



R4H4

Product Specifications

EFFICIENT 14 SEER HEAT PUMP ENVIRONMENTALLY SOUND R-410A REFRIGERANT

1-1/2 THRU 5 TONS SPLIT SYSTEM

208 / 230 Volt, 1-phase, 60 Hz

REFRIGERATION CIRCUIT

- Scroll compressors on all models
- Suction line accumulator factory installed
- Integrated solid state control with Time-Temperature Defrost
- High and Low pressure switches
- Copper tube / aluminum fin coil

EASY TO INSTALL AND SERVICE

- Easy Access service valves on all models
- External high and low refrigerant service ports
- Only two screws to access control panel
- Factory charged with R-410A refrigerant

BUILT TO LAST

- Painted cabinet finish over galvanized steel
- Coated inlet grille with 3/8" (10mm) spacing standard (hail guard)

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.



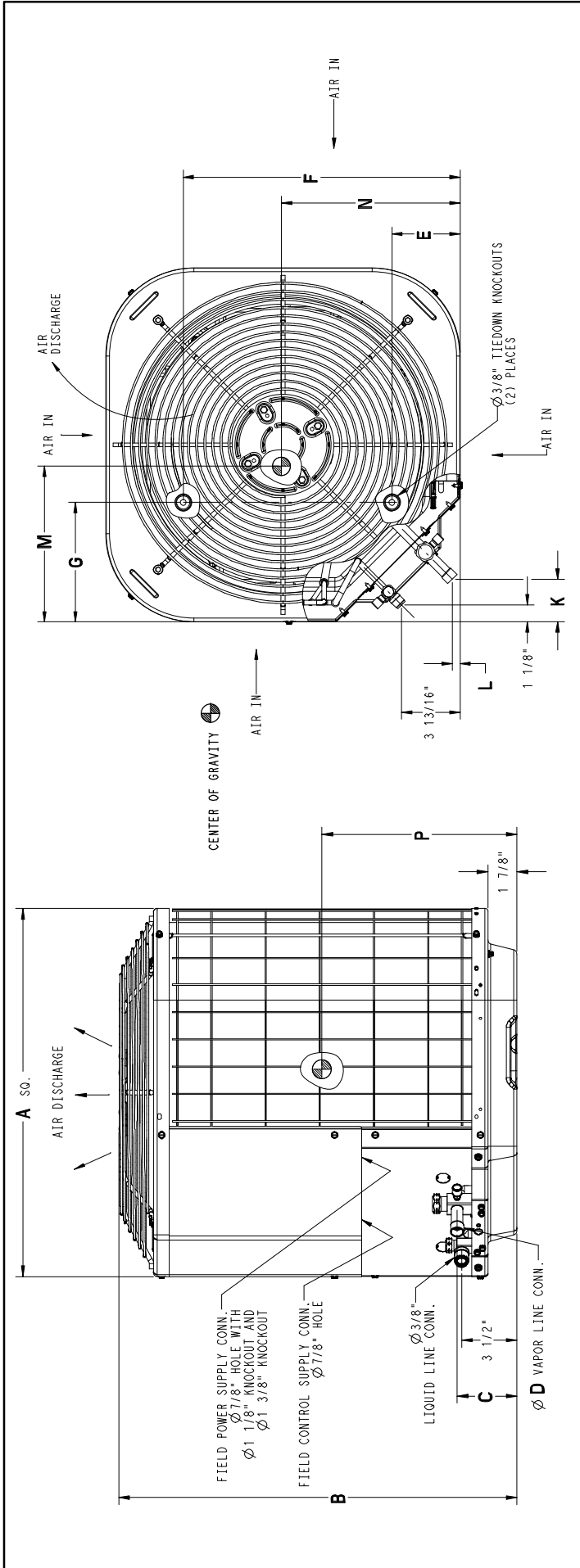
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Model Number	Size (tons)	Nominal BTU/hr	Min. Circuit Ampacity	Max. Fuse or Breaker	Operating Dimensions length x width x height in. (mm)	Operating/Shipping Weight lbs.(kg)
R4H418GKA	1-1/2	18,000	11.8	20	23-1/8 x 23-1/8 x 35-3/16 (587 x 587 x 894)	134/148 (61/67)
R4H424GKA	2	24,000	17.7	25	31-3/16 x 31-3/16 x 28-7/16 (792 x 792 x 722)	151/171 (69/78)
R4H430GKA	2-1/2	30,000	20.8	30	31-3/16 x 31-3/16 x 39-1/8 (792 x 792 x 994)	172/194 (78/88)
R4H436GKA	3	36,000	20.4	35	31-3/16 x 31-3/16 x 39-1/8 (792 x 792 x 994)	181/203 (82/92)
R4H442GKA	3-1/2	42,000	25.7	40	31-3/16 x 31-3/16 x 28-7/16 (792 x 792 x 722)	198/211 (90/99)
R4H448GKA	4	48,000	28.7	50	31-3/16 x 31-3/16 x 31-13/16 (792 x 792 x 808)	221/239 (101/109)
R4H460GKA	5	60,000	34.1	50	35 x 35 x 28-15/16 (889 x 889 x 735)	250/282 (114/128)

