

RCBA-MULTIFLEX® INDOOR COILS

AIRFLOW CAPACITIES 600-2000 CFM [218-944 L/s]

Ruud Value Series Indoor Coils are designed for use with Ruud Value Series outdoor units in upflow, downflow and horizontal configurations.

The MultiFlex® coils provide nominal capacities ranging from 18,000 to 60,000 BTUH [5.27 to 17.58 kW].

The patented single-row, single-coil pleated concept results in extremely low pressure drops and corresponding easy cleaning.

Drain connections may be made from either side of the coil.

Engineering Features

- Constructed of enhanced aluminum fins bonded to inner grooved copper tubing.
- Coils have sweat fitting refrigerant connections.
- Primary condensate drain connections are 3/4" [19 mm] F.N.P.T.
- Coils are A.R.I. certified for system application with a wide variety of Ruud Value Series outdoor units.
- Condensate drain pan is constructed of a high grade, heat resistant, corrosion free polymer material.









MODEL	. NUN	IBER IDENTIF	FICATIO	N				
<u>R</u>	<u>C</u>	<u>B</u>	<u>A</u>	-	<u>37</u>	<u>65</u>	<u>G</u>	<u>H</u>
Ruud Value Series	Coil	Type of Coil B = Flowcheck Standard Cooling/ Heat Pump	Design Series A = 1st Design		Nominal Capacity 24 = 18,000 to 24,000 BTUH [5.27 to 7.03 kW] 37 = 30,000 to 36,000 BTUH [8.79 to 10.55 kW] 48 = 42,000 to 48,000 BTUH [12.31 to 14.06 kW] 60 = 60,000 BTUH [17.58 kW]	Metering Device ** = Flowcheck Piston (RCBA Coils)	Airflow/Refrigerant Connections	Horizontal Drain Pan

REFRIGERANT METERING—RCBA Coils PISTON SIZES (PART NUMBER 61-23414-**)

MODEL/SIZE	10PJA- HEAT PUMP	10AJA- CONDENSING UNITS
TON [kW]	PRELIMINARY 10 SEER RECIP. MODELS	10 SEER RECIP. MODELS
18/1.5 [5.28]	53	51
24/2.0 [7.03]	61	61
30/2.5 [8.79]	70	65
36/3.0 [10.55]	68	73
42/3.5 [12.31]	78	78
48/4.0 [14.07]	N/A	78
60/5.0 [17.58]	N/A	89

^[] Designates Metric Conversions

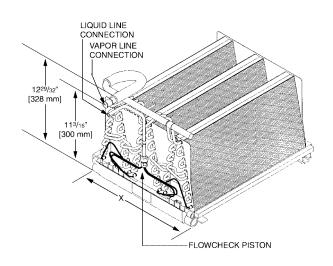
RXCT- EXPANSION VALVE CONVERSION KIT FOR RCBA INDOOR COILS

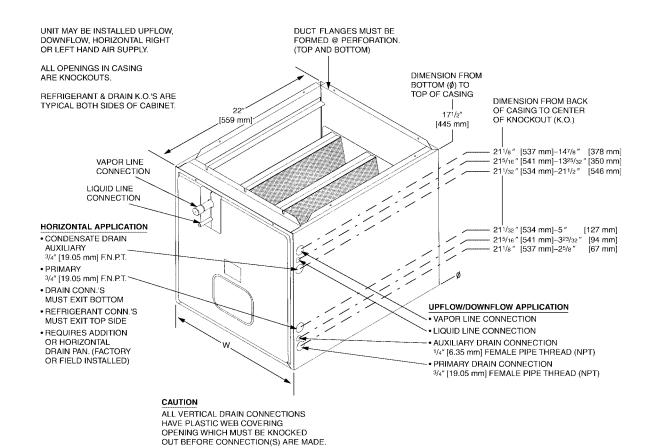
Use an expansion valve kit to convert RCBA- indoor coils to High Efficiency Coils

EXPANSION VALVE KIT	WITH RCBA- COIL	APPLICATION MODELS	PISTON SIZE
RCBA- APPLICATIONS—12 SI	EER COOLING ONLY MODELS		
RXCT-BCA	RCBA-24	11/2 Ton [5.28 kW]	.099
RXCT-BCB	RCBA-24	2 Ton [7.03 kW]	.120
RXCT-BCC	RCBA-37	21/2 Ton [8.79 kW]	.140
RXCT-BCD	RCBA-36/37	3 Ton [10.55 kW]	.157
RXCT-BCE	RCBA-48	31/2 Ton [12.31 kW] & 4 Ton [14.07 kW]	.157

