

**High
Efficiency**

14+

Arcoaire®
Air Conditioning & Heating

14+ SEER - AIR CONDITIONER



Representative photo only, some models may vary in appearance.

5
year **NO**
hassle
REPLACEMENT WARRANTY
see warranty certificate for details



Rated in accordance with ARI Standard 210. Certification applies only when used with proper components as listed with ARI.



2 THRU 5 TONS SPLIT SYSTEM

FEATURES

- Rugged and coated inlet and discharge grilles for superior coil protection
- Filled with Service Friendly features
- High efficiency scroll compressors on all models
- Service valves on all models with 3-1/2" stubs
- External refrigerant connections
- Copper tube / aluminum fin coil
- Prepainted condenser fins
- Fan motor in-line disconnect plug
- Factory charged with R-22, condenser plus 25 Ft. lines
- G-90 Galvanized steel cabinet with integral base rails
- Triple step paint process
- Easy side access sloped control panel
- Can be installed as close as 6" from home
- Standard 5 year limited warranty on parts
- Ten (10) year limited compressor warranty
- Covered under the 5 year No Hassle Replacement Warranty Program

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

	HAC424AKC	HAC430AKC	HAC436AKC	HAC442AKC	HAC448AKC	HAC460AKC
Model Number	HAC424GKC	HAC430GKC	HAC436GKC	HAC442GKC	HAC448GKC	HAC460GKC
Rated Cooling Capacity (Btuh)	23,600	29,400	35,200	41,500	47,500	58,000
SEER Label	14	14	14	14	14	14
Sound Rating Decibels	70	72	74	74	74	76
Fan HP / Type / Speeds	1/8-PSC-2	1/8-PSC-2	1/4-PSC-2	1/4-PSC-2	1/4-PSC-2	1/4-PSC-2
Fan RPM (High)	840	840	840	840	840	840
Fan Max. CFM	2950	2950	4480	4480	4480	4480
Coil Face Area (Sq Ft)	20.0	24.0	24.0	26.7	26.7	26.7
Coil Rows / Fins Per Inch	2 / 22	2 / 18	2 / 22	2 / 22	2 / 22	2 / 22
Line Connection Suction I.D. Size (In.)	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
Supplied Optional Evaporator Orifice Size	-	-	-	-	-	-
Compressor Type	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
Factory Charge - R22 (oz)	185.8	254.9	278	298	282	274
Weight Lbs. (Ship)	229	233	236	262	282	292

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

Minimum Circuit Ampacity	14.4	16.0	18.3	22.2	24.4	32.8
Wire Size (AWG Cu) / Max. Length (ft.)	14 / 45	14 / 35	14 / 29	12 / 38	12 / 31	8 / 51
Minimum Fuse (Amps)	20	25	30	35	35	50
Max. Fuse or HACR Breaker Size (Amps)	20	25	30	35	40	50
Compressor Full Run / Lock Rotor Amps	10.9 / 54	12.2 / 63.0	13.5 / 73.0	16.5 / 95	18.3 / 109	25.0 / 148
Fan Full Load / Lock Rotor Amps.	0.8 / 1.5	0.8 / 1.5	1.5 / 2.9	1.5 / 2.9	1.5 / 2.9	1.5 / 2.9

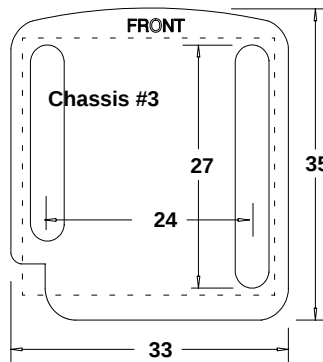
Dimensions		
Model	Chassis	Height (H)
424	3	32
430	3	38
436	3	38
442	3	42
448	3	42
460	3	42

Minimum Mounting Pad Size to fit under base rails. Unit overhangs pad with pad starting at 9" from structure for minimum clearances between unit and structure.

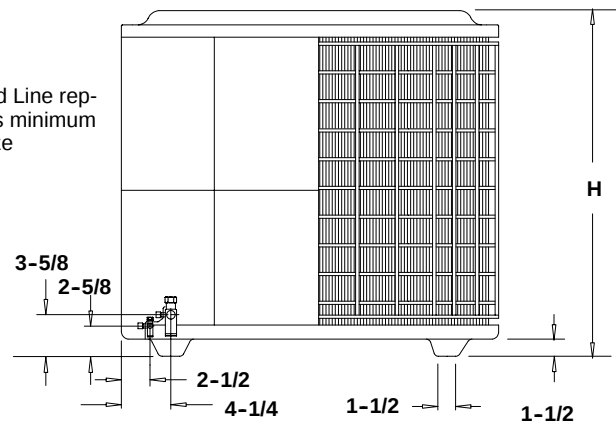
NOTE: Local Codes may require use of larger pads.

