ARQUEST[®] USA DX 1300 Product Specifications

EFFICIENT 13 SEER AIR CONDITIONER ENVIRONMENTALLY SOUND R-410A REFRIGERANT

1–1/2 THRU 5 TONS SPLIT SYSTEM 208 / 230 Volt, 1–phase, 60 Hz

REFRIGERATION CIRCUIT

- Copeland Scroll[™] compressors on all models
- Filter-Drier supplied with every unit for field installation
- External high and low refrigerant service ports
- Copper tube / aluminum fin coil

PERFORMANCE

- 2-speed Fan Motors factory wired on all models
- Compressor Sound Jacket standard

EASY TO INSTALL AND SERVICE

- Comfort Alert[™] Diagnostics device on all models
- Easy Access service valves on all models
- Innovative control box design
- High and Low pressure switches
- Fan motor in-line disconnect plug
- Only two screws to access control panel
- Factory charged with R-410A refrigerant

BUILT TO LAST

- High gloss, baked-on powder coat finish over galvanized steel
- Post-painted (black) coil fins
- Coated, weather-resistant cabinet screws
- Coated inlet grille with 3/8" (10mm) spacing for extra protection (hail guard)
- Corner Posts for extra strength and style

WARRANTY*

- 1 year No Hassle Replacement[™] limited warranty
- 5 year compressor limited warranty
- 5 year parts limited warranty (including compressor and coil)
- With timely registration, an additional 5 year parts limited warranty (including compressor and coil)
- * For owner occupied, residential applications only. See warranty certificate for complete details and restrictions, including warranty coverage for other applications.

Model Number	Size (tons)	Nominal Btu/hr	Min. Circuit Ampacity	Max. Fuse or Breaker	Operating Dimensions height x width x depth in. (mm)	Ship / Operating Weight Ibs. (kg)
H4A318GKN	1-1/2	18,000	11.8	20	25–3/16 x 23–1/8 x 23–1/8 (640 x 587 x 587)	143 / 117 (65 / 53)
H4A324GKN	2	24,000	17.6	30	25–3/16 x 23–1/8 x 23–1/8 (640 x 587 x 587)	142 / 118 (64 / 54)
H4A330GKN	2–1/2	30,000	16.8	25	28–9/16 x 23–1/8 x 23–1/8 (726 x 587 x 587)	151 / 127 (69 / 58)
H4A336GKN	3	36,000	21.9	35	25–3/16 x 31–3/16 x 31–3/16 (640 x 793 x 793)	196 / 160 (89 / 73)
H4A342GKN	3–1/2	42,000	23.5	40	32 x 31–3/16 x 31–3/16 (813 x 793 x 793)	230 / 195 (104 / 89)
H4A348GKN	4	48,000	26.0	40	35–3/8 x 31–3/16 x 31–3/16 (899 x 793 x 793)	243 / 203 (110 / 92)
H4A360GKN	5	60,000	34.2	50	28–9/16 x 31–3/16 x 31–3/16 (726 x 793 x 793)	250 / 215 (113 / 98)





Use of the AHRI Certified TM Mark indicates a manufacturer's participation in the program. For

verification of certification for individual products.

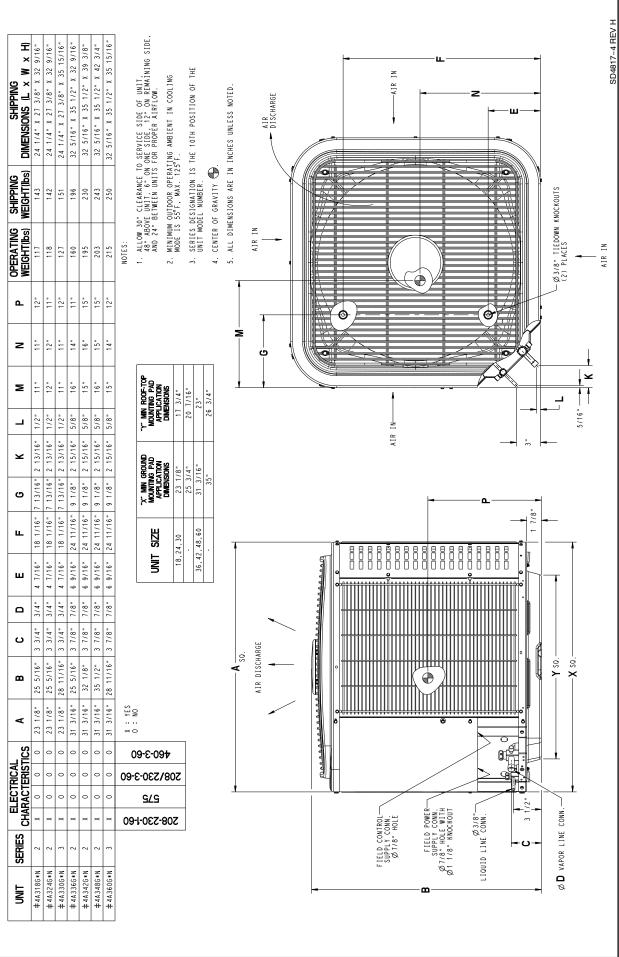
go to www.ahridirectory.org .



