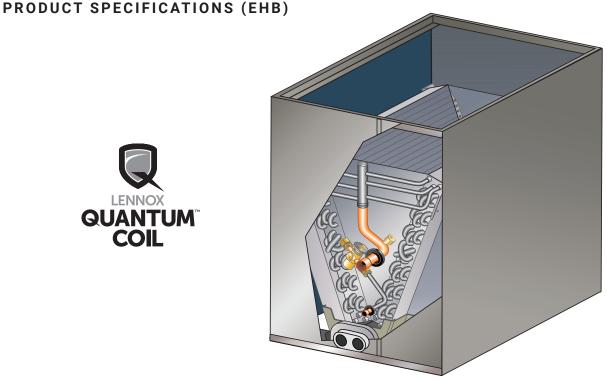
CK40DT



Downflow | Cased | Quantum™ Coil | TXV Furnished | R-410A / R-454B

RESIDENTIAL 2 to 5 Tons

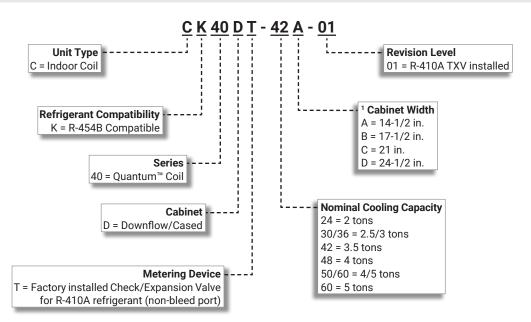




NOTE - Coils are furnished with a factory installed R-410A expansion valve. As an option, a R-454B expansion valve may be substituted. See page 5.

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.

CONTENTS

AIR RESISTANCE
APPROVALS AND WARRANTY
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OPTIONAL ACCESSORIES - ORDER SEPARATELY
OPTIONAL R-454B TXV SUBSTITUTION
SPECIFICATIONS

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 <u>may not</u> 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

- · 2 to 5 ton nominal sizes
- Lennox designed downflow indoor coils can easily be installed with most Lennox downflow 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 refrigerant leaks if they occur
- 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 in case of a refrigerant leak
- Ensures safe operation for systems equipped with R-454B refrigerant
- If a leak is detected the refrigerant detection system will prevent compressor and heating operation until a leak is no longer detected
- Refrigeration detection system also energizes the blower if a leak 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 a leak is detected
- Zone relay opens all zone dampers (if part of a zoning system) if a leak is detected

- Power is disabled to non-communicating thermostats to prevent demand if a leak 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
- Coil slides out of cabinet for ease of servicing
- 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

NOTE - "D" width coils do not match "C" width furnace width or openings. See Physical Matches drawing on page 7

SPECIFICATIO	NS				2 TO 3 TON
Size		24A	24B	30/36B	30/36C
Nominal size - Tons		2	2	2.5 / 3	2.5 / 3
Furnace Cabinet Ma	tching Letter Width	Α	В	В	С
Coil & Furnace Cabi	net Width - in.	14-1/2	17-1/2	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	Net face area sq. ft.	4.08	4.08	4.67	4.67
Coil	Tube diameter - in.	3/8	3/8	3/8	3/8
	Rows	3	3	3	3
	Fins - in.	14	14	14	14
Shipping Data - lbs.		44	51	52	60

SPECIFICATIO	NS				3.5 TO 5 TON	
Size		42B	48C	50/60C	60D	
Nominal size - Tons		3.5	4	4/5	5	
Furnace Cabinet Ma	urnace Cabinet Matching Letter Width		С	С	D	
Coil & Furnace Cabi	inet Width - in.	17-1/2	21	21	24-1/2	
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	Net face area sq. ft.	5.83	6.42	7.00	7.00	
Coil	Tube diameter - in.	3/8	3/8	3/8	3/8	
	Rows	3	3	3	3	
	Fins - in.	14	14	14	14	
Shipping Data - Ibs.		65	69	71	75	

AIR RESISTANCE

	Air	Total Resistance				
Size	Volume	Dry Coil	Wet Coil			
	cfm	in. w.g.	in. w.g.			
24A	400	0.08	0.09			
	600	0.16	0.18			
	800	0.29	0.33			
	1000	0.45	0.49			
24B	600	0.11	0.13			
	800	0.18	0.19			
	1000	0.27	0.29			
	1200	0.35	0.39			
	1400	0.47	0.51			
30/36B	600	0.1	0.12			
	800	0.15	0.18			
	1000	0.24	0.27			
	1200	0.32	0.36			
	1400	0.43	0.47			
30/36C	600	0.05	0.08			
	800	0.09	0.12			
	1000	0.13	0.17			
	1200	0.17	0.23			
	1400	0.24	0.30			
42B	600	0.08	0.10			
	800	0.12	0.14			
	1000	0.18	0.22			
	1200	0.25	0.30			
	1400	0.34	0.39			
	1600	0.43	0.49			

	Air	Total Resistance				
Size	Volume	Dry Coil	Wet Coil			
	cfm	in. w.g.	in. w.g.			
48C	800	0.09	0.10			
	1000	0.11	0.13			
	1200	0.15	0.18			
	1400	0.21	0.23			
	1600	0.26	0.30			
	1800	0.34	0.37			
	2000	0.4	0.44			
50/60C	800	0.09	0.11			
	1000	0.12	0.14			
	1200	0.16	0.20			
	1400	0.22	0.24			
	1600	0.27	0.32			
	1800	0.33	0.38			
	2000	0.4	0.46			
60D	800	0.09	0.08			
	1000	0.13	0.13			
	1200	0.18	0.16			
	1400	0.16	0.21			
	1600	0.2	0.26			
	1800	0.24	0.32			
	2000	0.29	0.39			

