

Product Guide

Multi-position Air Handler SVZ

SVZ-KP(12/18/24/30/36)NA

Product Overview

The SVZ air handler is ideal for both system replacement and new installs, providing efficient heating and air conditioning for ducted applications. This flexible unit can be easily disassembled and reassembled in tight spaces thanks to its modular design. The SVZ indoor unit is compatible with Hyper-heating SUZ universal outdoor units, providing even greater heating capability in colder climates. With rugged construction and quiet operation, you can install it with confidence in nearly any home.

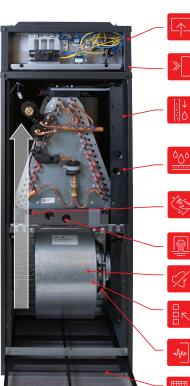
Features and Benefits

- Up to 19 SEER
- Up to 12.6 HSPF
- 12, 18, 24, 30, and 36 KBTU/H
- Compatible with standard and hyper-heat
- · Upflow, horizontal left, horizontal right configurations

Optional electric heat kits

to prevent sound from traveling through the ductwork

- Optional downflow kit
- Condensation overflow switch connection
- Humidifier and ERV interface connections



Optional auxiliary heat kit can be mounted on top of the air handler, simplifying field installation Black ZAM material is highly corrosion-resistant hot dip coated steel (zinc, aluminum and magnesium) 1 inch R4.2 fiberglass-free insulation is not compressed and there are no screw penetrations through the insulation, resulting in minimal condensation on the cabinet Cabinet air leakage is less than 2.0% at 1.0 in. w.g. static pressure (tested in accordance with ASHRAE Standard 193) Unique blow-through design results in a positive pressure cabinet and allows simple coil cleaning and blower removal No trap required for drain Forward curved blower ensures quiet operation Selectable external static pressures: 0.30, 0.50 and 0.80 in w.g., with three fan speeds at each static pressure setting Highly efficient, totally enclosed EC motor positioned

Standard filter size

Indoor Unit				SVZ-KP12NA	SVZ-KP18NA	SVZ-KP24NA	SVZ-KP30NA	SVZ-KP36NA
Outdoor Unit				SUZ-KA12NA2	SUZ-KA18NA2	SUZ-KA24NA2	SUZ-KA30NA2	SUZ-KA36NA2
Cooling	Capacity	Rated ¹	BTU/H	12,000	18,000	24,000	27,000	33,400
	Capacity Range	Min-Max	BTU/H	4,300-12,000	6,200–18,000	12,400-24,000	13,500-27,000	11,600–33,400
	Power Input	Rated ¹	W	940	1,360	1,920	2,160	3,711
	Moisture Removal	Pints/h		1.2	2.4	4.1	2.4	4.7
	Sensible Heat Factor			0.890	0.850	0.810	0.900	0.840
Heating	Capacity at 47°F	Rated ²	BTU/H	15,000	21,600	25,000	30,000	33,400
	Capacity Range	Min-Max	BTU/H	4,700–16,700	8,300–26,000	14,600–28,000	12,640-33,000	13,260–36,000
	Power Input at 47°F	Rated ²	W	1,210	1,600	1,910	2,060	3,030
	Capacity at 17°F	Rated ³	BTU/H	9,900	14,000	14,600	21,400	23,200