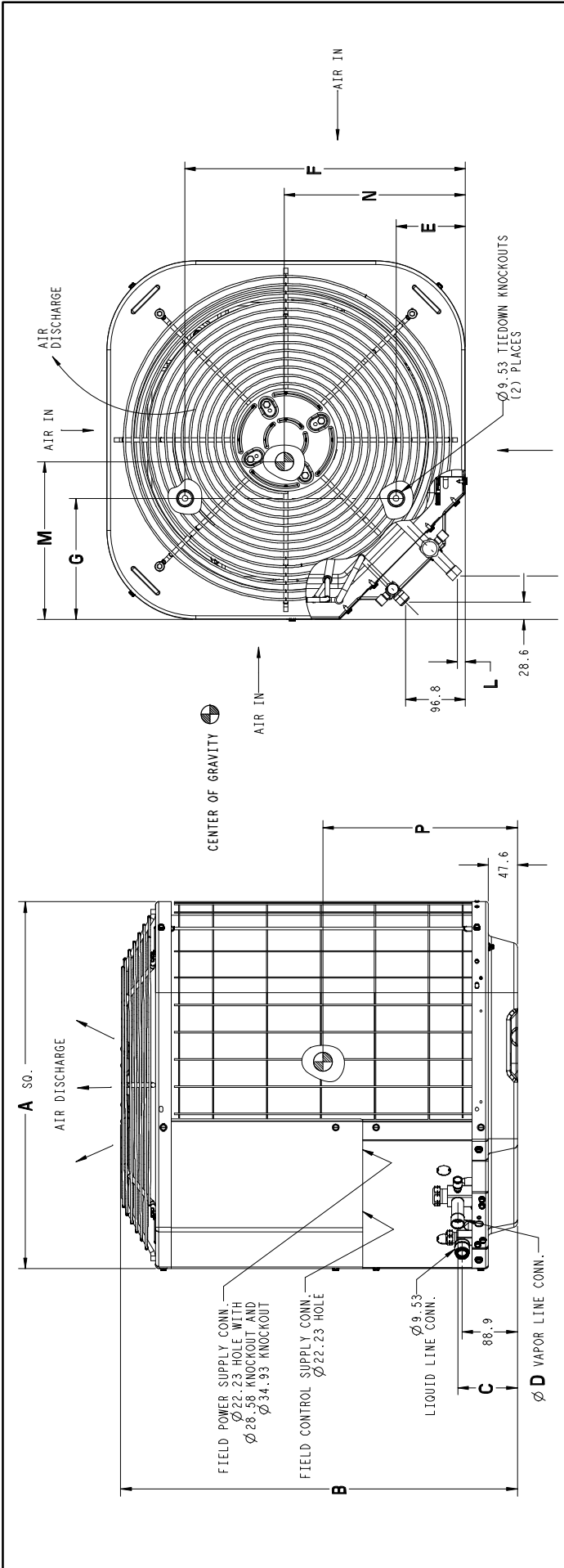
OUTDOOR UNIT MODEL NUMBER IDENTIFICATION GUIDE (single phase)											
Digit Position:	1	2	3	4	5, 6	7	8	9	10	11	12
Example Part Number:	R	4	H	4	18	G	K	A	1	0	0
Product Family	REFRIGERANT		TYPE								
4 = R-410A											
A = Air Conditioner											
H = Heat Pump											
4 = 14 SEER	NOMINAL EFFICIENCY										
18 = 18,000 BTUH = 1-1/2 tons											
24 = 24,000 BTUH = 2 tons											
30 = 30,000 BTUH = 2-1/2 tons											
36 = 36,000 BTUH = 3 tons											
42 = 42,000 BTUH = 3-1/2 tons											
48 = 48,000 BTUH = 4 tons											
60 = 60,000 BTUH = 5 tons			NOMINAL CAPACITY								
G = Coil Guard Grille					FEATURES						
K = 208/230-1-60							VOLTAGE				
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:	N	A	S	A	0	01	01	CH	
N = Non-Branded	BRANDING								
A = Accessory	PRODUCT GROUP								
S = Split System (AC & HP)			KIT USAGE						
A = Original					MAJOR SERIES				
B = 2nd Generation									
0 = Generic or Not Applicable									
2 = R-22									
4 = R-410A					REFRIGERANT				
Product Identifier Number									
Package Quantity									
Type of Kit (Example: CH = Crankcase Heater)									



All Dimensions Inches (English)

