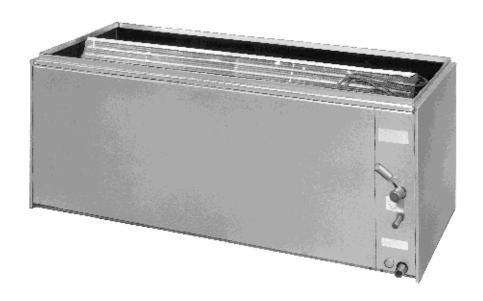
INDOOR COOLING COILS FOR DUAL FURNACE APPLICATION

RCCU-SERIES



The RCCU- series cooling coils are designed for use with two Electric Ignition Upflow Gas Furnaces or two 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.

RCCU 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 RCCU coil assembly.

WARNING

RCCU COOLING COIL

FOR USE IN

UPFLOW APPLICATIONS ONLY





Model RCCU-A5090S

6 ton [21.1 kW] evaporator coil

Single circuit slab coil with mounted expansion valve in a completely assembled plenum.

Model RCCU-A5012S 7.5 & 10 ton [26.4 & 35.2 kW] evaporator coil

Single circuit "A" coil with mounted expansion valve in a completely assembled plenum.

Model RXOP-B25 OIL MODELS

wiring kit

Model RXGP-F02 GAS FURNACES

twinning kit

For all (-)GDG Gas Furnaces with Honeywell S9201A-1010, -1028 or -1036 controls (see wiring diagram 90-23553-02-00 page 6).

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

The following furnaces may be used in 6.5, 7.5 or 10 ton [22.9, 26.4 or 35.2 kW] applications

Gas Upflow

Hot Surface Ignition Models

(-)GDJ/(-)GPH-04*AUS	(-)GPK/(-)GPJ-05*AUE	(-)GRA/(-)GRJ-04*MAE
(-)GDJ/(-)GPH-05*AUE	(-)GPK/(-)GPJ-07*AUE	(-)GRA/(-)GRJ-06*MAE
(-)GDJ/(-)GPH-06*AUE	(-)GPK/(-)GPJ-07*AMG	(-)GRA/(-)GRJ-07*MAE
(-)GDJ/(-)GPH-07*AUE	(-)GPK/(-)GPJ-10*AME	(-)GRA/(-)GRJ-07*YBG
(-)GDJ/(-)GPH-07*AMG	(-)GPK/(-)GPJ-10*BRJ	(-)GRA/(-)GRJ-09*ZAJ
(-)GDJ/(-)GPH-10*AME	(-)GPK/(-)GPJ-12*ARJ	(-)GRA/(-)GRJ-10*ZAJ
(-)GDJ/(-)GPH-10*BRJ	(-)GPK/(-)GPJ-15*ARJ	(-)GRA/(-)GRJ-12*ZAJ
(-)GDJ/(-)GPH-12*ARJ		
(-)GDJ/(-)GPH-15*ARJ		

Oil Furnaces

6.5 & 7.5 Ton [22.9 & 26.4 kW] Applications*

> (-)OBC-084QBE (-)OBC-095QBE (-)OBC-112QBE

(-)OBC-130RBJ (-)OBC-150RBJ 7.5 & 10 Ton [26.4 & 35.2 kW] Applications*

> (-)OBC-130RBJ (-)OBC-150RBJ

*Model RXOP-B25 Wiring Kit is required and 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. DO NOT TWIN standing pilot models.

