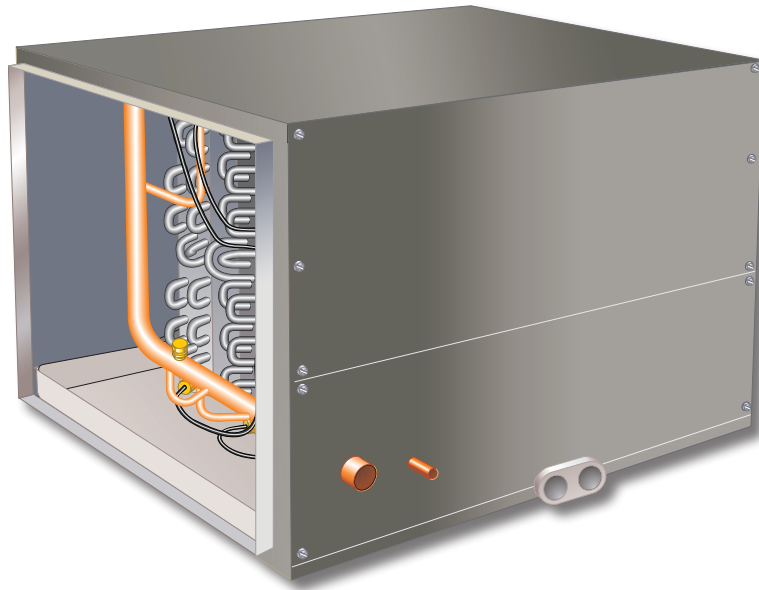
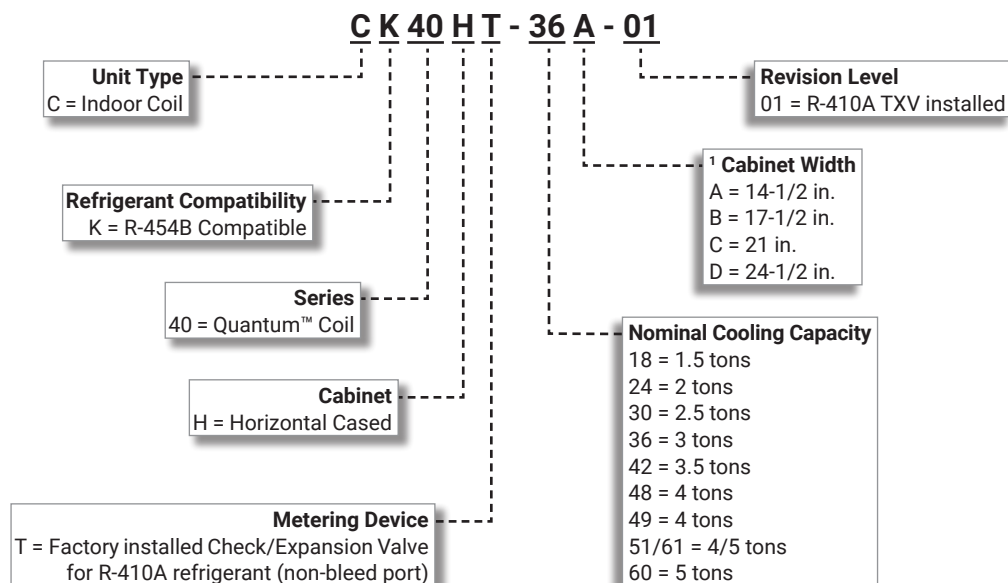


CK40HTHorizontal | Cased | Quantum™ Coil | TXV Furnished | **R-410A / R-454B****RESIDENTIAL
PRODUCT SPECIFICATIONS (EHB)****1.5 to 5 Tons**

NOTE - Coils are furnished with a factory installed R-410A expansion valve. As an option, a R-454B expansion valve may be substituted. See page 5.

NOTE - See R-454B Refrigerant Conversion Table on page 5 for additional components required for conversion.

MODEL NUMBER IDENTIFICATION

¹ Furnaces with the same letter designation physically match the indoor coil.

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APPROVALS AND WARRANTY

APPROVALS

- Tested with matching air conditioners and heat pump units in the Lennox Research Laboratory environmental test room in accordance with AHRI Standard 210/240-2023
- AHRI Certified system match-ups and expanded ratings, visit www.LennoxPros.com
- Air resistance tests from Lennox Laboratory air test chamber

NOTE – Coils can be field configured for use with R-454B refrigerant during the initial installation only. Coils may not be modified after initial installation.