Model	A	B	C	D	E	F	G	K	L	M	N	P	Minimum Mounting Pad Size	Crated Dimensions L x W x H
R4H418GKA	23-1/8	35-3/16	3-3/4	5/8	4-7/16	18-1/16	7-13/16	2-13/16	1/2	11-1/2	10-1/2	13-1/2	23-1/2 x 23-1/2	24-1/8 x 24-1/8 x 37-1/4
R4H424GKA	31-3/16	28-7/16	3-3/4	5/8	6-9/16	24-11/16	9-1/8	2-13/16	1/2	15-5/8	16-3/4	14-1/2	31-1/2 x 31-1/2	32-1/4 x 32-1/4 x 30-3/8
R4H430GKA	31-3/16	39-1/8	3-3/4	3/4	6-9/16	24-11/16	9-1/8	2-15/16	1/2	15-5/8	16-3/4	17	31-1/2 x 31-1/2	32-1/4 x 32-1/4 x 40-5/8
R4H436GKA	31-3/16	39-1/8	3-3/4	3/4	6-9/16	24-11/16	9-1/8	2-15/16	1/2	15-5/8	16-3/4	17	31-1/2 x 31-1/2	32-1/4 x 32-1/4 x 40-5/8
R4H442GKA	31-3/16	28-7/16	3-7/8	7/8	6-9/16	24-11/16	9-1/8	2-15/16	5/8	15	15	11-1/2	31-1/2 x 31-1/2	32-1/4 x 32-1/4 x 30-3/8
R4H448GKA	31-3/16	31-13/16	3-7/8	7/8	6-9/16	24-11/16	9-1/8	2-15/16	5/8	15	15	12-1/2	31-1/2 x 31-1/2	32-1/4 x 32-1/4 x 34
R4H460GKA	35	28-15/16	3-7/8	7/8	6-9/16	28-7/16	9-1/8	2-15/16	5/8	17	16	12	35 x 35	37-1/8 x 37-1/8 x 30



All Dimensions mm (SI Metric)

Model	A	B	C	D	E	F	G	K	L	M	N	P	Minimum Mounting Pad Size	Crated Dimensions L x W x H
R4H418GKA	587	894	95	16	113	459	198	71	13	292	237	434	597 x 597	613 x 613 x 944
R4H424GKA	792	722	95	16	167	627	232	71	13	397	425	368	800 x 800	818 x 818 x 771
R4H430GKA	792	994	95	19	167	627	232	75	13	397	425	432	800 x 800	818 x 818 x 1031
R4H436GKA	792	994	95	19	167	627	232	75	13	397	425	432	800 x 800	818 x 818 x 1031
R4H442GKA	792	722	98	22	167	627	232	75	16	381	381	292	800 x 800	818 x 818 x 771
R4H448GKA	792	808	98	22	167	627	232	75	16	381	381	318	800 x 800	818 x 818 x 864
R4H460GKA	889	735	98	22	167	722	232	75	16	432	406	305	889 x 889	943 x 943 x 762

PHYSICAL DATA							
Model Size – R4H4	18	24	30	36	42	48	60
ELECTRICAL							
Unit: Volts–Phase–Hertz	208/230–1–60						
Operating Voltage Range	197–253						
Unit Ampacity for Wiring Size (MCA)	11.8	17.7	20.8	20.4	25.7	28.7	34.1
Min. Wire Size (60°C/75°C Copper) (AWG)*	14/14	14/14	12/12	12/12	10/10	10/10	8/10
Max Length (60°C/75°C (Ft)†	67/64	45/42	60/57	61/58	78/74	70/66	91/56
Max Branch Circuit Fuse Size (Amps)‡	20	25	30	35	40	50	50
Compressor Rated Load Amps	9.0	13.5	16.0	15.4	19.9	21.8	26.3
Locked Rotor Amps	48.0	58.3	77.0	70.0	109.0	117.0	134.0
Fan Motor HP	1/12	1/10	1/10	1/5	1/10	1/4	1/4
Fan RPM (single speed)	1100	1100	1100	1100	1100	1100	800
Fan Motor Full Load Amps	0.50	0.75	0.75	1.10	0.75	1.40	1.20
COMPRESSOR AND REFRIGERANT							
Compressor Type	Scroll						
Refrigerant Charge R–410A lbs. (kg)	5.3 (2.40)	6.75 (3.06)	7.50 (3.40)	7.60 (3.45)	8.88 (4.03)	10.50 (4.76)	11.0 (4.99)
REFRIGERANT TUBES							
Rated Vapor**	5/8	5/8	3/4	3/4	7/8	7/8	1–1/8
Liquid	3/8						
OUTDOOR COIL AND FAN							
Coil Face Area ft ² (m ²)	12.6 (1.17)	15.1 (1.46)	21.6 (2.00)	21.6 (2.00)	15.1 (1.46)	17.2 (1.60)	17.6 (1.63)
Fan CFM	1700	2614	2614	3365	2614	3365	4046

*The ampacity of non-metallic (NM) sheathed cable shall be that of 60° C (140° F) conductors per NEC 2011, Article 336–26. If wire used is other than specified in chart, refer to applicable tables available in 2011 NEC. Copper wire must be used from disconnect to unit.

† Length shown is as measured 1 way along the wire path between the unit and the service panel for a voltage drop not to exceed 2%.

‡ Units may use fuses or circuit breakers (U.S. only).