Coil Models:

RCCU-A5090S RCCU-A5012S



Pressure Drop (Inches, Water Column) [kPa]

RCCU-A5090S											
CFM	[L/s]	DRY	COIL	WET	COIL						
2000	[944]	.15	[.04]	.23	[.06]						
2200	[1038]	.17	[.04]	.26	[.06]						
2400	[1133]	.20	[.05]	.30	[.07]						
2600	[1227]	.23	[.06]	.35	[.09]						
2800	[1321]	.26	[.06]	.40	[.10]						
3000	[1416]	.29	[.07]	.45	[.11]						
3200	[1510]	.33	[.08]	.50	[.12]						

RCCU-A5012S									
CFM [L/s]	DRY COIL	WET COIL	CFM [L/s]	DRY COIL	WET COIL				
2400 [1133]	.06 [.01]	.09 [.02]	3800 [1793]	.13 [.03]	.20 [.05]				
2600 [1227]	.07 [.02]	.11 [.03]	4000 [1888]	.14 [.03]	.22 [.05]				
2800 [1321]	.08 [.02]	.12 [.03]	4200 [1982]	.16 [.04]	.24 [.06]				
3000 [1416]	.09 [.02]	.14 [.03]	4400 [2077]	.17 [.04]	.26 [.06]				
3200 [1510]	.10 [.02]	.15 [.04]	4600 [2171]	.18 [.04]	.28 [.07]				
3400 [1605]	.11 [.03]	.17 [.04]	4800 [2265]	.20 [.05]	.31 [.08]				
3600 [1699]	.12 [.03]	.18 [.04]			_				

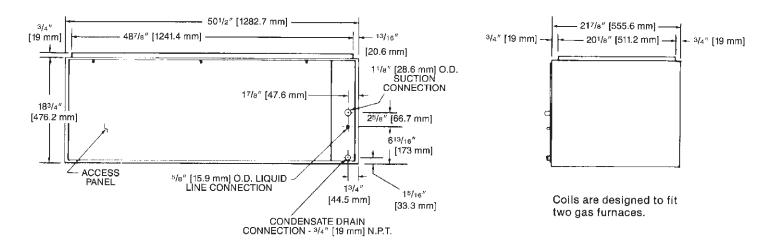
Physical Data Table

MODEL NO. RCCU-	A5090S	A5012S
Nominal Tons [kW]	6.5 [22.9]	7.5, 10 [26.4, 35.2]
Coil Face Area (Sq. Ft.) [m²]	6.28 [0.58]	12.57 [1.17]
Coil Tube Diameter (In.) [mm]	5/16" [7.9]	5/16" [7.9]
Coil, Rows Deep—Fins Per Inch	4/13	4/13
REFRIGERANT CONTROL: Thermal Expansion Valve	XVE-71/2	PVE-11GA
CABINET: Finish	Powder Paint	Powder Paint
Sheet Metal	Galvanized	Galvanized
Gauge (Nominal)	20	20
UNIT WEIGHTS: Operating (lbs.) [kg]	90 [40.8]	125 [56.7]
Shipping (lbs.) [kg]	100 [45.4]	135 [61.2]
Packaging Dimensions (H x W x L) (In.) [mm]	26" x 22 ¹ / ₂ " x 53 ¹ / ₄ " [660.4] x [571.5] x [1352.6]	26" x 221/2" x 53 ¹ /4" [660.4] x [571.5] x [1352.6]

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									
RCCU- COOLING COIL	RCCU- COOLING COIL (-)AWD- CONDENSING UNIT NET BTUH [kW] EVAP CFM [L/s] EER								
A5090S	065	72,000 [21.1]	2,600 [1227]	9.4					
A5012S	075	90,000 [26.4]	3,200 [1510]	9.1					
A5012S	100	120,000 [35.2]	3,800 [1793]	8.9					

