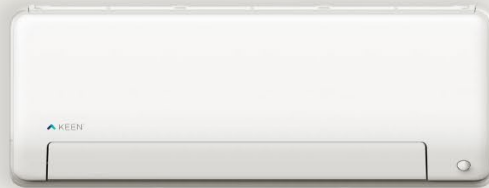




Mini-Split Heating and Cooling Systems

SGE
Solar
Local & Trusted
SGESolar.com/Keen



Equipment Catalog
Ducted and Ductless Systems

A Heat Pump engineered for cold climates



Up to 100% Heating Capacity at **5°F** with COP up to 2.0*

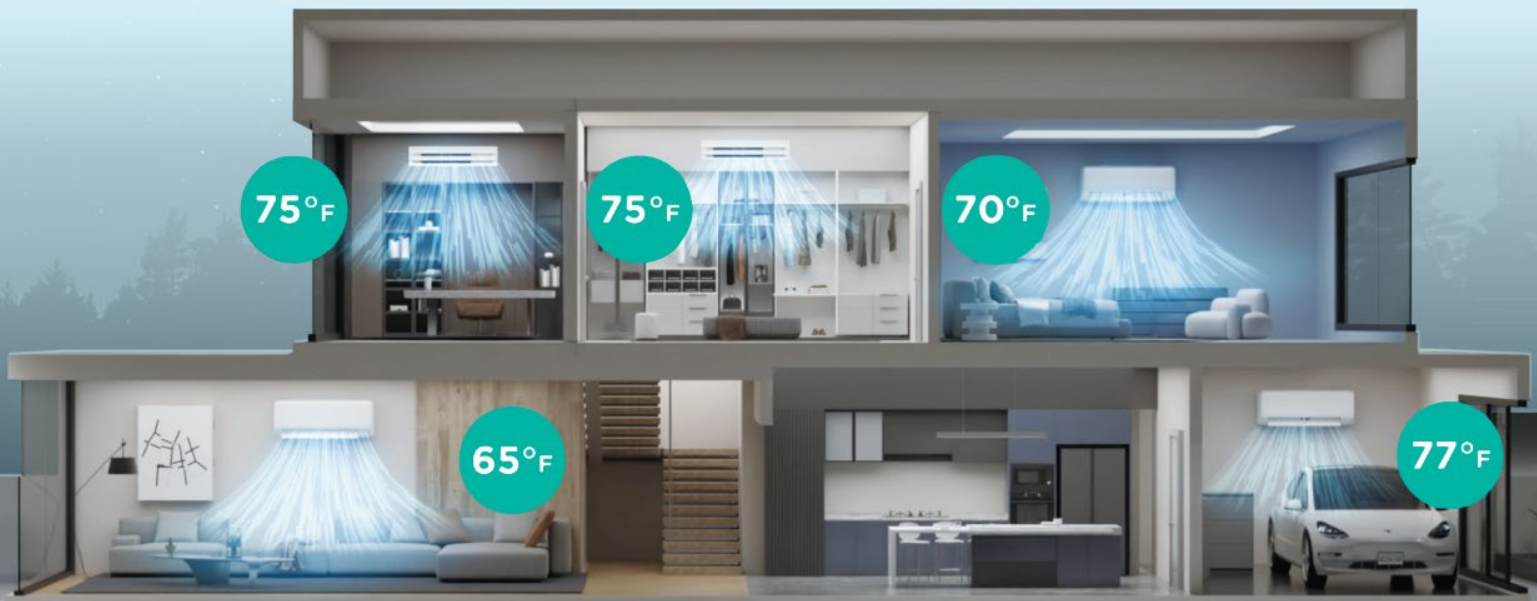


Continuous Operation at temperatures as low as **-22°F***



Flexible Design Options to meet the needs of every home

*Varies by equipment model



A new standard for labor and equipment warranties



10 Year Parts & Labor Warranty

Experience peace of mind like never before, with an industry leading 10 year warranty for parts and labor.



Complete Peace of Mind

Complete coverage for both parts and labor

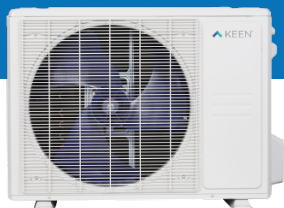
Adds Value to the Home

A transferable warranty that buyers love

Protection from Rising Costs

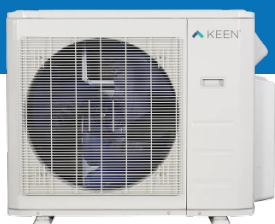
Labor rates may climb, your costs stay locked





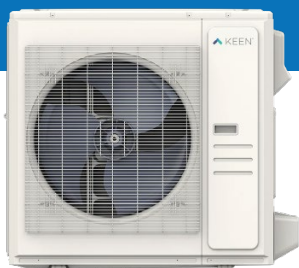
Single Zone Condensers

KEENHYMHP06AA KEENHYMHP12AA
KEENHYMHP09AA KEENHYMHP18AA



Multi Zone Condensers

KEENHYZHP20AA
KEENHYZHP27AA



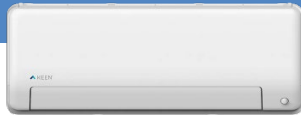
Multi Zone Condensers

KEENHYZHP36AA



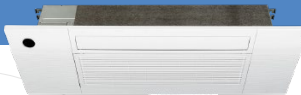
Multi Zone Condensers

KEENHYZHP49AA KEENHYZHP60AA
KEENHYZHP55AA



Wall Mounted [Ductless]

KEENHYMAH612A
KEENHYMAH18AA



Ceiling Cassettes [Ductless]

KEENOWAH06AA KEENOWAH12AA
KEENOWAH09AA KEENOWAH18AA



Floor and Ceiling [Ductless]

KEENFCAH18AA
KEENFCAH24AA



Pancake Coils [Ducted]

KEENSTPAH18AA KEENSTPAH36AA
KEENSTPAH24AA



Hyper Heat Air Handlers [Ducted]

KEENHYDAH24AA KEENHYDAH48AA
KEENHYDAH36AA KEENHYDAH60AA



Ultra Heat Air Handlers [Ducted]

KEENULDAH24AA KEENULDAH48AA
KEENULDAH36AA KEENULDAH60AA

KEEN Heat Pump Model Series

KEEN ST D AH 06 XX

Brand

KEEN = KEEN
Heat Pump

Family

ST = Standard
HY = Hyper-Heat
UL = Ultra Heat

Type

D = Ducted
P = Pancake
M = Wall Mounted
OW = Ceiling Cassette
FC = Floor and Ceiling
Z = Multizone