Specifications subject to change without notice.

OUTDOOR UNIT		EL NU	MBER	IDEN	IFICA	TION (GUIDE	(sing	le pha	se)	
Digit Position:	1	2	3	4	5, 6	7	8	9	10	11	12
Example Part Number:	н	4	Α	3	18	G	Κ	Ν	1	0	0
H = Airquest Mainline		J									
4 = R-410A R	EFRIGE	RANT									
A = Air Conditioner			,								
H = Heat Pump			TYPE								
3 = 13 SEER 4 = 14 SEER 5 = 15 SEER 6 = 16 SEER 7 = 17 SEER 8 = 18 SEER	N	ΟΜΙΝΙΔΙ	_ EFFIC	IENCY							
8 = 18 SEER 18 = 18,000 BTUH = 1–1/2 tons		OMINAL		IENCT							
24 = 24,000 BTUH = 1 - 1/2 tons	5										
30 = 30,000 BTUH = 2-1/2 tons	s										
36 = 36,000 BTUH = 3 tons	0										
42 = 42,000 BTUH = 3–1/2 ton	S										
48 = 48,000 BTUH = 4 tons											
60 = 60,000 BTUH = 5 tons			NOMIN	AL CAP	ACITY						
A = Standard Grille G = Coil Guard Grille C = Coastal					FEAT	URES					
					ILAI		J				
K = 208/230-1-60						VOL	TAGE	ļ			
Sales Code]		
Engineering Revision											
Extra Digit										-	
Extra Digit											

ACCESSORIES PART NUMBER IDENTIFICATION GUIDE									
	Digit Position:	1	2	3	4	5	6, 7	8, 9	10, 11
	Example Part Number:	Ν	Α	S	Α	0	01	01	СН
N = Non-Branded	BRA	NDING							
A = Accessory	PRC	DUCT C	GROUP						
S = Split System (AC & I	HP)		KIT I	USAGE					
A = Original					,				
B = 2nd Generation			Ν	AJOR S	SERIES				
0 = Generic or Not Applic	cable								
2 = R–22									
4 = R–410A					REFRIGI	ERANT			
Product Identifier Numbe	r						,		
Package Quantity								•	
Type of Kit									-
(Example: CH = Crankca	ase Heater)								