Coil Dimensional Data



[] Designates Metric Conversions

Cooling Performance Data

	RCCU-A5090S @ 2600 CFM [1227 L/s]											
	EVAP		EVAP	EVAPORATOR ENTERING AIR DB—°F [°C]								
EVAP	INLET	TOTAL	LVG	70 [21.1]	75 [23.9]	80 [26.7]	85 [29.4]	90 [32.2]	95 [35.0]			
°F [°C]	AIR WB	CAPAC MBH [kW]	AIR WB	SENSIBLE CAPACITY								
. [0]	°F [°C]	in Bir [kw]	°F [°C]	MBH [kW]	MBH [kW]	MBH [kW]	MBH [kW]	MBH [kW]	MBH [kW]			
35 [1.7]	59 [15.0]	72.2 [21.16]	48.5 [9.2]	55.5 [16.27]	68.9 [20.19]	72.2 [21.16]	72.2 [21.16]	72.2 [21.16]	72.2 [21.16]			
	63 [17.2]	86.7 [25.41]	51.2 [10.7]	49.9 [14.62]	63.3 [18.55]	76.7 [22.48]	86.7 [25.41]	86.7 [25.41]	86.7 [25.41]			
	67 [19.4]	99.8 [29.25]	54.5 [12.5]	44.6 [13.07]	58.0 [17.00]	71.4 [20.93]	84.9 [24.88]	98.3 [28.81]	99.8 [29.25]			
	71 [21.7]	115.7 [33.91]	57.6 [14.2]	0.0 [0.0]	52.0 [15.24]	65.4 [19.17]	78.8 [23.09]	92.2 [27.02]	105.6 [30.95]			
	75 [23.9]	130.2 [38.16]	61.2 [16.2]	0.0 [0.0]	46.3 [13.57]	59.8 [17.53]	73.2 [21.45]	86.6 [25.38]	100.0 [29.31]			
40 [4.4]	59 [15.0]	57.1 [16.73]	50.8 [10.4]	48.5 [14.21]	57.1 [16.73]	57.1 [16.73]	57.1 [16.73]	57.1 [16.73]	57.1 [16.73]			
	63 [17.2]	73.2 [21.45]	53.2 [11.8]	43.8 [12.84]	57.2 [16.76]	70.6 [20.69]	73.2 [21.45]	73.2 [21.45]	73.2 [21.45]			
	67 [19.4]	87.7 [25.70]	56.2 [13.4]	39.5 [11.58]	53.0 [15.53]	66.4 [19.46]	79.8 [23.39]	87.7 [25.70]	87.7 [25.70]			
	71 [21.7]	105.4 [30.89]	59.0 [15.0]	0.0 [0.0]	47.8 [14.01]	61.3 [17.97]	74.7 [21.89]	88.1 [25.82]	101.5 [29.75]			
	75 [23.9]	121.5 [35.61]	62.3 [16.8]	0.0 [0.0]	43.2 [12.66]	56.6 [16.59]	70.0 [20.51]	83.4 [24.44]	96.8 [28.37]			
45 [7.2]	59 [15.0]	38.7 [11.34]	53.6 [12.0]	38.7 [11.34]	38.7 [11.34]	38.7 [11.34]	38.7 [11.34]	38.7 [11.34]	38.7 [11.34]			
	63 [17.2]	56.4 [16.53]	55.6 [13.1]	36.8 [10.79]	50.2 [14.71]	56.4 [16.53]	56.4 [16.53]	56.4 [16.53]	56.4 [16.53]			
	67 [19.4]	72.5 [21.25]	58.2 [14.6]	33.4 [9.79]	46.8 [13.72]	60.2 [17.64]	72.5 [21.25]	72.5 [21.25]	72.5 [21.25]			
	71 [21.7]	91.9 [26.93]	60.7 [15.9]	0.0 [0.0]	42.6 [12.48]	56.0 [16.41]	69.4 [20.34]	82.8 [24.27]	91.9 [26.93]			
	75 [23.9]	109.6 [32.12]	63.7 [17.6]	0.0 [0.0]	38.8 [11.37]	52.2 [15.30]	65.6 [19.23]	79.0 [23.15]	92.5 [27.11]			
50 [10.0]	59 [15.0]	17.4 [5.10]	56.6 [13.7]	17.4 [5.10]	17.4 [5.10]	17.4 [5.10]	17.4 [5.10]	17.4 [5.10]	17.4 [5.10]			
	63 [17.2]	36.6 [10.73]	58.3 [14.6]	28.9 [8.47]	36.6 [10.73]	36.6 [10.73]	36.6 [10.73]	36.6 [10.73]	36.6 [10.73]			
	67 [19.4]	54.0 [15.83]	60.6 [15.9]	26.2 [7.68]	39.6 [11.61]	53.0 [15.53]	54.0 [15.83]	54.0 [15.83]	54.0 [15.83]			
	71 [21.7]	75.0 [21.98]	62.8 [17.1]	0.0 [0.0]	36.3 [10.64]	49.7 [14.57]	63.1 [18.49]	75.0 [21.98]	75.0 [21.98]			
