



CXA6

Product Specifications

HIGH EFFICIENCY 16 SEER AIR CONDITIONER ENVIRONMENTALLY SOUND R-410A REFRIGERANT

1½ 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
- 48 and 60 models for higher SEER, lower capacity
- 49 and 61 models for higher capacity, lower SEER

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

- 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
- Corner Posts for extra strength and style

WARRANTY*

- 5 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.



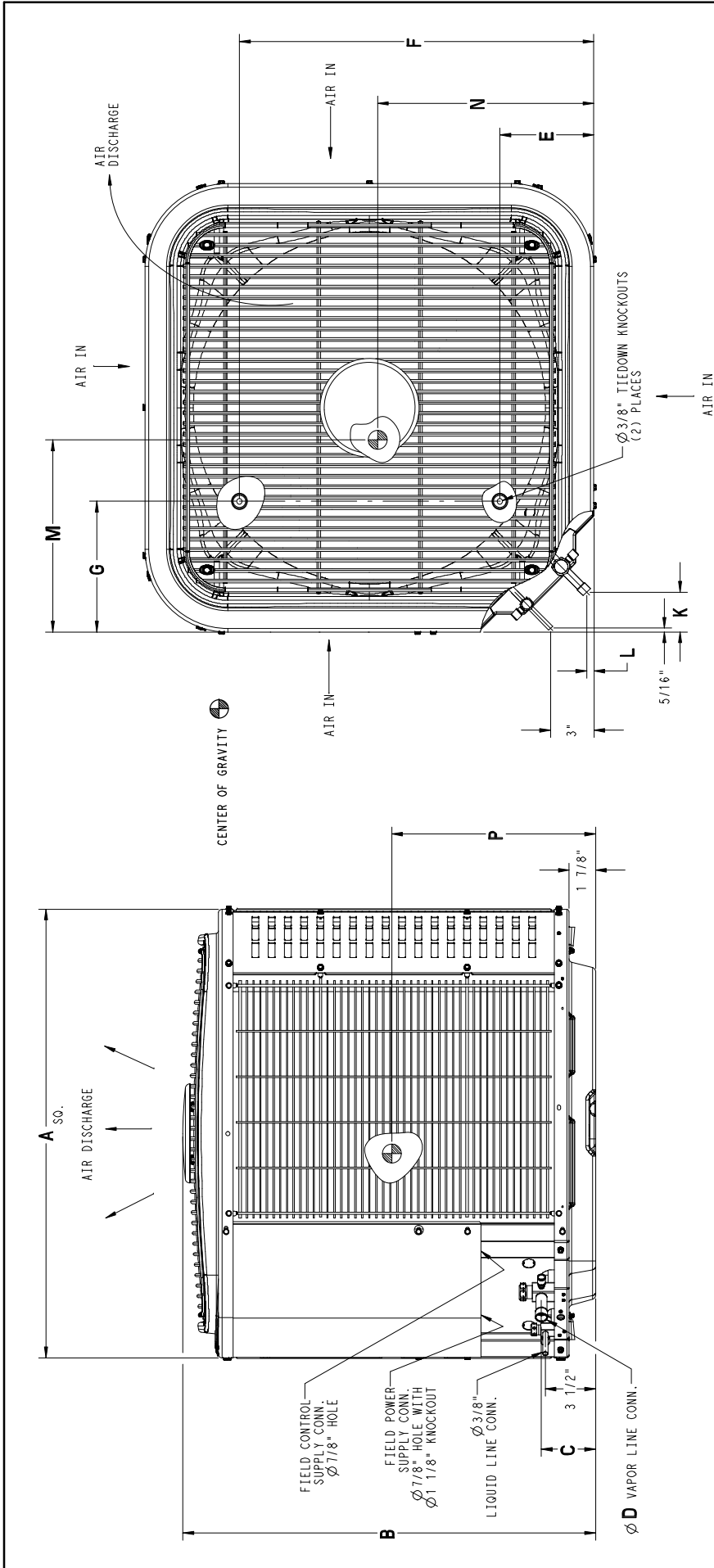
Use of the AHRI Certified TM Mark indicates a manufacturer's participation in the program. For verification of certification for individual products, go to www.ahridirectory.org.