Chassis #3 = 27" W X 28" D

ALL DIMENSIONS IN INCHES



Dashed Line represents minimum pad size



Accessory	Description	Used On
AMF153TKB	Expansion Valve Kit	2 - 3 Ton
AMF355TKB	Expansion Valve Kit	3 1/2 - 5 Ton
AMA001TDA	Indoor Blower Time Delay	All Models
24370800 *	Compressor Anti-short cycle 24 Volt 3 Min. Time Delay	All Models
1070822*	Compressor Anti-short cycle 24 Volt 5 Min. Time Delay	All Models
1148671 *	Low Ambient Kit (Fan Cycling Switch)	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 Number	Indoor Model Number	Cooling Capacity(MBtuh)	EER	SEER	Outdoor Coil Air Quantity (SCFM)	Indoor Coil Air Quantity (SCFM)
*AC424AKC	EX*24B****+TD1	23600	12.3	14	2900	700
*AC424AKC	EP*24B****+TD1+TXV	22400	11.45	13	2900	700
*AC424AKC	EP*30B****+TD1+TXV	22800	11.7	13	2900	700
*AC424AKC	EP*30F****+TD1+TXV	22800	11.7	13	2900	700
*AC424AKC	EP*30F****+MV12F19****+TXV	23600	13.25	14.5	2900	790
*AC424AKC	EX*24F****+TD1	23600	12.3	14	2900	700
*AC424AKC	EX*24F****+NTV6050	24000	13.4	15	2900	745
*AC424AKC	EX*24F****+NTV6075	24000	13.45	15	2900	655
*AC424AKC	EX*24F****+*9MPV050	24000	13.05	15	2900	725
*AC424AKC	EX*24F****+*9MPV075	24000	13.25	15	2900	695
*AC424AKC	EBP24****+TXV	23600	12.3	14	2900	700
*AC424AKC	EBP30****+TXV	24000	12.55	14	2900	700
*AC424AKC	EBV24****	24000	13.65	15	2900	700
*AC424AKC	EBV36****	24000	13.3	15	2900	700
*AC424AKC	EBX24****	24000	12.55	14	2900	700
*AC424AKC	EP*36B****+TD1+TXV	23600	12.15	13.5	2900	700
*AC424AKC	EP*36F****+TD1+TXV	23600	12.15	13.5	2900	700
*AC424AKC	EP*36J****+TD1+TXV	23600	12.15	13.5	2900	700
*AC424AKC	EX*36B****+TD1	24000	12.6	14	2900	700
*AC424AKC	EX*36F****+TD1	24000	12.6	14	2900	700
*AC424AKC	EX*36F****+MV12F19****	24000	14.2	15	2900	705
*AC424AKC	EX*42F****+TD1	24000	12.8	14	2900	700
*AC424AKC	EX*42J****+TD1	24000	12.8	14	2900	700
*AC430AKC	EX*36F****+TD1	28600	12.6	14	2900	1070
*AC430AKC	EP*36B****+TD1+TXV	27000	12.05	13	2900	1000
*AC430AKC	EX*36F****+*9MPV075	28400	13.15	14.5	2900	1040
*AC430AKC	EX*36F****+*9MPV100	28600	13.6	15	2900	1055
*AC430AKC	EX*42J****+*9MPV100	29200	13.9	15	2900	1075
*AC430AKC	EBV36****	28600	13.9	15	2900	1070
*AC430AKC	EP*30B****+TD1+TXV	26000	11.55	12.5	2900	950
*AC430AKC	EP*30F****+TD1+TXV	26000	11.55	12.5	2900	950
*AC430AKC	EP*30F****+*9MPV075+TXV	26200	12.2	13.5	2900	980
*AC430AKC	EP*36F****+TD1+TXV	27200	12.05	13	2900	1000
*AC430AKC	EP*36F****+*9MPV050+TXV	27000	12.3	13.5	2900	955
*AC430AKC	EP*36F****+*9MPV075+TXV	27400	12.8	14	2900	995
*AC430AKC	EP*36F****+MV12F19****+TXV	27400	13.5	15	2900	915
*AC430AKC	EP*36J****+TD1+TXV	27200	12.05	13	2900	1000
*AC430AKC	EX*36F****+MV12F19****	28800	14	15.5	2900	1015
*AC430AKC	EX*36J****+TD1	28200	12.65	14	2900	1000
*AC430AKC	EBP30****+TXV	27600	12.45	13.5	2900	1000
*AC430AKC	EBX36****	28200	12.5	13.5	2900	1000