	75 [23.9]	94.2 [27.61]	65.4 [18.6]	0.0 [0.0]	33.3 [9.76]	46.7 [13.69]	60.1 [17.61]	73.5 [21.54]	86.9 [25.47]			
			RCCL	J-A5012S @	3800 CF	M [1793 L/	s]					
35 [1.7]	59 [15.0]	106.8 [31.30]	48.3 [9.1]	86.2 [25.26]	106.8 [31.30]	106.8 [31.30]	106.8 [31.30]	106.8 [31.30]	106.8 [31.30]			
	63 [17.2]	134.9 [39.54]	50.4 [10.2]	78.4 [22.98]	99.0 [29.01]	119.6 [35.05]	134.9 [39.54]	134.9 [39.54]	134.9 [39.54]			
	67 [19.4]	159.7 [46.80]	53.1 [11.7]	70.9 [20.78]	91.5 [26.82]	112.1 [32.85]	132.6 [38.86]	153.2 [44.90]	159.7 [46.80]			
	71 [21.7]	191.1 [56.01]	55.6 [13.2]	0.0 [0.0]	83.5 [24.47]	104.1 [30.51]	124.7 [36.55]	145.2 [42.55]	165.8 [48.59]			
	75 [23.9]	219.2 [64.24]	58.7 [14.8]	0.0 [0.0]	75.8 [22.21]	96.3 [28.22]	116.9 [34.26]	137.5 [40.30]	158.1 [46.33]			
40 [4.4]	59 [15.0]	83.1 [24.35]	50.9 [10.5]	75.7 [22.19]	83.1 [24.35]	83.1 [24.35]	83.1 [24.35]	83.1 [24.35]	83.1 [24.35]			
	63 [17.2]	112.3 [32.91]	52.7 [11.5]	68.7 [20.13]	89.3 [26.17]	109.9 [32.21]	112.3 [32.91]	112.3 [32.91]	112.3 [32.91]			
	67 [19.4]	138.0 [40.44]	55.3 [12.9]	62.0 [18.17]	82.5 [24.18]	103.1 [30.22]	123.7 [36.25]	138.0 [40.44]	138.0 [40.44]			
	71 [21.7]	170.7 [50.03]	57.5 [14.2]	0.0 [0.0]	75.4 [22.10]	96.0 [28.14]	116.5 [34.14]	137.1 [40.18]	157.7 [46.22]			
	75 [23.9]	199.9 [58.58]	60.4 [15.8]	0.0 [0.0]	68.4 [20.05]	89.0 [26.08]	109.6 [32.12]	130.1 [38.13]	150.7 [44.17]			
45 [7.2]	59 [15.0]	56.8 [16.65]	53.6 [12.0]	56.8 [16.65]	56.8 [16.65]	56.8 [16.65]	56.8 [16.65]	56.8 [16.65]	56.8 [16.65]			
	63 [17.2]	86.9 [25.47]	55.2 [12.9]	58.4 [17.12]	78.9 [23.12]	86.9 [25.47]	86.9 [25.47]	86.9 [25.47]	86.9 [25.47]			
	67 [19.4]	113.3 [33.20]	57.6 [14.2]	52.2 [15.30]	72.7 [21.31]	93.3 [27.34]	113.3 [33.20]	113.3 [33.20]	113.3 [33.20]			
	71 [21.7]	146.9 [43.05]	59.6 [15.3]	0.0 [0.0]	66.3 [19.43]	86.9 [25.47]	107.4 [31.48]	128.0 [37.51]	146.9 [43.05]			
	75 [23.9]	177.0 [51.87]	62.3 [16.8]	0.0 [0.0]	60.0 [17.58]	80.6 [23.62]	101.1 [29.63]	121.7 [35.67]	142.3 [41.70]			
50 [10.0]	59 [15.0]	28.9 [8.47]	56.3 [13.5]	28.9 [8.47]	28.9 [8.47]	28.9 [8.47]	28.9 [8.47]	28.9 [8.47]	28.9 [8.47]			
	63 [17.2]	59.2 [17.35]	57.8 [14.3]	47.6 [13.95]	59.2 [17.35]	59.2 [17.35]	59.2 [17.35]	59.2 [17.35]	59.2 [17.35]			
	67 [19.4]	85.7 [25.12]	60.0 [15.6]	41.8 [12.25]	62.3 [18.26]	82.9 [24.30]	85.7 [25.12]	85.7 [25.12]	85.7 [25.12]			
	71 [21.7]	120.0 [35.17]	61.9 [16.6]	0.0 [0.0]	56.4 [16.53]	77.0 [22.57]	97.6 [28.60]	118.1 [34.61]	120.0 [35.17]			
	75 [23.9]	150.3 [44.05]	64.5 [18.1]	0.0 [0.0]	50.6 [14.83]	71.1 [20.84]	91.7 [26.87]	112.3 [32.91]	132.8 [38.92]			