Series

AA = Updates

Approximate Capacity (BTU)

06 = 6k
09 = 9k
12 = 12k
18 = 18k
20 = 20k
24 = 24k
27 = 27k
30 = 30k
36 = 36k
48 = 48k
49 = 49k
55 = 55k
60 = 60k
612 = Wall Mounted
6k, 9k & 12k

Component

AH = Air Handler
HP = Condenser

Wall Mounted Units



Indoor Model		KEENHYMAH612A	KEENHYMAH612A	KEENHYMAH612A	KEENHYMAH18AA	
Outdoor Model		KEENHYMHP06AA	KEENHYMHP09AA	KEENHYMHP12AA	KEENHYMHP18AA	
Power supply	Voltage range	V-Hz-Ph	208/230V, 60Hz, 1Ph	208/230V, 60Hz, 1Ph	208/230V, 60Hz, 1Ph	208/230V, 60Hz, 1Ph
		V	187 - 253	187 - 253	187 - 253	187 - 253
National Certification	Cooling Capacity	Btu/h	6,000	9,000	12,000	18,000
	Cooling Input	W	343	529	840	1,200
	Cooling Current	A	2.1	3.1	3.7	5.5
	SEER2	Btu/h/W	35	33.3	29.4	25.6
	EER2	Btu/h/W	17.4	17	14.2	15
	Cooling Capacity Range	Btu/h	3,100 ~ 16,500	3,100 ~ 16,500	3,100 ~ 16,500	12,600 ~ 27,900
	Cooling Input (range)	W	180 ~ 1,380	180 ~ 1,380	180 ~ 1,380	940 ~ 2,280
	Cooling Current (range)	A	1.2 ~ 6.2	1.2 ~ 6.2	1.2 ~ 6.2	4.3 ~ 10.0
	Heating Capacity	Btu/h	9,000	12,000	12,000	20,000
	Heating Input	W	660	977	977	1,332
	Heating Current	A	3.9	4.3	4.3	5.9
	HSPF2-4	Btu/h/W	30	22	14.5	16.2
	HSPF2-5	Btu/h/W	25	16	10	12.9
	COP	W/W	4	3.6	3.6	4.4
	Heating Capacity Range	Btu/h	4,100 ~ 17,200	4,100 ~ 17,200	4,100 ~ 17,200	9,700 ~ 29,700
	Heating Input (range)	W	200 ~ 1,585	200 ~ 1,585	200 ~ 1,585	525 ~ 2,440
	Heating Current (range)	A	1.1 ~ 7.2	1.1 ~ 7.2	1.1 ~ 7.2	2.9 ~ 10.7
	Cooling at 109°F (43°C) Rated capacity	Btu/h	15,000	15,000	15,000	23,300
	Cooling at 5°F (-15°C)	Btu/h	13,000	13,000	13,000	27,000
	Heating at 17°F (-8.33°C) Rated capacity	Btu/h	14,500	14,500	14,500	23,200
	Heating (H42) 5°F (-15°C) Rated capacity	Btu/h	13,500	13,500	13,500	22,600
	Heating at -4°F (-20°C) Rated capacity	Btu/h	10,000	10,000	10,000	16,400
	Heating at -13°F (-25°C) Rated capacity	Btu/h	9,000	9,000	9,000	14,700
	Heating at -22°F (-30°C) Rated capacity	Btu/h	7,500	7,500	7,500	11,900
	Indoor air flow (Turbo/Hi/Mi/Lo/Si)	m /h	950 / 720 / 360 / 260 / 260	950 / 720 / 360 / 260 / 260	950 / 720 / 360 / 260 / 260	1380 / 1050 / 700 / 540 / 540
	Indoor air flow (Turbo/Hi/Mi/Lo/Si)	CFM	559.2 / 423.8 / 211.9 / 153 / 153	559.2 / 423.8 / 211.9 / 153 / 153	559.2 / 423.8 / 211.9 / 153 / 153	812.3 / 618.0 / 412.0 / 317.8 / 317.8
	Indoor noise level (Turbo/Hi/Mi/Lo/Si)	dB(A)	41.5 / 41.5 / 33 / 23 / 19	41.5 / 41.5 / 33 / 23 / 19	41.5 / 41.5 / 33 / 23 / 19	54.5 / 43.5 / 38.5 / 27 / 16
	Outdoor noise level (Hi)	dB(A)	57	57	57	61.5
N.A. Design pressure	PSI	550 / 340	550 / 340	550 / 340	550 / 340	
Outdoor Refrigerant type		R454B	R454B	R454B	R454B	
Outdoor Refrigerant charge	oz	44.09	44.09	44.09	63.49	
Outdoor Additional charge per feet	oz/ft	0.16	0.16	0.16	0.32	
Outdoor Throttle type		EXV	EXV	EXV	EXV + Throttle valve	
Liquid side	mm(inch)	6.35mm (1/4in)	6.35mm (1/4in)	6.35mm (1/4in)	9.52mm (3/8in)	
Gas side	mm(inch)	9.52mm (3/8in)	9.52mm (3/8in)	9.52mm (3/8in)	15.9mm (5/8in)	
Max. refrigerant pipe length	m	25	25	25	50	
Max. Piping Length	ft	82	82	82	164	
Max. difference in level	m	15	15	15	25	
Max. Height Difference	ft	49.2	49.2	49.2	82	
Indoor Operating Temp. Range (Cooling)	°F	60 ~ 90	60 ~ 90	60 ~ 90	60 ~ 90	
Outdoor Operating Temp. Range (Heating)	°F	-22 ~ 75	-22 ~ 75	-22 ~ 75	-22 ~ 75	
Indoor Operating Temp. Range (Heating)	°F	32 - 86	32 - 86	32 - 86	32 - 86	
Outdoor Operating Temp. Range (Cooling)	°F	-22 ~ 122	-22 ~ 122	-22 ~ 122	-22 ~ 122	
Size/Weight	Indoor Item Net/Gross weight	lb	28.22 / 36.82	28.22 / 36.82	28.22 / 36.82	43.65 / 55.56
	Indoor Unit Dimension WxDxH	inch	40.06 x 9.72 x 12.60	40.06 x 9.72 x 12.60	40.06 x 9.72 x 12.60	46.85 x 11.20 x 14.59
	Outdoor Item Net/Gross weight	lb	99.65 / 107.80	99.65 / 107.80	99.65 / 107.80	130.29 / 141.31
	Outdoor Unit Dimension WxDxH	inch	35.04 x 13.46 x 26.50	35.04 x 13.46 x 26.50	35.04 x 13.46 x 26.50	37.24 x 16.14 x 31.89

