

12

Comfortmaker®

Air Conditioning & Heating

12+ SEER Heat Pump



Representative photo only, some models may vary in appearance.

1½ THRU 5 TONS SPLIT SYSTEM

REFRIGERATION CIRCUIT

- Suction line accumulator on all models
- Integrated solid-state time/temperature defrost and compressor anticycle timer
- Soft defrost change over
- Low pressure cut out switch
- Large biflow filter-driers

BUILT TO LAST

- Galvanized steel cabinet with integral base rails
- Triple step painting process
- Copper tube / aluminum fin coil
- Precoated condenser fins
- Coated inlet grilles
- Ten (10) year limited warranty on compressor
- Standard 5 Year limited warranty on parts

EASY TO INSTALL AND SERVICE

- Service valves on all models with 3½" stubs
- Fan motor in-line disconnect plug
- Factory charged with R-22, condenser plus 15 Ft. lines
- External high and low refrigerant service ports
- Top discharge design for quieter operation



Rated in accordance with ARI Standard 240. Certification applies only when used with proper components as listed with ARI.

International Comfort Products Corporation, LLC
651 Heil-Quaker Ave.
Lewisburg, Tennessee 37091

RESIDENTIAL AND COMMERCIAL SYSTEMS • SPLIT SYSTEMS • PACKAGED AIR CONDITIONERS • COMBINATION GAS / ELECTRIC UNITS • HEAT PUMPS • AIR HANDLERS • MANUFACTURED HOME AIR CONDITIONERS • GAS, OIL AND ELECTRIC FURNACES

Base Specifications

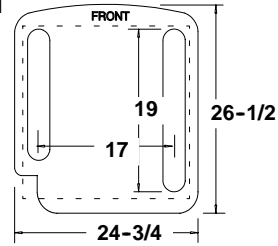
Model Number	NHP218AKC	NHP224AKC	NHP230AKC	NHP236AKC	NHP242AKC	NHP248AKC	NHP260AKC
	NHP218GKC	NHP224GKC	NHP230GKC	NHP236GKC	NHP242GKC	NHP248GKC	NHP260GKC
Max. Cooling Capacity (Btuh)	17000	22600	28400	34000	39000	43500	53500
Max. Heating Capacity (Btuh)	18000	22800	29000	34000	40000	46000	57000
SEER Label	12	12	12	12	12	12	11.15
Sound Rating Decibels	72	74	76	77	78	78	78
Fan HP / Type / Speeds	1/12-PSC-1	1/5-PSC-1	1/3-PSC-1	1/3-PSC-1	1/3-PSC-1	1/3-PSC-1	1/3-PSC-1
Fan RPM / Max. CFM	1100 / 2250	1100 / 2250	1100 / 2850	1100 / 2850	1100 / 2900	1100 / 2900	1100 / 2900
Coil Face Area (Sq Ft)	16.6	18.9	16.6	21.3	21.3	21.3	21.3
Coil Rows / Fins Per Inch	1 / 22	1 / 22	2 / 20	2 / 20	2 / 22	2 / 22	2 / 22
Line Connection Suction I.D. Size (In.)	3/4	3/4	3/4	3/4	7/8	7/8	1 1/8
Line Connection Liquid I.D. Size (In.)	3/8	3/8	3/8	3/8	3/8	3/8	3/8
Supplied Optional Evaporator Orifice Size	--	--	--	--	--	--	--
Factory Charge - R-22 (Oz)	118	122	156.8	217.6	225.6	233.3	249
Weight Lbs. (Ship)	170	188	190	199	223	238	248

Electrical Specifications - 208 / 230 - 1 - 60, Voltage Range 197V - 253V

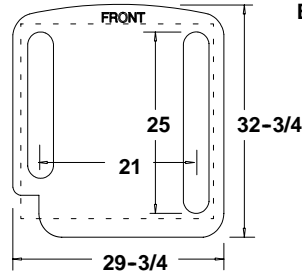
Minimum Circuit Ampacity	11.7	18.1	25.7	22.9	24.3	30.5	38
Wire Size/Max. Length (AWG Cu) Ft.	14 / 62	14 / 42	10 / 66	12 / 52	12 / 48	10 / 58	8 / 78
Time Delay Fuse (Amps)	20	30	40	35	40	50	60
Max. Fuse or HACR Breaker Size (Amps)	20	30	40	35	40	50	60
Compressor Full Run / Lock Rotor Amps	9.0 / 41	13.6 / 54	19.1 / 72.5	16.8 / 88	17.9 / 104	22.9 / 109	28.9 / 148
Fan Full Load / Lock Rotor Amps.	0.5 / 0.7	1.08 / 2.4	1.9 / 3.7	1.9 / 3.7	1.9 / 3.7	1.9 / 3.7	1.9 / 3.7

