3.0, 9.0
Reingerani	Initial Charge Quantity	Ft. [m]	65.0 [20.0]
	Additional Refrigerant Charge Per Additional Piping Length	oz./Ft. [g/m]	0 [0]
	Gas Pipe Size O.D. [Flared]	In.[mm]	3/8 [9.52]
	Liquid Pipe Size O.D. [Flared]	In.[mm]	1/4 [6.35]
Piping	Maximum Piping Length	Ft. [m]	65 [20]
	Maximum Height Difference	Ft. [m]	40 [12]
	Maximum Number of Bends		10

NOTES: AHRI Rated Conditions (Rated data is determined at a fixed compressor speed)

80 DB, 67 WB // 95 DB, 75 WB 70 DB, 60 WB // 47 DB, 43 WB 70 DB, 60 WB // 17 DB, 15 WB °F °F °F

<sup>1</sup>Cooling (Indoor // Outdoor) <sup>2</sup>Heating at 47°F (Indoor // Outdoor) <sup>3</sup>Heating at 17°F (Indoor // Outdoor)

<sup>4</sup>Heating at 5°F (Indoor // Outdoor) Conditions

°F 70 DB, 60 WB // 5 DB, 4 WB

<sup>\*</sup>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.

<sup>\*\*</sup>Outdoor Unit Operating Temperature Range (Cooling Thermal Lock-out / Re-start Temperatures; Heating Thermal Lock-out / Re-start Temperatures):

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## **INDOOR UNIT ACCESSORIES: SVZ-KP12NA**

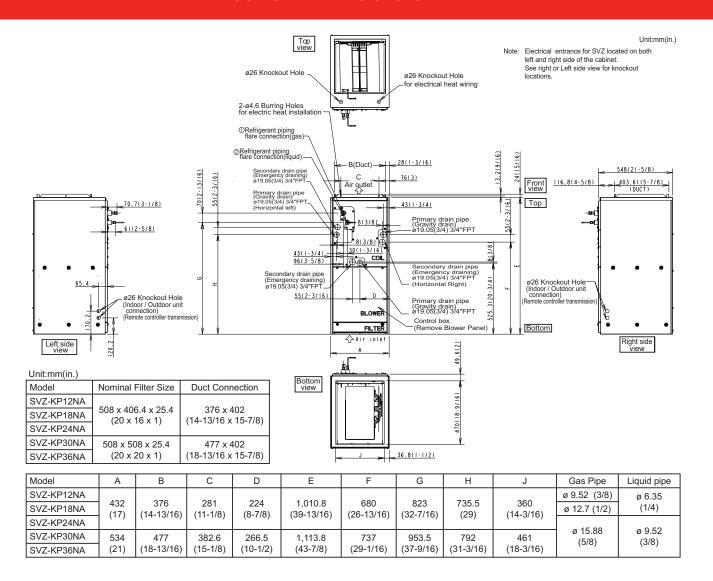
	Airzone ZBS Wired Blueface Principal Controller White	AZZBSBLUEFACECB
	Airzone ZBS Wired Blueface Principal Controller White	
	Airzone ZBS Wired Lite Controller White	AZZBSBLUEZEROCB  AZZBSLITECB
	Airzone ZBS Wireless Lite Controller White	AZZBSLITECB
	Airzone ZBS Wireless Think Controller White	
	BACnet® and Modbus® Interface	AZZBSTHINKRB
	CN24 Relay Kit	PAC-UKPRC001-CN-1
Control Interface	Connector cable for remote display	CN24RELAY-KIT-CM3
	IT Extender	PAC-SA88HA-EP
	kumo station® for kumo cloud®	PAC-WHS01IE-E
	Remote Operation Adapter <sup>‡</sup>	PAC-WHS01HC-E
	Thermostat Interface	PAC-SF40RM-E
	USNAP Adapter	PAC-US445CN-1
	Wireless Interface for kumo cloud®	PAC-WHS01UP-E
	Flush Mount Remote Temperature Sensor	PAC-USWHS002-WF-2
	·	PAC-USSEN002-FM-1
Remote Sensor	Flush Mount Temperature Sensor  Remote Temperature Sensor	PAC-USSEN001-FM-1
	Wireless temperature and humitity sensor for kumo cloud®	PAC-SE41TS-E
	Deluxe Wired MA Remote Controller <sup>†</sup>	PAC-USWHS003-TH-1
Mine d Demonts Combanilles		PAR-40MAAU
Wired Remote Controller	Simple MA Remote Controller	PAC-YT53CRAU-J
	Touch MA Controller <sup>†</sup>	PAR-CT01MAU-SB
Minutes Demote Controller	kumo touch™ RedLINK™ Wireless Controller	MHK2
Wireless Remote Controller	Wireless MA Receiver	PAR-FA32MA-W
	Wireless MA Remote Controller	PAR-FL32MA-E
	Blue Diamond (Advanced) Mini Condensate Pump w/ Reservoir & Sensor (208/230V) [recommended]	X87-721
Condensate	Blue Diamond (MicroBlue) Mini Condensate Pump (110/208/230V) up to 18,000 BTU/H	X86-003
	Blue Diamond Sensor Extension Cable — 15 Ft.	C13-103
	Refco Condensate Pump (100-240 VAC) up to 120,000 BTU/H	COMBI
Control Wire	20/2PR, 1PR shielded + 1PR plenum wire for Airzone, 100 ft reel	CW2042S2-100
	20/2PR, shielded + 1PR plenum wire for Airzone, 500 ft reel	CW2042S2-500
Disconnect Switch	(30A/600V/UL) [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-S
Electric Heat Lockout	Electric Heat Lockout	ETC-211020-MIT
Electric Kit Heats	3kW Electric Heater	EH03-SVZ-S
	5kW Electric Heater	EH05-SVZ-S
	15' x 1/4" x 15' / 3/8" Lineset (Twin-Tube Insulation)	MLS143812T-15
Lineset	30' x 1/4" x 30' / 3/8" Lineset (Twin-Tube Insulation)	MLS143812T-30
Emoce	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
Terminal Block	Separate Terminal Power Block	SPTB1