** Units are rated with 0–80 ft (0–24 m) of lineset length. See *Vapor Line Sizing and Cooling Capacity Loss* table when using other sizes and lengths of lineset.

METERING DEVICE			
UNIT SIZE	OUTDOOR PISTON	REQUIRED TXV SUBCOOLING °F (°C)	INDOOR METERING DEVICE
18	42	11 (6.1)	49
24	42	11 (6.1)	57
30	55	10 (5.5)	70
36	57	10 (5.5)	73
42	65	11 (6.1)	78
48	70	15 (8.3)	84
60	76	15 (8.3)	TXV*

* TXV must be ordered separately when indoor coil is not supplied with a TXV. TXV must be hard–shutoff type.

VAPOR LINE SIZING AND COOLING CAPACITY LOSS

Acceptable vapor line diameters provide adequate oil return to the compressor while avoiding excessive capacity loss. The suction line diameters shown in the chart below are acceptable for HP systems with R-410A refrigerant:

R-410A COOLING CAPACITY LOSS FOR VARIOUS LINE LENGTHS & TUBE DIAMETERS												
Unit Nominal Size	Maximum Liquid Line Diameters in. (mm)	Acceptable Vapor Line Sizes in. (mm)	Cooling Capacity Loss (%)									
			Total Equivalent Line Length, ft (m)									
			Standard Application			Long Line Application Requires Accessories						
			25 (7.6)	50 (15.2)	80 (24.4)	81-100 (25-30)	101-125 (31-38)	126-150 (38-46)	151-175 (46-53)	176-200 (54-61)	201-225 (61-69)	226-250 (69-76)
18 1 Stage R-410A HP	3/8 (10)	1/2 (13)	1	2	3	3	4	6	7	8	9	10
		5/8 (16)	0	0	1	1	1	1	2	2	3	3
		3/4 (19)	0	0	0	0	0	0	0	1	1	1
25 1 Stage R-410A HP	3/8 (10)	5/8 (16)	0	1	1	1	2	3	3	4	4	5
		3/4 (19)	0	0	0	0	0	1	1	1	1	1
		7/8 (22)	0	0	0	0	0	0	0	0	0	0
30 1 Stage R-410A HP	3/8 (10)	5/8 (16)	1	2	2	2	3	4	5	6	7	8
		3/4 (19)	0	0	0	1	1	1	2	2	2	3
		7/8 (22)	0	0	0	0	0	1	1	1	1	1
36 1 Stage R-410A HP	3/8 (10)	5/8 (16)	1	2	4	4	5	6	7	9	10	11
		3/4 (19)	0	0	1	1	1	2	2	3	3	4
		7/8 (22)	0	0	1	1	0	1	1	1	1	2
42 1 Stage R-410A HP	3/8 (10)	3/4 (19)	0	1	2	2	2	3	4	4	5	6
		7/8 (22)	0	0	1	1	1	1	2	2	2	3
		1-1/8 (29)	0	0	0	0	0	0	0	0	0	0
48 1 Stage R-410A HP	3/8 (10)	3/4 (19)	1	2	2	2	3	4	5	6	7	7
		7/8 (22)	0	1	1	1	2	2	2	3	3	4
		1-1/8 (29)	0	0	0	0	0	0	1	1	1	1
60 1 Stage R-410A HP	3/8 (10)	3/4 (19)	1	2	3	3	4	6	7	8	9	11
		7/8 (22)	0	1	1	1	2	2	3	4	4	5
		1-1/8 (29)	0	0	0	0	0	0	0	1	1	1

* 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 this area are "Long Line". Accessories are required as shown recommended on Long Line Applications Guideline.

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

REFRIGERANT PIPING LENGTH LIMITATIONS

Maximum Line Lengths

The maximum allowable total equivalent length for heat pumps varies depending on the vertical separation. See the tables below for allowable lengths depending on whether the outdoor unit is on the same level, above or below the outdoor unit.

MAXIMUM LINE LENGTHS FOR HEAT PUMP APPLICATIONS			
	MAXIMUM ACTUAL LENGTH ft (m)	MAXIMUM EQUIVALENT † LENGTH ft (m)	MAXIMUM VERTICAL SEPARATION ft (m)
Units on Equal Level	200 (61)	250 (76.2)	N/A
Outdoor Unit ABOVE Indoor Unit	200 (61)	250 (76.2)	200 (61)
Outdoor Unit BELOW Indoor Unit	See Table 'Maximum Total Equivalent Length: Outdoor Unit BELOW Indoor Unit'		

† Total equivalent length accounts for losses due to elbows or fitting. See the Long Line Guideline for details.