Dimensions		
Model	Chassis	Height (H)
NHP218	2	29.5
NHP224	2	33.5
NHP230	2	29.5
NHP236	2	37.5
NHP242	2	37.5
NHP248	2	37.5
NHP260	2	37.5

Chassis #1



Chassis #2



ALL DIMENSIONS IN INCHES

Minimum Mounting Pad Sizes with pad starting at 15" from structure for minimum clearance of 12" to structure.

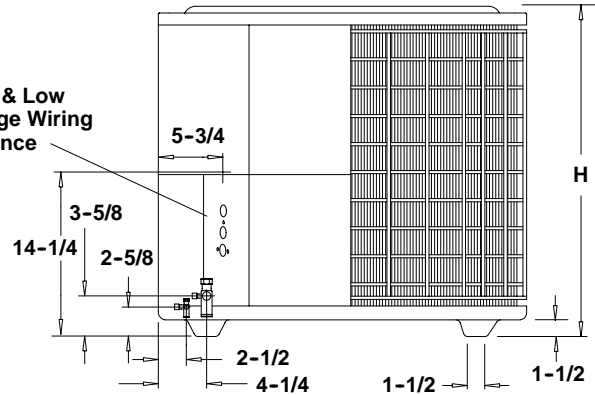
Chassis #1

20" W X 20" D

Chassis #2

24" W X 26" D

Line & Low Voltage Wiring Entrance



Accessory	Description	Used On
AMF153TKB	Expansion Valve Kit	1 1/2 - 3 Ton
AMF355TKB	Expansion Valve Kit	3 1/2 - 5 Ton
AXWR01DFA	Fossil Fuel Kit	All Models
AMA001TDA	Indoor Blower Time Delay	All Models
AMB001CMA	Mesh Coil Guard Kit - Trim to Fit (Packages of 6 Only)	All Models
1053477 *	Compressor Crankcase Heater Solid State "Stick On" Type	All Models
1148113 *	Compressor Crankcase Heater "Wrap-around" Type (6.5 to 8.5 inch Dia Compressors)**	**All Models
1061482 *	Compressor Crankcase Heater "Wrap-around" Type (4.2 to 6.7 inch Dia Compressors)**	**All Models
1060833 *	Compressor Sound Jacket (Small Scroll)	1 1/2 - 3 Ton
1060834 *	Compressor Sound Jacket (Large Scroll)	3 1/2 - 5 Ton