PRODUCT SPECIFICATIONS

shipping Dimensions (L × W × H)	616.0 X 695.3 X 827.1	616.0 X 695.3 X 912.8	616.0 X 695.3 X 912.8	820.8 X 901.7 X 827.1	820.8 X 901.7 X 1000.1	820.8 X 901.7 X 1085.8	820.8 X 901.7 X 912.8	WOLES: 1. ALLOW TR2.0 CLEARANCE TO SERVICE SIDE OF UNIT: 1. 219:2.ABORO UNIT: F12:0.000 REPAITING SIDE, 2. MINIMUM OUTDOOR OPERATING NABIENT IN COLLING 3. SERIES DESIGNATION IS THE TOTH POSITION OF THE MINIMUM OULD NOBEL NUMBER. 3. SERIES DESIGNATION IS THE TOTH POSITION OF THE 4. CENTER OF GRAVITY 4. ALL DIMENSIONS ARE IN YWY UNLESS NOTED. 5. ALL DIMENSIONS ARE IN YWY UNLESS NOTED. 5. ALL DIMENSIONS ARE IN YWY UNLESS NOTED. 6. CENTER OF GRAVITY 7. ALL DIMENSIONS ARE IN YWY UNLESS NOTED. 6. CENTER OF GRAVITY 7. ALL DIMENSIONS ARE IN YWY UNLESS NOTED. 7. ALL DIMENSIONS ARE IN YWY UNCENTRAL AND ALL YWY UNLESS NOTED. 7. ALL DIMENSION AND AND AND AND AND AND AND AND AND AN	
shipping Weight(K _{gs})	64.9	64.4	68.5	88.9	104.3	110.2	113.4	ES: ALLOW T62.0 CLEARANCE TO SERVICE SIDE OF UNIT, AD 609.6 BETWEEN UNITS FOR ROPER AIRELOM. ANNUM OUTDOOR OF RATION ABLINT IN COLING MODE IS 13°C, MAX. 3°C C. ANNUM OUTDOOR OF RATION OF THE INTI MODEL NUMBER. ALL DIMENSIONS ARE IN WAT UNLESS NOTED. ALL DIMENSIONS ARE IN WAT UNLESS NOTED. AIR IN AIR	
operating Weight(Kgs)	53.1	53.5	57.6	72.6	88.4	92.1	97.5	ES: ALLOW 762.0 CLEARANCE A19.2 ABOVE UNIT 15; A19.2 ABOVE UNIT 15; A19.2 ABOVE UNIT 15; A10.1 TO ANT 17 A11.1 ANT 10 A11.0 INEREN AT 10 A11.0 INEREN ARE IN A11.0 INEREN ARE IN A11.0 INEREN ARE IN A11.0 INEREN ARE IN A12.0 STREEP ART 10 A11.0 INEREN ART 10 A11.0 INERN ART 10 A	AIR IN
٩	304.8	279.4	304.8	279.4	381.0	381.0	304.8	NOTES: 1. ALL 1. ALL	
z	279.4	304.8	279.4	355.6	406.4	381.0	355.6		
×	279.4	304.8	279.4	406.4	381.0	406.4	381.0	This is the second seco	
_	12.8	12.8	12.8	16.3	16.3	16.3	16.3	AIR IN 100 100 100 100 100 100 100 100 100 10	
×	70.9	70.9	70.9	74.5	74.5	74.5	74.5		
G	197.9	197.9	197.9	231.3	231.3	231.3	231.3	Amounting PAD Amounting PAD Amenication Amenication Amenication Amenication Amenication 192:5 192:5 192:5	
ш	459.0	459.0	459.0	626.3	626.3	626.3	626.3		
ш	113.0	113.0	113.0	166.1	166.1	166.1	166.1		
۵	19.1	19.1	19.1	22.2	22.2	22.2	22.2		
ပ	95.6	95.6	95.6	97.9	97.9	97.9	97.9	S0. 0	
m	642.9	642.9	729.3	642.9	815.6	902.0	729.3	X × ×	
A	587.3	587.3	587.3	792.5	792.5	792.5	792.5		
TICS TICS	0	0	0	0	0	0	0	+e0-3-e0	
ARACTERIST	0	-	_	0	-	0	0		
CHARACTERISTICS	0	-		0	-	0	0	EVENTIAL CONN- INE CONN- INE CONN- INE CONN- INE CONN- State CONN- CONN	
SERIES CH	2 X	2 X	3	2 X	2 X	2 X	3 X	FIELD CONTROL 575 SUPPLY CONROL 208-230-1-60 SUPPLY CONROL 222.23 HOLE WITH Ø 222.23 HOLE WITH 88.9 M PAPOR LINE CONN 88.9	
UNIT SER		_	_	#4A336G*N 2			±4A360G∗N 3		

	PHY	SICAL D	ATA				
Model Size	18	24	30	36	42	48	60
Nominal Cooling Capacity (BTU/hr)	18,000	24,000	30,000	36,000	42,000	48,000	60,000
Nominal SEER	13.0	13.0	13.0	13.0	13.0	13.0	13.0
Sound Rating** High Speed Fan (dBA) Low Speed Fan (dBA)	70 68	74 71	73 72	73 72	74 74	73 71	74 72
PSC Fan Motor HP	1/12	1/10	1/10	1/5	1/5	1/4	1/4
Fan RPM High Fan RPM Low	1094 995	1092 990	1087 937	840 803	841 799	828 764	816 735
Fan CFM (High)	1747	2191	2191	3359	3359	3937	3937
Coil Face Area ft ² (m ²)	8.40 (0.78)	8.40 (0.78)	9.80 (0.91)	12.93 (1.20)	17.25 (1.60)	19.40 (1.80)	15.09 (1.40)
Coil Rows-fins per inch	1–20	1–25	1–25	1–25	1–25	1–25	2–20
Low Pressure Switch Open Pressure (psig) Close Pressure (psig)	50 ± 7 95 ± 7	50 ± 7 95 ± 7	50 ± 7 95 ± 7	50 ± 7 95 ± 7			
High Pressure Switch Open Pressure (psig) Close Pressure (psig)	610 ± 10 420 ± 25						
Liquid Line Connection Size in. (mm)	3/8 (10)	3/8 (10)	3/8 (10)	3/8 (10)	3/8 (10)	3/8 (10)	3/8 (10)
Vapor Line Connection Size in. (mm)	3/4 (19)	3/4 (19)	3/4 (19)	7/8 (22)	7/8 (22)	7/8 (22)	7/8 (22)
Recommended Line Set Liquid Tube Diameter in. (mm)	3/8 (10)	3/8 (10)	3/8 (10)	3/8 (10)	3/8 (10)	3/8 (10)	3/8 (10)
Recommended Line Set Vapor Tube Diameter in. (mm)*	3/4 (19)*	3/4 (19)*	3/4 (19)*	7/8 (22)*	7/8 (22)*	7/8 (22)*	1–1/8 (29)
Recommended Vapor Tube Line size is ine" installations. When the total equival ertical separation between indoor and ou urchasing/installing line sets.	ent line leng	th exceeds	s 80 feet (2	4.4m) or th	ere is more	e than 20 fe	et (6.1m