WARRANTY

- All other covered components:
 - Limited five years in residential installations
 - Limited one year in non-residential installations

NOTE - Refer to Lennox® Basic Limited Warranty at www.Lennox.com for additional details.

FEATURES

APPLICATIONS

- 1.5 to 5 ton nominal sizes
- Lennox designed horizontal indoor coils can easily be installed with most Lennox horizontal furnaces
- Factory installed R-410A check/expansion valve

NOTE - Coils can be field converted for use with R-454B refrigerant.

COIL CONSTRUCTION

Quantum™ Coil

- Lennox designed and fabricated coil
- Aluminum tubing, hairpins, distributor and header tubes
- Copper refrigerant sweat connections on both liquid and suction lines for easy brazing
- Ripple-edged aluminum fins
- Lanced fins provide maximum exposure of fin surface to air stream
- Helical grooved tubing provides superior heat transfer
- Twin coil construction assembled in an “A” configuration for large surface area
- High pressure testing insures leak-proof construction

Refrigerant Line Connections

- Copper refrigerant sweat connections on both liquid and suction lines for easy brazing
- Lines extend outside of the cabinet for ease of connection
- See dimension drawings for locations

Anti-Microbial Drain Pan

- Non-corrosive, UV-resistant polymer drain pan with dual FPT drain connections
- Anti-Microbial additive resists growth of mold and mildew on drain pan which improves indoor air quality and reduces drain line blockage

R-410A Check and Expansion Valve

- For use with R-410A systems
- Wide range valve with Chatleff style fitting
- Factory installed on all models

FEATURES

R-454B REFRIGERANT CONVERSION

Additional Components are required for conversion to R-454B Refrigerant:

- Refrigerant Detection System (RDS) Coil Sensor Kit
- Refrigerant Detection System (RDS) Blower Control Board
- R-454B Check and Expansion Valve

Optional Accessories

Refrigerant Detection System (RDS) Coil Sensor Kit

- Complies with UL 60335-2-40 approved standard
- Required for all systems using R-454B refrigerant
- Consists of Refrigerant Detection System (RDS) sensor, lineset sleeves, mounting brackets and A2L labeling
- Sensor ensures safe operation for systems equipped with R-454B refrigerant
- Indoor sensor will detect any R-454B refrigerant
- See R-454B Refrigerant Conversion Table on page 5

Refrigerant Detection System (RDS) Blower Control Board Communicating Blower Control Board (Universal)

- Communicating Blower Control Board and Sensor can be used universally with any Lennox® communicating furnace or any non-communicating 24 volt furnace

Non-Communicating Blower Control Board

- Non-Communicating Blower Control Board and Sensor can be used with any non-communicating 24 volt furnace

Standard Features

- Complies with UL 60335-2-40 approved standard
- Required for all systems using R-454B refrigerant
- Connects to the RDS sensor furnished with the RDS Coil Sensor Kit
- Supports up to two RDS Sensors (factory setting)
- Used as interface between indoor unit and thermostat to control system
- Ensures safe operation for systems equipped with R-454B refrigerant
- If R-454B refrigerant is detected the refrigerant detection system will prevent compressor and heating operation until R-454B refrigerant is no longer detected
- Refrigeration detection system also energizes the blower if R-454B refrigerant is detected to mitigate any concentrations of refrigerant from the conditioned space
- Multi-color LED for system status and as an aid in troubleshooting
 - Flashing LED codes for system status (Green/Blue) and diagnosing Sensor errors (Red)
- Alarm relay can trigger an external alarm if R-454B refrigerant is detected
- Zone relay opens all zone dampers (if part of a zoning system) if R-454B refrigerant is detected

- Power is disabled to non-communicating thermostats to prevent demand if R-454B refrigerant is detected
- On system start-up blower will run for five minutes and any thermostat demands are disabled
- Dimensions (H x W x D): 7-7/16 x 7-7/16 x 2-1/2 (189 x 189 x 127 mm)
- See R-454B Refrigerant Conversion Table on page 5

NOTE - Refer to the Installation Instructions for additional information.