Floor and Ceiling Units



Indoor Model		KEENFCAH18AA	KEENFCAH24AA	
Outdoor Model		KEENUMHP18AA	KEENUMHP24AA	
Power Supply	Voltage range	208/230V, 60Hz, 1Ph	208/230V, 60Hz, 1Ph	
	V-Hz-Ph	187-253	187-253	
National Certification	Cooling Capacity	Btu/h	17,000	
	Cooling Input	W	1,350	
	Cooling Current	A	8.7	
	SEER2	Btu/h/W	20.4	
	EER2	Btu/h/W	12.5	
	Cooling Capacity Range	Btu/h	7,400 ~ 19,200	
	Cooling Input (range)	W	500 ~ 1,670	
	Cooling Current (range)	A	2.5 ~ 7.4	
	Heating Capacity	Btu/h	19,000	
	Heating Input	W	1,814	
	Heating Current	A	11	
	HSPF2-4	Btu/h/W	10.3	
	HSPF2-5	Btu/h/W	8.2	
	COP	W/W	3.07	
	Heating Capacity Range	Btu/h	8,300 ~ 20,700	
	Heating Input (range)	W	525 ~ 1,830	
	Heating Current (range)	A	2.8 ~ 8.0	
	Cooling at 109°F (43°C) Rated capacity	Btu/h	14,500	
	Cooling at 5°F (-15°C)	Btu/h	19,700	
	Heating at 17°F (-8.33°C) Rated capacity	Btu/h	20,200	
	Heating at 5°F (-15°C) Rated capacity	Btu/h	17,000	
	Heating at -4°F (-20°C) Rated capacity	Btu/h	14,800	
	Heating at -13°F (-25°C) Rated capacity	Btu/h	10,900	
	Heating at -22°F (-30°C) Rated capacity	Btu/h	8,400	
	Indoor air flow (Turbo/Hi/Mi/Lo/Si)	m /h	980 / 930 / 825 / 715 / N/A	
	Indoor air flow (Turbo/Hi/Mi/Lo/Si)	CFM	576.8 / 547.4 / 485.6 / 420.8 / N/A	
	Indoor noise level (Turbo/Hi/Mi/Lo/Si)	dB(A)	45 / 42.5 / 39.5 / 30.5 / 29	
	Outdoor noise level (Hi)	dB(A)	58	
	Basic Parameter (NC)	N.A. Design pressure	PSI	550 / 340
		Outdoor Refrigerant type		R454B
Outdoor Refrigerant charge		oz	55.38	
Outdoor Additional charge		oz/ft	0.16	
Outdoor Throttle type			EXV+Throttle valve	
Liquid side		mm(inch)	6.35mm (1/4in)	
Gas side		mm(inch)	12.7mm (1/2in)	
Max. refrigerant pipe length		m	30	
Max. Piping Length		ft	98.4	
Max. difference in level		m	20	
Max. Height Difference		ft	65.6	
Indoor Operating Temp. Range (Cooling)		°F	60~90	
Outdoor Operating Temp. Range(Cooling)		°F	-22~122	
Indoor Operating Temp. Range (Heating)		°F	32~86	
Outdoor Operating Temp. Range (Heating)		°F	-22~75	
Size/Weight	Indoor Item Net/Gross weight	lb	58.42 / 70.55	
	Indoor Unit Dimension WxDxH	inch	42.05 x 26.57 x 9.25	
	Outdoor Item Net/Gross weight	lb	99.87 / 107.80	
	Outdoor Unit Dimension WxDxH	inch	35.04 x 13.46 x 26.50	