* Order from Service Parts

PERFORMANCE DATA COOLING

Outdoor Model	Indoor Model	Cooling 95 °F					Heating 47 °F			Heating 17 °F		CFM
		Btuh	SEER	S/T	EER	Watts	Btuh	COP	HSPF	Btuh	COP	
NHP218A(G)KC*	EBP24****	17000	11	0.77	11	1553	18000	3.3	6.9	10700	2.08	600
NHP218A(G)KC*	EBV24****	18000	13	0.77	12.4	1457	17000	3.2	7.4	10200	2.5	635
NHP218A(G)KC*	EBX18****	17000	12	0.77	11	1553	18000	3	6.9	10700	2	635
NHP218A(G)KC*	EBX24****	17000	12	0.77	11.1	1538	17600	3	7	10600	2	635
NHP218A(G)KC*	EP*30B****+MV08B15****+TXV	17000	13	0.77	12.1	1411	17000	3	7.4	10100	2.26	570
NHP218A(G)KC*	EP*30B****+TD1+TXV	17000	11.5	0.77	10.6	1611	17200	3	7	10700	2.12	635
NHP218A(G)KC*	EP*30F****+MV12F19****+TXV	17000	13	0.77	12	1417	17000	3	7.4	10100	2.26	565
NHP218A(G)KC*	EP*30F****+TD1+TXV	17000	11.5	0.77	10.6	1611	17200	3	7	10600	2.12	635
NHP218A(G)KC*	EX*24B****+MV08B15****	18000	13	0.77	12.3	1469	16800	3.2	7.4	10100	2.46	665
NHP218A(G)KC*	EX*24B****+TD1	17000	12	0.77	10.9	1567	17200	3	7	10500	2.26	635
NHP218A(G)KC*	EX*24F****+MV12F19****	17000	13	0.77	12.3	1382	16800	3.2	7.4	10000	2.42	540
NHP218A(G)KC*	EX*24F****+TD1	17000	12	0.77	10.9	1567	17200	3	7	10500	2.26	635
NHP218A(G)KC*	FWM24****+TXV	17000	12	0.77	10.9	1560	17600	3	6.8	10700	2.12	635
NHP224A(G)KC*	EBP30****	22600	11	0.77	10.6	2142	22800	3.04	7	13400	1.86	800
NHP224A(G)KC*	EBX24****	22600	12	0.77	10.6	2132	22800	3	7.3	13300	1.96	800
NHP224A(G)KC*	EMH42F****+TXV+TD1	22800	11.5	0.77	10.6	2161	22000	3	7.2	13100	2.1	800
NHP224A(G)KC*	EP*36B****+TD1+TXV	22200	11.5	0.77	10.3	2155	22800	3	7.2	13300	1.96	800
NHP224A(G)KC*	EP*36F****+TD1+TXV	22200	11.5	0.77	10.3	2155	22800	3.1	7.2	13300	1.96	800
NHP224A(G)KC*	EP*36J****+TD1+TXV	22200	11.5	0.77	10.3	2155	22800	3.1	7.2	13300	1.96	800
NHP224A(G)KC*	EP*42F****+TD1+TXV	22600	12	0.77	10.6	2142	22000	3.2	7.3	13100	2.1	800
NHP224A(G)KC*	EP*42J****+TD1+TXV	22600	12	0.77	10.6	2142	22000	3.2	7.3	13100	2.1	800
NHP224A(G)KC*	EX*24B****+MV08B15****	22600	12.5	0.77	11.5	1965	22000	3.2	7.3	12700	2.14	795
NHP224A(G)KC*	EX*24B****+TD1	22200	12	0.77	10.4	2135	22400	3	7.1	13200	2.02	800
NHP224A(G)KC*	EX*24F****+MV12F19****	22600	12.5	0.77	11.6	1957	22000	3.2	7.3	12700	2.14	810
NHP224A(G)KC*	EX*24F****+TD1	22400	12	0.77	10.5	2144	22200	3	7.1	13200	2.04	800
NHP224A(G)KC*	FWM30****+TXV	22600	11.5	0.77	10.5	2163	22800	3.16	7.2	13400	1.96	800
NHP230A(G)KC*	EBP36****+TXV	27600	11.5	0.76	10.1	2746	29600	3	7	17000	2	1000
NHP230A(G)KC*	EBP42****	28400	11	0.76	9.95	2854	29000	3.12	6.8	19400	2.2	1000
NHP230A(G)KC*	EBV36****	28000	12.5	0.76	10.9	2581	29000	3	7	17000	2	1000
NHP230A(G)KC*	EBX36****	28400	12	0.76	10.4	2744	29000	3	7	19500	2	1000
NHP230A(G)KC*	EMH42F****+TXV+TD1	28000	12	0.76	10.3	2718	29000	3	7	18400	2	1000
NHP230A(G)KC*	EP*42F****+TD1+TXV	28000	12	0.76	10.3	2732	29000	3	7	18400	2	1000
NHP230A(G)KC*	EP*42J****+MV16J22****+TXV	28000	12	0.76	10.9	2581	29000	3	7	18000	2	1000
NHP230A(G)KC*	EP*42J****+TD1+TXV	28000	12	0.76	10.3	2732	29000	3	7	18400	2	1000
NHP230A(G)KC*	EX*36B****+TD1	28000	12	0.76	10.4	2692	28000	3	7	17000	2	1000
NHP230A(G)KC*	EX*36F****+MV12F19****	28000	13	0.76	11.4	2456	29000	3	7	17000	2	895
NHP230A(G)KC*	EX*36F****+TD1	28000	12	0.76	10.4	2692	29000	3	7	18000	2	1000
NHP230A(G)KC*	EX*36J****+MV12F19****	28000	13	0.76	11.5	2445	29000	3	7	17000	2	920
NHP230A(G)KC*	EX*36J****+TD1	28000	12	0.76	10.4	2692	29000	3	7	17000	2	1000

(continued on next page)

PERFORMANCE DATA COOLING

(continued)