R-454B Check and Expansion Valve

- For use with R-454B systems
- Wide range valve with Chatleff style fitting
- Replaces factory installed TXV, internal to cabinet
- See Optional R-454B TXV Substitution table on page 5

CABINET

- Pre-painted heavy gauge steel
- Insulated with thick fiberglass insulation
- Flanges provided in outlet for ease of duct connection
- Removable panels provide access to coil
- Refrigerant lines extend outside of cabinet for easy installation

Furnace Match-Up

- Coils exactly match corresponding furnaces with the same letter designation in model number
- No adaptor required
- Engaging holes furnished on cabinet for alignment with furnace

SPECIFICATIONS		1.5 TO 2 TON		
Size		18A	24A	24B
Nominal Tonnage		1.5	2	2
Furnace Cabinet Matching Letter Width		A	A	B
Coil & Furnace Cabinet Width - in.		14-1/2	14-1/2	17-1/2
Connections	Liquid line (OD) sweat - in.	3/8	3/8	3/8
	Suction line (OD) sweat - in.	7/8	7/8	7/8
	Condensate drain (FPT) - in.	(2) 3/4	(2) 3/4	(2) 3/4
Indoor Coil	Net face area - ft. ²	3.5	3.5	4.67
	Tube diameter - in.	3/8	3/8	3/8
	Rows	2	3	2
	Fins - in.	19	14	19
Shipping Data - lbs.		44	46	50

SPECIFICATIONS		2.5 TO 3 TON				
Size		30A	30B	36A	36B	36C
Nominal Tonnage		2.5	2.5	3	3	3
Furnace Cabinet Matching Letter Width		A	B	A	B	C
Coil & Furnace Cabinet Width - in.		14-1/2	17-1/2	14-1/2	17-1/2	21
Connections	Liquid line (OD) sweat - in.	3/8	3/8	3/8	3/8	3/8
	Suction line (OD) sweat - in.	7/8	7/8	7/8	7/8	7/8
	Condensate drain (FPT) - in.	(2) 3/4	(2) 3/4	(2) 3/4	(2) 3/4	(2) 3/4
Indoor Coil	Net face area - ft. ²	4.33	4.67	3.5	4.67	5.83
	Tube diameter - in.	3/8	3/8	3/8	3/8	3/8
	Rows	3	3	3	2	2
	Fins per inch	16	14	12	18	18
Shipping Data - lbs.		56	54	48	49	56

SPECIFICATIONS		3.5 TO 4 TON			
Size		42B	42C	48B	48C
Nominal Tonnage		3.5	3.5	4	4
Furnace Cabinet Matching Letter Width		B	C	B	C
Coil & Furnace Cabinet Width - in.		17-1/2	21	17-1/2	21
Connections	Liquid line (OD) sweat - in.	3/8	3/8	3/8	3/8
	Suction line (OD) sweat - in.	7/8	7/8	7/8	7/8
	Condensate drain (FPT) - in.	(2) 3/4	(2) 3/4	(2) 3/4	(2) 3/4
Indoor Coil	Net face area - ft. ²	5.78	5.83	5.78	5.83
	Tube diameter - in.	3/8	3/8	3/8	3/8
	Rows	4	3	3	3
	Fins per inch	12	13	12	12
Shipping Data - lbs.		67	67	61	60

SPECIFICATIONS		4 TO 5 TON	
Size		51/61C	60D
Nominal Tonnage		4 / 5	5
Furnace Cabinet Matching Letter Width		C	D
¹ Coil & Furnace Cabinet Width - in.		21	24-1/2
Connections	Liquid line (OD) sweat - in.	3/8	3/8
	Suction line (OD) sweat - in.	7/8	7/8
	Condensate drain (FPT) - in.	(2) 3/4	(2) 3/4
Indoor Coil	Net face area - ft. ²	7.22	7.94
	Tube diameter - in.	3/8	3/8
	Rows	3	3
	Fins per inch	13	12
Shipping Data - lbs.		70	79

R-454B REFRIGERANT CONVERSION - ORDER SEPARATELY

Description		Order No.
Refrigerant Detection System (RDS) Coil Sensor Kit		26Z69
Refrigerant Detection System (RDS) Blower Control Board	Any Lennox® Communicating Furnace <u>or</u> any Non-Communicating 24V Furnace (Universal)	27A03
	Any Non-Communicating 24V Furnace	27A02

NOTE - Communicating Blower Control Board and Sensor can be used universally with Lennox® communicating furnace or any non-communicating 24 volt furnace.
Non-Communicating Blower Control Board and Sensor can be used with any non-communicating 24 volt furnace.

NOTE - Order R-454B Expansion Valve separately.

OPTIONAL R-454B TXV SUBSTITUTION

NOTE - R-454B Coil Conversion Kit (**26Z69**) is required for TXV substitution and must be ordered separately.