Ceiling Cassettes



Indoor Model			KEENOWAH06AA	KEENOWAH09AA	KEENOWAH12AA	KEENOWAH18AA	
Outdoor Model			KEENUMHP06AA	KEENUMHP09AA	KEENUMHP12AA	KEENUMHP18AA	
Power supply	Voltage range	V-Hz-Ph	208/230V, 60Hz, 1Ph	208/230V, 60Hz, 1Ph	208/230V, 60Hz, 1Ph	208/230V, 60Hz, 1Ph	
		V	187 - 253	187 - 253	187-253	187 - 253	
National Certification	Cooling Capacity	Btu/h	6,500	9,000	12,000	16,700	
	Cooling Input	W	427	610	923	1,337	
	Cooling Current	A	3	4.5	4.3	8.3	
	SEER2	Btu/h/W	22	24	23	20.6	
	EER2	Btu/h/W	15	14.6	13	12.5	
	Cooling Capacity Range	Btu/h	3,600 ~ 11,200	4,000 ~ 12,900	4,000 ~ 13,900	5,700 ~ 19,000	
	Cooling Input (range)	W	155 ~ 680	147 ~ 1,150	147 ~ 1,230	550 ~ 1,700	
	Cooling Current (range)	A	1.2 ~ 4.3	1.2 ~ 5.1	1.2 ~ 5.4	3.7 ~ 8.3	
	Heating Capacity	Btu/h	7,400	10,900	12,500	20,000	
	Heating Input	W	578	860	1,030	1,950	
	Heating Current	A	4	3.8	4.6	12	
	HSPF2-4	Btu/h/W	12	12.1	10	12.2	
	HSPF2-5	Btu/h/W	10.3	9.5	8	9.2	
	COP	W/W	3.75	3.71	3.56	3.01	
	Heating Capacity Range	Btu/h	3,700 ~ 11,500	3,800 ~ 13,900	4,600 ~ 15,200	8,900 ~ 22,000	
	Heating Input (range)	W	290 ~ 950	300 ~ 1,350	362 ~ 1,377	850 ~ 1,990	
	Heating Current (range)	A	1.4 ~ 4.2	1.5 ~ 5.9	1.7 ~ 6.1	5.6 ~ 12	
	Cooling at 109°F (43°C) Rated capacity	Btu/h	11,200	11,200	11,900	14,500	
	Cooling at 5°F (-15°C)	Btu/h	12,200	12,500	13,200	18,800	
	Heating at 17°F (-8.33°C) Rated capacity	Btu/h	9,500	11,900	11,900	18,800	
	Heating at 5°F (-15°C) Rated capacity	Btu/h	8,100	10,600	11,500	17,500	
	Heating at -4°F (-20°C) Rated capacity	Btu/h	6,400	8,600	8,600	14,500	
	Heating at -13°F (-25°C) Rated capacity	Btu/h	5,300	6,300	6,300	11,000	
	Heating at -22°F (-30°C) Rated capacity	Btu/h	4,100	5,100	5,100	9,500	
	Indoor air flow (Turbo/Hi/Mi/Lo/Si)	m /h	580 / 500 / 440 / 400 / 400	580 / 500 / 440 / 400 / 400	600 / 530 / 480 / 420 / 300	680 / 598 / 510 / 352 / 352	
	Indoor air flow (Turbo/Hi/Mi/Lo/Si)	CFM	341.4 / 294.3 / 259.0 / 235.4 / 235.4	341.4 / 294.3 / 259.0 / 235.4 / 235.4	353.2 / 312.0 / 282.5 / 247.2 / 176.6	400.2 / 352.0 / 300.2 / 207.2 / 207.2	
	Indoor noise level (Turbo/Hi/Mi/Lo/Si)	dB(A)	46.5 / 37.5 / 35.5 / 26 / 23.5	38 / 38 / 36 / 33 / 24	41 / 41 / 37 / 33 / 24	44 / 44 / 41.5 / 31 / 26	
	Outdoor noise level (Hi)	dB(A)	54	55	56	59	
Basic Parameter (NC)	N.A. Design pressure	PSI	550 / 340	550 / 340	550 / 340	550 / 340	
	Outdoor Refrigerant type		R454B	R454B	R454B	R454B	
	Outdoor Refrigerant charge	oz	32.45	35.27	35.27	55.38	
	Outdoor Additional charge per feet	oz/ft	0.16	0.16	0.16	0.16	
	Outdoor Throttle type		EXV	EXV	EXV	EXV + Throttle valve	
	Liquid side	mm(inch)	6.35mm (1/4in)	6.35mm (1/4in)	6.35mm (1/4in)	6.35mm (1/4in)	
	Gas side	mm(inch)	9.52mm (3/8in)	9.52mm (3/8in)	9.52mm (3/8in)	12.7mm (1/2in)	
	Max. refrigerant pipe length	m	25	25	25	30	
	Max. Piping Length	ft	82.02	82.02	82.02	98.43	
	Max. difference in level	m	15	15	15	20	
	Max. Height Difference	ft	49.21	49.21	49.21	65.62	
	Indoor Operating Temp. Range (Cooling)	°F	60~90	60~90	60~90	60~90	
	Outdoor Operating Temp. Range (Heating)	°F	-22~122	-22~122	-22~122	-22~122	
	Indoor Operating Temp. Range (Heating)	°F	32~86	32~86	32~86	32~86	
	Outdoor Operating Temp. Range (Cooling)	°F	-22~75	-22~75	-22~75	-22~75	
	Size/Weight	Indoor Item Net/Gross weight	lb	45.19 / 82.45	45.19 / 82.45	45.19 / 82.45	45.19 / 82.89
		Indoor Unit Dimension WxDxH	inch	50.31 x 13.19 x 8.98	50.31 x 13.19 x 8.98	50.31 x 13.19 x 8.98	50.31 x 13.19 x 8.98
Outdoor Item Net/Gross weight		lb	62.17 / 67.68	72.75 / 78.70	72.75 / 78.70	99.87 / 107.80	
Outdoor Unit Dimension WxDxH		inch	30.12 x 11.93 x 21.85	31.69 x 12.99 x 21.81	31.69 x 12.99 x 21.81	35.04 x 13.46 x 26.50	