Outdoor Model	Indoor Model	Cooling 95 °F					Heating 47 °F			Heating 17 °F		
		Btuh	SEER	S/T	EER	Watts	Btuh	COP	HSPF	Btuh	COP	CFM
NHP236A(G)KC*	EBP42****+TXV	33000	11.5	0.74	10.7	3099	34000	2.54	6.8	21000	1.92	1200
NHP236A(G)KC*	EBV36****	34000	12.5	0.74	11.5	2969	34000	2.76	7.1	21000	2.18	1200
NHP236A(G)KC*	EBX36****	34000	12	0.74	10.5	3254	34000	2.68	7	21600	2.1	1200
NHP236A(G)KC*	EMH48F****+TD1+TXV	33400	12	0.74	10.8	3107	34000	3	7	21200	2.62	1200
NHP236A(G)KC*	EP*48F****+TD1+TXV	33000	12	0.74	10.7	3084	34000	3	7	21000	2.82	1200
NHP236A(G)KC*	EX*36B****+TD1	33000	12	0.74	10.8	3056	34000	2.96	7	21400	2.44	1100
NHP236A(G)KC*	EX*36F****+MV12F19****	33600	12.5	0.74	11.6	2909	34000	3	7.1	21600	2.7	1100
NHP236A(G)KC*	EX*36F****+TD1	33000	12	0.74	10.8	3056	34000	3	7	21200	2.62	1100
NHP236A(G)KC*	EX*36J****+MV16J22****	34000	13	0.74	11.9	2869	34000	3	7	21600	2.74	1225
NHP236A(G)KC*	EX*36J****+TD1	33400	12	0.74	10.8	3107	34000	3	7	21200	2.62	1200
NHP242A(G)KC*	EBP48****	38000	11	0.76	10	3800	40000	2.94	6.8	26200	1.96	1400
NHP242A(G)KC*	EBP48****+TXV	38000	11.5	0.76	10.1	3781	40000	2.8	6.8	26200	1.9	1400
NHP242A(G)KC*	EBV48****	39000	12.5	0.76	10.8	3611	39500	3	7.4	24800	2	1225
NHP242A(G)KC*	EBX48****	39000	12	0.76	10.3	3805	40000	3	7.1	25200	2	1400
NHP242A(G)KC*	EP*48F****+TD1+TXV	36400	11.5	0.76	9.95	3658	40000	2.94	6.8	26000	1.98	1300
NHP242A(G)KC*	EP*48J****+MV16J22****+TXV	37000	12.5	0.76	11	3379	38500	3	7	24800	2	1235
NHP242A(G)KC*	EP*48J****+TD1+TXV	37000	11.5	0.76	10	3700	39500	3	7	25600	2	1350
NHP242A(G)KC*	EP*48N****+TD1+TXV	37000	11.5	0.76	10	3700	39500	3	7	25600	2	1350
NHP242A(G)KC*	EX*42F****+TD1	37000	12	0.76	10.2	3627	38500	3	7	25400	2	1200
NHP242A(G)KC*	EX*48L****+TD1	37600	12	0.76	10.2	3704	39000	3	7.1	25200	2	1400
NHP242A(G)KC*	EX*48N****+TD1	37600	12	0.76	10.2	3704	39000	3	7.1	25200	2	1400
NHP248A(G)KC*	EBP48****+TXV	42000	12	0.78	10.2	4118	46000	2.94	7	28400	2	1550
NHP248A(G)KC*	EBP60****	43000	11	0.78	10.2	4216	46000	3.4	6.8	28400	2.3	1600
NHP248A(G)KC*	EBP60****+TXV	42500	12	0.78	10.2	4167	45000	3	7.1	28200	2.1	1550
NHP248A(G)KC*	EBV48****	43000	12.5	0.78	11	3909	43000	3.2	7.5	27600	2.3	1600
NHP248A(G)KC*	EBV60****	44000	13	0.78	11.4	3860	43500	3.2	7.5	27200	2.3	1600
NHP248A(G)KC*	EBX48****	43500	12	0.78	10.4	4203	46000	3	7	28400	2.2	1600
NHP248A(G)KC*	EBX60****	43500	12	0.78	10.5	4163	45500	3	7	28400	2.3	1600
NHP248A(G)KC*	EX*48J****+TD1	42000	12	0.78	10.4	4038	46000	3	7	28000	2.1	1500
NHP248A(G)KC*	EX*48L****+TD1	42000	12	0.78	10.4	4038	46000	3	7	28000	2.1	1500
NHP248A(G)KC*	EX*48N****+TD1	42000	12	0.78	10.3	4078	46000	3	7	28400	2.1	1500
NHP248A(G)KC*	EX*60L****+TD1	43000	12	0.78	10.8	4000	43000	3	7	27400	2.3	1600
NHP248A(G)KC*	EX*60N****+TD1	43000	12	0.78	10.8	4000	43000	3	7	27400	2.3	1600
NHP260A(G)KC*	EBP60****	53500	11	0.73	9.85	5431	57000	3.04	6.8	37600	2.16	1800
NHP260A(G)KC*	EBV60****	53500	12	0.73	10.6	5047	57000	3.2	7.2	36200	2.3	1700
NHP260A(G)KC*	EBX60****	53500	11.3	0.73	9.6	5573	57000	3.1	7	36400	2	1750
NHP260A(G)KC*	EX*60L****+TD1	53500	11.3	0.73	10.3	5194	56000	3.2	7	36200	2.3	1700
NHP260A(G)KC*	EX*60N****+MV20N26****	53500	12	0.73	10.6	5047	56000	3.2	7.2	35800	2.3	1830
NHP260A(G)KC*	EX*60N****+TD1	53500	11.3	0.73	9.8	5459	56000	3.2	7	35600	2.3	1700