Size	Order Number
18	26Z70
24	26Z70
30	26Z70
36	26Z70
42	26Z71
48	26Z71
51/61	26Z71
60	26Z72

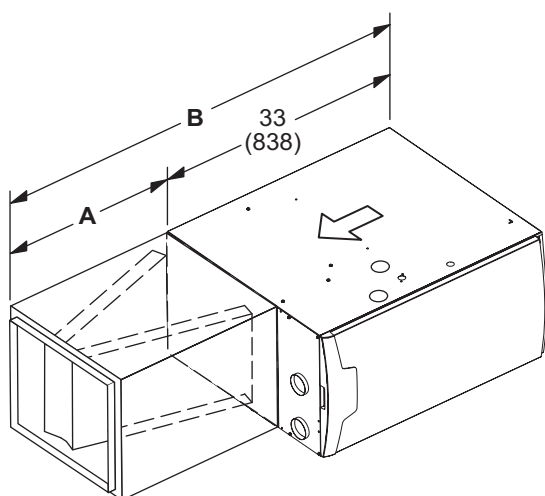
AIR RESISTANCE

Air Volume cfm	Total Air Resistance - in. w.g.													
	18A		24A		24B		30A		30B		36A		36B	
	Dry Coil	Wet Coil	Dry Coil	Wet Coil	Dry Coil	Wet Coil	Dry Coil	Wet Coil	Dry Coil	Wet Coil	Dry Coil	Wet Coil	Dry Coil	Wet Coil
200	0.02	0.02	---	---	---	---	---	---	---	---	---	---	---	---
400	0.05	0.06	0.04	0.05	0.03	0.04	0.04	0.05	0.02	0.02	---	---	---	---
600	0.09	0.11	0.09	0.11	0.05	0.07	0.09	0.10	0.05	0.06	---	---	---	---
800	0.15	0.17	0.15	0.19	0.09	0.11	0.15	0.17	0.09	0.11	0.15	0.18	0.08	0.10
1000	0.22	0.25	0.23	0.29	0.15	0.17	0.24	0.27	0.14	0.16	0.22	0.27	0.11	0.16
1200	---	---	0.32	0.40	0.21	0.23	0.34	0.38	0.19	0.23	0.30	0.39	0.16	0.21
1400	---	---	0.43	0.50	0.28	0.30	0.45	0.51	0.26	0.30	0.41	0.48	0.21	0.27
1600	---	---	---	---	---	---	---	---	---	---	0.53	0.63	0.27	0.35

AIR RESISTANCE

Air Volume cfm	Total Air Resistance - in. w.g.													
	36C		42B		42C		48B		48C		51/61C		60D	
	Dry Coil	Wet Coil	Dry Coil	Wet Coil	Dry Coil	Wet Coil	Dry Coil	Wet Coil	Dry Coil	Wet Coil	Dry Coil	Wet Coil	Dry Coil	Wet Coil
800	0.06	0.08	0.10	0.10	0.06	0.06	---	---	---	---	---	---	---	---
1000	0.10	0.13	0.14	0.18	0.09	0.10	0.14	0.16	---	---	---	---	---	---
1200	0.15	0.18	0.20	0.25	0.15	0.16	0.19	0.23	0.16	0.19	0.15	0.16	---	---
1400	0.19	0.23	0.26	0.31	0.18	0.21	0.25	0.29	0.21	0.26	0.20	0.23	0.12	0.16
1600	0.24	0.31	0.34	0.36	0.26	0.28	0.30	0.38	0.27	0.30	0.25	0.29	0.16	0.20
1800	---	---	0.42	0.47	0.31	0.38	0.38	0.42	0.33	0.39	0.31	0.36	0.20	0.24
2000	---	---	---	---	---	---	---	---	0.39	0.49	0.40	0.44	0.24	0.30
2200	---	---	---	---	---	---	---	---	---	---	0.48	0.54	0.29	0.36
2400	---	---	---	---	---	---	---	---	---	---	---	---	0.34	0.42