Maximum Total Equivalent Length† - Outdoor Unit BELOW Indoor Unit								
Model Size	Liquid Line in.(mm)	HP with R-410A Refrigerant - Maximum Total Equivalent Length						
		Vertical Separation ft (m) Outdoor unit BELOW indoor unit;						
		0-20 (0-6.1)	21-30 (6.4-9.1)	31-40 (9.4-12.2)	41-50 (12.5-15.2)	51-60 (15.5-18.3)	61-70 (18.6-21.3)	71-80 (21.6-24.4)
18	3/8 (10)	250*	250*	250*	250*	250*	250*	250*
24		250*	250*	250*	250*	250*	250*	250*
30		250*	250*	250*	250*	250*	250*	250*
36		250*	250*	250*	250*	250*	250*	250*
42		250*	250*	250*	250*	250*	250*	150
48		250*	250*	250*	250*	230	160	--
60		250*	225*	190	150	110	--	--

* Maximum actual length not to exceed 200 ft (61 m)

† Total equivalent length accounts for losses due to elbows or fitting. See the Long Line Guideline for details.

-- = outside acceptable range

LONG LINE APPLICATIONS

An application is considered Long Line when the refrigerant level in the system requires the use of accessories to maintain acceptable refrigerant management for systems reliability. Defining a system as long line depends on the liquid line diameter, actual length of the tubing, and vertical separation between the indoor and outdoor units.

For Heat Pump systems, the chart below shows when an application is considered Long Line. Beyond these lengths, long line accessories are required:

HP WITH R-410A REFRIGERANT LONG LINE DESCRIPTION ft (m)			
Beyond these lengths, long line accessories are required			
Liquid Line Size	Units On Same Level	Outdoor Below Indoor	Outdoor Above Indoor
3/8	80 (24.4)	20 (6.1) vertical or 80 (24.4) total	80 (24.4)

Note: See Long Line Guideline for details

R4H4 A-Weighted Sound Power Level - Without Sound Shield								
Model	Standard Rating (dBA)	Typical Octave Band Spectrum (dBA without pure tone adjustment)						
		125	250	500	1000	2000	4000	8000
R4H418GKA	70	50.0	58.0	63.5	65.5	60.0	57.0	52.0
R4H424GKA	74	52.5	61.5	68.0	70.0	67.0	63.5	58.5
R4H430GKA	74	49.5	59.5	65.0	70.5	66.0	64.5	60.0
R4H436GKA	72	53.0	60.0	66.5	67.5	65.0	63.0	57.5
R4H442GKA	77	56.0	66.5	70.0	72.0	67.5	64.0	57.0
R4H448GKA	78	57.0	66.0	71.0	73.5	70.5	67.0	61.0
R4H460GKA	77	55.0	63.0	67.5	71.5	68.0	64.0	60.5

Note: Tested in accordance with AHRI Standard 270-2008 (not listed in AHRI).

R4H4 A-Weighted Sound Power Level - With Sound Shield								
Model	Standard Rating (dBA)	Typical Octave Band Spectrum (dBA without pure tone adjustment)						
		125	250	500	1000	2000	4000	8000
R4H418GKA	68	49.5	56.0	62.5	63.5	59.0	56.0	50.5
R4H424GKA	73	52.5	61.0	67.5	69.0	65.5	62.0	56.5
R4H430GKA	73	51.5	62.0	66.5	67.5	64.5	62.0	57.5
R4H436GKA	72	54.5	59.5	66.0	67.0	64.0	62.0	56.5
R4H442GKA	76	57.0	66.0	70.0	70.5	67.0	63.5	56.5
R4H448GKA	77	58.0	66.5	71.0	72.5	70.0	66.5	59.5
R4H460GKA	74	55.0	63.5	67.0	69.0	66.5	62.0	57.0

Note: Tested in accordance with AHRI Standard 270-2008 (not listed in AHRI).

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 Maratherm database at:
<http://www.icpeqp.com/AHRIratings/ratings.aspx?Brand=Maratherm>
 Or scan this QR code:



COOLING & HEATING PERFORMANCE FOR COMBINATION RATINGS											
Outdoor Model	Indoor Model *Tested Model	Furnace Model	COOLING				HEATING				
			Factory Installed	Capacity	SEER	EER	HIGH TEMP		LOW TEMP		
							Capacity	COP	Capacity	COP	
R4H418GKA	*FEM4X18**B*		TDR&TXV	17,800	14.0	11.5	17,600	3.72	10,400	2.40	8.0
R4H424GKA	*FEM4X30**B*		TDR&TXV	22,600	14.0	11.5	21,800	3.60	13,400	2.42	7.8
R4H430GKA	*FEM4X30**B*		TDR&TXV	30,000	14.0	11.5	29,600	3.58	18,300	2.44	8.0
R4H436GKA	*FEM4X36**B*		TDR&TXV	33,600	14.0	11.7	34,000	3.74	20,400	2.42	8.0
R4H442GKA	*FEM4X48**B*		TDR&TXV	41,000	14.0	11.5	39,000	3.74	23,600	2.60	8.0
R4H448GKA	*FEM4X60**B*		TDR&TXV	45,500	14.0	11.5	45,000	3.70	26,600	2.48	8.0
R4H460GKA	*FXM4X60**A*		TDR&TXV	58,500	14.0	11.5	55,500	3.68	35,000	2.62	8.0

* AHRI = Air Conditioning, Heating & Refrigeration Institute

EERA — Energy Efficiency Ratio – 'A' conditions – 80°F (26.6°C) indoor db/67°F (19.4°C) indoor wb & 95°F (35°C) outdoor wb.