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

RCCU-A5090S @ 2600 CFM [1227 L/s]									
ACTUAL—CFM	2000	2200	2400	2600	2800	3000	3200		
[L/s]	[944]	[1038]	[1133]	[1227]	[1321]	[1416]	[1510]		
TOTAL MBH	0.84	0.90	0.95	1.00	1.05	1.09	1.13		
[kW]	[0.25]	[0.26]	[0.28]	[0.29]	[0.31]	[0.32]	[0.33]		
SENSIBLE MBH	0.83	0.89	0.94	1.00	1.05	1.10	1.15		
[kW]	[0.24]	[0.26]	[0.28]	[0.29]	[0.31]	[0.32]	[0.34]		

RCCU-A5012S @ 3800 CFM [1793 L/s]													
ACTUAL—CFM [L/s]	2400	2600	2800	3000	3200	3400	3600	3800	4000	4200	4400	4600	4800
	[1133]	[1227]	[1321]	[1416]	[1510]	[1605]	[1699]	[1793]	[1888]	[1982]	[2077]	[2171]	[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
[kW]	[0.23]	[0.24]	[0.25]	[0.26]	[0.27]	[0.28]	[0.28]	[0.29]	[0.30]	[0.31]	[0.31]	[0.32]	[0.33]
SENSIBLE MBH [kW]	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
	[0.22]	[0.23]	[0.24]	[0.25]	[0.26]	[0.28]	[0.28]	[0.29]	[0.30]	[0.31]	[0.32]	[0.33]	[0.33]

NOTES: 1. Multiply correction factor times gross performance data.

2. Resulting sensible capacity cannot exceed total capacity.

Coil Adapters

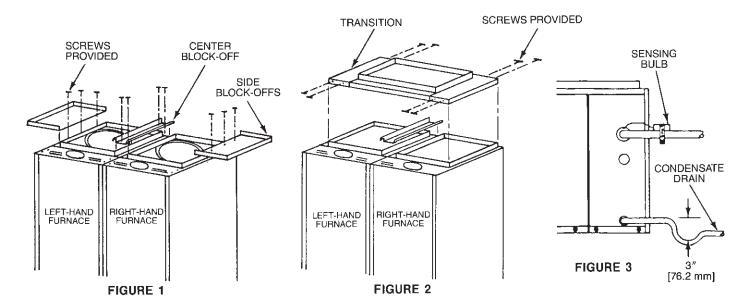
Models RCCU-A5090S and RCCU-A5012S cased coil assemblies are composed of an upflow coil installed in an insulated cabinet. Both coil models include several adapters and a transition which enable them to fit the furnace models listed below. The table illustrates the required adapter combinations. See figures 1 and 2.