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

Outdoor Model Number	Indoor Model Number	Cooling Capacity(MBtuh)	EER	SEER	Outdoor Coil Air Quantity (SCFM)	Indoor Coil Air Quantity (SCFM)
*AC436AKC	EX*36J****+TD1	35000	12.15	14	2900	1200
*AC436AKC	EP*36B****+TD1+TXV	33400	11.55	13	2900	1200
*AC436AKC	EP*36F****+TD1+TXV	33400	11.55	13	2900	1200
*AC436AKC	EP*36J****+TD1+TXV	33400	11.55	13	2900	1200
*AC436AKC	EP*42F****+TD1+TXV	34400	11.9	13.5	2900	1200
*AC436AKC	EP*42F****+MV12F19****+TXV	35000	12.75	14	2900	1205
*AC436AKC	EP*42J****+TD1+TXV	34600	11.95	13.5	2900	1200
*AC436AKC	EX*36B****+TD1	35000	12.15	14	2900	1200
*AC436AKC	EX*36F****+TD1	35000	12.15	14	2900	1200
*AC436AKC	EX*36F****+NTV6125	35400	13.25	15	2900	1115
*AC436AKC	EX*36F****+*9MPV100	35400	12.7	14.5	2900	1195
*AC436AKC	EX*36J****+NTV6100	35600	13.3	15	2900	1225
*AC436AKC	EX*36J****+NTV6125	35600	13.35	15	2900	1165
*AC436AKC	EX*36J****+*9MPV100	35600	12.8	15	2900	1240
*AC436AKC	EX*36J****+*9MPV125	35600	12.7	14.5	2900	1240
*AC436AKC	EX*36J****+MV16J22****	36000	13.5	15	2900	1225
*AC436AKC	EX*42F****+TD1	35400	12.35	14	2900	1200
*AC436AKC	EX*42J****+TD1	35400	12.35	14	2900	1200
*AC436AKC	EX*42J****+NTV6100	36000	13.45	15	2900	1195
*AC436AKC	EX*42J****+NTV6125	36000	13.5	15	2900	1140
*AC436AKC	EX*42J****+*9MPV100	36000	13	15	2900	1215
*AC436AKC	EX*42J****+*9MPV125	36000	12.9	15	2900	1215
*AC436AKC	EX*42J****+MV16J22****	36000	13.65	15	2900	1200
*AC436AKC	EBP36****+TXV	34600	11.7	13.5	2900	1200
*AC436AKC	EBP42****+TXV	35000	12	13.5	2900	1200
*AC436AKC	EBV36****	35600	12.95	15	2900	1200
*AC436AKC	EBX36****	35000	12	14	2900	1200
*AC442AKC	EX*42J****+TD1	41000	12.15	14	4000	1400
*AC442AKC	EP*42F****+TD1+TXV	38000	11.7	13	4000	1100
*AC442AKC	EBP48****+TXV	41000	11.95	13.5	4000	1400
*AC442AKC	EBX48****	41500	12.25	13.5	4000	1400
*AC442AKC	EBX60****	42000	12.25	13.5	4000	1400
*AC442AKC	EBV48****	42000	13.35	15	4000	1400
*AC442AKC	EP*42J****+TD1+TXV	38500	11.7	13	4000	1200
*AC442AKC	EP*48F****+TD1+TXV	39500	11.85	13	4000	1300
*AC442AKC	EP*48J****+TD1+TXV	40000	11.9	13.5	4000	1400
*AC442AKC	EP*48J****+MV16J22****+TXV	40500	12.85	14.5	4000	1415
*AC442AKC	EP*48L****+TD1+TXV	40000	11.9	13.5	4000	1400
*AC442AKC	EP*48N****+TD1+TXV	40000	11.9	13.5	4000	1400
*AC442AKC	EX*42F****+TD1	40000	12.15	13.5	4000	1200
*AC442AKC	EX*42J****+TD1	40000	12.15	13.5	4000	1200
*AC442AKC	EX*42J****+*9MPV100	41000	12.3	13.5	4000	1390
*AC442AKC	EX*42J****+*9MPV125	41000	12.15	13.5	4000	1385
*AC442AKC	EX*42J****+MV16J22****	41500	13	14.5	4000	1385
*AC442AKC	EX*48J****+TD1	41000	12.1	13.5	4000	1400
*AC442AKC	EX*48J****+NTV6100	41500	13	14.5	4000	1430
*AC442AKC	EX*48L****+TD1	41000	12.1	13.5	4000	1400
*AC442AKC	EX*48L****+*9MPV100	41000	12.35	14	4000	1435
*AC442AKC	EX*48N****+TD1	41000	12.1	13.5	4000	1400
*AC442AKC	EX*48N****+MV16J22****	41500	13.1	14.5	4000	1440
*AC442AKC	EX*60N****+TD1	42000	12.5	14	4000	1400
*AC442AKC	EBP42****+TXV	40000	11.7	13	4000	1400
*AC442AKC	EBP48****+TXV	41000	11.95	13.5	4000	1400
*AC442AKC	EBP60****+TXV	41500	11.9	13	4000	1400
*AC442AKC	EBV48****	42000	13.35	15	4000	1400
*AC442AKC	EBV60****	42000	13.8	15	4000	1400
*AC442AKC	EBX48****	41500	12.25	13.5	4000	1400
*AC442AKC	EBX60****	42000	12.25	13.5	4000	1400