SEER — Seasonal Energy Efficiency Ratio

NOTES:

1. Ratings are net values reflecting the effects of circulating fan motor heat. Supplemental electric heat is not included.
2. Tested outdoor/indoor combinations have been tested in accordance with DOE test procedures for central air conditioners. Ratings for other combinations are determined under DOE computer simulation procedures.
3. Determine actual CFM values obtainable for your system by referring to fan performance data in fan coil or furnace coil literature.
4. Do not apply with capillary tube coils as performance and reliability are significantly affected.

EXPANDED COOLING PERFORMANCE RATINGS For Outdoor / Indoor Models

For complete ratings information, use the AHRI website directory search: www.AHRIdirectory.org.
New ratings may be listed online before Specification Sheets are updated.

R4H436GKA Outdoor With FEM4P36**A* Indoor Cooling

Table for R4H436GKA Outdoor With FEM4P36**A* Indoor Cooling. Columns include Outdoor Ambient Temperature (75, 85, 95, 105, 115) and Entering Indoor Temperature (57, 62, 63, 67, 72). Rows include CFM, MBH, S/T, AMPS, HI PR, and LO PR for models 1050, 1200, and 1350.

R4H442GKA Outdoor With FEM4X48**B* Indoor Cooling

Table for R4H442GKA Outdoor With FEM4X48**B* Indoor Cooling. Columns include Outdoor Ambient Temperature (75, 85, 95, 105, 115) and Entering Indoor Temperature (57, 62, 63, 67, 72). Rows include CFM, MBH, S/T, AMPS, HI PR, and LO PR for models 1225, 1400, and 1575.

R4H448GKA Outdoor With FEM4X60**B* Indoor Cooling

Table for R4H448GKA Outdoor With FEM4X60**B* Indoor Cooling. Columns include Outdoor Ambient Temperature (75, 85, 95, 105, 115) and Entering Indoor Temperature (57, 62, 63, 67, 72). Rows include CFM, MBH, S/T, AMPS, HI PR, and LO PR for models 1400, 1600, and 1800.

† Total capacities are net (I.D blower heat subtracted) system capacities based on 25' line set.
If additional tubing length and/or indoor unit is located above outdoor unit, a slight variation in capacity may occur.
* System amps are total of indoor and outdoor amps
‡ S/T are based on 80 F db entering air at the indoor coil. For sensible capacities at other than 80 F db, deduct 835 Btuh per GKA0 cfm of indoor coil air from MBhxS/T for each degree below 80 F, or add 835 Btuh per GKA0 cfm of indoor coil air from MBhxS/T for each degree above 80 F
†† At TVA rating indoor condition (75 F db/ 63 F wb), All other indoor air temperatures are at 80 F db

EXPANDED COOLING PERFORMANCE RATINGS For Outdoor / Indoor Models

For complete ratings information, use the AHRI website directory search: www.AHRIdirectory.org.
New ratings may be listed online before Specification Sheets are updated.

R4H460GKA Outdoor With FXM4X60A* Indoor Cooling**

Outdoor Ambient Temperature - Degrees F, Dry Bulb

75	85					95					105					115				
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Entering Indoor Temperature - Degrees F, Wet Bulb

CFM		57					62					63††					67					72				
		57	62	63††	67	72	57	62	63††	67	72	57	62	63††	67	72	57	62	63††	67	72	57	62	63††	67	72
1750	MBh†	70.73	64.53	59.98	58.84	56.42	67.52	61.60	57.26	56.19	54.34	64.13	58.50	54.38	53.40	52.13	60.51	55.17	51.29	50.44	49.74	56.62	51.62	47.98	47.46	47.11
	S/T‡	0.51	0.69	0.72	0.90	1.00	0.52	0.70	0.73	0.92	1.00	0.53	0.72	0.75	0.94	1.00	0.54	0.74	0.76	0.96	1.00	0.55	0.76	0.79	0.98	1.00
	AMPS*	18.49	18.16	17.92	17.87	17.75	20.37	20.02	19.77	19.72	19.62	22.47	22.12	21.86	21.81	21.74	24.85	24.49	24.24	24.19	24.15	27.57	27.22	26.98	26.95	26.93
	LO PR	293	287	283	282	280	337	331	326	325	323	385	378	373	372	371	437	430	424	423	422	493	486	480	479	479
2000	MBh†	72.07	65.81	61.24	60.17	58.79	68.70	62.75	58.38	57.44	56.55	65.16	59.47	55.35	54.58	54.17	61.41	56.03	52.15	51.68	51.61	57.36	52.34	48.70	48.87	48.81
	S/T‡	0.53	0.72	0.75	0.94	1.00	0.54	0.74	0.76	0.96	1.00	0.54	0.75	0.78	0.98	1.00	0.56	0.78	0.80	1.00	1.00	0.57	0.80	0.82	1.00	1.00
	AMPS*	18.87	18.52	18.28	18.23	18.16	20.74	20.39	20.13	20.09	20.04	22.84	22.48	22.22	22.18	22.15	25.22	24.85	24.60	24.57	24.57	27.92	27.57	27.33	27.34	27.34
	LO PR	295	289	285	284	282	339	333	328	327	326	387	380	375	374	374	438	431	426	425	425	495	487	482	482	482
2250	MBh†	73.06	66.76	62.17	61.32	60.75	69.59	63.58	59.22	58.51	58.38	65.93	60.23	56.09	55.92	55.86	62.05	56.67	52.78	53.21	53.13	57.90	52.87	49.24	50.22	50.18
	S/T‡	0.54	0.75	0.78	0.98	1.00	0.55	0.77	0.79	1.00	1.00	0.56	0.79	0.81	1.00	1.00	0.57	0.81	0.84	1.00	1.00	0.59	0.84	0.86	1.00	1.00
	AMPS*	19.23	18.87	18.62	18.59	18.56	21.10	20.74	20.48	20.44	20.44	23.20	22.83	22.56	22.56	22.55	25.56	25.20	24.94	24.97	24.96	28.27	27.91	27.66	27.73	27.73
	LO PR	296	290	286	285	284	340	334	329	328	328	388	381	376	376	376	440	433	427	428	428	496	488	483	484	484