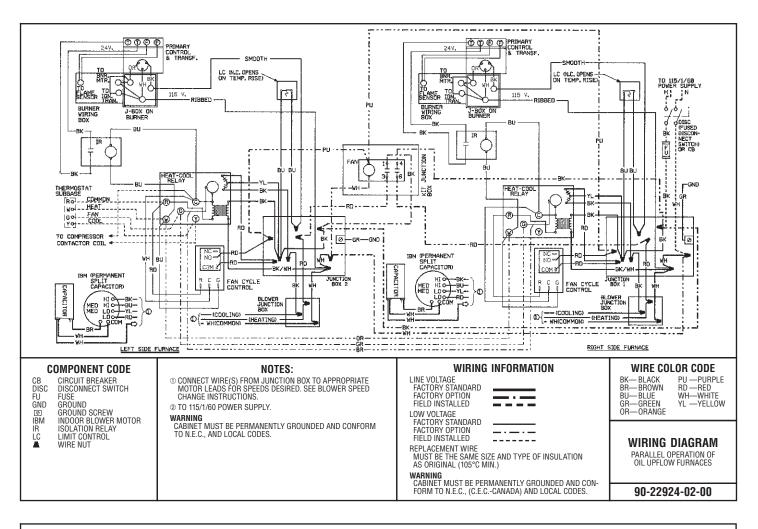
FURNACE	CENTER BLOCK-OFF (In.) [mm]	SIDE BLOCK-OFFS (In.) [mm]
(-)GRA-04*MAE	2.25 [57.2]	7 [177.8]
(-)GRA-06*MAE	2.25 [57.2]	7 [177.8]
(-)GRA-07*MAE	2.25 [57.2]	7 [177.8]
(-)GRA-07*YB	2.25 [57.2]	3.5 [88.9]
(-)GRA-09*ZAJ	2.25 [57.2]	3.5 [88.9]
(-)GRA-10*ZAJ	2.25 [57.2]	3.5 [88.9]
(-)GRA-12*ZAJ	2.25 [57.2]	None
(-)GDG/(-)GPH-04*AUS	2.25 [57.2]	7 [177.8]
(-)GDG/(-)GPH-05*AUE	2.25 [57.2]	7 [177.8]
(-)GDG/(-)GPH-06/07*AUE	2.25 [57.2]	7 [177.8]
(-)GDG/(-)GPH-07*AMG	2.25 [57.2]	7 [177.8]
(-)GDG/(-)GPH-10*AME	2.25 [57.2]	7 [177.8]
(-)GDG/(-)GPH-10*BRJ	2.25 [57.2]	3.5 [88.9]
(-)GDG/(-)GPH-12*ARJ	2.25 [57.2]	None
(-)GDG/(-)GPH-15*ARJ	2.25 [57.2]	None
(-)OBC-084QBE	3.0 [76.2]	None
(-)OBC-095QBE	3.0 [76.2]	None
(-)OBC-112QBG	3.0 [76.2]	None
(-)OBC-130RBJ	1.5 [38.1]	Transition
(-)OBC-150RBJ	1.5 [38.1]	Transition

