10

TEMPSTAR®
Heating and Cooling Products

10+ SEER Heat Pump

Representative photo only, some models may vary in appearance.

LIMITED PARTS 5 YEAR WARRANTY

MANUFACTURER CERTIFIED TO ARI AS COMPLYING WITH UNITARY HEAT PUMP EQUIPMENT CERTIFICATION SECTIONS OF ARI STANDARD 240

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

c UL US LISTED

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

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
- 5 Year parts, 5 year compressor limited warranties

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

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

Printed in U.S.A.

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

PART NO. 428 21 3001 08
August 2005

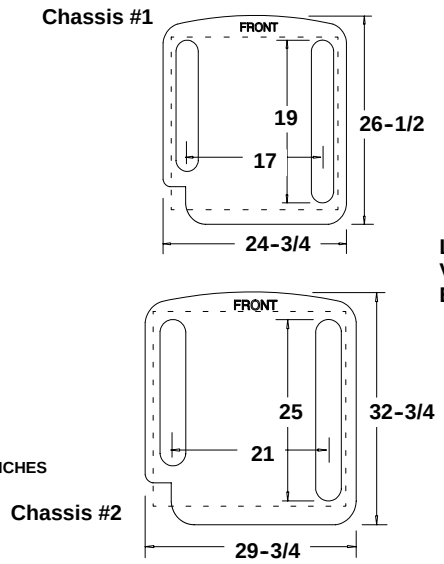
Base Specifications

Model Number	NHP018 A(G)KC	NHP024 A(G)KC	NHP030 A(G)KC	NHP036 A(G)KC	NHP042 A(G)KC	NHP048 A(G)KC	NHP060 A(G)KC
Max. Cooling Capacity (Btuh)	17000	22400	28000	33200	39500	44000	56000
Max. Heating Capacity (Btuh)	17200	23000	29000	33600	38000	47000	59000
SEER Label	10	10	10	10	10	10	10
Sound Rating Decibels	72	74	76	76	76	78	78
Compressor Type	Recip.	Recip.	Recip.	Recip.	Scroll	Scroll	Scroll
Fan HP / Type / Speeds	1/12-PSC-1	1/8-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 / 1500	1100 / 1500	1100 / 2650	1100 / 2650	1100 / 2650	1100 / 2850	1100 / 2850
Coil Face Area (Sq Ft)	11.6	13.4	15.4	15.4	20.1	21.3	16.6
Coil Rows / Fins Per Inch	1 / 24	1 / 24	1 / 20	1 / 18	1 / 22	1 / 22	2 / 18
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	.053	.058	.065	.067	TXV	.079	.093
Factory Charge - R-22 (Oz)	85	98	110	127	138	152	202
Weight Lbs. (Ship)	150	159	180	199	212	229	253

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

Minimum Circuit Ampacity	12.6	14.9	19.4	21.4	27.8	31	40.5
Wire Size (AWG Cu) / Max. Length (Ft)	14 / 56	14 / 47	12 / 58	12 / 54	10 / 65	10 / 68	8 / 69
Time Delay Fuse (Amps)	20	25	30	30	40	50	60
Max. Fuse or HACR Breaker Size (Amps)	20	25	30	30	40	50	60
Compressor Full Run / Lock Rotor Amps	9.6 / 49	11.2 / 56	14 / 75	15.6 / 96	20.7 / 127	23.3 / 137	30.9 / 148
Fan Full Load / Lock Rotor Amps.	.55 / 0.7	.93 / 2.2	1.9 / 3.7	1.9 / 3.7	1.9 / 3.7	1.9 / 3.7	1.9 / 3.7

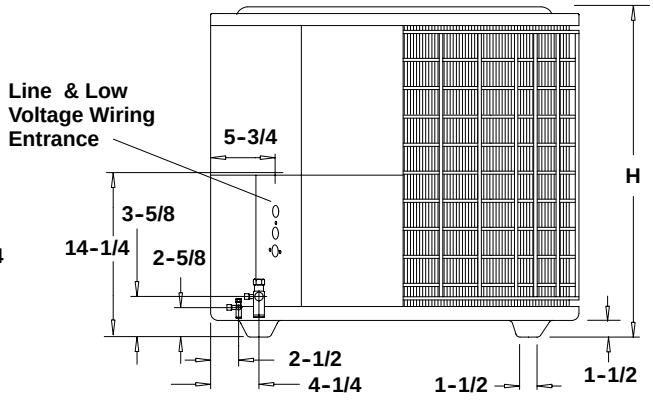
Dimensions		
Model	Chassis	Height (H)
NHP018	1	27.5
NHP024	1	31.5
NHP030	2	27.5
NHP036	2	27.5
NHP042	2	35.5
NHP048	2	37.5
NHP060	2	29.5



