

INDOOR COOLING COILS FOR DUAL FURNACE APPLICATION

RCCL- SERIES

R-410A
earth friendly refrigerant



The RCCL- series cooling coils are designed for use with two Upflow Gas Furnaces or two Upflow Oil Furnaces and a single 6.5, 7.5 or 10 ton [22.9, 26.4 or 35.2 kW] commercial condensing unit.

For twinning furnaces, please refer to the appropriate Installation Instructions.

RCCL coils are single circuit coils with a mounted expansion valve in a completely assembled and insulated plenum.

Sheet metal transitions and block-offs for dual furnace applications are packaged with the RCCL coil assembly.

WARNING
RCCL COOLING COIL
FOR USE IN
UPFLOW APPLICATIONS ONLY



6.5, 7.5 and 10 Ton [22.9, 26.4 and 35.2 kW] Single Circuit Evaporator Coils

Model RCCL-D5013S
6.5, 7.5 ton & 10 ton
[22.9, 26.4 & 35.2 kW]
High efficiency
evaporator coil

Model RXGP-F03
GAS FURNACES

Twinning kit
(except -GPR)

NOTE: Sheet metal transition and block-offs for dual furnace applications are packaged with the RCCL coil assembly. Twinning Kit must be ordered as a separate item.

The following furnaces may be used in 6.5 and 7.5 ton [22.9 or 26.4 kW] upflow applications.

(-)GPR-07?BRQ? (-)GPR-10?BRM? (-)GPR-12?ARM
 See I/O for Wiring

The following furnaces may be used in 10 ton [35.2 kW] upflow applications.

80% Gas Upflow	Two-stage 80% Gas Upflow	90 Plus Gas Upflow	Two-stage 90 Plus Gas Upflow
(-)GPN/80PS-05*AUE	(-)GPR-05*AUE	(-)GRA/90RS-06*MAE	(-)GRL-06*MAE
(-)GPN/80PS-07*AUE	(-)GPR-07*AUE	(-)GRB/90RT-07*MAE	(-)GRL-07*MAE
(-)GPN/80PS-10*AME	(-)GPR-07*AMG	(-)GRB/90RT-07*YBG	(-)GRL-07*YBG
(-)GPN/80PS-10*BRJ	(-)GPR-10*AME	(-)GRA/90RS-09*ZAJ	(-)GRL-09*ZAJ
(-)GPN/80PS-12*ARJ	(-)GPR-10*BRJ	(-)GRA/90RS-10*ZAJ	(-)GRL-10*ZAJ
(-)GPN/80PS-15*ARJ	(-)GPR-12*ARJ	(-)GRA/90RS-12*ZAJ	(-)GRL-12*RAJ

- Refer to Installation Guide for specific model twinned.
- 80PS, and 90RS, 90RT models using UTEC 1027-200 IFC require the twinning kit RXGP-F03.
- Twinning kits must be ordered as a separate item.

NOTES: 1. Hot surface ignition models identified by the fourth model number character "J" require the use of twinning kit model **RXGP-F03**. Refer to Installation Instructions for additional information.
 2. See gas furnace specification sheets to determine appropriate models and fan speeds for 6.5, 7.5 or 10 ton [22.9, 26.4 & 35.2 kW] applications.
 3. Refer to RCCL I&O for twinning wiring diagrams.

Coil Model:
RCCL-D5013S

Oil Furnace Wiring Kit Model:
RXOP-D25



Pressure Drop (Inches, Water Column) [kPa]

RCCL-D5013S					
CFM [L/s]	DRY COIL	WET COIL	CFM [L/s]	DRY COIL	WET COIL
2400 [1133]	.15 [.04]	.18 [.04]	3800 [1793]	.25 [.06]	.32 [.08]
2600 [1227]	.16 [.04]	.20 [.05]	4000 [1888]	.26 [.06]	.34 [.08]
2800 [1321]	.18 [.04]	.22 [.05]	4200 [1982]	.28 [.07]	.36 [.09]
3000 [1416]	.19 [.05]	.24 [.06]	4400 [2077]	.30 [.07]	.38 [.09]
3200 [1510]	.20 [.05]	.26 [.06]	4600 [2171]	.31 [.08]	.40 [.10]
3400 [1605]	.22 [.05]	.28 [.07]	4800 [2265]	.32 [.08]	.42 [.10]
3600 [1699]	.23 [.06]	.30 [.07]			