NOTES: 
‡PAC-SF40RM-E (Unable to use with wireless remote controller)

## **OUTDOOR UNIT ACCESSORIES: SUZ-KA12NAHZ**

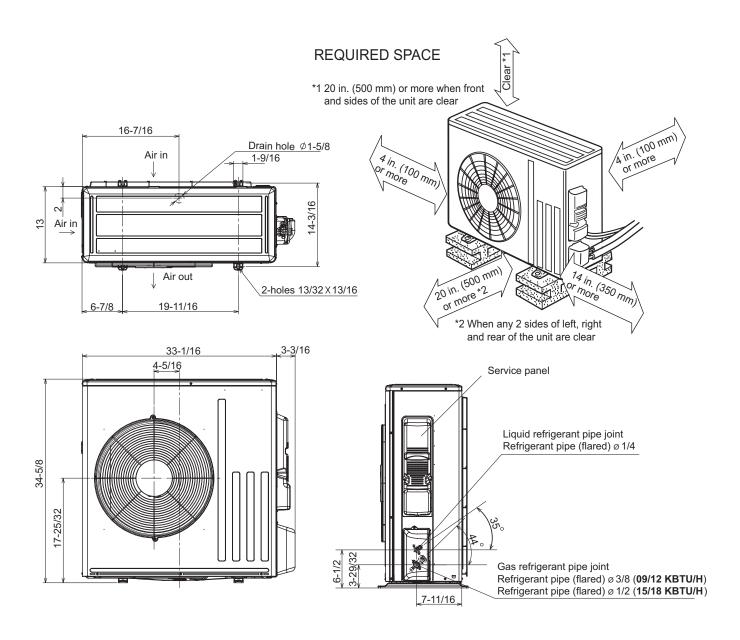
Air Outlet Guide	Air Outlet Guide	MAC-886SG-E
Control/Service Tool	M- & P-Series Maintenance Tool Cable Set	M21EC0397
Mini-Split Wire	14 Gauge, 4 wire MiniSplit Cable—250 ft. roll	S144-250
	14 Gauge, 4 wire MiniSplit Cable—250 ft. roll	SW144-250
	14 Gauge, 4 wire MiniSplit Cable—50 ft. roll	S144-50
	14 Gauge, 4 wire MiniSplit Cable—50 ft. roll	SW144-50
	16 Gauge, 4 wire MiniSplit Cable—250 ft. roll	S164-250
	16 Gauge, 4 wire MiniSplit Cable—250 ft. roll	SW164-250
	16 Gauge, 4 wire MiniSplit Cable—50 ft. roll	S164-50
	16 Gauge, 4 wire MiniSplit Cable—50 ft. roll	SW164-50
Mounting Pad	Condensing Unit Mounting Pad: 16" x 36" x 3"	ULTRILITE1
Port Adaptor	Adaptor: 1/2" x 3/8" (required)	MAC-A455JP-E
Stand	18" Single Fan Stand	QSMS1801M
	24" Single Fan Stand	QSMS2401M
	Condenser Wall Bracket	QSWB2000M-1
	Outdoor Unit Stand — 12" High	QSMS1201M

#### INDOOR UNIT DIMENSIONS: SVZ-KP12NA



#### **OUTDOOR UNIT DIMENSIONS: SUZ-KA12NAHZ**

Unit: inch



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