Hyper Heat Multi-Zone Condensers



Outdoor Model			KEENHYZHP20AA	KEENHYZHP27AA	KEENHYZHP36AA	KEENHYZHP49AA	KEENHYZHP55AA
Power Supply	Power Supply (Volts; Hz; Phase)	V-Hz-Ph	208/230V, 60Hz, 1Ph	208/230V, 60Hz, 1Ph	208/230V, 60Hz, 1Ph	208/230V, 60Hz, 1Ph	208/230V, 60Hz, 1Ph
	Voltage Range	V	187 - 253	187 - 253	187 - 253	187 - 253	187 - 253
National Certification	Cooling Capacity	Btu/h	19,000	27,000	36,000	47,000	51,000
	Cooling Input	W	1,265	2,125	2,750	3,917	4,250
	Cooling Current	A	5.6	9.5	12	17.3	18.5
	SEER2	Btu/h/W	25	23	23	23	22.2
	EER2	Btu/h/W	15	12.5	13	12	12
	Cooling Capacity Range	Btu/h	5,400 ~ 28,000	7,200 ~ 37,000	9,000 ~ 43,000	12,000 ~ 57,000	19,000 ~ 59,000
	Cooling Input (range)	W	400 ~ 2,250	500 ~ 3,620	600 ~ 4,000	800 ~ 5,400	1,200 ~ 5,400
	Cooling Current (range)	A	3.5 ~ 10	4.0 ~ 16	5.2 ~ 17.8	7.0 ~ 24	10.5 ~ 24
	Heating Capacity	Btu/h	20,000	27,000	36,000	49,000	55,000
	Heating Input	W	1,465	2,082	2,638	3,881	4,605
	Heating Current	A	6.5	9.1	11.5	17.3	20.1
	HSPF2-4	Btu/h/W	10.4	10.5	10.7	11	10.5
	HSPF2-5	Btu/h/W	8.5	8.5	8.5	9	8.5
	COP	W/W	4	3.8	4	3.7	3.5
	Heating Capacity Range	Btu/h	5,700 ~ 27,000	8,400 ~ 36,000	10,000 ~ 44,000	13,000 ~ 57,000	20,000 ~ 59,000
	Heating Input (range)	W	350 ~ 2,300	500 ~ 3,400	600 ~ 3,750	800 ~ 5,200	1,200 ~ 5,200
	Heating Current (range)	A	3 ~ 10	4 ~ 15	5.2 ~ 16.6	7 ~ 23	10.5 ~ 23
	Cooling Capacity at 109°F (43°C)	Btu/h	19,600	32,000	39,000	43,000	45,000
	Cooling Capacity at 5°F (-15°C)	Btu/h	30,000	36,000	47,500	60,000	74,000
	Heating Capacity at 17°F (-8.33°C)	Btu/h	19,000	28,000	42,000	51,500	52,000
	Heating Capacity at 5°F (-15°C)	Btu/h	19,000	27,000	36,000	47,000	47,000
	Heating Capacity at -4°F (-20°C)	Btu/h	15,000	21,000	34,400	36,000	38,500
	Heating Capacity at -13°F (-25°C)	Btu/h	12,000	17,000	28,000	30,000	32,000
	Heating Capacity at -22°F (-30°C)	Btu/h	10,000	14,000	22,400	24,600	26,400
Outdoor noise level (Hi)	dB(A)	62	61	65	65	65	
N.A. Design pressure	PSI	550 / 340	550 / 340	550 / 340	550 / 340	550 / 340	
Outdoor Refrigerant type		R454B	R454B	R454B	R454B	R454B	
Outdoor Refrigerant charge	ozs	78.31	120.63	134.04	151.68	151.68	
Outdoor Additional refrigerant per ft	oz/ft	0.16	0.16	0.16	0.16	0.16	
Outdoor Throttle type		EXV+Capillary	EXV	EXV	EXV	EXV	
Liquid side	mm(inch)	3 x 6.35mm (3 x 1/4in)	4 x 6.35mm (4 x 1/4in)	5 x 6.35mm (5 x 1/4in)	6 x 6.35mm (6 x 1/4in)	6 x 6.35mm (6 x 1/4in)	
Gas side	mm(inch)	3 x 9.52mm (3 x 3/8in)	3 x 9.52mm + 1 x 12.7mm (3 x 3/8in + 1 x 1/2in)	3 x 9.52mm + 2 x 12.7mm (3 x 3/8in + 2 x 1/2in)	4 x 9.52mm + 2 x 12.7mm (4 x 3/8in + 2 x 1/2in)	4 x 9.52mm + 2 x 12.7mm (4 x 3/8in + 2 x 1/2in)	
Max. Length per each indoor unit	m	30	35	35	35	35	
Max. Length per each indoor unit	ft	98.4	114.8	114.8	114.8	114.8	
Total Maximum Piping Length per system	m	60	80	80	80	80	
Total Maximum Piping Length per system	ft	196.8	262.4	262.4	262.4	262.4	
Max. difference in level	m	15	15	15	15	15	
Max. Height Difference	ft	49.2	49.2	49.2	49.2	49.2	
Indoor Operating Temp. Range (Cooling)	°F	60 ~ 90	60 ~ 90	60 ~ 90	60 ~ 90	60 ~ 90	
Outdoor Operating Temp. Range (Cooling)	°F	-22 ~ 122	-22 ~ 122	-22 ~ 122	-22 ~ 122	-22 ~ 122	
Indoor Operating Temp. Range (Heating)	°F	32 - 86	32 - 86	32 - 86	32 - 86	32 - 86	
Outdoor Operating Temp. Range (Heating)	°F	-22 ~ 75	-22 ~ 75	-22 ~ 75	-22 ~ 75	-22 ~ 75	
Size/Weight	Outdoor Item Net/Gross weight	lb	137.35 / 148.15	168.43 / 179.67	211.86 / 244.71	246.47 / 276.68	246.47 / 276.68
	Outdoor Unit Dimension WxDxH	inch	37.24 x 16.14 x 31.89	37.24 x 16.14 x 31.89	38.58 x 16.34 x 38.39	37.48 x 16.34 x 52.48	37.48 x 16.34 x 52.48