UNIT DIMENSIONS & WEIGHTS— RCBA- UNCASED COILS

			IECTION	UNIT WEIGHT (LBS.) [Kg]		
MODEL NUMBER	UNCASED COIL	SIZE (IN.) [mm] SWEAT		UNCASED COIL		
	"X" IN. [mm]	LIQUID	SUCTION			
		I.D.	I.D.	WT.	SHIP WT.	
RCBA-24	12 ¹ / ₄ [311]		3/4 [19]	15 [6.80]	17 [7.11]	
RCBA-37	153/4 [400]	3/0 [10]	94[19]	20 [9.07]	22 [9.98]	
RCBA-48	191/4 [489]	3/8 [10]	7/2 [22]	26 [11.79]	29 [13.15]	
RCBA-60	223/4 [578]		7/8 [22]	32 [14.51]	35 [15.88]	





TXBC CABINET WIDTH SUPPLY & RETURN AIR DIMENSIONS WITH TXBC COIL CASING

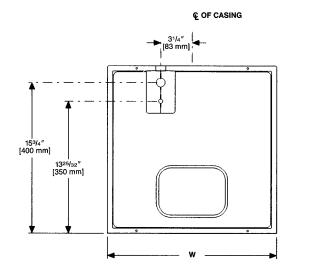
UPFLOW/HORIZONTAL

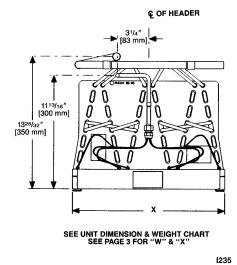
TXBC CABINET WIDTH		14" [356]	17.5" [445]	21" [533]	24.5" [622]
SUPPLY AIR	"W" IN. [mm]	13" [330]	16 ¹ /2" [419]	20" [508]	231/2" [597]
	"D" IN. [mm]	195/8" [498]	195/8" [498]	195/8" [498]	195/8" [498]
RETURN AIR	"W" IN. [mm]	13" [330]	161/2" [419]	20" [508]	231/2" [597]
ne i univain	"D" IN. [mm]	19 ⁷ /8" [505]			

DOWNFLOW

TXBC CABINET WIDTH		14" [356]	17.5" [445]	21" [533]	24.5" [622]
SUPPLY AIR	"W" IN. [mm]	13" [330]	16 ¹ /2" [419]	20" [508]	231/2" [597]
	"D" IN. [mm]	19 ⁷ /8" [505]			
RETURN AIR	"W" IN. [mm]	13" [330]	16 ¹ /2" [419]	20" [508]	231/2" [597]
ne i univain	"D" IN. [mm]	195/8" [498]	195/8" [498]	195/8" [498]	195/8" [498]

"G(-)" FRONT CONNECTION FOR RCBA-





Front Connection
Designated as (G) in model number.

NOTE: Models 14 and 17 have front connections only unless option 31 is available, which allows side connections. Side connection can also be field-installed to models 21 and 24.

PHYSICAL DATA

COIL MODEL NUMBER	APPROX. DESIGN AIRFLOW RANGE (CFM) [L/s]	FACE AREA (SQ. FT.) [m²]	FINS/IN.	NUMBER OF SLABS
RCBA-24**	600-800 [283.1-377.6]	5.07 [.471]		4
RCBA-37**	1000-1200 [471.1-566.3]	7.60 [.706]	18	6
RCBA-48**	1400-1600 [660.7-755.1]	10.13 [.941]	10	8
RCBA-60**	2000 [943.9]	12.67 [1.18]		10

NOTES: **—Indicates piston size on RCBA coils.

UNCASED COIL APPLICATION—REPLACEMENT OR AIR HANDLER UNITS WITHOUT COILS

COIL	NO.	AIR HANDLER						
MODEL NUMBER	COIL SLABS	14AH	17AH	21AH	24AH			
RC(B)A-24	4	Х						
RC(B)A-37	6		X					
RC(B)A-48	8			Х				
RC(B)A-60	10				Х			

NOTES: Requires coil code "00" (without coil—with plenum) in unit model number. All require horizontal drain pan accessory (RXBD-DA) for horizontal applications. Cabinet widths 14 = 14" [355.6], 17 = 17.5" [444.5], 21 = 21" [533.4], 24 & 25 = 24.5" [622.3].

RCBA COIL WITH TXBC CASED APPLICATION

Coil can be matched to heating products as listed in table below.

NO. OF COIL COIL PLENUM SLABS WIDTH			80% UPF	AS FURNAC LOW, DOWI ZONTAL MC	NFLOW &	GAS FURNACE 34" 90 PLUS UPFLOW, DOWNFLOW & HORIZONTAL CONDENSING MODELS					
SLADS	WIDIR	05	07	10	12	15	04	06	07	10	12
4	14	Α									
4	17.5		A & B				A & B	A&B			
6	17.5	Е	Α				Α	Α			
6	21			A & B					A & B	A & B	
8	21		E	Α					Α	Α	
8	24.5				A & B	A & B					A&B
10	24.5			Е	Α	Α					Α
_	RNACE I IN. [mm]	14 [355.6]	17.5 [444.5]	21 [533.4]		4.5 [2.3]	1	7.5 4.5]	1	21 3.4]	24.5 [622.3]

NOTES: BOLD AREAS INDICATE FLUSH FIT APPLICATIONS

A—Upflow/Downflow/Horizontal Application. Horizontal application requires field installed

horizontal drain pan accessory RXBD-DA (One pan fits all).