_		Max	BTU/H	9,900	14,000	14,600	21,400	23,200
	Capacity at 5°F	Max ⁴	BTU/H	7,800	12,200	_	_	_
	Capacity at -5°F	Max 5	BTU/H	_	_	_	_	_
	SEER		18.0	18.0	18.0	18.0	16.0	
	EER			12.7	13.2	12.5	12.5	9.0
Efficiency	HSPF			12.1	12.6	10.4	13.6	11.7
,	COP			3.6	3.9	3.8	4.2	3.2
	ENERGY STAR® Certified			Yes	Yes	Yes	Yes	No
	Air Flow Rate - Cooling (Quiet-Lo-Med-Hi-SHi)	Dry	CFM	278–381–448	471–573–675	515–625–735	613–744–875	767–910–910
	Air Flow Rate - Cooling (Quiet-Lo- Med-Hi-SHi)	Wet	CFM	_	_	_	_	_
	Air Flow Rate - Heating (Quiet-Lo- Med-Hi-SHi)	Dry	CFM	278–381–448	471–573–675	515-625-735	613–744–875	767–910–910
Indoor Unit	Sound Pressure Level (Quiet-Lo-Med-Hi-SHi)	Cooling	dB(A)	29–36–39	33–36–41	33–36–41	32–37–41	35–40–42
	Sound Pressure Level (Quiet-Lo- Med-Hi-SHi)	Heating	dB(A)	29–36–39	33–36–41	33–36–41	32–37–41	35–40–42
	External Static Pressure In. W.G.		In. W.G.	0.30-0.5-0.8	0.30-0.5-0.8	0.30-0.5-0.8	0.30-0.5-0.8	0.30-0.5-0.8
	Condensate Lift Mechanism	Max Distance	In. [mm]	_	_	_	_	_
	Dimensions	Н	In. [mm]	39-13/16 [1011]	39-13/16 [1011]	39-13/16 [1011]	43-3/4 [1111]	43-3/4 [1111]
		W	In. [mm]	17 [432]	17 [432]	17 [432]	21 [533]	21 [533]
		D	In. [mm]	21-5/8 [549]	21-5/8 [549]	21-5/8 [549]	21-5/8 [549]	21-5/8 [549]
	Weight	lbs [kg]		93 [42]	93 [42]	93 [42]	119 [54]	119 [54]
	MCA	A		9.0	14.0	17.0	17.0	17.0
	MOCP	A		16	24	31	31	31
		Н	In. [mm]	21-5/8 [550]	34-5/8 [880]	34-5/8 [880]	34-5/8 [880]	34-5/8 [880]
	Dimensions	W	In. [mm]	31-1/2 [800]	33-1/16 [840]	33-1/16 [840]	33-1/16 [840]	33-1/16 [840]
Outdoor Unit		D	In. [mm]	11-1/4 [285]	13 [330]	13 [330]	13 [330]	13 [330]
	Weight	lbs [kg]		81 [37]	127 [58]	129 [59]	129 [59]	129 [59]
	Air Flow Rate (Cooling/Heating)	CFM		1228/1172	1691/1691	2020/1930	2020/1930	2020/1930
	Sound Pressure Level	Cooling	dB(A)	49	54	55	55	55
		Heating	dB(A)	51	55	55	55	55
Piping	Diameter	Gas (O.D.)	In. [mm]	3/8 [9.52]	1/2 [12.7]	5/8 [15.88]	5/8 [15.88]	5/8 [15.88]
		Liquid (O.D)	In. [mm]	1/4 [6.35]	1/4 [6.35]	3/8 [9.52]	3/8 [9.52]	3/8 [9.52]
		Indoor Drain	In. [mm]	3/4 [19.05]	3/4 [19.05]	3/4 [19.05]	3/4 [19.05]	3/4 [19.05]
	Max. Length	ft [m]		65 [20]	100 [30]	100 [30]	100 [30]	100 [30]
	Max. Height	ft [m]		40 [12]	50 [15]	100 [30]	100 [30]	100 [30]
Electrical	Outdoor-Indoor ⁶	V, ph, Hz		208/230, 1, 60	208/230, 1, 60	208/230, 1, 60	208/230, 1, 60	208/230, 1, 60
	Recommended Breaker Size A		15	15	20	20	20	
Refrigerant Type				R410A	R410A	R410A	R410A	R410A
Guaranteed Temperature	Cooling 7	°F DB [°C DB]		14 to 115 [-10.0 to 46.0]				
Operation Range	Heating	°F DB [°C DB]		-4 to -75 [-20.0 to 24.0]	-4 to -75 [-20.0 to 24.0]	14 to -75 [-10.0 to 24.0]	14 to -75 [-10.0 to 24.0]	14 to -75 [-10.0 to 24.0]