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 lbs. (kg)
CXA618GKA	1½	18,000	11.8	20	28-5/16 x 31-3/16 x 31-3/16 (719 x 792 x 792)	183 / 147 (83 / 67)
CXA624GKA	2	24,000	17.7	25		188 / 153 (85 / 69)
CXA630GKA	2½	30,000	16.8	25	32-5/16 x 31-3/16 x 31-3/16 (821 x 792 x 792)	204 / 165 (93 / 75)
CXA636GKA	3	36,000	18.1	30	28-5/16 x 35 x 35 (719 x 889 x 889)	254 / 213 (115 / 96)
CXA642GKA	3½	42,000	23.6	40	39-1/8 x 35 x 35 (994 x 889 x 889)	317 / 264 (144 / 120)
CXA648GKA	4	48,000	26.1	40	39-1/8 x 35 x 35 (994 x 889 x 889)	269 / 231 (122 / 105)
CXA649GKA	4	48,000	28.4	40	39-1/8 x 35 x 35 (994 x 889 x 889)	310 / 272 (141 / 123)
CXA660GKA	5	60,000	28.0	40	45-15/16 x 35 x 35 (1167 x 889 x 889)	310 / 272 (141 / 123)
CXA661GKA	5	60,000	32.5	50	45-15/16 x 35 x 35 (1167 x 889 x 889)	

Specifications subject to change without notice.