Ultra Heat Ducted Air Handlers



Indoor Model		KEENULDAH18AA	KEENULDAH24AA	KEENULDAH36AA	KEENULDAH48AA	KEENULDAH60AA		
Outdoor Model		KEENHYDHP18AA	KEENHYDHP24AA	KEENULDHP36AA	KEENHYDHP48AA	KEENHYDHP60AA		
Basic Parameter	IDU Power Supply (Volts; Hz; Phase)	115/208/230V, 60Hz, 1Ph	115/208/230V, 60Hz, 1Ph	115/208/230V, 60Hz, 1Ph	115/208/230V, 60Hz, 1Ph	115/208/230V, 60Hz, 1Ph		
	ODU Power Supply (Volts; Hz; Phase)	208/230V, 60Hz, 1Ph	208/230V, 60Hz, 1Ph	208/230V, 60Hz, 1Ph	208/230V, 60Hz, 1Ph	208/230V, 60Hz, 1Ph		
National Certification	Cooling Capacity	Btu/h	18,000	24,000	36,000	48,000	54,000	
	Cooling Input	W	1,440	2,150	3,000	4,266	4,851	
	Cooling Current	A	9.3	9.1	13.4	18	20.5	
	SEER2	Btu/h/W	19	18.6	17.7	17.5	17.5	
	EER2	Btu/h/W	12.5	12	12	12	12	
	Cooling Capacity Range	Btu/h	4,600 ~ 23,100	6,400 ~ 28,700	14,800 ~ 41,700	18,000 ~ 52,000	11,400 ~ 60,000	
	Cooling Input (range)	W	530 ~ 2,020	830 ~ 2,850	1180 ~ 3,930	1300 ~ 4,870	1540 ~ 6,720	
	Cooling Current (range)	A	4.1 ~ 8.9	3.7 ~ 12.5	5.5 ~ 17.4	6.1 ~ 21.6	7.2 ~ 29.7	
	Heating Capacity	Btu/h	18,000	24,000	36,000	48,000	55,000	
	Heating Input	W	1,465	2,150	2,930	4,521	5,015	
	Heating Current	A	9.4	9.1	13.3	18.9	21.5	
	HSPF2-4	Btu/h/W	10.1	10	10	9.5	9.5	
	HSPF2-5	Btu/h/W	8.5	8.1	8	7.7	7.7	
	COP	W/W	3.6	3.49	3.6	3.28	3.35	
	Heating Capacity Range	Btu/h	5,700 ~ 23,100	6,700 ~ 29,100	10,700 ~ 38,400	13,500 ~ 52,000	8,600 ~ 60,000	
	Heating Input (range)	W	410 ~ 1,900	405 ~ 2,450	645 ~ 3,110	925 ~ 3,880	775 ~ 5,720	
	Heating Current (range)	A	2.2 ~ 8.4	2.2 ~ 10.8	3.5 ~ 13.8	5.0 ~ 17.3	4.2 ~ 26.7	
	Cooling Capacity at 109°F (43°C)	Btu/h	17,900	23,800	34,600	45,500	53,000	
	Cooling Capacity at 5°F (-15°C)	Btu/h	23,600	25,200	39,800	50,000	54,000	
	Heating Capacity at 17°F (-8.33°C)	Btu/h	19,500	22,800	33,000	48,000	54,000	
	Heating Capacity at 5°F (-15°C)	Btu/h	18,600	20,600	32,600	48,000	54,000	
	Heating Capacity at -4°F (-20°C)	Btu/h	16,400	17,800	27,600	39,500	49,500	
	Heating Capacity at -13°F (-25°C)	Btu/h	14,100	14,800	22,900	32,400	44,000	
	Heating Capacity at -22° (-30°C)	Btu/h	11,800	12,100	19,200	27,200	37,300	
	Indoor air flow (Turbo/Hi/Mi/Lo/Si)	m /h	1,050 / 980 / 900 / 830 / N/A	1,400 / 1290 / 1180 / 1070 / N/A	2,100 / 1950 / 1800 / 1650 / N/A	2,720 / 2450 / 2150 / 1850 / N/A	3,060 / 2,800 / 2,550 / 2,100 / N/A	
	Indoor air flow (Turbo/Hi/Mi/Lo/Si)	CFM	618.0 / 576.8 / 529.7 / 488.5 / N/A	824.0 / 759.3 / 694.5 / 629.8 / N/A	1,236.1 / 1,147.8 / 1,059.5 / 971.2 / N/A	1,601. / 1,442.1 / 1,265.5 / 1,088.9 / N/A	1,801.1 / 1,648.1 / 1,500.9 / 1,236.1 / N/A	
	Indoor noise level (Turbo/Hi/Mi/Lo/Si)	dB(A)	N/A / 42.5 / 40.5 / 37 / N/A	N/A / 47.5 / 44 / 33 / N/A	N/A / 49.5 / 48 / 31.5 / N/A	N/A / 53 / 49.5 / 33.5 / N/A	60 / 57 / 54.5 / 37 / N/A	
Outdoor noise level (Hi)	dB(A)	57	59	63	65	65		
Basic Parameter (NC)	Design pressure	PSI	550 / 340	550 / 340	550 / 340	550 / 340	550 / 340	
	Outdoor Refrigerant type		R454B	R454B	R454B	R454B	R454B	
	Outdoor Refrigerant charge	oz	74.08	74.08	126.99	134.04	183.42	
	Outdoor Additional charge	oz/ft	0.7	0.7	0.7	0.7	0.7	
	Outdoor Throttle type		EXV	EXV	EXV	EXV	EXV	
	Liquid side	mm(inch)	9.52mm (3/8in)	9.52mm (3/8in)	9.52mm (3/8in)	9.52mm (3/8in)	9.52mm (3/8in)	
	Gas side	mm(inch)	19mm (3/4in)	19mm (3/4in)	19mm (3/4in)	19mm (3/4in)	19mm (3/4in)	
	Max. refrigerant pipe length	m	50	50	65	75	75	
	Max. Piping Length	ft	164	164	213.2	246	246	
	Max. difference in level	m	25	25	30	30	30	
	Max. Height Difference	ft	82	82	98.4	98.4	98.4	
	Indoor Operating Temp. Range (Cooling)	°F	60 ~ 90	60 ~ 90	60 ~ 90	60 ~ 90	60 ~ 90	
	Outdoor Operating Temp. Range (Cooling)	°F	-22 ~ 122	-22 ~ 122	-22 ~ 122	-22 ~ 122	-22 ~ 122	
	Indoor Operating Temp. Range (Heating)	°F	32 - 86	32 - 86	32 - 86	32 - 86	32 - 86	
	Outdoor Operating Temp. Range (Heating)	°F	-22 ~ 75	-22 ~ 75	-22 ~ 75	-22 ~ 75	-22 ~ 75	
	Size/Weight	Indoor Net/Gross Weight	lb	123.02 / 154.76	123.02 / 154.76	149.25 / 182.10	186.51 / 232.14	188.05 / 238.32
		Indoor Unit Dimension WxDxH	inch	21 x 14 x 49	21 x 14 x 49	21 x 17 x 54	21 x 17 x 54	21 x 17 x 54
Outdoor Net/Gross Weight		lb	101.41 / 109.13	102.29 / 109.13	166.67 / 176.37	232.59 / 201.50	242.95 / 275.13	
Outdoor Unit Dimension WxDxH		inch	35 x 13 x 26	35 x 13 x 26	37 x 16 x 31	38 x 16 x 38	37 x 16 x 52	

