

# INDOOR COOLING COILS FOR DUAL FURNACE APPLICATION

## RCCU- SERIES



The RCCU- 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.

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



"CERTIFIED UNDER THE  
A.R.I. CERTIFICATION  
PROGRAM—A.R.I.  
STANDARD 360"

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

## Model RCCU-A5090S

6.5 ton [22.9 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-D25 OIL MODELS

wiring kit

## Model RXGP-F03 GAS FURNACES

twinning kit

## Model RCCU-C5091S

6.5 ton [22.9 kW]  
High efficiency  
evaporator coil

## Model RCCU-C5013S

7.5 ton & 10 ton  
[26.4 & 35.2 kW]  
High efficiency  
evaporator coil

**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

### 80% Gas Upflow

(-)GPH/(-)GPJ-05\*AUE  
(-)GPH/(-)GPJ-07\*AUE  
(-)GPH/(-)GPJ-10\*AUE  
(-)GPH/(-)GPJ-10\*BRJ  
(-)GPH/(-)GPJ-12\*ARJ  
(-)GPH/(-)GPJ-15\*ARJ

### Two-stage 80% Gas Upflow

(-)GPK-05\*AUE  
(-)GPK-07\*AUE  
(-)GPK-07\*AMG  
(-)GPK-10\*AME  
(-)GPK-10\*BRJ  
(-)GPK-12\*ARJ  
(-)GPK-15\*ARJ  
(-)GPL-05\*BMK  
(-)GPL-07\*BRK  
(-)GPL-07\*BRQ  
(-)GPL-10\*BRM  
(-)GPL-12\*ARM

### 90 Plus Gas Upflow

(-)GRA/(-)GRJ-06\*MAE  
(-)GRA/(-)GRJ-07\*MAE  
(-)GRA/(-)GRJ-07\*YB  
(-)GRA/(-)GRJ-09\*ZAJ  
(-)GRA/(-)GRJ-10\*ZAJ  
(-)GRA/(-)GRJ-12\*ZAJ

### Oil Furnaces

(-)OBD-084QBE\*  
(-)OBD-095QBE\*  
(-)OBD-112QBG\*  
(-)OBD-130RBJ\*  
(-)OBD-150RBJ\*

- Refer to Installation Guide for specific model twinned.
- (-)GPJ and (-)GRJ models using UTEC 1012-925 IFC require the twinning kit RXGP-F03.
- Oil furnaces require the twinning kit RXOP-D25.
- 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 RCCU I&O for twinning wiring diagrams.

## Coil Models:

RCCU-A5090S  
RCCU-A5012S

## Oil Furnace Wiring Kit Model:

RXOP-D25



## Pressure Drop (Inches, Water Column) [kPa]

| RCCU-A5090S/C5091S |           |           |
|--------------------|-----------|-----------|
| 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/C5013S |           |           |             |           |           |
|--------------------|-----------|-----------|-------------|-----------|-----------|
| 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] |             |           |           |