[] Designates Metric Conversions

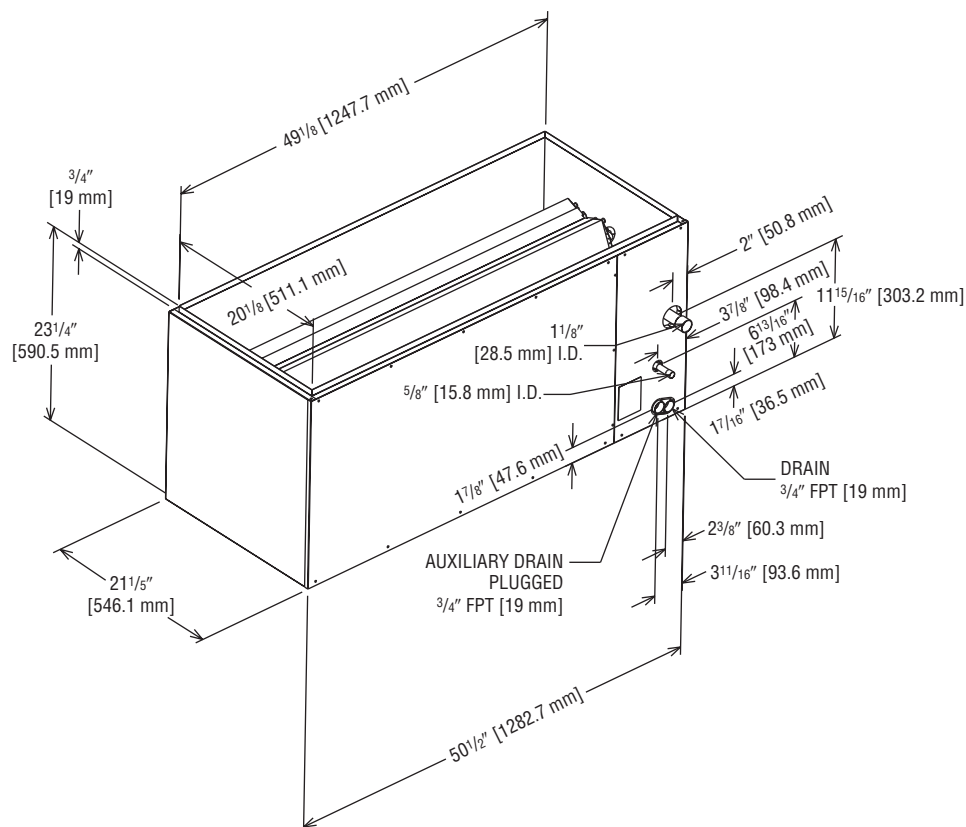
Physical Data Table

MODEL NO. RCCL-	D5013S
Nominal Tons [kW]	6.5, 7.5, 10 [22.9, 26.4, 35.2]
Coil Face Area (Sq. Ft.) [m ²]	12.57 [1.17]
Coil Tube Diameter (In.) [mm]	3/8" [9.5]
Coil, Rows Deep—Fins Per Inch	4/12
REFRIGERANT CONTROL: Thermal Expansion Valve	BBIZE-8
CABINET: Finish	Galvanized
Sheet Metal	Galvanized
Gauge (Nominal)	20
UNIT WEIGHTS: Operating (lbs.) [kg]	130 [57.7]
Shipping (lbs.) [kg]	140 [63.5]
Packaging Dimensions (H x W x L) (In.) [mm]	26" x 26" x 52 1/4" [660.4] x [660.9] x [1327.2]

