



NXH5

Performance Series

Product Specifications

HIGH EFFICIENCY 15 SEER HEAT PUMP ENVIRONMENTALLY BALANCED R-410A REFRIGERANT

1½ THRU 5 TONS SPLIT SYSTEM
208 / 230 Volt, 1-phase, 60 Hz

REFRIGERATION CIRCUIT

- Copeland Scroll™ compressors on all models
- Suction line accumulator factory installed
- Bi-flow filter-drier included for field installation
- 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

- 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) grille spacing for extra protection

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)

* Applies to original purchaser/homeowner, some limitations may apply. See Warranty certificate for complete details.



This product has been designed and manufactured to meet ENERGY STAR criteria for energy efficiency when matched with appropriate coil components. However, proper refrigerant charge and proper air flow are critical to achieve rated capacity and efficiency. Installation of this product should follow the manufacturer's refrigerant charging and air flow instructions. Failure to confirm proper charge and airflow may reduce energy efficiency and shorten equipment life.



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 inches (mm)	Ship / Operating Weight lbs. (kg)
NXH518GKA	1-1/2	18,000	11.8	20	28-11/16 x 31-3/16 x 31-3/16 (729 x 793 x 793)	207 / 169 (94 / 77)
NXH524GKA	2	24,000	16.5	25	32-1/16 x 35 x 35 (815 x 889 x 889)	233 / 200 (106 / 91)
NXH530GKA	2-1/2	30,000	18.1	30	32-1/16 x 35 x 35 (815 x 889 x 889)	242 / 196 (110 / 89)
NXH537GKB	3	36,000	21.6	35	32-1/16 x 35 x 35 (815 x 889 x 889)	253 / 215 (115 / 98)
NXH542GKA	3-1/2	42,000	27.6	40	28-11/16 x 35 x 35 (729 x 889 x 889)	290 / 245 (132 / 111)
NXH548GKA	4	48,000	28.5	40	28-11/16 x 35 x 35 (729 x 889 x 889)	303 / 260 (137 / 118)
NXH560GKA	5	60,000	34.2	50	38-7/8 x 35 x 35 (988 x 889 x 889)	345 / 294 (157 / 133)

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:	N	X	H	5	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											
4 = 14 SEER											
5 = 15 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											
37 = 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											
A = Standard Grille											
G = Coil Guard Grille											
C = Coastal FEATURES											
K = 208/230-1-60 VOLTAGE											
Sales Code											
Engineering Revision											
Extra Digit											
Extra Digit											

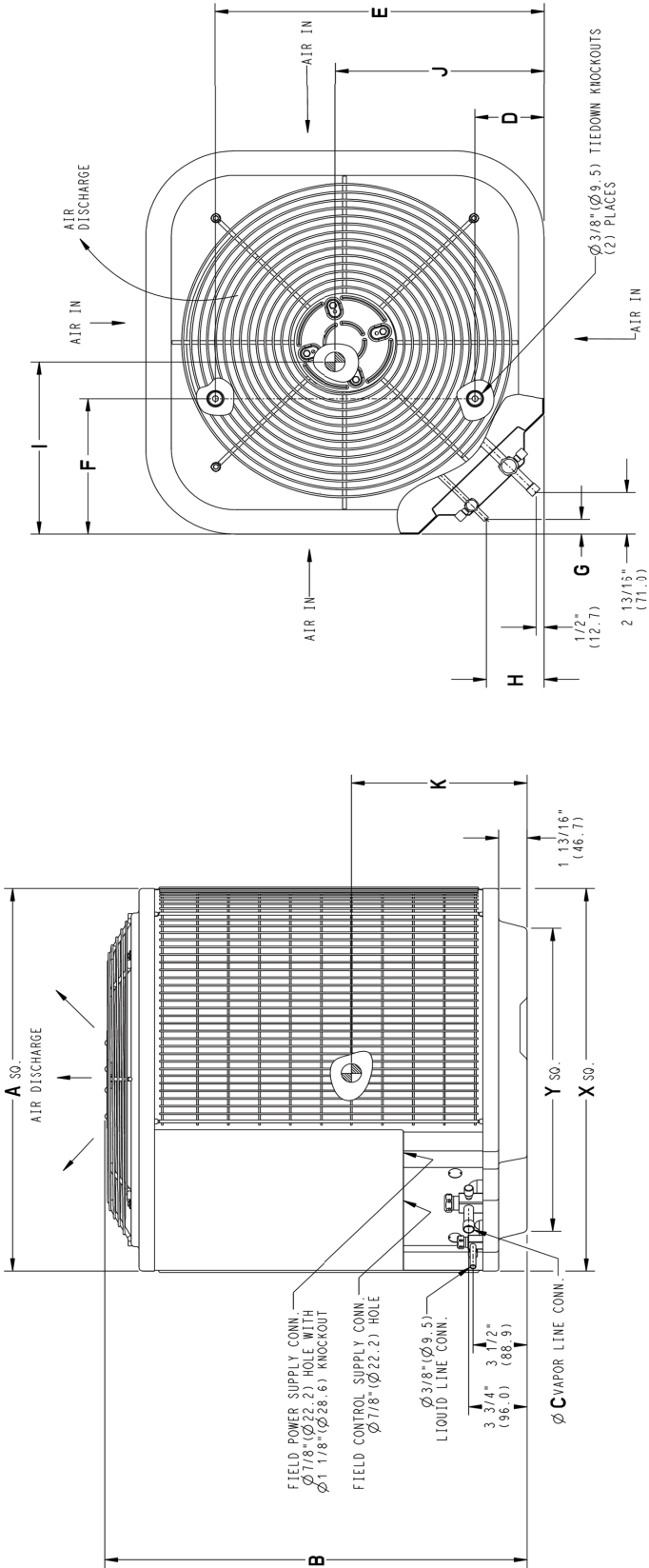
ACCESSORIES PART NUMBER IDENTIFICATION GUIDE									
Digit Position:	1	2	3	4	5	6, 7	8, 9	10, 11	
Example Part Number:	N	A	S	A	0	0 1	01	CH	
N = Non-Branded BRANDING									
A = Accessory PRODUCT GROUP									
S = Split System (AC & HP) KIT USAGE									
A = Original									
B = 2nd Generation MAJOR 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)									