DIMENSIONS - FURNACE/COIL COMBINED DIMENSIONS

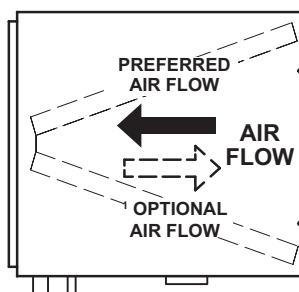


HORIZONTAL POSITION

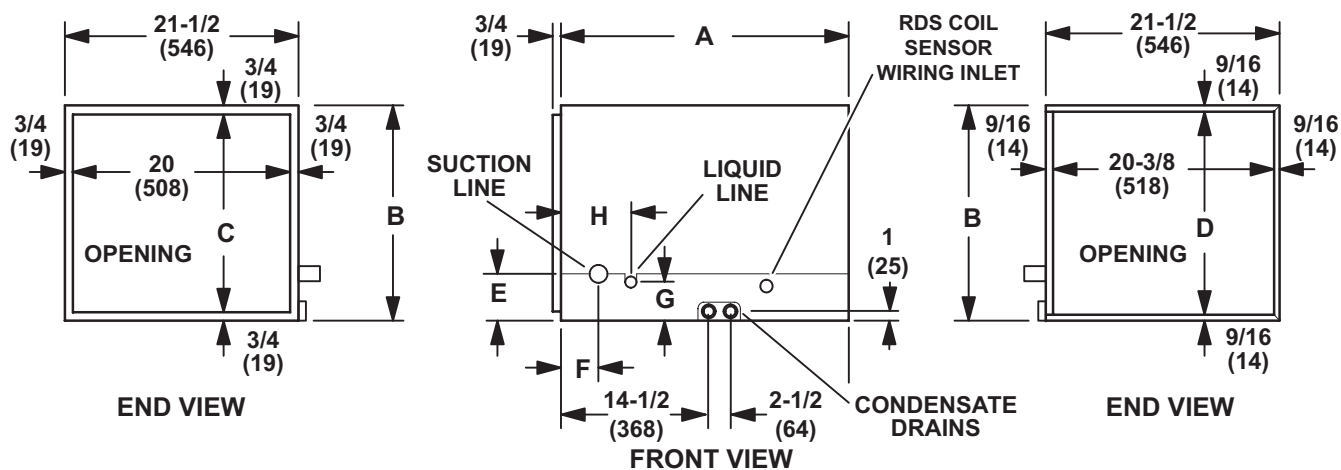
Coil Size	A		B	
	in.	mm	in.	mm
18A	26-1/2	673	59-1/2	1511
24A				
24B				
30B				
36A				
36B				
36C	31-1/2	880	64-1/2	1638
42C				
48C				
30A				
42B				
48B	31-1/2	880	64-1/2	1638
51/61C				
60D				

DIMENSIONS

¹ Optional right-hand airflow requires a field fabricated 6 in. (152 mm) spacer in-between the furnace and coil.



TOP VIEW



Size	A		B		C		D		E		F		G		H	
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
18A	26-1/2	673	14-1/2	368	13	330	13-3/8	340	3-1/4	83	1-3/4	44	3-3/8	86	4-3/8	111
24A	26-1/2	673	14-1/2	368	13	330	13-3/8	340	3-1/4	83	1-3/4	44	3-3/8	86	4-3/8	111
24B	26-1/2	673	17-1/2	444	16	406	16-3/8	416	3-1/4	83	1-3/4	44	3-3/8	86	4-3/8	111
30A	31-1/2	800	14-1/2	368	13	330	13-3/8	340	3-1/4	83	1-3/4	44	3-3/8	86	4-3/8	111
30B	26-1/2	673	17-1/2	444	16	406	16-3/8	416	3-1/4	83	1-3/4	44	3-3/8	86	4-3/8	111
36A	26-1/2	673	14-1/2	368	13	330	13-3/8	340	3-1/4	83	1-3/4	44	3-3/8	86	4-3/8	111
36B	26-1/2	673	17-1/2	444	16	406	16-3/8	416	3-1/4	83	1-3/4	44	3-3/8	86	4-3/8	111
36C	26-1/2	673	21	533	19-1/2	495	19-7/8	505	3-1/4	83	1-3/4	44	3-3/8	86	4-3/8	111
42B	31-1/2	800	17-1/2	444	16	406	16-3/8	416	3-1/4	83	1-3/4	44	3-3/8	86	4-3/8	111
42C	26-1/2	673	21	533	19-1/2	495	19-7/8	505	3-1/4	83	1-3/4	44	3-3/8	86	4-3/8	111
48B	31-1/2	800	17-1/2	444	16	406	16-3/8	416	3-1/4	83	1-3/4	44	3-3/8	86	4-3/8	111
48C	26-1/2	673	21	533	19-1/2	495	19-7/8	505	3-1/4	83	1-3/4	44	3-3/8	86	4-3/8	111
51/61C	31-1/2	800	21	533	19-1/2	495	19-7/8	505	3-1/4	83	1-3/4	44	3-3/8	86	4-3/8	111
60D	31-1/2	800	24-1/2	622	23	584	23-3/8	594	3-1/4	83	1-3/4	44	3-1/4	83	4-3/8	111



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