A.R.I. Ratings

INDOOR COOLING COIL WITH CONDENSING UNIT 80°F. D.B. [27°C]/67°F. W.B. [19°C] INDOOR—95°F. D.B. [35°C] OUTDOOR				
COOLING COIL	CONDENSING UNIT	NET BTUH [kW]	EVAP CFM [L/s]	EER
RCCL-D5013S	RAWL-078+RGPR-07?BRQ?	77,000 [22.6]	2,600 [1227]	11.2
	RAWL-078+RGPR-10?BRM?	77,000 [22.6]	2,600 [1227]	11.2
	RAWL-078+RGPR-12?ARM?	77,000 [22.6]	2,600 [1227]	11.2
	RAWL-090+RGPR-07?BRQ?	90,000 [26.4]	2,800 [1321]	11.2
	RAWL-090+RGPR-10?BRM?	90,000 [26.4]	2,800 [1321]	11.2
	RAWL-090+RGPR-12?ARM?	90,000 [26.4]	2,800 [1321]	11.2
	RAWL-120	118,000 [34.6]	3,800 [1793]	11.2
	RAWL-125	116,000 [34.0]	3,800 [1793]	11.2

Coil Dimensional Data



Cooling Performance Data

EVAPORATOR RCCL-D5013S @ 3800 CFM [1793 L/S] 105° F [40.5° C] LIQUID TEMPERATURE AT TXV													
AIRFLOW	EVAP. TEMP.	75/63				80/67				85/71			
		TC	SC	LDB	LWB	TC	SC	LDB	LWB	TC	SC	LDB	LWB
3800	40	140,998	102,474	50.0	49.4	173,090	116,082	51.7	51.2	206,985	129,069	53.6	53.0
	45	112,095	87,881	53.6	52.5	144,476	102,013	55.1	54.2	179,183	115,581	56.8	55.8
	50	83,570	74,429	56.9	55.3	113,163	87,458	58.7	57.3	147,620	101,423	60.3	58.8

TC = Total Capacity, BTUH LDB = Leaving Dry Bulb, °F SC = Sensible Capacity, BTUH LWB = Leaving Wet Bulb, °F

NOTES: 1. Total and sensible capacity is gross, with no deduction for indoor blower motor heat.
2. Interpolation is permissible. Do not extrapolate.

Airflow Correction Factors

RCCL-D5013S													
ACTUAL—CFM [L/s]	2400 [1133]	2600 [1227]	2800 [1321]	3000 [1416]	3200 [1510]	3400 [1605]	3600 [1699]	3800 [1793]	4000 [1888]	4200 [1982]	4400 [2077]	4600 [2171]	4800 [2265]
TOTAL MBH	0.80	0.84	0.87	0.90	0.92	0.95	0.97	1.00	1.03	1.05	1.07	1.09	1.11
SENSIBLE MBH	0.75	0.80	0.84	0.87	0.90	0.94	0.97	1.00	1.03	1.06	1.09	1.12	1.14

NOTES: 1. Multiply correction factor times gross performance data.
2. Resulting sensible capacity cannot exceed total capacity.

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Coil Adapters

Models and RCCL-D5013S cased coil assembly is composed of an upflow coil installed in an insulated cabinet. The coil includes several adapters and a transition which enables it to fit the furnace models listed below. The table illustrates the required adapter combinations. See figures 1 and 2.