Hyper Heat Ducted Air Handlers




Indoor Model		KEENHYDAH18AA	KEENHYDAH24AA	KEENHYDAH36AA	KEENHYDAH48AA	KEENHYDAH60AA	
Outdoor Model		KEENHYDHP18AA	KEENHYDHP24AA	KEENHYDHP36AA	KEENHYDHP48AA	KEENHYDHP60AA	
Power Supply	IDU Power Supply (Volts; Hz; Phase)	V-Hz-Ph	115 / 208 / 230V, 60Hz, 1Ph	115 / 208 / 230V, 60Hz, 1Ph	115 / 208 / 230V, 60Hz, 1Ph	115 / 208 / 230V, 60Hz, 1Ph	115 / 208 / 230V, 60Hz, 1Ph
	ODU Power Supply (Volts; Hz; Phase)	V	208 / 230V, 60Hz, 1Ph	208 / 230V, 60Hz, 1Ph	208 / 230V, 60Hz, 1Ph	208 / 230V, 60Hz, 1Ph	208 / 230V, 60Hz, 1Ph
National Certification	Cooling Capacity	Btu/h	18,000	23,000	36,000	48,000	54,000
	Cooling Input	W	1,445	1,965	3,076	4,690	5,400
	Cooling Current	A	6.6	9	13.4	20	23.3
	SEER2	Btu/h/W	19	18.3	17.4	16.5	16
	EER2	Btu/h/W	12.5	11.7	11.7	10.5	10
	Cooling Capacity Range	Btu/h	5,600 ~ 22,000	7,200 ~ 27,000	9,700 ~ 42,000	15,600 ~ 51,000	11,400 ~ 56,300
	Cooling Input (range)	W	440 ~ 1,950	530 ~ 2,870	820 ~ 4,440	1,345 ~ 5,180	1,540 ~ 6,430
	Cooling Current (range)	A	2 ~ 9.5	3.4 ~ 12.6	5.6 ~ 19.7	6.4 ~ 22.9	7.2 ~ 28.4
	Heating Capacity	Btu/h	19,000	24,000	37,000	50,000	56,000
	Heating Input	W	1,740	2,112	3,012	4,750	5,300
	Heating Current	A	7.6	9.5	13.1	20.5	23.1
	HSPF2-4	Btu/h/W	9.7	10	10.2	9.5	9
	HSPF2-5	Btu/h/W	8	8	8.6	8	8
	COP	W/W	3.2	3.33	3.6	3.4	3.1
	Heating Capacity Range	Btu/h	6,000 ~ 22,000	7,100 ~ 30,000	11,000 ~ 48,000	15,500 ~ 57,300	8,100 ~ 64,500
	Heating Input (range)	W	500 ~ 1,950	440 ~ 2,730	665 ~ 4,370	1,045 ~ 5,200	725 ~ 5,970
	Heating Current (range)	A	3.2 ~ 9.5	2.40 ~ 12.0	3.6 ~ 19.4	5.7 ~ 23.1	4.0 ~ 30.6
	Cooling Capacity at 109 °F (43°C)	Btu/h	17,400	25,000	35,000	41,200	50,900
	Cooling Capacity at 5°F (-15°C)	Btu/h	23,400	25,600	40,000	52,000	54,000
	Heating Capacity at 17°F (-8.33°C)	Btu/h	21,600	22,000	41,000	48,000	50,400
	Heating Capacity at 5°F (-15°C)	Btu/h	18,000	21,600	39,000	46,000	52,000
	Heating Capacity at -4°F (-20°C)	Btu/h	16,600	17,300	36,000	40,700	46,700
	Heating Capacity at -13°F (-25°C)	Btu/h	14,000	14,400	30,800	34,200	41,600
	Heating Capacity at -22°F (-30°C)	Btu/h	11,000	12,000	27,800	25,900	30,900
	Indoor air flow (Turbo/Hi/Mi/Lo/Si)	m /h	1,050 / 980 / 900 / 830 / N/A	1,400 / 1290 / 1180 / 1070 / N/A	2,020 / 1840 / 1650 / 1470 / N/A	2,720 / 2,500 / 2,180 / 1,860 / N/A	3,070 / 2,690 / 2,310 / 1,930 / N/A
	Indoor air flow (Turbo/Hi/Mi/Lo/Si)	CFM	618.0 / 576.8 / 529.7 / 488.5 / N/A	824.0 / 759.3 / 694.5 / 629.8 / N/A	1,189.0 / 1,083.0 / 971.2 / 865.2 / N/A	1,601.0 / 1,471.5 / 1,283.1 / 1,094.8 / N/A	1,807.0 / 1,583.3 / 1,359.7 / 1,136.0 / N/A
	Indoor noise level (Turbo/Hi/Mi/Lo/Si)	dB(A)	N/A / 41 / 39 / 33 / N/A	N/A / 44 / 42 / 28 / N/A	49 / 48.0 / 45.5 / 25.5 / N/A	N/A / 52 / 50 / 34 / N/A	54.5 / 52 / 49.5 / 34.5 / N/A
	Outdoor noise level (Hi)	dB(A)	59	60	62.5	65	65
	N.A. Design pressure	PSI	550 / 340	550 / 340	550 / 340	550 / 340	550 / 340
	Outdoor Refrigerant type		R454B	R454B	R454B	R454B	R454B
	Liquid side	mm (inch)	9.52mm (3/8in)	9.52mm (3/8in)	9.52mm (3/8in)	9.52mm (3/8in)	9.52mm (3/8in)
	Gas side	mm (inch)	19mm (3/4in)	19mm (3/4in)	19mm (3/4in)	19mm (3/4in)	19mm (3/4in)
Max. refrigerant pipe length	m	30	50	75	75	75	
Max. Piping Length	ft	98.4	164	246	246	246	
Max. difference in level	m	20	25	30	30	30	
Max. Height Difference	ft	65.6	82	98.4	98.4	98.4	
Size/Weight	Indoor Unit Net/Gross weight	lb	105.82 / 126.76	105.60 / 127.43	129.41 / 153.88	162.92 / 190.92	162.92 / 190.92
	Indoor Unit Dimension WxDxH	inch	21.02 x 17.52 x 45.00	21.02 x 17.52 x 45.00	21.02 x 21.02 x 49.02	21.02 x 24.49 x 52.99	21.02 x 24.49 x 52.99
	Outdoor Unit Net/Gross weight	lb	101.41 / 109.13	102.29 / 109.13	204.15 / 235.23	201.06 / 232.36	242.95 / 275.13
	Outdoor Unit Dimension WxDxH	inch	35.04 x 13.46 x 26.50	35.04 x 13.46 x 26.50	38.58 x 16.34 x 38.39	38.58 x 16.34 x 38.39	37.48 x 16.34 x 52.48