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



Accessory	Description	Used On
AMF153TKB	Expansion Valve Kit	1½ - 3 Ton
AMF355TKB	Expansion Valve Kit	3½ - 5 Ton
AXWR01DFA	Fossil Fuel Kit	All Models
AMA001TDA	Indoor Blower Time Delay	All Models
AMB001CMA	Mesh Grille Guard (Pkg of 6) Trim to Fit	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)	3 Ton
1060834 *	Compressor Sound Jacket (Large Scroll)	4 and 5 Ton

* Order from Service Parts

PERFORMANCE DATA COOLING & HEATING

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
NHP018A(G)KC*	EBP18****	17000	10	0.74	8.9	1910	17400	2.92	6.8	9400	1.86	600
NHP018A(G)KC*	EBP24****	17600	10.2	0.74	9.2	1913	17400	3.02	6.8	9700	1.92	600
NHP018A(G)KC*	EBX24****	17600	10.5	0.74	9.5	1853	17200	3.02	6.8	9700	1.92	600
NHP018A(G)KC*	FWM24****	17600	10	0.74	9.15	1923	17600	3	6.8	9800	1.9	600
NHP024A(G)KC*	EBP24****	22400	10	0.76	8.95	2503	23000	3.16	6.8	12500	1.98	800
NHP024A(G)KC*	EBP30****	22600	10	0.76	9.1	2484	23000	3.18	6.8	12500	1.98	800
NHP024A(G)KC*	EBX24****	22600	10.2	0.76	9.1	2484	23400	3.06	6.8	13000	1.98	800
NHP024A(G)KC*	EP*30F****+MV12F19****	22000	10.5	0.76	9.65	2280	22400	3.3	7	11800	2.08	790
NHP024A(G)KC*	FWM24****	22200	10	0.76	8.8	2523	23000	3.12	6.8	12600	1.96	800
NHP030A(G)KC*	EBP30****	28000	10	0.76	9.05	3094	29000	3.06	6.8	15500	1.92	1000
NHP030A(G)KC*	EBP36****	28200	10	0.76	8.95	3151	29000	3.02	6.8	15800	1.9	1000
NHP030A(G)KC*	EBX24****	28000	10	0.76	9.15	3060	29000	3.06	6.8	15600	1.88	1000
NHP030A(G)KC*	EBX36****	28600	10.2	0.76	9.2	3109	27400	3	6.8	15800	1.92	1000
NHP030A(G)KC*	EP*36B****+TD1	26600	10	0.76	8.95	2972	28600	3.04	6.8	15100	1.9	825
NHP030A(G)KC*	EP*36F****+MV12F19****	27400	10.5	0.76	9.8	2796	27800	3.22	7.2	14800	2.02	915
NHP030A(G)KC*	EP*36F****+TD1	26600	10	0.76	8.95	2972	28600	3.04	6.8	15100	1.9	825
NHP030A(G)KC*	EP*36J****+MV12F19****	27400	10.5	0.76	9.8	2796	27800	3.22	7.2	14800	2.02	915
NHP030A(G)KC*	EP*36J****+TD1	26600	10	0.76	8.95	2972	28600	3.04	6.8	15100	1.9	825
NHP030A(G)KC*	FWM30****	28000	10	0.76	8.95	3128	29000	3.06	6.8	15700	1.92	1000
NHP036A(G)KC*	EBP36****	33200	10	0.77	8.85	3751	33600	3	6.8	19700	2.1	1200
NHP036A(G)KC*	EBP42****	33600	10	0.77	9	3733	33600	3.02	6.8	19700	2.14	1200
NHP036A(G)KC*	EBX36****	33600	10.2	0.77	9.05	3713	33400	3.04	6.8	19700	2.14	1200
NHP036A(G)KC*	EE*48F****+TD1	32400	10	0.77	9.05	3580	33200	3.12	6.8	19400	2.16	1100
NHP036A(G)KC*	EMH36F****+TD1	31400	10	0.77	8.8	3568	33400	3.06	6.8	19400	2.12	1175
NHP036A(G)KC*	EMH42F****+TD1	32400	10	0.77	9.05	3580	33200	3.12	6.8	19400	2.16	1100
NHP036A(G)KC*	EP*36B****+TD1	31000	10	0.77	8.85	3503	32600	3.04	6.8	18900	2.12	1000
NHP036A(G)KC*	EP*36F****+TD1	31400	10	0.77	8.8	3568	33400	3.06	6.8	19400	2.12	1175
NHP036A(G)KC*	EP*36J****+TD1	31400	10	0.77	8.8	3568	33400	3.06	6.8	19400	2.12	1175
NHP036A(G)KC*	EP*42F****+MV12F19****+TXV	33400	10.5	0.77	9.5	3516	33000	3.22	7.2	19200	2.24	1205
NHP036A(G)KC*	EP*42F****+TD1	32600	10	0.77	9.05	3602	33200	3.12	6.8	19400	2.16	1100
NHP036A(G)KC*	EP*42J****+MV16J22****+TXV	32600	10.5	0.77	9.45	3450	32800	3.16	7	18800	2.22	1000
NHP036A(G)KC*	EP*42J****+TD1	32600	10	0.77	9	3622	33000	3.1	6.8	19700	2.16	1200
NHP036A(G)KC*	EX*36F****+TD1	33200	10.2	0.77	9.15	3628	33400	3.14	6.8	19500	2.16	1100
NHP036A(G)KC*	EX*36J****+TD1	33600	10.2	0.77	9.15	3672	33000	3.12	6.8	19800	2.18	1200
NHP036A(G)KC*	FCP36****	31400	10	0.77	8.75	3589	33400	3.04	6.8	19500	2.12	1175
NHP036A(G)KC*	FCP42****	32800	10	0.77	8.8	3727	33400	3.06	6.8	19800	2.12	1200
NHP036A(G)KC*	FCX36****	33400	10.2	0.77	9.05	3691	32800	3.1	6.8	19900	2.16	1200