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

Outdoor Model Number	Indoor Model Number	Cooling Capacity(MBtuh)	EER	SEER	Outdoor Coil Air Quantity (SCFM)	Indoor Coil Air Quantity (SCFM)
*AC448AKC	EX*48N****+TD1	47000	12.2	14	4000	1500
*AC448AKC	EP*48F****+TD1+TXV	44500	11.95	13.2	4000	1300
*AC448AKC	EP*48J****+TD1+TXV	45500	12.05	13.5	4000	1400
*AC448AKC	EP*48L****+TD1+TXV	45500	12.05	13.5	4000	1400
*AC448AKC	EP*48N****+TD1+TXV	45500	12.05	13.5	4000	1400
*AC448AKC	EP*60J****+TD1+TXV	46500	12.15	13.8	4000	1600
*AC448AKC	EP*60L****+TD1+TXV	47000	12.15	14	4000	1600
*AC448AKC	EP*60N****+TD1+TXV	47000	12.15	14	4000	1600
*AC448AKC	EX*48J****+TD1	46500	12.2	13.8	4000	1500
*AC448AKC	EX*48J****+NTV6100	47000	12.8	14.2	4000	1570
*AC448AKC	EX*48J****+NTV6125	47000	12.85	14.2	4000	1535
*AC448AKC	EX*48J****+MV16J22****	47000	12.9	14.5	4000	1625
*AC448AKC	EX*48L****+TD1	47000	12.2	14	4000	1500
*AC448AKC	EX*48N****+NTV6100	47000	12.8	14.2	4000	1575
*AC448AKC	EX*48N****+NTV6125	47000	12.85	14.5	4000	1540
*AC448AKC	EX*48N****+MV16J22****	47000	12.9	14.5	4000	1630
*AC448AKC	EX*60J****+TD1	48000	12.7	14.2	4000	1600
*AC448AKC	EX*60L****+TD1	48000	12.7	14.2	4000	1600
*AC448AKC	EX*60N****+TD1	48000	12.7	14.2	4000	1600
*AC448AKC	EBP48****+TXV	47000	11.95	13	4000	1600
*AC448AKC	EBP60****+TXV	47500	12.05	13.5	4000	1600
*AC448AKC	EBV48****	48000	13	14.5	4000	1600
*AC448AKC	EBV60****	48000	13.45	15	4000	1600
*AC448AKC	EBX48****	48000	12.35	13.5	4000	1600
*AC448AKC	EBX60****	48000	12.5	14	4000	1600
*AC460AKC	EBV60****	58000	9.8	13.5	4000	1800
*AC460AKC	EP*60J****+TD1+TXV	53500	8.95	12	4000	1700
*AC460AKC	EP*60L****+TD1+TXV	53500	8.95	12	4000	1700
*AC460AKC	EP*60N****+TD1+TXV	53500	8.95	12	4000	1700
*AC460AKC	EP*60N****+MV20N26****+TXV	54000	9.25	12.5	4000	1840
*AC460AKC	EX*60L****+TD1	56500	9.4	12.5	4000	1700
*AC460AKC	EX*60N****+NTV6100	57500	9.45	12.5	4000	1900
*AC460AKC	EX*60N****+NTV6125	57500	9.55	13	4000	1840
*AC460AKC	EX*60N****+MV20N26****	57500	9.65	13	4000	1830
*AC460AKC	EBP60****+TXV	55000	8.95	12	4000	1800
*AC460AKC	EBX60****	57000	9.25	12.5	4000	1800

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MODEL NUMBER IDENTIFICATION GUIDE

MODEL NUMBER PRODUCT FAMILY * = Brand	AC	4	24	A	K	C
						SALES CODE
						ELECTRICAL
						K = 208/230-1-60 H = 208/230-3-60
PRODUCT TYPE AC = Air Conditioning CA = Condenser A/C HP = Heat Pump CH = Condenser H/P						CONNECTIONS
						A = Sweat / Valve G = Sweat / Valve with 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, 25' (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