R-454B REFRIGERANT CONVERSION - ORDER SEPARATELY						
Description						
Refrigerant Detection System (RDS) Coil Sensor Kit						
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				

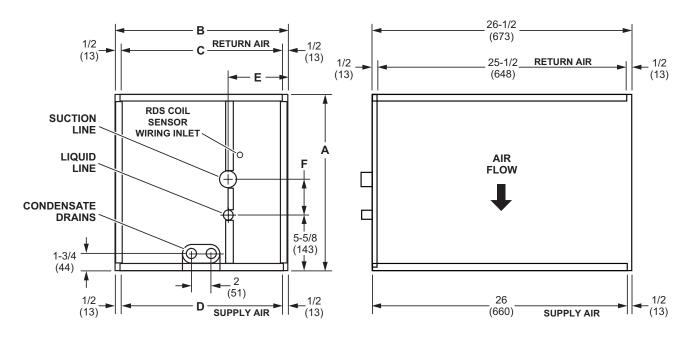
NOTE - Communicating Blower Control Board and Sensor can be used universally with Lennox® communicating furnace or any non-communicating 24 volt furnace. Non-Communicating Blower Control Board and Sensor can be used with any non-communicating 24 volt furnace.

OPTIONAL R-454B TXV SUBSTITUTION

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

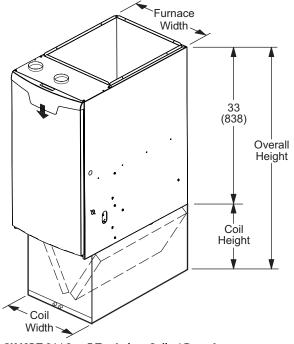
Size	Order Number
24	26Z70
30/36	26Z70
42	26Z71
48	26Z71
50/60	26Z71
60	26Z72

NOTE - Order R-454B Expansion Valve separately.



Size	(Hei	A ght)	(Wie	3 dth)	C D			E		F		
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
24A	18	457	14 -1/2	368	13-1/2	343	13-1/2	343	4-5/8	117	3-5/8	92
24B	18	457	17-1/2	445	16-1/2	419	16-1/2	419	6-1/8	155	3-5/8	92
30/36B	23-1/2	597	17-1/2	445	16-1/2	419	16-1/2	419	6-1/8	155	4-3/4	121
30/36C	23-1/2	597	21	533	20	508	20	508	7-7/8	200	4-3/4	121
42B	23-1/2	597	17-1/2	445	16-1/2	419	16-1/2	419	6-1/8	155	6-3/8	162
48C	27-1/2	699	21	533	20	508	20	508	7-7/8	200	8-5/8	219
50/60C	27-1/2	699	21	533	20	508	20	508	7-7/8	200	10	254
60D	27-1/2	699	24-1/2	622	23-1/2	597	23-1/2	597	9-5/8	244	10-1/2	267

DIMENSIONS - FURNACE/COIL COMBINED DIMENSIONS

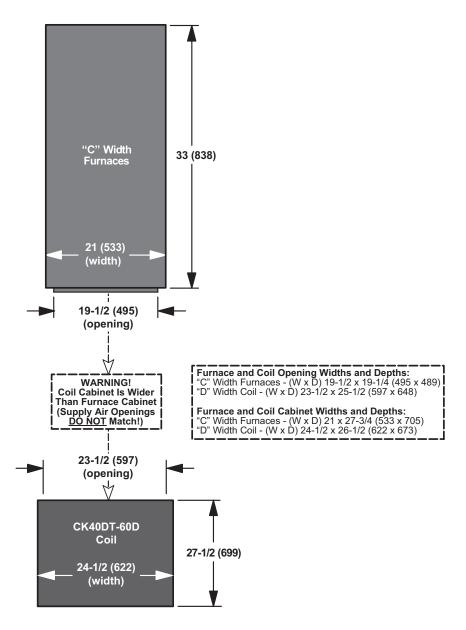


Size	Co Wid		Furna Wid				Overall Height		
	in.	mm	in.	mm	in.	mm	in.	mm	
24A	14-1/2	368	14-1/2	368	18	457	51	1295	
24B	17-1/2	445	17-1/2	445	18	457	51	1295	
30/36B	17-1/2	445	17-1/2	445	23-1/2	597	56-1/2	1435	
30/36C	21	533	21	533	23-1/2	597	56-1/2	1435	
42B	17-1/2	445	17-1/2	445	23-1/2	597	56-1/2	1435	
48C	21	533	21	533	27-1/2	699	60-1/2	1537	
50/60C	21	533	21	533	27-1/2	699	60-1/2	1537	
60D	24-1/2	622	24-1/2	622	27-1/2	699	60-1/2	1537	

CK40DT-01 | 2 to 5 Ton Indoor Coils $\,$ | Page 6 $\,$

PHYSICAL MATCHES

DOWNFLOW GAS FURNACES – "C" WIDTH FURNACES WITH "D" WIDTH COIL (NOTE – Coil DOES NOT match furnace cabinet width and depth or supply air opening width and depth!)











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