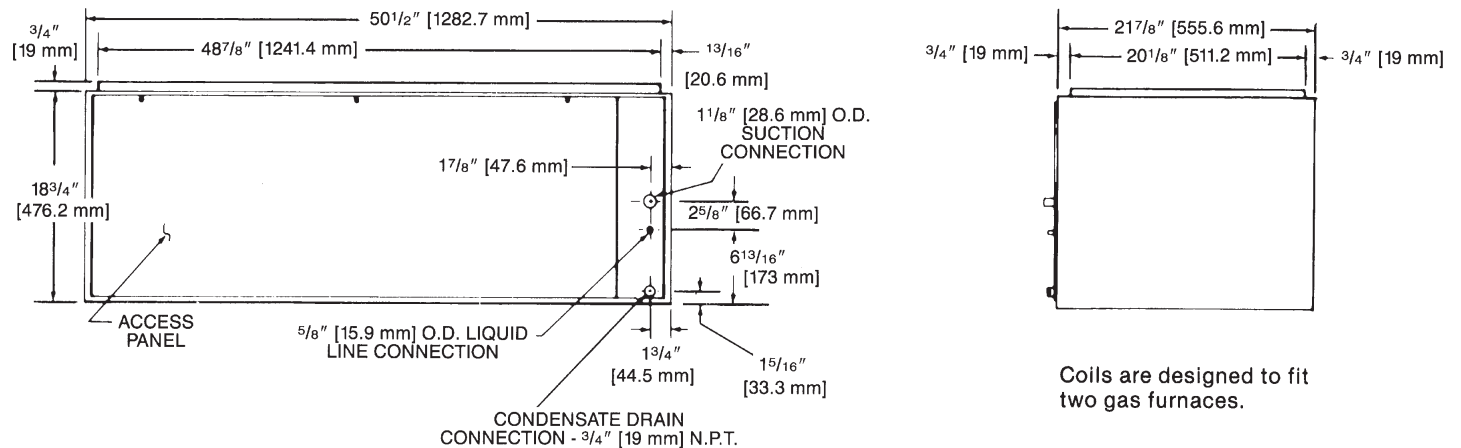
## Physical Data Table

| MODEL NO. RCCU-  | A5090S  | C5091S  | A5012S               | C5013S               |
|--|---|---|----------------------|----------------------|
| Nominal Tons [kW]                                      | 6.5 [22.9]  | 6.5 [22.9]  | 7.5, 10 [26.4, 35.2] | 7.5, 10 [26.4, 35.2] |
| Coil Face Area (Sq. Ft.) [m <sup>2</sup> ]             | 6.28 [0.58]   | 12.57 [1.17]  | 12.57 [1.17]         | 12.57 [1.17]         |
| Coil Tube Diameter (In.) [mm]                          | 5/16" [7.9]   | 5/16" [7.9]   | 5/16" [7.9]          | 3/8" [9.5]           |
| Coil, Rows Deep—Fins Per Inch                          | 4/13  | 4/13  | 4/13                 | 4/13                 |
| <b>REFRIGERANT CONTROL:</b><br>Thermal Expansion Valve | XVE-7 <sup>1</sup> / <sub>2</sub>   | PVE-11GA  | PVE-11GA             | BIVE-8               |
| <b>CABINET:</b><br>Finish                              | Powder Paint  | Powder Paint  |                      |                      |
| Sheet Metal  | Galvanized  | Galvanized  |                      |                      |
| Gauge (Nominal)  | 20  | 20  |                      |                      |
| <b>UNIT WEIGHTS:</b><br>Operating (lbs.) [kg]          | 90 [40.8]   | 125 [56.7]  | 125 [56.7]           | 135 [61.2]           |
| Shipping (lbs.) [kg]                                   | 100 [45.4]  | 135 [61.2]  | 135 [61.2]           | 145 [65.8]           |
| Packaging Dimensions<br>(H x W x L) (In.) [mm]         | 26" x 22 <sup>1</sup> / <sub>2</sub> " x 53 <sup>1</sup> / <sub>4</sub> "<br>[660.4] x [571.5] x [1352.6] | 26" x 22 <sup>1</sup> / <sub>2</sub> " x 53 <sup>1</sup> / <sub>4</sub> "<br>[660.4] x [571.5] x [1352.6] |                      |                      |

## A.R.I. Ratings

| INDOOR COOLING COIL WITH CONDENSING UNIT<br>80°F. D.B. [27°C]/67°F. W.B. [19°C] INDOOR—95°F. D.B. [35°C] OUTDOOR |                 |                |                |      |
|--|-----------------|----------------|----------------|------|
| RCCU- COOLING COIL   | CONDENSING UNIT | NET BTUH [kW]  | EVAP CFM [L/s] | EER  |
| A5090S   | (-)AWD- 065     | 72,000 [21.1]  | 2,600 [1227]   | 9.4  |
| A5012S   | (-)AWD- 075     | 90,000 [26.4]  | 3,200 [1510]   | 9.1  |
|  | (-)AWD- 100     | 120,000 [35.2] | 3,800 [1793]   | 8.9  |
| C5091S   | (-)AWE- 078     | 76,000 [22.3]  | 2,400 [1133]   | 10.3 |
| C5013S   | (-)AWE- 090     | 87,000 [25.5]  | 2,600 [1227]   | 10.3 |
|  | (-)AWE- 120     | 125,000 [36.6] | 3,800 [1793]   | 10.3 |