(continued on next page)

Many matches require a pin change. Always check pin size to insure maximum performance. 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 (AMF153) replaces HTXV1,2 or 3 where listed in ratings, TXV335 (AMF335) Replaces HTXV4 or 5 where listed in ratings. EP* = EPA, EPD, EPM series of coils. EX* = EXA, EXD, EXM series of coils.

PERFORMANCE DATA COOLING & HEATING

(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
NHP042A(G)KC*	EBP42****	39500	10	0.78	8.8	4489	38000	3.08	6.8	22000	2.18	1400
NHP042A(G)KC*	EBP48****	40000	10	0.78	8.9	4494	38000	3.16	6.8	22200	2.22	1400
NHP042A(G)KC*	EBV36****	39000	10	0.78	8.75	4457	38000	3.06	6.8	22200	2.16	1400
NHP042A(G)KC*	EBV48****	41000	11	0.78	9.8	4184	38000	3.18	6.8	21600	2.38	1400
NHP042A(G)KC*	EBX48****	41000	10.2	0.78	9.1	4505	38000	3.24	6.8	22200	2.26	1400
NHP042A(G)KC*	EE*60J****+TD1	39500	10	0.78	8.9	4438	38500	3.22	6.8	20200	2.22	1400
NHP042A(G)KC*	EMH48F****+TD1	39000	10	0.78	8.95	4358	36000	3.12	6.8	19800	2.22	1300
NHP042A(G)KC*	EP*48F****+TD1	39000	10	0.78	8.9	4382	38000	3.18	6.8	22000	2.24	1400
NHP042A(G)KC*	EP*48F****+TD1+TXV	39000	10.1	0.78	8.9	4382	38500	3.2	6.8	22400	2.26	1400
NHP042A(G)KC*	EP*48J****+MV16J22****+TXV	39500	10.5	0.78	9.65	4093	39000	3.32	6.8	23000	2.4	1235
NHP042A(G)KC*	EP*48J****+TD1	39500	10	0.78	8.9	4438	38500	3.22	6.8	22400	2.26	1400
NHP042A(G)KC*	EP*48N****+TD1	39500	10	0.78	8.9	4438	38500	3.22	7.2	22400	2.26	1400
NHP042A(G)KC*	FCP42****	38500	10	0.78	8.7	4425	38500	3.1	6.8	22400	2.2	1400
NHP042A(G)KC*	FCP48****	39000	10	0.78	8.75	4457	39000	3.16	6.8	22600	2.22	1400
NHP042A(G)KC*	FCX36****	38500	10.1	0.78	8.9	4326	38000	3.1	6.8	22000	2.22	1200
NHP048A(G)KC*	EBP48****	44000	10	0.77	8.8	5000	47000	3.16	6.8	30200	2.36	1600
NHP048A(G)KC*	EBP60****	45000	10	0.77	8.8	5114	47000	3.22	6.8	30600	2.36	1600
NHP048A(G)KC*	EBX48****	44000	10.2	0.77	9.1	4835	47000	3.28	6.8	30200	2.4	1590
NHP048A(G)KC*	EBX60****	46500	10.2	0.77	9.15	5082	47000	3.42	7	31200	2.44	1600
NHP048A(G)KC*	EMH48F****+TD1	42500	10	0.77	8.95	4749	46000	3.12	6.8	29600	2.36	1300