UNIT	SERIES	ELECTRICAL CHARACTERISTICS				A		B		C		D		E		F		G		H		I		J		K		OPERATING WEIGHT		SHIPPING WEIGHT		SHIPPING LENGTH / WIDTH (Sq.)		SHIPPING HEIGHT				
		INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	Lbs	Kgs	Lbs	Kgs	INCH	MM	INCH	MM			
NXH518GKA200	2	Y	N	N	N	31	3/16	792.5	28 11/16	728.7	5/8	15.9	6 9/16	166.1	24 11/16	626.3	9 1/8	231.3	1 1/8	28.2	3 13/16	97.4	16	406.4	15	381.0	14	355.6	169	76.7	207	93.9	33 5/16	846.6	33 3/16	843.1		
NXH524GKA200	2	Y	N	N	N	35	1/8	889.0	32 1/16	815.1	5/8	15.9	6 9/16	166.1	28 7/16	722.8	9 1/8	231.3	1 1/8	28.2	3 13/16	97.4	15	3/4	400.1	16	3/4	425.5	16 1/2	419.1	200	90.7	233	105.7	37 1/8	943.1	36 5/8	929.5
NXH530GKA200	2	Y	N	N	N	35	1/8	889.0	32 1/16	815.1	3/4	19.1	6 9/16	166.1	28 7/16	722.8	9 1/8	231.3	1 1/8	28.2	3 13/16	97.4	16	1/4	412.8	16	406.4	15 1/2	393.7	196	88.9	242	109.8	37 1/8	943.1	36 5/8	929.5	
NXH537GKB101	1	Y	N	N	N	35	1/8	889.0	32 1/16	815.1	3/4	19.1	6 9/16	166.1	28 7/16	722.8	9 1/8	231.3	1 1/8	28.2	3 13/16	97.4	17	3/8	441.3	17 1/2	444.5	13 3/4	349.3	215	97.5	253	114.8	37 1/8	943.1	36 5/8	929.5	
NXH542GKA200	2	Y	N	N	N	35	1/8	889.0	28 11/16	728.7	7/8	22.2	6 9/16	166.1	28 7/16	722.8	9 1/8	231.3	1 1/8	28.2	3 13/16	97.4	17	431.8	16	3/4	425.5	14 3/4	374.7	245	111.1	290	131.5	37 1/8	943.1	33 3/16	843.1	
NXH548GKA200	2	Y	N	N	N	35	1/8	889.0	28 11/16	728.7	7/8	22.2	6 9/16	166.1	28 7/16	722.8	9 1/8	231.3	1 1/8	28.2	3 13/16	97.4	16	3/4	425.5	16 1/4	412.8	14	355.6	260	117.9	303	137.4	37 1/8	943.1	33 3/16	843.1	
NXH560GKA200	2	Y	N	N	N	35	1/8	889.0	38 7/8	987.8	7/8	22.2	6 9/16	166.1	28 7/16	722.8	9 1/8	231.3	1 1/8	28.2	3 13/16	97.4	17 1/4	438.2	16 1/4	412.8	18 1/4	483.6	294	133.4	345	156.5	37 1/8	943.1	43 3/8	1102.2		

Y=YES N=NO
575-3-60
460-3-60
208/230-3-60
208-230-1-60

NOTES:

1. CENTER OF GRAVITY



UNIT SIZE	"X"		"Y"	
	MINIMUM GROUND MOUNTING PAD APPLICATION DIMENSIONS	MINIMUM ROOF-TOP MOUNTING PAD APPLICATION DIMENSIONS	MINIMUM GROUND MOUNTING PAD APPLICATION DIMENSIONS	MINIMUM ROOF-TOP MOUNTING PAD APPLICATION DIMENSIONS
-	23 1/8	587.3	17 7/8	454.6
-	25 3/4	654.0	20 7/16	518.5
18	31 3/16	792.5	22 15/16	583.2
24 THRU 60	35	889.0	26 3/4	679.7

NOTE: ALL DIMENSIONS IN INCH (MM)

U.S. ECCN: Not Subject to Regulation (N.S.R.)

Copy of SD487-4 REV. H

PHYSICAL DATA							
Model Size	18	24	30	37	42	48	60
Nominal Cooling Capacity (BTU/hr)	18,000	24,000	30,000	36,000	42,000	48,000	60,000
Nominal SEER	15.0	15.0	15.0	15.0	15.0	15.0	15.0
Sound Rating (dBA)**	73	69	71	72	74	74	74
PSC Fan Motor HP	1/12	1/12	1/12	1/12	1/5	1/4	1/4
Fan RPM (single speed)	800	800	800	800	800	800	800
Fan CFM	2233	3223	3223	3223	3810	4046	4046
Coil Face Area ft ² (m ²)	15.09 (1.40)	20.12 (1.87)	20.12 (1.87)	20.10 (1.87)	17.60 (1.64)	17.60 (1.64)	25.15 (2.34)
Coil Rows–fins per inch	1 – 20	1 – 20	1 – 20	2 – 20	2 – 20	2 – 20	2 – 20
Low Pressure Switch Open Pressure (psig) Close Pressure (psig)	23 5 55 5	23 5 55 5	23 5 55 5	23 5 55 5	23 5 55 5	23 5 55 5	23 5 55 5
High Pressure Switch Open Pressure (psig) Close Pressure (psig)	670 10 470 25	670 10 470 25	670 10 470 25	670 10 470 25	670 10 470 25	670 10 470 25	670 10 470 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)	5/8 (16)	5/8 (16)	3/4 (19)	3/4 (19)	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)	5/8 (16) *	5/8 (16) *	3/4 (19) *	3/4 (19) *	7/8 (22) *	7/8 (22) *	1–1/8 (29)*
* Recommended Vapor Tube Line size is for standard installations. These recommendations may not apply to “Long Line” installations. When the total equivalent line length exceeds 80 feet (24.4m) or there is more than 20 feet (6.1m) vertical separation between indoor and outdoor units, consult the Long Line Application Guideline document before purchasing/installing line sets.							
Factory Charge R–410A lbs. (kg)	5.60 (2.54)	7.60 (3.45)	7.00 (3.18)	11.20 (5.08)	8.90 (4.04)	9.60 (4.35)	12.50 (5.67)
Required Subcooling ° F (° C)	12 (7)	13 (7)	10 (6)	10 (6)	12 (7)	13 (7)	13 (7)
Weight, shipping lbs. (kg)	207 (94)	233 (106)	242 (110)	253 (115)	290 (132)	303 (137)	345 (157)
Weight, operating lbs. (kg)	169 (77)	200 (91)	196 (89)	215 (98)	245 (111)	260 (118)	294 (133)

ELECTRICAL DATA (208/230–1–60, voltage range 197V – 253V)							
Model Size	18	24	30	37	42	48	60
Minimum Circuit Ampacity – MCA (amps)	11.8	16.5	18.1	21.6	27.6	28.5	34.2
Maximum OverCurrent Protective device – MOCP (amps)	20	25	30	35	40	40	50
Compressor RLA (Rated Load Amps) LRA (Locked Rotor Amps)	9.0 48	12.8 58	14.1 73	16.8 75	21.1 109	21.8 117	26.4 134
Fan Motor FLA (Full Load Amps)	0.5	0.5	0.5	0.6	1.2	1.2	1.2

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

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
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
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
37		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
48		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
60		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

* 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.

ACCESSORY USAGE GUIDELINES

Accessory	REQUIRED FOR APPLICATIONS IN SNOW-BELT REGION	REQUIRED FOR LOW-AMBIENT APPLICATIONS {Below 55°F (13°C)}	REQUIRED FOR LONG-LINE APPLICATIONS* {Over 80 Ft. (24.4m)}
Crankcase Heater	Standard (if required)	Yes	Yes
Evaporator Freeze Thermostat	No	Yes	No
Accumulator	Standard (factory installed)	Standard (factory installed)	Standard (factory installed)
Hard Start Kit (Capacitor & Relay)	No	Yes	Yes
Low Ambient Kit (Pressure Switch)	No	Yes	No
Support Feet, 4" (102mm) tall	Yes	Recommended	No
Liquid Line Solenoid Valve	No	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.