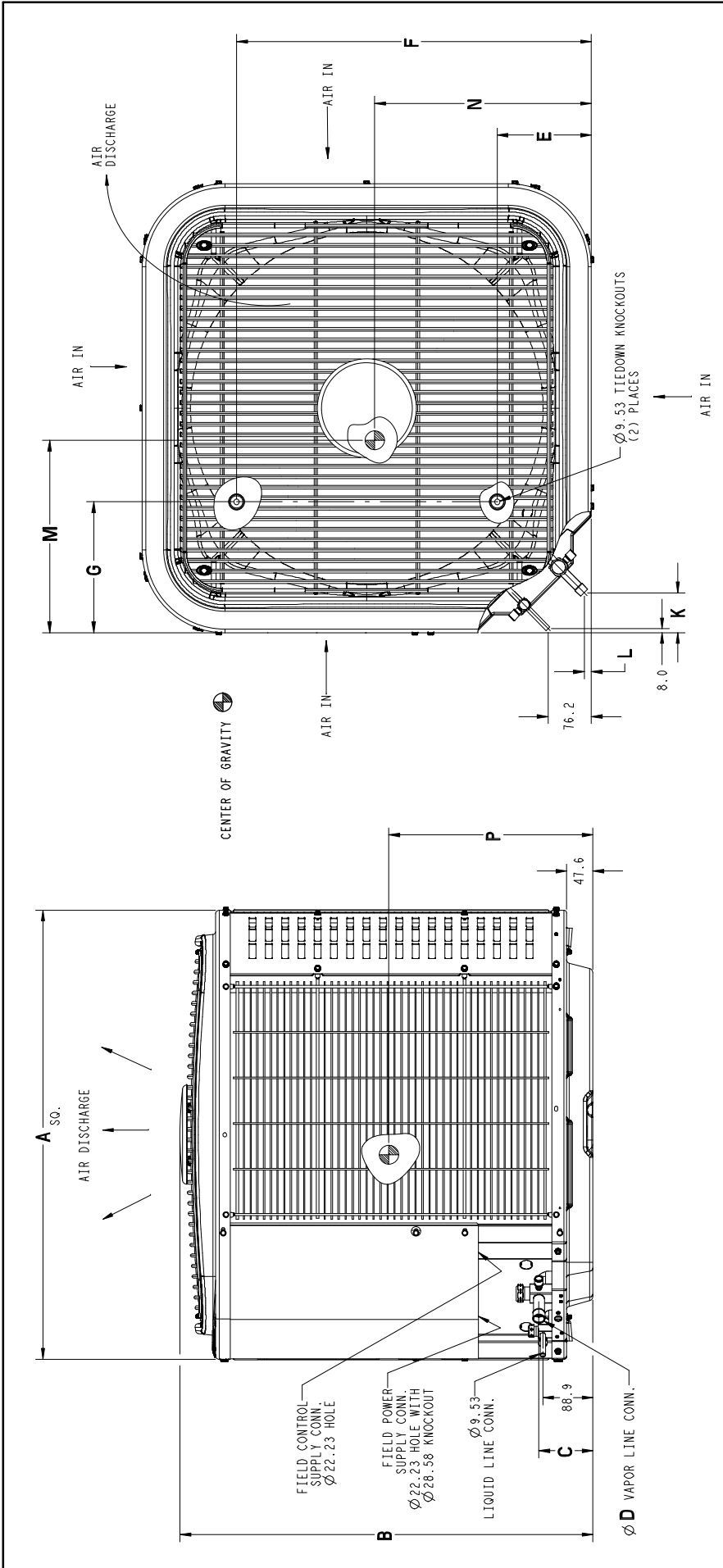
OUTDOOR UNIT MODEL NUMBER IDENTIFICATION GUIDE (single phase)											
Digit Position:	1	2	3	4	5, 6	7	8	9	10	11	12
Example Part Number:	C	X	A	6	18	G	K	A	1	0	0
C = Day & Night Mainline N = Day & Night Entry BRANDING											
X = R-410A REFRIGERANT											
A = Air Conditioner H = Heat Pump TYPE											
3 = 13 SEER 4 = 14 SEER 5 = 15 SEER 6 = 16 SEER 7 = 17 SEER 8 = 18 SEER NOMINAL EFFICIENCY											
18 = 18,000 BTUH = 1½ tons 24 = 24,000 BTUH = 2 tons 30 = 30,000 BTUH = 2½ tons 36 = 36,000 BTUH = 3 tons 42 = 42,000 BTUH = 3½ tons 48 = 48,000 BTUH = 4 tons 49 = 48,000 BTUH = 4 tons 60 = 60,000 BTUH = 5 tons 61 = 60,000 BTUH = 5 tons NOMINAL CAPACITY											
A = Standard Grille G = Coil Guard Grille C = Coastal 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 B = 2nd Generation MAJOR SERIES									
0 = Generic or Not Applicable 2 = R-22 4 = R-410A REFRIGERANT									
Product Identifier Number									
Package Quantity									
Type of Kit (Example: CH = Crankcase Heater)									



Dimensions Inches (English)

Model	A	B	C	D	E	F	G	K	L	M	N	P	Minimum Mounting Pad Size	Crated Dimensions H x W x D
CXA618GKA	31-3/16	28-5/16	3-3/4	3/4	6-9/16	24-11/16	9-1/8	2-13/16	1/2	16	16	13	31-1/2 X 31-1/2	35-15/16x35-1/2x32-3/8
CXA624GKA	31-3/16	28-5/16	3-3/4	3/4	6-9/16	24-11/16	9-1/8	2-13/16	1/2	16	16	13	31-1/2 X 31-1/2	35-15/16x35-1/2x32-3/8
CXA630GKA	31-3/16	32-5/16	3-3/4	3/4	6-9/16	24-11/16	9-1/8	2-13/16	1/2	15-1/2	16	14-1/4	31-1/2 X 31-1/2	39-5/16x35-1/2x32-3/8
CXA636GKA	35	28-5/16	3-7/8	7/8	6-9/16	28-7/16	9-1/8	2-15/16	5/8	16	16	13	35 X 35	35-13/16x39-5/16x36-1/8
CXA642GKA	35	39-1/8	3-7/8	7/8	6-9/16	28-7/16	9-1/8	2-15/16	5/8	16-1/2	17-1/2	17-1/2	35 X 35	46-1/8x39-5/16x36-1/8
CXA648GKA	35	39-1/8	3-7/8	7/8	6-9/16	28-7/16	9-1/8	2-15/16	5/8	17-1/2	16-1/2	15	35 X 35	46-1/8x39-5/16x36-1/8
CXA649GKA	35	39-1/8	3-7/8	7/8	6-9/16	28-7/16	9-1/8	2-15/16	5/8	17-1/2	16-1/2	15	35 X 35	46-1/8x39-5/16x36-1/8
CXA660GKA	35	45-15/16	3-7/8	7/8	6-9/16	28-7/16	9-1/8	2-15/16	5/8	16-1/2	17	16-1/4	35 X 35	51-13/16x39-5/16x36-1/8
CXA661GKA	35	45-15/16	3-7/8	7/8	6-9/16	28-7/16	9-1/8	2-15/16	5/8	16-1/2	17	16-1/4	35 X 35	51-13/16x39-5/16x36-1/8