NHP048A(G)KC*	EP*48J****+TD1	43000	10	0.77	8.95	4804	46000	3.2	6.8	29800	2.38	1400
NHP048A(G)KC*	EP*48J****+TXV	43500	10	0.77	8.9	4888	46500	3.2	6.8	29800	2.38	1400
NHP048A(G)KC*	EP*48L****+TD1	43000	10	0.77	8.95	4804	46000	3.2	6.8	29800	2.38	1400
NHP048A(G)KC*	EP*60J****+MV16J22****+TXV	45000	10.3	0.77	9.4	4787	46500	3.4	7.2	29600	2.52	1660
NHP048A(G)KC*	EP*60J****+TD1	44000	10	0.77	8.95	4916	47000	3.32	6.8	30200	2.44	1600
NHP048A(G)KC*	EP*60N****+MV20N26****+TXV	45000	10.3	0.77	9.45	4762	46500	3.46	7.2	29600	2.52	1650
NHP048A(G)KC*	EX*48L****+TD1	44000	10	0.77	9	4889	46000	3.3	6.8	30000	2.42	1500
NHP048A(G)KC*	EX*48N****+TD1	44000	10	0.77	9	4889	46000	3.3	6.8	30000	2.42	1500
NHP060A(G)KC*	EBP60****	56000	10	0.73	8.65	6474	59000	3.02	6.8	37200	2.24	1800
NHP060A(G)KC*	EBX60****	55500	10.3	0.73	8.95	6201	54000	3.02	6.8	34800	2.18	1750
NHP060A(G)KC*	EP*60J****+TD1+TXV	52000	10	0.73	8.7	5977	58000	3.08	6.8	36600	2.28	1700
NHP060A(G)KC*	EP*60N****+TD1+TXV	52000	10	0.73	8.7	5977	58000	3.08	6.8	36600	2.28	1700
NHP060A(G)KC*	FCP60****+TXV	52000	10	0.73	8.55	6082	59000	3.08	6.8	37000	2.26	1800

Many matches require a pin change. Always check pin size to insure maximum performance. 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 (AMF153) replaces HTXV1,2 or 3 where listed in ratings, TXV335 (AMF335) Replaces HTXV4 or 5 where listed in ratings. EP* = EPA, EPD, EPM series of coils. EX* = EXA, EXD, EXM series of coils.

MODEL NUMBER IDENTIFICATION GUIDE

MODEL NUMBER	N	HP	0	24	A	K	C

PRODUCT FAMILY
N = Brand

PRODUCT TYPE
AC = Air Conditioning CA = Condenser A/C
HP = Heat Pump CH = Condenser H/P

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

CONNECTIONS
A = Sweat / Valve G = Sweat / Valve w/Coil Guard

ELECTRICAL
K = 208/230–1–60
H = 208/230–3–60

SALES CODE

EXTENDED REFRIGERANT LINE CORRECTION FACTORS

Varying Line Length in Feet (m) vs. Total Capacity Multiplier					
25 (8)	50 (1)	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' (8m) of refrigerant line and matching indoor section.
Refrigerant charge correction per foot (305mm) 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