TESTED AHRI COMBINATION RATINGS

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

COOLING & HEATING PERFORMANCE FOR COMBINATION RATINGS								
For complete ratings information, use the AHRI website directory search: www.AHRIdirectory.org . New ratings may be listed online before Specification Sheets are updated.								
Outdoor Model	Indoor Model *Tested Combo	Factory Installed	Cooling 95°F (35°C)			Heat 47°F (8.3°C)		HSPF
			Capacity BTU/hr	SEER	EER	BTU/hr	COP	
				Standard				
NXH518GKA	FXM4X18**AL	TXV	17800	15	12.5	17800	3.92	8.5
NXH524GKA	FXM4X24**AL	TXV	24000	15	12.5	24000	3.96	8.5
NXH530GKA	FXM4X30**AL	TXV	28400	15	12.5	28200	3.98	8.5
NXH537GKB	FXM4X48**AL	TXV	35000	16	13.0	35000	4.16	8.5
NXH542GKA	FXM4X42**AL	TXV	41500	15	12.5	42000	3.82	8.5
NXH548GKA	FXM4X48**AL	TXV	47500	15	12.5	45500	3.84	8.5
NXH560GKA	FXM4X60**AL	TVX	57000	15	12.5	56000	3.86	8.5
2015 ENERGY STAR compliance for combinations with all three: SEER 15.00 or higher and EER 12.50 or higher and HSPF 8.5 or higher.								

AHRI — Air Conditioning, Heating & Refrigeration Institute

EER — Energy Efficiency Ratio — 80°F (26.6°C) indoor db/67°F (19.4°C) indoor wb & 95°F (35°C) outdoor db.

SEER — Seasonal Energy Efficiency Ratio

TDR — Time-Delay Relay. In most cases, only one method should be used to achieve TDR function. Using more than one method in a system may cause degradation in performance.

Use either the accessory Time-Delay Relay or a furnace equipped with TDR. Most ICP furnaces are equipped with TDR.

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.

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 APPLICATIONS IN SNOW-BELT REGION	REQUIRED FOR LOW-AMBIENT APPLICATIONS {Below 55°F (13°C)}	REQUIRED FOR LONG-LINE APPLICATIONS* {Over 80 Ft. (24.4m)}
Crankcase Heater	Standard (if required)	Yes	Yes
Evaporator Freeze Thermostat	No	Yes	No
Accumulator	Standard (factory installed)	Standard (factory installed)	Standard (factory installed)
Hard Start Kit (Capacitor & Relay)	No	Yes	Yes
Low Ambient Kit (Pressure Switch)	No	Yes	No
Support Feet, 4" (102mm) tall	Yes	Recommended	No
Liquid Line Solenoid Valve	No	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
NASA001SC	Start Component – PTC Device	ALL
NASA00201FS	Evaporator Freeze Thermostat	ALL
NASA001LS	Liquid Line Solenoid Valve, HP, R-410A	ALL
NASA001TD	Time Delay Relay, Indoor Blower	ALL
NASA00101IK	ISLN Relay Kit	37
NASA001AC	Anti-Cycle Timer (5 minute delay)	ALL
NASA401LA	Low Ambient Pressure Switch	ALL
NASA00201SF	Support Feet, 4" (102mm) tall	ALL
NASA00201SJ	Sound Jacket, Compressor	37
NASA001SJ	Sound Jacket, Compressor	18, 24, 30, 42, 48, 60
NASA001CH	Crankcase Heater for Scroll Compressor (208/230 V)	48, 60
NASA003CH	Crankcase Heater for Scroll Compressor (208/230 V)	18, 30
NASA00501CH	Crankcase Heater for Scroll Compressor (208/230 V)	42
NASA00601CH	Crankcase Heater for Scroll Compressor (208/230 V)	24
NASA003SC	Hard Start Kit (Capacitor & Relay)	18, 30
NASA012SC	Hard Start Kit (Capacitor & Relay)	37
NASA005SC	Hard Start Kit (Capacitor & Relay)	24, 42, 48, 60
NAEA40501TX	TXV Kit, R-410A – for use with copper or tin fan coils	18, 24, 30
NAEA40601TX	TXV Kit, R-410A – for use with copper or tin fan coils	37, 42
NAEA40701TX	TXV Kit, R-410A – for use with copper or tin fan coils	48, 60
NAEB40501TX	TXV Kit, R-410A – for use with aluminum fan coils	18, 24, 30
NAEB40601TX	TXV Kit, R-410A – for use with aluminum fan coils	37, 42
NAEB40701TX	TXV Kit, R-410A – for use with aluminum fan coils	48, 60