B—Upflow/Downflow/Horizontal Application. Requires use of RXBA-AA internal coupler accessory.

E—Upflow and Horizontal application requires external plenum adapter accessory RXBA-AC. Downflow/Horizontal application requires external plenum adapter accessory RXBA-AD.

RCBA-PRESSURE DROP

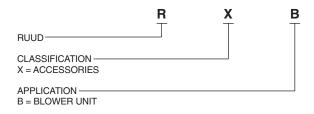
No. of Coil Slabs			4	(3	8		10		
Coil Cooling Size		18,	24	30,	30, 36		42, 48		60	
Coil Position (Airflo	v)	Up	Down	Up	Down	Up	Down	Up	Down	
					AIRFLOW CF	M [L/s]				
	.05 [.01]	578 [272.8]	521 [245.9]	752 [354.9]	673 [317.6]	895 [422.4]	764 [360.6]	1005 [474.3]	885 [417.7]	
Static Pressure	.10 [.02]	889 [419.6]	827 [390.3]	1113 [525.3]	977 [461.1]	1299 [613.1]	1103 [520.6]	1559 [437.8]	1308 [617.3]	
Drop Through Wet Cooling Coil In.	.15 [.04]	1158 [546.5]	977 [461.1]	1416 [668.3]	1244 [587.1]	1641 [774.5]	1386 [654.1]	1939 [915.1]	1605 [757.5]	
W.C. [kPa]	.20 [.05]	1346 [635.2]	1149 [542.3]	1647 [777.3]	1413 [666.9]	1960 [925.0]	1637 [772.6]	2271 [1071.8]	1883 [888.7]	
	.25 [.06]	1546 [729.6]	1271 [599.8]	1876 [885.4]	1633 [770.7]	2187 [1032.1]	1826 [861.8]	2552 [1204.4]	2134 [1007.1]	
	.30 [.07]	1665 [785.8]	1401 [661.2]	2065 [974.6]	1784 [841.0]	2429 [1146.4]	2013 [950.0]	2890 [1363.9]	2365 [1116.2]	

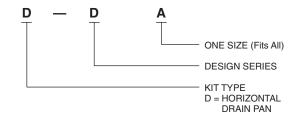
NOTES: Air pressure drop for horizontal airflow is the same as that shown for upflow.

ACCESSORIES

HORIZONTAL DRAIN PAN KIT RXBD-DA

This horizontal drain pan accessory is for installation in cased indoor cooling coils. This accessory allows a coil to be converted for horizontal application. The same drain pan fits all RCBAcoils. (Kit has external metal drain pan extension required for gas furnace applications only).





[] Designates Metric Conversions

GENERAL TERMS OF LIMITED WARRANTY

ICECOSM will furnish a replacement for any part of this product which fails in normal use and service within the applicable period stated, in accordance with the terms of the limited warranty.

For Complete Details of the Limited Warranty, Including Applicable Terms and Conditions, See Your Local Installer or visit www.ICECOhvac.com.

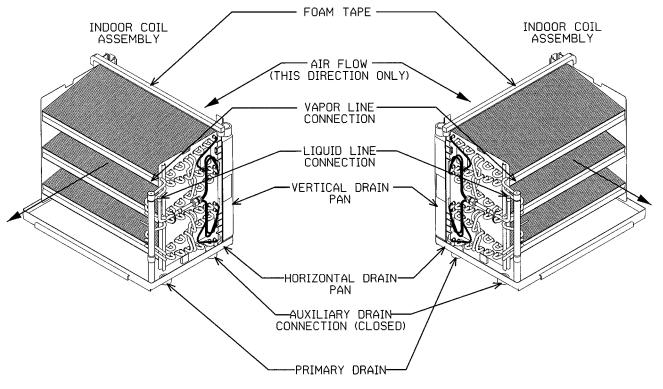
MultiFlex Coil leaks caused by	
factory defects	Five (5) Years
Any Part	Five (5) Years

ACCESSORIES (continued)

RCBA- HORIZONTAL INDOOR COIL ASSEMBLY

Figure 1. Indoor coil and drain pan set-up for horizontal left-hand air supply. Designated as (L) in model number. Side connection coil shown.

Indoor coil and drain pan set-up for horizontal right-hand air supply. Designated as (R) in model number. Side connection coil shown.