† Total capacities are net (I.D blower heat subtracted) system capacities based on 25' line set.
If additional tubing length and/or indoor unit is located above outdoor unit, a slight variation in capacity may occur.
* System amps are total of indoor and outdoor amps
‡ S/T are based on 80 F db entering air at the indoor coil. For sensible capacities at other than 80 F db, deduct 835 Btuh per GKA0 cfm of indoor coil air from MBhxS/T for each degree below 80 F, or add 835 Btuh per GKA0 cfm of indoor coil air from MBhxS/T for each degree above 80 F
†† At TVA rating indoor condition (75 F db/ 63 F wb), All other indoor air temperatures are at 80 F db

EXPANDED HEATING PERFORMANCE RATINGS For Outdoor / Indoor Models

For complete ratings information, use the AHRI website directory search: www.AHRIdirectory.org.
New ratings may be listed online before Specification Sheets are updated.

R4H436GKA Size Outdoor With FEM4P36**A* Indoor Heating

Outdoor Ambient Temperature - Degrees F, Dry Bulb

Table with 8 columns representing outdoor ambient temperatures: -3, 7, 17, 27, 37, 47, 57, 67.

Entering Indoor Temperature - Degrees F, Dry Bulb

Table with 12 columns representing entering indoor temperatures: 65, 70, 75 for each of the 4 outdoor temperature groups.

Main performance table for R4H436GKA model, including CFM, MBH†, T/R, AMPS*, HI PR, and LO PR for various capacities (1050, 1200, 1350).

R4H442GKA Size Outdoor With FEM4X60**B* Indoor Heating

Outdoor Ambient Temperature - Degrees F, Dry Bulb

Table with 8 columns representing outdoor ambient temperatures: -3, 7, 17, 27, 37, 47, 57, 67.

Entering Indoor Temperature - Degrees F, Dry Bulb

Table with 12 columns representing entering indoor temperatures: 65, 70, 75 for each of the 4 outdoor temperature groups.

Main performance table for R4H442GKA model, including CFM, MBH†, T/R, AMPS*, HI PR, and LO PR for various capacities (1225, 1400, 1575).

R4H448GKA Size Outdoor With FEM4X60**B* Indoor Heating

Outdoor Ambient Temperature - Degrees F, Dry Bulb

Table with 8 columns representing outdoor ambient temperatures: -3, 7, 17, 27, 37, 47, 57, 67.

Entering Indoor Temperature - Degrees F, Dry Bulb

Table with 12 columns representing entering indoor temperatures: 65, 70, 75 for each of the 4 outdoor temperature groups.

Main performance table for R4H448GKA model, including CFM, MBH†, T/R, AMPS*, HI PR, and LO PR for various capacities (1400, 1600, 1800).

† Total capacities are net (I.D blower heat added) system capacities based on 25' line set.
If additional tubing length and/or indoor unit is located above outdoor unit, a slight variation in capacity may occur.
* System amps are total of indoor and outdoor amps
T/R - Temp Rise is based on 25' line set.
If additional tubing length and/or indoor unit is located above outdoor unit, a slight variation in Temp Rise may occur.

EXPANDED HEATING PERFORMANCE RATINGS For Outdoor / Indoor Models

For complete ratings information, use the AHRI website directory search: www.AHRIdirectory.org.
 New ratings may be listed online before Specification Sheets are updated.