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 70 DB, 60 WB // 5 DB, 4 WB 70 DB, 60 WB // -5 DB, -6 WB

Indoor Unit				SVZ-KP12NA	SVZ-KP18NA	SVZ-KP24NA	SVZ-KP30NA	SVZ-KP36NA
Outdoor Unit				SUZ-KA12NAHZ	SUZ-KA18NAHZ	SUZ-KA24NAHZ	SUZ-KA30NAHZ	SUZ-KA36NAHZ
	Capacity	Rated ¹	BTU/H	12.000	18.000	24.000	27.000	36.000
Cooling	Capacity Range	Min-Max	BTU/H	5,600–12,000	9,360–18,000	8,800–24,000	13,400–27,000	14,200–36,000
	Power Input	Rated ¹	W	860	1,440	2,420	2,100	3,760
	Moisture Removal	Pints/h	**	0.8	1.1	4.7	4.1	8.4
	Sensible Heat Factor	F III CS/II		0.920	0.930	0.780	0.830	0.740
	Capacity at 47°F	Rated ²	BTU/H	15.000	21.600	23.000	32.000	37.000
	Capacity Range	Min-Max	BTU/H	7,700–18,000	8,800–28,000	9,400–28,800	13,000–34,000	13,800–40,000
Heating	Power Input at 47°F	Rated ²	W	1,130	1.880	2,140	2.400	3,280
	Capacity at 17°F Capacity at 5°F	Rated ³	BTU/H	8.900	14.300	19.200	21,400	32,800
		Max	BTU/H	15,000	21,600	23,000	32,000	37,000
		Max ⁴	BTU/H	15,000	21,600	23,000	32,000	37,000
	Capacity at -5°F	Max 5	BTU/H			23,000	32,000	37,000
	SEER	IVIdX -	В10/П	19.0	18.4	16.0	15.0	16.0
Efficiency				13.9	12.5	9.9	12.5	9.5
	EER			10.2	10.4	9.9	9.0	9.0
Efficiency	HSPF			3.8		3.1	3.9	3.3
	COP			3.8 Yes	3.3 Yes	3.1 No	3.9 Yes	3.3 No
	ENERGY STAR® Certified Air Flow Rate - Cooling			Yes	Yes	NO NO	Yes	INO
	(Quiet-Lo-Med-Hi-SHi) Air Flow Rate - Cooling (Quiet-Lo-Med-Hi-SHi)	Dry	CFM	278–381–448	471–573–675	515–625–735	613–744–875	767–910–910
	Med-Hi-SHi) Air Flow Rate - Heating (Quiet-Lo-	Wet	CFM	_	_	_	_	_
	Med-Hi-SHi)	Dry	CFM	278–381–448	471–573–675	515-625-735	613–744–875	767–910–910
Indoor Unit	Sound Pressure Level (Quiet-Lo-Med-Hi-SHi)	Cooling	dB(A)	29–36–39	33–36–41	33–36–41	32–37–41	35–40–42
	Sound Pressure Level (Quiet-Lo- Med-Hi-SHi)	Heating	dB(A)	29–36–39	33–36–41	33–36–41	32–37–41	35–40–42
	External Static Pressure In. W.G.		0.30-0.5-0.8	0.30-0.5-0.8	0.30-0.5-0.8	0.30-0.5-0.8	0.30-0.5-0.8	
	Condensate Lift Mechanism	Max Distance	In. [mm]		_	_	_	_
	Dimensions	Н	In. [mm]	39-13/16 [1011]	39-13/16 [1011]	39-13/16 [1011]	43-3/4 [1111]	43-3/4 [1111]
		W	In. [mm]	17 [432]	17 [432]	17 [432]	21 [533]	21 [533]
		D	In. [mm]	21-5/8 [549]	21-5/8 [549]	21-5/8 [549]	21-5/8 [549]	21-5/8 [549]
	Weight	lbs [kg]		93 [42]	93 [42]	93 [42]	119 [54]	119 [54]
	MCA	A		14.0	17.0	17.0	24.0	26.0
	MOCP	A		24	31	27	40	42
	Dimensions	Н	In. [mm]	34-5/8 [880]	34-5/8 [880]	37-1/8 [943]	52-11/16 [1338]	52-11/16 [1338]
		W	In. [mm]	33-1/16 [840]	33-1/16 [840]	37-13/32 [950]	41-5/16 [1050]	41-5/16 [1050]
Outdoor Unit		D	In. [mm]	13 [330]	13 [330]	14-3/16 [360]	14-3/16 [360]	14-3/16 [360]
	Weight	lbs [kg]		129 [58.5]	131 [59.5]	190 [86]	261 [118]	261 [118]
	Air Flow Rate (Cooling/Heating)	CFM		1,691/1,691	2,020/1,930	800/800	590/680	590/680
	Sound Pressure Level	Cooling	dB(A)	54	55	52	52	52
		Heating	dB(A)	55	55	53	53	53
Piping	Diameter	Gas (0.D.)	In. [mm]	3/8 [9.52]	1/2 [12.7]	5/8 [15.88]	5/8 [15.88]	5/8 [15.88]
		Liquid (O.D)	In. [mm]	1/4 [6.35]	1/4 [6.35]	3/8 [9.52]	3/8 [9.52]	3/8 [9.52]
		Indoor Drain	In. [mm]	3/4 [19.05]	3/4 [19.05]	3/4 [19.05]	3/4 [19.05]	3/4 [19.05]
	Max. Length	ft [m]		65 [20]	100 [30]	100 [30]	245 [75]	245 [75]
	Max. Height	ft [m]		40 [12]	50 [15]	100 [30]	100 [30]	100 [30]
Electrical	Outdoor-Indoor ⁶	V, ph, Hz		208/230, 1, 60	208/230, 1, 60	208/230, 1, 60	208/230, 1, 60	208/230, 1, 60
	Recommended Breaker Size	A		15	20	25	35	35
Refrigerant Type				R410A	R410A	R410A	R410A	R410A
Guaranteed	Cooling ⁷ °F DB [°C DB]			0 to 115 [-18.0 to 46.0]				
Temperature Operation Range	Heating	°F DB [°C DB]		-13 to 75 [-25.0 to 24.0]				

Notes: AHRI Rated Conditions °F °F °F ¹Cooling (Indoor // Outdoor) 80 DB, 67 WB // 95 DB, 75 WB (Rated data is determined at a fixed compressor speed) ²Heating at 47°F (Indoor // Outdoor) ³Heating at 17°F (Indoor // Outdoor) 70 DB, 60 WB // 47 DB, 43 WB 70 DB, 60 WB // 17 DB, 15 WB ⁴Heating at 5°F (Indoor // Outdoor) ⁵Heating at -5°F (Indoor // Outdoor) 70 DB, 60 WB // 5 DB, 4 WB 70 DB, 60 WB // -5 DB, -6 WB Conditions

Indoor units receive power from outdoor units through field-supplied interconnected wiring.

Applications should be restricted to comfort cooling only, equipment cooling applications are not recommended for low ambient temperature conditions.