Factory Charge R-410A lbs. (kg)	3.50	3.80	4.10	5.34	5.84	7.00	8.00
	(1.59)	(1.72)	(1.86)	(2.42)	(2.65)	(3.18)	(3.63)
Required Subcooling ° F (° C)	10 (6)	10 (6)	10 (6)	12 (7)	10 (6)	15 (8)	10 (6)

ELECTRICAL DATA (208/230–1–60, voltage range 197V – 253V)											
Model Size	18	24	30	36	42	48	60				
Minimum Circuit Ampacity – MCA (amps)	11.8	17.6	16.8	21.9	23.5	26.0	34.2				
Maximum OverCurrent Protective device – MOCP (amps)	20	30	25	35	40	40	50				
Compressor RLA (Rated Load Amps) LRA (Locked Rotor Amps)	9.0 48	13.5 58.3	12.8 64	16.7 79	17.9 112	19.9 109	26.4 134				
Fan Motor FLA (Full Load Amps)	0.5	0.75	0.75	1.1	1.1	1.2	1.2				

**Sound Rating tested in accordance with AHRI Standard 270-2008 (not listed with AHRI).

R-4	R-410A COOLING CAPACITY LOSS FOR VARIOUS LINE LENGTHS & TUBE DIAMETERS											AMET	ERS
	Liquid	Acceptable			ng Capa o Long L	-	. ,		•		•	• •	
Model	Line	Vapor Line Sizes	Standa	ard Appl	ication		Long L	ine App	lication	(Require	s Acces	sories)	
Size	in.(mm)	in.(mm)	25'	50'	80'	81'	100'	125'	150'	175'	200'	225'	250'
			(7.6)	(15.2)	(24.4)	(24.7)	(30.5)	(38.1)	(45.7)	(53.3)	(61)	(68.6)	(76.2)
		1/2 (13)	1	2	3	3	4	6	7	8	9	10	12
18		5/8 (16)	0	0	1	1	1	1	2	2	3	3	3
		3/4 (19)	0	0	0	0	0	1	1	1	1	1	1
		5/8 (16)	0	1	1	1	2	3	3	4	4	5	6
24		3/4 (19)	0	0	0	0	0	1	1	1	1	1	2
		7/8 (22)	0	0	0	0	0	0	0	0	0	0	1
		5/8 (16)	1	2	3	3	3	4	5	6	7	8	9
30		3/4 (19)	0	0	1	1	1	1	2	2	2	3	3
		7/8 (22)	0	0	0	0	0	1	1	1	1	1	1
		5/8 (16)	1	2	4	4	5	6	7	9	10	11	13
36	3/8 (10)	3/4 (19)	0	0	1	1	1	2	2	3	3	4	4
		7/8 (22)	0	0	0	0	0	1	1	1	1	2	2
		3/4 (19)	0	1	2	2	2	3	4	4	5	6	6
42		7/8 (22)	0	0	1	1	1	1	2	2	2	3	3
		1–1/8 (29)	0	0	0	0	0	0	0	0	0	0	1
		3/4 (19)	0	1	2	2	3	4	5	5	6	7	8
48/49		7/8 (22)	0	0	1	1	1	2	2	2	3	3	4
		1–1/8 (29)	0	0	0	0	0	0	0	0	1	1	1
		3/4 (19)	1	2	4	4	5	6	7	9	10	11	12
60/61		7/8 (22)	0	1	2	2	2	3	4	4	5	5	6
		1-1/8(29)	0	0	0	0	1	1	1	1	1	1	2

* Applications are considered "Long Line" if the total equivalent tubing length exceeds 80 feet (24.4m) or there is more than 20 foot (6.1m) vertical separation between indoor and outdoor units. These applications require additional accessories and system modifications for reliable system operation.