Dimensions mm (SI Metric)

Model	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Minimum Mounting Pad Size	Crated Dimensions H x W x D
CXA618GKA	792	719	95	19	167	627	232	232	71	13	13	13	406	406	330	330	800 x 800	914 x 902 x 822
CXA624GKA	792	719	95	19	167	627	232	232	71	13	13	13	406	406	330	330	800 x 800	914 x 902 x 822
CXA630GKA	792	821	95	19	167	627	232	232	71	13	13	13	394	406	362	362	800 x 800	999 x 902 x 822
CXA636GKA	889	719	98	22	167	722	232	232	75	16	16	16	406	406	330	330	889 x 889	914 x 998 x 918
CXA642GKA	889	994	98	22	167	722	232	232	75	16	16	16	419	445	445	445	889 x 889	1173 x 998 x 918
CXA648GKA	889	994	98	22	167	722	232	232	75	16	16	16	445	419	381	381	889 x 889	1173 x 998 x 918
CXA649GKA	889	994	98	22	167	722	232	232	75	16	16	16	445	419	381	381	889 x 889	1173 x 998 x 918
CXA660GKA	889	1167	98	22	167	722	232	232	75	16	16	16	419	432	413	413	889 x 889	1316 x 998 x 918
CXA661GKA	889	1167	98	22	167	722	232	232	75	16	16	16	419	432	413	413	889 x 889	1316 x 998 x 918

PHYSICAL DATA									
Model Size	18	24	30	36	42	48	49	60	61
Nominal Cooling Capacity (BTU/hr)	18,000	24,000	30,000	36,000	42,000	48,000	48,000	60,000	60,000
Nominal SEER	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
Sound Rating**	72	71	71	73	75	72	77	74	74
PSC Fan Motor HP	1/12	1/10	1/10	1/12	1/5	1/4	1/4	1/4	1/4
Fan RPM High	830	830	830	830	830	830	830	830	830
Fan RPM Low	780	780	780	780	780	780	780	780	780
Fan CFM (High)	2200	2600	2600	3200	3800	4100	4100	4100	4100
Coil Face Area ft ² (m ²)	15.07 (1.4)	15.07 (1.4)	17.22 (1.6)	17.58 (1.6)	25.12 (2.3)	25.12 (2.3)	25.12 (2.3)	30.15 (2.8)	30.15 (2.8)
Coil Rows-fins per inch	1-25	1-25	1-25	1-25	1-25	2-20	1-25	2-20	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	50 ±7 95 ±7	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	610±10 420±25	610±10 420±25	610±10 420±25	610±10 420±25	610±10 420±25	610±10 420±25	610±10 420±25	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)	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)	7/8 (22)	7/8 (22)
Rated 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)	3/8 (10)	3/8 (10)
Rated 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)*	7/8 (22)*	18 (29)*	18 (29)*
Factory Charge R-410A lbs. (kg)	5.25 (2.38)	6.00 (2.72)	6.81 (3.09)	7.00 (3.18)	8.62 (3.91)	13.00 (5.90)	9.00 (4.08)	14.50 (6.58)	14.50 (6.58)
Required Subcooling °F (°C)	10 (6)	10 (6)	10 (6)	10 (6)	9 (5)	8 (4)	8 (4)	9 (5)	9 (5)
Weight, shipping lbs. (kg)	183 (83)	183 (83)	188 (85)	204 (93)	254 (115)	317 (144)	269 (122)	310 (141)	310 (141)
Weight, operating lbs. (kg)	147 (67)	147 (67)	153 (69)	165 (75)	213 (96)	264 (120)	231 (105)	272 (123)	272 (123)