R4H460GKA Size Outdoor With FXM4X60A* Indoor Heating**

CFM		Outdoor Ambient Temperature - Degrees F, Dry Bulb																							
		-3			7			17			27			37			47			57			67		
		Entering Indoor Temperature - Degrees F, Dry Bulb																							
		65	70	75	65	70	75	65	70	75	65	70	75	65	70	75	65	70	75	65	70	75	65	70	75
1750	MBh†	19.92	18.96	17.86	26.13	25.18	24.18	32.70	31.78	30.83	40.40	39.14	38.13	48.32	47.61	46.97	56.33	55.50	54.71	65.47	64.62	63.72	74.04	73.09	72.12
	T/R	11.20	10.60	10.00	14.70	14.10	13.50	18.40	17.80	17.30	22.70	22.00	21.30	27.20	26.70	26.30	31.70	31.10	30.60	36.80	36.20	35.70	41.60	41.00	40.40
	AMPS*	14.46	15.05	15.67	15.12	15.74	16.41	15.77	16.44	17.15	16.58	17.26	18.01	17.47	18.26	19.12	18.39	19.22	20.09	19.14	19.98	20.89	20.10	20.97	21.89
	LO PR	34	34	34	44	44	44	55	55	56	67	68	68	81	82	82	97	98	98	115	115	116	131	132	132
2000	MBh†	20.34	19.33	18.23	26.60	25.65	24.62	33.24	32.31	31.35	41.69	39.79	38.76	48.89	48.18	47.51	57.20	56.35	55.49	65.93	65.09	64.24	74.13	73.21	72.29
	T/R	10.00	9.50	8.90	13.10	12.60	12.10	16.40	15.90	15.40	20.50	19.50	19.00	24.00	23.60	23.30	28.10	27.70	27.20	32.40	32.00	31.50	36.50	35.90	35.40
	AMPS*	14.62	15.21	15.83	15.22	15.85	16.51	15.81	16.47	17.18	16.64	17.22	17.96	17.32	18.11	18.94	18.08	18.92	19.78	18.80	19.63	20.51	19.60	20.46	21.36
	LO PR	34	34	34	44	44	44	55	55	55	67	68	68	81	82	82	97	98	98	114	114	115	129	130	130
2250	MBh†	20.71	19.68	18.59	27.01	26.05	25.03	33.71	32.77	31.81	42.13	40.43	39.31	49.42	48.71	48.00	57.87	57.02	56.18	66.21	65.41	64.58	73.92	73.09	72.20
	T/R	9.10	8.60	8.10	11.80	11.40	10.90	14.70	14.30	13.80	18.40	17.60	17.10	21.60	21.30	20.90	25.30	24.90	24.50	29.00	28.50	28.10	32.30	31.90	31.40
	AMPS*	14.80	15.39	16.01	15.35	15.98	16.64	15.90	16.56	17.27	16.65	17.25	17.99	17.28	18.06	18.87	17.92	18.74	19.61	18.60	19.42	20.28	19.28	20.13	21.01
	LO PR	34	34	34	43	44	44	55	55	55	67	67	68	81	81	82	97	97	98	112	113	114	127	127	128

ACCESSORY USAGE GUIDELINES				
Accessory	Required for applications in snow belt region	Required for Low-Ambient Cooling Applications {Below 55°F (13°C)}	Required for Long Line Applications* {Over 80 Ft. (24.4m)}	Required for Seacoast Applications (Within 2 miles/3.22km)
Crankcase Heater	Standard (if required)	Yes	Yes	No
Evaporator Freeze Thermostat	No	Yes	No	No
Accumulator	Standard	Standard	Standard	Standard
Compressor Start Assist Capacitor and Relay	No	Yes	Yes	No
Low-ambient Control	No	Yes***	No	No
Support Feet	Yes	Recommended	No	Recommended
Liquid Line Solenoid Valve	No	No	See Long-Line Application Guideline	No

* For Tubing Set lengths between 80 and 200 ft (24.4 and 61m) horizontal or 20 ft (6.1m) vertical differential, refer to the Application Guideline and Service Manual-Air Conditioners and Heat Pumps using R-410A

*** For heat pump application, isolation relay required (see kit below)

ACCESSORIES		
Part Number	Description	Used On Model Size
NASA001SC	Start Component – PTC Device	ALL
NASA001FS	Evaporator Freeze Thermostat	ALL
NASA001LS	Liquid Line Solenoid Valve	ALL
NASA001TD	Time Delay Relay, Indoor Blower	ALL
NASA001AC	Anti-Cycle Timer (5 minute delay)	ALL
NASA401LA	Low Ambient Kit (Pressure Switch)	ALL
NASA00101IK	Low Ambient Isolation Relay Kit	ALL
AMF002OTA	Outdoor Thermometer Kit	ALL
NASA404PS	High Pressure Switch	ALL
NASA001SF	Support Feet, 4" (102mm) tall	ALL
NASA003SC	Hard Start Kit (Capacitor & Relay)	ALL
NASA003CH	Crankcase Heater for Compressor	18, 24, 30, 36
NASA001CH	Crankcase Heater for Compressor	42, 48, 60
NASA002SJ	Sound Jacket, Compressor	18, 24, 30
NASA001SJ	Sound Jacket, Compressor	36, 42, 43, 48, 49
NASA003SJ	Sound Jacket, Compressor	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