Applications in shaded area may have height restrictions that limit allowable total equivalent length when outdoor unit is below indoor unit.

	COOLING PERI	FORMANCE FOR	COMBINAT	ION RATIN	GS Indoo	r Models		
		gs information, use the A atings may be listed onlir		,		ectory.org.		
				AH	RI Standard	Ratings		
Cooling 95°F (35°C)								
						SEER		
				Factory		W/ Field	W/ Field]
Unit Size	Indoor Model	Furnace Model	Capacity	Enhance	Standard	TDR	TXV	EER
H4A318GKN	*ED*4X18B**		17200	TXV		13		10.9
H4A324GKN	*ED*4X24B**		23000	TXV		13		11
H4A330GKN	*ED*4X30B**		27200	TXV		13		10.8
H4A336GKN	*ED*4X36F**		35200	TXV		13.2		11
H4A342GKN	*ED*4X42J**		41000	TXV		13.2		11
H4A348GKN	*ED*4X48J**		46000	TXV		13.2		11
H4A360GKN	*ED*4X60L**		57500	TXV		13		11

TESTED AHRI COMBINATION RATINGS*

NOTE: Ratings contained in this document are subject to change at any time.

For AHRI ratings certificates, please refer to the AHRI directory. **www.ahridirectory.org** Additional ratings and system combinations can be accessed via the Airquest database: <u>http://www.icpeqp.com/AHRIratings/ratings.aspx?Brand=Airquest</u> Or scan this QR code:



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PRODUCT SPECIFICATIONS

	ACCESSORY USAGE GUIDELIN	IES
	REQUIRED FOR LOW-AMBIENT	REQUIRED FOR LONG LINE
Accessory	APPLICATIONS	APPLICATIONS*
	{Below 55°F (13°C)}	{Over 80 Ft.(24.4m)}
Crankcase Heater	Yes	Yes
Evaporator Freeze Thermostat	Yes	No
Winter Start Control	Yes	No
Hard Start Kit (Capacitor & Relay)	Yes	Yes
Low Ambient Kit (Pressure Switch)	Yes	No
Support Feet, 4" (102mm) tall	Recommended	No
Liquid Line Solenoid Valve	No	See Long-Line Application Guideline

* For Line Set lengths between 80 and 200 ft (24.4 and 61m) horizontal, or more than 20 ft (6.1m) indoor-outdoor vertical separation, refer to the Long Line Application Guideline document.

	ACCESSORIES				
Part Number	Description	Used On Model Size			
NASA001CH	Crankcase Heater for Scroll Compressor (208/230 V)	42, 48, 60			
NASA003CH	NASA003CH Crankcase Heater for Scroll Compressor (208/230 V)				
NASA001SC	Start Component – PTC Device	ALL			
NASA00201FS	Evaporator Freeze Thermostat	ALL			
NASA401LS	Liquid Line Solenoid Valve, R-410A	ALL			
NASA001TD	Time Delay Relay, Indoor Blower	ALL			
NASA00201WS	Winter Start Control	ALL			
NASA001AC	Anti-Cycle Timer (5 minute delay)	ALL			
NASA005SC	Hard Start Kit (Capacitor & Relay)	ALL			
NASA401LA	Low Ambient Kit (Pressure Switch), R–410A	ALL			
NASA00201SF	Support Feet, 4" (102mm) tall (5 blocks)	18, 24, 36			
NASA001SF	Support Feet, 4" (102mm) tall (4 blocks)	30, 42, 48, 60			
EBAC05TXVX	TXV Kit, R-410A - 2005-2009 R-22 TXV Fancoils (air handlers)	18, 24, 30			
EBAC06TXVX	TXV Kit, R-410A - 2005-2009 R-22 TXV Fancoils (air handlers)	36, 42			
EBAC07TXVX	TXV Kit, R-410A - 2005-2009 R-22 TXV Fancoils (air handlers)	48, 60			
NAEA40501TX	TXV Kit, R-410A - 2010 and later Piston Coils	18, 24, 30			
NAEA40601TX	TXV Kit, R-410A - 2010 and later Piston Coils	36, 42			
NAEA40701TX	TXV Kit, R-410A - 2010 and later Piston Coils	48, 60			