* Units are rated with 25 ft (7.6 m) of lineset length. See Vapor Line Sizing and Cooling Capacity Loss table when using other sizes and lengths of lineset. **Note:** See unit Installation Instruction for proper installation.

ELECTRICAL DATA (208/230-1-60, voltage range 197V - 253V)									
Model Size	18	24	30	36	42	48	49	60	61
Minimum Circuit Ampacity -MCA (amps)	11.8	17.7	16.8	18.1	23.6	26.1	28.4	28.0	32.5
Maximum OverCurrent Protective device - MOCP (amps)	20	25	25	30	40	40	40	40	50
Compressor RLA (Rated Load Amps)	9.0	13.5	12.8	14.1	17.9	19.9	21.8	21.4	25.0
LRA (Locked Rotor Amps)	48	58.3	64	77	112	109	117	135	134
Fan Motor FLA (Full Load Amps)	0.5	0.75	0.75	0.5	1.2	1.2	1.2	1.2	1.2

**Sound Rating tested in accordance with ARI Standard 270-95 (not listed with ARI).

REFRIGERANT CHARGE ADJUSTMENTS

Liquid Line Size	R-410A Charge oz/ft
3/8	0.60 (Factory charge for lineset = 9 oz)
5/16	0.40
1/4	0.27

Units are factory charged for 15 ft (4.6 m) of 3/8" liquid line. The factory charge for 3/8" lineset 9 oz. When using other length or diameter liquid lines, charge adjustments are required per the chart above.

Charging Formula:

[(Lineset oz/ft x total length) – (factory charge for lineset)] = charge adjustment

Example 1: System has 15 ft of line set using existing 1/4" liquid line. What charge adjustment is required?

Formula: (.27 oz/ft x 15ft) – (9 oz) = (-4.95) oz.

Net result is to remove 4.95 oz of refrigerant from the system

Example 2: System has 45 ft of existing 5/16" liquid line. What is the charge adjustment?

Formula: (.40 oz/ft. x 45ft) – (9 oz.) = 9 oz.

Net result is to add 9 oz of refrigerant to the system

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. See Accessory Usage Guideline table for required accessories. 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 Air Conditioner systems, the charts below shows when an application requires a TXV and long line accessories due to lineset length.

AC with R-410A Refrigerant Long Line Description ft (m) Beyond these lengths, a TXV is required

Total Length	Outdoor Unit Above or Below Indoor Unit
TXV required beyond 50 ft. (15.2 m)	TXV required beyond 20 ft. (6.1 m)

AC 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
1/4 + TXV	No accessories needed within allowed lengths	No accessories needed within allowed lengths	175 (53.3)
5/16 + TXV	120 (36.6)	50 (15.2) vertical or 120 (36.6) total	120 (36.6)
3/8 + TXV	80 (24.4)	35 (10.7) vertical or 80 (24.4) total	80 (24.4)