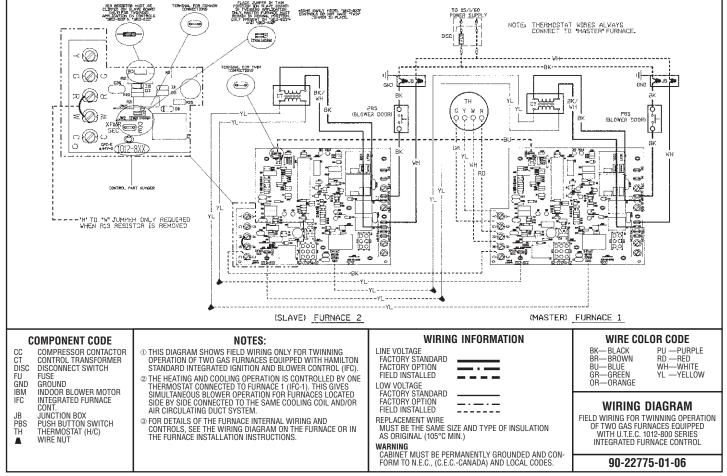
*E or N

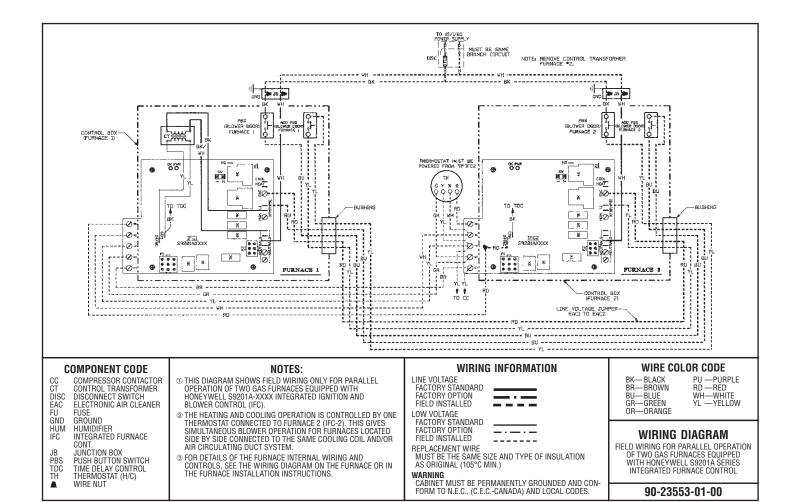
Coil Piping And Expansion Valve Bulb Location

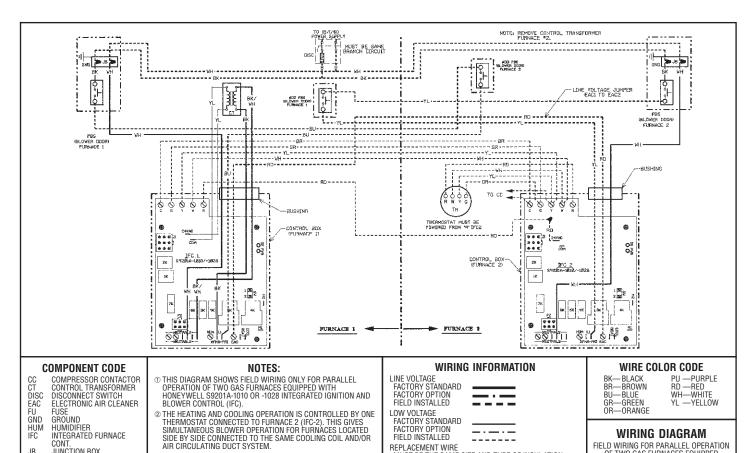
- 1. An oil trap in the suction line should be provided.
- 2. The expansion valve sensing bulb must be strapped securely to the top of the suction line on the outside of the coil cabinet. Both the bulb and suction line must be insulated. See figure 3.
- 3. The condensate drain connection is 3/4" [19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











© FOR DETAILS OF THE FURNACE INTERNAL WIRING AND CONTROLS, SEE THE WIRING DIAGRAM ON THE FURNACE OR IN THE FURNACE INSTALLATION INSTRUCTIONS.

JUNCTION BOX
PUSH BUTTON SWITCH
THERMOSTAT (H/C)
WIRE NUT

JB PBS TH

REPLACEMENT WIRE
MUST BE THE SAME SIZE AND TYPE OF INSULATION
AS ORIGINAL (105°C MIN.)

CABINET MUST BE PERMANENTLY GROUNDED AND CON-FORM TO N.E.C., (C.E.C.-CANADA) AND LOCAL CODES.

WARNING

WIRING DIAGRAM FIELD WIRING FOR PARALLEL OPERATION OF TWO GAS FURNACES EQUIPPED WITH HONEYWELL \$9201A SERIES INTEGRATED FURNACE CONTROL

90-23553-02-00