Many matches require a pin change. Always check pin size to insure maximum performance. PIN=Refrigerant orifice PIN size. TD1=AMA001TDA Indoor Blower Time Delay Kit, required to make SEER indicated. All products using an electronic fan control satisfy TD1 requirements. TXV=Thermostatic Expansion Valve, TXV153 (AMF153KA) replaces HTXV1,2 or 3 where listed in ratings, TXV335 (AMF335KA) Replaces HTXV4 or 5 where listed in ratings. EP* = EPA, EPD, EPM series of coils. EX* = EXA, EXD, EXM series of coils. EE* = EEA OR EED series of coils.

MODEL NUMBER IDENTIFICATION GUIDE

MODEL NUMBER PRODUCT FAMILY N = Brand	N	HP	2	24	A	K	C
PRODUCT TYPE AC = Air Conditioning CA = Condenser A/C HP = Heat Pump CH = Condenser H/P	SALES CODE ELECTRICAL K = 208/230-1-60 H = 208/230-3-60 A = Sweat / Valve G = Sweat / Valve, Wire Coil Guard M = Sweat / Valve, Mesh Coil Guard						
NOMINAL SEER RATING 0 = 10 2 = 12 4 = 14	NOMINAL CAPACITY (BTUH) 18 = 18,000 24 = 24,000 30 = 30,000 36 = 36,000 42 = 42,000 48 = 48,000 60 = 60,000						

EXTENDED REFRIGERANT LINE CORRECTION FACTORS

Varying Line Length in Feet (m) vs. Total Capacity Multiplier

25 (8)	50 (15)	75 (23)	100 (30)	125 (38)	150 (46)
1.00	.99	.98	.96	.94	.92

REFRIGERANT CHARGE DATA

All models are factory charged with R-22 for outdoor unit, 15' (8 m) of refrigerant line and matching indoor section.
 Refrigerant charge correction per foot (305 mm) of line:
 1/4" O.D. = .25 oz.; 5/16" O.D. = .45 oz.; 3/8" O.D. = .60 oz.;
 1/2" O.D. = 1.2 oz.

VOLTAGE CORRECTION FACTORS

Volts	Capacity	Watts
208	.98	.99

INDOOR AIRFLOW CORRECTION TABLE

% Rated Air	90	95	100	105	110
Total Cap. Mult.	.98	.99	1.00	1.01	1.03
Sens Cap. Mult.	.95	.98	1.00	1.03	1.05

INDOOR TEMPERATURE CORRECTION TABLE

(Based on 95°F Ambient)

Indoor D.B. °F (°C)	Correction Factor	Entering Indoor Wet Bulb °F (°C)						
		59 (15)	61 (16)	63 (17)	65 (18)	67 (19)	69 (20)	71 (21)
70 (21)	Total Cap. Mult.	.90	.93	.96	.99	1.02	-	-
	Sens Cap. Mult.	.86	.85	.82	.77	.70	-	-
75 (24)	Total Cap. Mult.	.89	.92	.95	.98	1.01	1.04	-
	Sens Cap. Mult.	1.04	1.03	1.00	.95	.88	.78	-
80 (26)	Total Cap. Mult.	.88	.91	.94	.97	1.00	1.03	1.06
	Sens Cap. Mult.	1.18	1.17	1.14	1.08	1.00	.89	.73
85 (29)	Total Cap. Mult.	-	.90	.93	.96	.99	1.02	1.05
	Sens Cap. Mult.	-	1.29	1.26	1.20	1.11	.98	.81

Bold Type = approximately 50% Relative Humidity