Note: See Long Line Guideline for details

R-410A COOLING CAPACITY LOSS FOR VARIOUS LINE LENGTHS & TUBE DIAMETERS															
Model Size	Liquid Line in.(mm)	Acceptable Vapor Line Sizes in. (mm)	Cooling Capacity Loss (%) at Total Equivalent Line Length, feet (m) Refer to Long Line Application Guideline to calculate equivalent length												
			Standard Application			Long Line Application (Requires Accessories)									
			25' (7.6)	50' (15.2)	80' (24.4)	81' (24.7)	100' (30.5)	125' (38.1)	150' (45.7)	175' (53.3)	200' (61)	225' (68.6)	250' (76.2)		
18	3/8 (10)	1/2 (13)	1	2	3	3	4	6	7	8	9	10	12		
		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		
24		5/8 (16)	0	1	1	1	2	3	3	4	4	5	6		
		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		
30		5/8 (16)	1	2	3	3	3	4	5	6	7	8	9		
		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		
36		5/8 (16)	1	2	4	4	5	6	7	9	10	11	13		
		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		
42		3/4 (19)	0	1	2	2	2	3	4	4	5	6	6		
		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			
48/49	3/4 (19)	0	1	2	2	3	4	5	5	6	7	8			
	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			
60/61	3/4 (19)	1	2	4	4	5	6	7	9	10	11	12			
	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			

Consult the Long Line Application Guideline document before purchasing/installing line sets.

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

COOLING PERFORMANCE FOR COMBINATION RATINGS Indoor Models								
For complete ratings information, use the AHRI website directory search: www.AHRI.directory.org . New ratings may be listed online before Specification Sheets are updated.								
Unit Size	Indoor Model	Furnace Model	AHRI Standard Ratings					
			Capacity	Factory Installed	Cooling 95° F (35°C)			EER
					SEER	W/ Field TDR	W/ Field TXV	
Standard	Standard	Standard	Standard	Standard	Standard	Standard		
CXA618GKA	*EN(A,D)4X19*17**		18000	TXV		14.5		12
CXA624GKA	*EN(A,D)4X31*17**		23600	TXV		14.5		12
CXA630GKA	*EN(A,D)4X31*17**		28600	TXV		14.5		12
CXA636GKA	*EN(A,D)4X37*17**		34400	TXV		14.5		12
CXA642GKA	*EN(A,D)4X43*24**		41500	TXV		14.5		12
CXA648GKA	*ED*4X60L**		46000	TXV		14.5		12
CXA649GKA	*ED*4X60L**		48000	TXV		14		11.5
CXA660GKA	*EN(A,D)4X61*24**		56000	TXV		14.5		12
CXA661GKA	*EN(A,D)4X61*24**		59500	TXV		14.5		12

† For coils not listed with a matching furnace or blower, coil rating applies with any indoor blower device.

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 Day and Night database:

<http://www.icpeqp.com/AHRIratings/ratings.aspx?Brand=DayAndNight>

Or scan this QR code:



ACCESSORY USAGE GUIDELINES		
Accessory	REQUIRED FOR LOW-AMBIENT APPLICATIONS {Below 55°F (13°C)}	REQUIRED FOR LONG-LINE APPLICATIONS*
Crankcase Heater	Yes	Yes
Evaporator Freeze Thermostat	Yes	No
Winter Start Control	Yes**	No
TXV	Yes	Yes‡
Hard Start Kit (Capacitor & Relay)	Yes	Yes
Low Ambient Kit (Pressure Switch)	Yes	No
Support Feet, 4" (102mm) tall	Recommended	No

* Refer to the Long Line Application Guideline document.

** Can only be installed in conjunction with the Low Pressure Switch

‡ TXV required beyond 20 ft (6.1m) vertical separation or 50 ft (15.2) total length.

ACCESSORIES		
Part Number	Description	Used On Model Size
NASA003CH	Crankcase Heater for Scroll Compressor (208/230 V)	18, 24, 30, 36
NASA001CH	Crankcase Heater for Scroll Compressor (208/230 V)	42, 48, 49, 60, 61*
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
NASA001SF	Support Feet, 4" (102mm) tall	ALL
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, 49, 60, 61
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, 49, 60, 61

*Some models may be factory installed.