FURNACE	CENTER BLOCK-OFF (In.) [mm]	SIDE BLOCK-OFFS (In.) [mm]
90RS/(-)GRA/06*MAE	2.25 [57.2]	7 [177.8]
90RT/(-)GRB/-07*MAE	2.25 [57.2]	7 [177.8]
90RS/(-)GRB/-07*YBG	2.25 [57.2]	3.5 [88.9]
90RS/(-)GRA-09*ZAJ	2.25 [57.2]	3.5 [88.9]
90RS/(-)GRA-10*ZAJ	2.25 [57.2]	3.5 [88.9]
90RS/(-)GRA-12*ZAJ	2.25 [57.2]	None
80PS/(-)GPN/-05*AUE	2.25 [57.2]	7 [177.8]
80PS/(-)GPN/-07*AUE	2.25 [57.2]	7 [177.8]
80PS/(-)GPN/-10*AME	2.25 [57.2]	7 [177.8]
80PS/(-)GPN/-10*BRJ	2.25 [57.2]	3.5 [88.9]
80PS/(-)GPN/-12*ARJ	2.25 [57.2]	None
80PS/(-)GPN/-15*ARJ	2.25 [57.2]	None
(-)GPR-05*AUE	2.25 [57.2]	7 [177.8]
(-)GPR-07*AUE	2.25 [57.2]	7 [177.8]
(-)GPR-07*AMG	2.25 [57.2]	7 [177.8]
(-)GPR-10*AME	2.25 [57.2]	7 [177.8]
(-)GPR-10*BRJ	2.25 [57.2]	3.5 [88.9]
(-)GPR-12*ARJ	2.25 [57.2]	None
(-)GRK-06*MAE	2.25 [57.2]	7 [177.8]
(-)GRK-07*MAE	2.25 [57.2]	7 [177.8]
(-)GRK-07*YBG	2.25 [57.2]	3.5 [88.9]
(-)GRK-09*ZAJ	2.25 [57.2]	3.5 [88.9]
(-)GRK-10*ZAJ	2.25 [57.2]	3.5 [88.9]
(-)GRK-12*RAJ	2.25 [57.2]	None

*E or N

Coil Piping And Expansion Valve Bulb Location

1. An oil trap in the suction line should be provided.
2. The expansion valve sensing bulb must be strapped securely to the top of the suction line on the outside of the coil cabinet. Both the bulb and suction line must be insulated. See figure 3.
3. The condensate drain connection is 3/4" [19 mm] NPT. A 3" [76.2 mm] trap with adequate pitch must be provided. See figure 3.

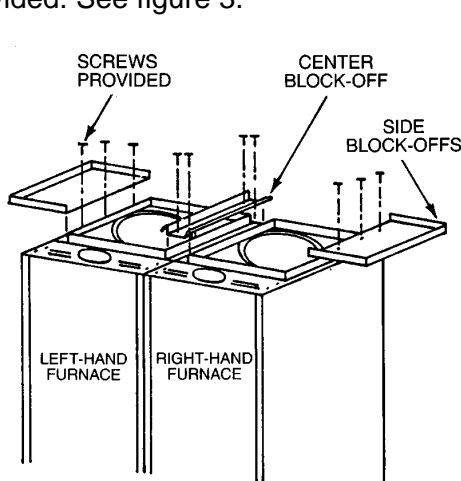


FIGURE 1

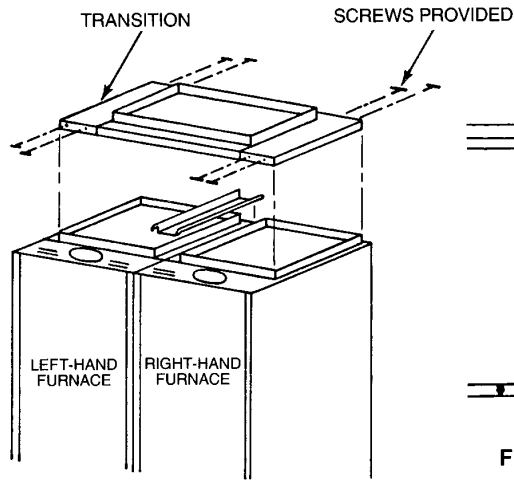


FIGURE 2

(Field Supplied)

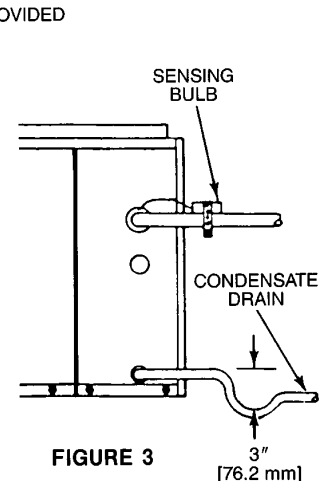


FIGURE 3

[] Designates Metric Conversions

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