Pancake Coil Ducted Units



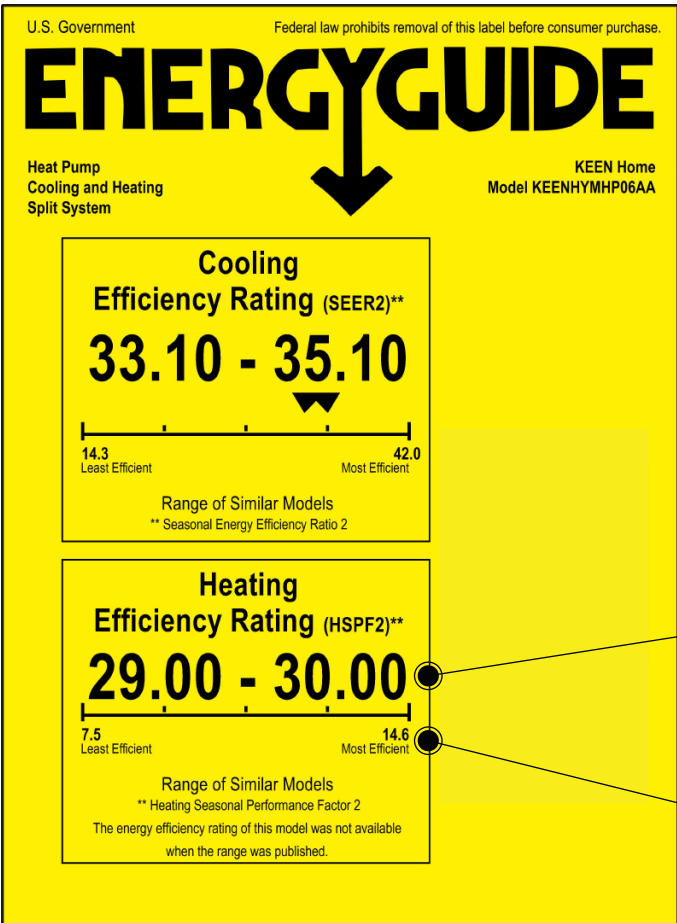
Indoor Model		KEENSTPAH18AA	KEENSTPAH24AA	KEENSTPAH36AA	
Outdoor Model		KEENHYDHP18AA	KEENHYDHP24AA	KEENHYDHP36AA	
Power Supply	IDU Power Supply (Volts; Hz; Phase)	V-Hz-Ph	115/208/230, 60Hz, 1Ph	115/208/230, 60Hz, 1Ph	115/208/230, 60Hz, 1Ph
	ODU Power Supply (Volts; Hz; Phase)	V	208/230, 60Hz, 1Ph	208/230, 60Hz, 1Ph	208/230, 60Hz, 1Ph
National Certification	Cooling Capacity	Btu/h	18,000	24,000	36,000
	Cooling Input	W	2	2,222	3,529
	Cooling Current	A	10	9.8	15.3
	SEER2	Btu/h/W	16.8	17.5	15.4
	EER2	Btu/h/W	12	10.8	10.2
	Cooling Capacity Range	Btu/h	6,000 ~ 20,000	7,400 ~ 27,000	11,100 ~ 40,000
	Cooling Input (range)	W	600 ~ 2,000	700 ~ 2,900	800 ~ 4,350
	Cooling Current (range)	A	2.5 ~ 10.5	4.5 ~ 13	5.7 ~ 19.4
	Heating Capacity	Btu/h	19,000	26,000	37,000
	Heating Input	W	1,590	2,209	3,286
	Heating Current	A	10.2	9.8	14.3
	HSPF2-4	Btu/h/W	10.5	9.2	9.8
	HSPF2-5	Btu/h/W	8.5	7.5	8
	COP	W/W	3.5	3.45	3.3
	Heating Capacity Range	Btu/h	6,600 ~ 22,800	9,200 ~ 32,200	10,700 ~ 45,000
	Heating Input (range)	W	500 ~ 1,950	600 ~ 2,750	750 ~ 4,460
	Heating Current (range)	A	2.8 ~ 10.5	3 ~ 12	4.1 ~ 19.8
	Cooling Capacity at 109°F (43°C)	Btu/h	17,500	23,600	34,200
	Cooling Capacity at 5°F (-15°C)	Btu/h	20,800	24,600	39,000
	Heating Capacity at 17°F (-8.33°C)	Btu/h	23,000	23,000	38,000
	Heating Capacity at 5°F (-15°C)	Btu/h	19,000	20,000	36,000
	Heating Capacity at -4°F (-20°C)	Btu/h	19,100	15,600	36,000
	Heating Capacity at -13°F (-25°C)	Btu/h	16,000	15,000	30,000
	Heating Capacity at -22°F (-30°C)	Btu/h	9,600	11,500	27,000
	Indoor air flow (Turbo/Hi/Mi/Lo/Si)	m ³ /h	1,020 / 960 / 900 / 830 / 830	1,400 / 1,290 / 1,100 / 1,070 / 1,070	2,020 / 1,840 / 1,650 / 1,470 / 1,470
	Indoor air flow (Turbo/Hi/Mi/Lo/Si)	CFM	600 / 565 / 530 / 489 / 489	824 / 759 / 647 / 630 / 630	1,189 / 1,083 / 971 / 865 / 865
	Indoor noise level (Turbo/Hi/Mi/Lo/Si)	dB(A)	55.5 / 55.5 / 52.5 / 50.5 / 50.5	56.5 / 56.5 / 53.5 / 51.5 / 51.5	59.5 / 59.5 / 57 / 48 / 48
	Outdoor noise level (Hi)	dB(A)	59	59	65
Basic Parameter (NC)	N.A. Design pressure	PSI	550 / 340	550 / 340	550 / 340
	Outdoor Refrigerant type		R454B	R454B	R454B
	Outdoor Refrigerant charge	oz	74.08	74.08	126.99
	Outdoor Additional charge per feet	oz/ft	0.7	0.7	0.7
	Outdoor Throttle type		EXV	EXV	EXV
	Liquid side	mm(inch)	9.52mm (3/8in)	9.52mm (3/8in)	9.52mm (3/8in)
	Gas side	mm(inch)	19mm (3/4in)	19mm (3/4in)	19mm (3/4in)
	Max. refrigerant pipe length	m	30	50	75
	Max. Piping Length	ft	98	164	246
	Max. difference in level	m	20	25	30
Size/Weight	Max. Height Difference	ft	66	82	98
	Indoor Unit Net/Gross weight	lb	118 / 127.87	127.87 / 138.89	143.3 / 156.75
	Indoor Unit Dimension WxDxH	inch	43.23 x 23.33 x 10.93	49.13 x 23.33 x 10.93	62.13 x 23.33 x 10.93
	Outdoor Unit Net/Gross weight	lb	101.41 / 109.13	101.41 / 109.13	204.15 / 235.23
Outdoor Unit Dimension WxDxH	inch	35.04 x 13.46 x 26.5	35.04 x 13.46 x 26.5	38.58 x 16.34 x 38.39	

	 KEEN™	Mitsubishi	LG
Model #	KEENHYMHP06AA	MUZ-FX06NLHZ	KUSAL091A
SEER2	35	35	27
HSPF2 Region IV	30	13	13.5
Rated BTU Output @ 5°F	13,500	12,600	12,000
Rated BTU Output @ 47°F	9,000	9,000	11,000
Max Lineset Distance	82 ft	65 ft	65 ft
Minimum Continuous Operating Temperature	-30°F	-22°F	-31°F
Standard Warranty	10 Years PARTS / COMPRESSOR + LABOR	5/7 Years PARTS / COMPRESSOR	5/7 Years PARTS / COMPRESSOR
Refrigerant	R454B	R454B	R32

EnergyGuide Certification

Every KEEN Heat Pump is tested and certified under the U.S. Federal Trade Commission and Department of Energy's **EnergyGuide labeling program**. This **trusted label** helps homeowners compare the energy efficiency of different appliances.

EnergyGuide sticker for KEEN Single Zone System



Official Federal Program

Issued under the U.S. Department of Energy to help consumers compare appliance efficiency.

Standardized Testing

All data comes from laboratory tests conducted according to DOE and AHRI (Air-Conditioning, Heating, and Refrigeration Institute) standards.



The KEEN Heat Pump sticker above shows an incredible **heating efficiency rating (HSPF2) of 29 - 30**. This means that the KEEN Single-Zone Heat Pump is twice as efficient compared to EnergyGuide's current *Most Efficient* models, rated at HSPF2 of 14.6.



Contact

Sales@Sgegroup.com
SGESolar.com/Keen

508-377-40