*Foam Tape

Foam tape is factory installed on the sides of the vertical drain pan if the coil is provided in a coil casing. Foam tape is shipped loose with uncased coils.

If uncased coil is installed vertical in a coil casing or air handler, install the foam tape on the sides of the vertical drain pan.

If installed horizontal, **DO NOT** install foam tape on the side of the vertical drain pan that fits into the horizontal drain pan. Remove foam tape, if already attached, from the side of the vertical drain pan that fits into the horizontal drain pan.

If coil, vertical or horizontal, is installed in coil casing or air handler with optional "Florida Insulation," **DO NOT** install foam tape on either side of the vertical drain pan.

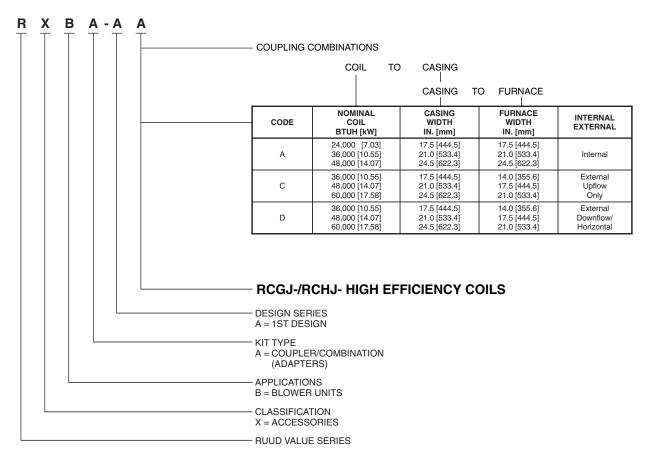
ACCESSORIES (continued)

INTERNAL COUPLER ACCESSORY RXBA-AA

This internal coupler accessory is for installation in cased indoor cooling and heat pump coils. This allows a nominal size coil to be installed in the next larger size casing.

PLENUM ADAPTER ACCESSORY RXBA-AC AND RXBA-AD

This internal coupler accessory is for installation in cased indoor cooling and heat pump coils. This allows a nominal size coil to be installed in the next larger size casing.

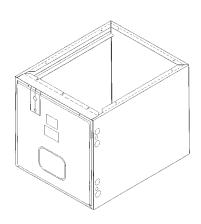


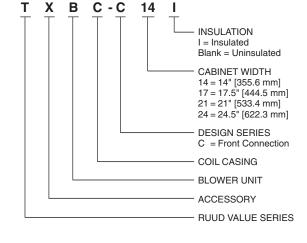
RXBC-INDOOR COIL CASING

UNIT DIMENSIONS & WEIGHTS—RXBC- INDOOR COIL CASINGS

MODEL	WIDTH	HEIGHT	DEPTH	UNIT	WEIGHT	SUPP	LY ①	RETU	RN ②	
NUMBER	"W" IN. [mm]	IN. [mm]	IN. [mm]	WT. [Kg]	SHIP WT. [Kg]	WIDTH IN. [mm]	DEPTH IN. [mm]	WIDTH IN. [mm]	DEPTH IN. [mm]	
TXBC-14	14 [356]	171/2		17 [7.11]	19 [8.62]	13 [330]		13 [330]		
TXBC-17	17 ¹ / ₂ [445]		171/2	171/2	22	19 [8.62]	21 [5.33]	16 ¹ / ₂ [419]	19 5/8	16 ¹ / ₂ [419]
TXBC-21	21 [533]	[445]	[559]	20 [9.07]	23 [10.43]	20 [508]	[498]	20 [508]	[505]	
TXBC-24	241/2 [622]			22 [9.98]	25 [11.34]	231/2 [597]		231/2 [597]		

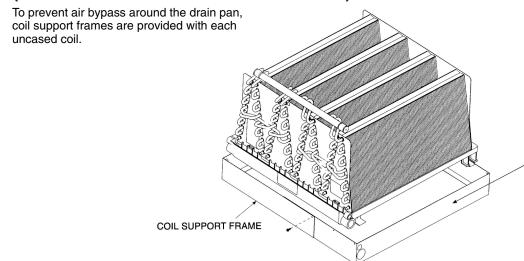
NOTES: ① Supply dimensions for upflow & horizontal units. This is return dimensions for downflow units. ② Return dimensions for upflow & horizontal units. This is supply dimensions for downflow units.





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AIR BYPASS FRAME FOR UNCASED COILS—(STANDARD ON ALL UNCASED COILS)



Frame is only used when coil is not installed in other than standard coil casing. Air bypass frame is not for use with TXBC coil casing or AH series air handlers.

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NOTES

Before proceeding with installation, refer to installation instructions packaged with each model, as well as complying with all Federal, State, Provincial, and Local codes, regulations, and practices.

RUUD AIR CONDITIONING DIVISION

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