## Coil Dimensional Data



[ ] Designates Metric Conversions

# Cooling Performance Data

| RCCU-A5090S @ 2600 CFM [1227 L/s] |                                    |                            |                                  |                                    |              |              |              |              |               |
|-----------------------------------|------------------------------------|----------------------------|----------------------------------|------------------------------------|--------------|--------------|--------------|--------------|---------------|
| EVAP<br>TEMP<br>°F [°C]           | EVAP<br>INLET<br>AIR WB<br>°F [°C] | TOTAL<br>CAPAC<br>MBH [kW] | EVAP<br>LVG<br>AIR WB<br>°F [°C] | EVAPORATOR ENTERING AIR DB—°F [°C] |              |              |              |              |               |
|                                   |                                    |                            |                                  | 70 [21.1]                          | 75 [23.9]    | 80 [26.7]    | 85 [29.4]    | 90 [32.2]    | 95 [35.0]     |
|                                   |                                    |                            |                                  | SENSIBLE CAPACITY                  |              |              |              |              |               |
|                                   |                                    |                            |                                  | 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]  |

| RCCU-A5012S @ 3800 CFM [1793 L/s] |                                    |                            |                                  |                                    |               |               |               |               |               |
|-----------------------------------|------------------------------------|----------------------------|----------------------------------|------------------------------------|---------------|---------------|---------------|---------------|---------------|
| EVAP<br>TEMP<br>°F [°C]           | EVAP<br>INLET<br>AIR WB<br>°F [°C] | TOTAL<br>CAPAC<br>MBH [kW] | EVAP<br>LVG<br>AIR WB<br>°F [°C] | EVAPORATOR ENTERING AIR DB—°F [°C] |               |               |               |               |               |
|                                   |                                    |                            |                                  | 70 [21.1]                          | 75 [23.9]     | 80 [26.7]     | 85 [29.4]     | 90 [32.2]     | 95 [35.0]     |
|                                   |                                    |                            |                                  | SENSIBLE CAPACITY                  |               |               |               |               |               |
|                                   |                                    |                            |                                  | MBH [kW]                           | MBH [kW]      | MBH [kW]      | MBH [kW]      | MBH [kW]      | MBH [kW]      |
| 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<br>[L/s]               | 2000<br>[944]  | 2200<br>[1038] | 2400<br>[1133] | 2600<br>[1227] | 2800<br>[1321] | 3000<br>[1416] | 3200<br>[1510] |  |
| TOTAL MBH<br>[kW]                 | 0.84<br>[0.25] | 0.90<br>[0.26] | 0.95<br>[0.28] | 1.00<br>[0.29] | 1.05<br>[0.31] | 1.09<br>[0.32] | 1.13<br>[0.33] |  |
| SENSIBLE MBH<br>[kW]              | 0.83<br>[0.24] | 0.89<br>[0.26] | 0.94<br>[0.28] | 1.00<br>[0.29] | 1.05<br>[0.31] | 1.10<br>[0.32] | 1.15<br>[0.34] |  |

| RCCU-A5012S @ 3800 CFM [1793 L/s] |                |                |                |                |                |                |                |                |                |                |                |                |                |
|-----------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| ACTUAL—CFM<br>[L/s]               | 2400<br>[1133] | 2600<br>[1227] | 2800<br>[1321] | 3000<br>[1416] | 3200<br>[1510] | 3400<br>[1605] | 3600<br>[1699] | 3800<br>[1793] | 4000<br>[1888] | 4200<br>[1982] | 4400<br>[2077] | 4600<br>[2171] | 4800<br>[2265] |
| TOTAL MBH<br>[kW]                 | 0.80<br>[0.23] | 0.84<br>[0.24] | 0.87<br>[0.25] | 0.90<br>[0.26] | 0.92<br>[0.27] | 0.95<br>[0.28] | 0.97<br>[0.28] | 1.00<br>[0.29] | 1.03<br>[0.30] | 1.05<br>[0.31] | 1.07<br>[0.31] | 1.09<br>[0.32] | 1.11<br>[0.33] |
| SENSIBLE MBH<br>[kW]              | 0.75<br>[0.22] | 0.80<br>[0.23] | 0.84<br>[0.24] | 0.87<br>[0.25] | 0.90<br>[0.26] | 0.94<br>[0.28] | 0.97<br>[0.28] | 1.00<br>[0.29] | 1.03<br>[0.30] | 1.06<br>[0.31] | 1.09<br>[0.32] | 1.12<br>[0.33] | 1.14<br>[0.33] |

NOTES: 1. Multiply correction factor times gross performance data. [ ] Designates Metric Conversions  
 2. Resulting sensible capacity cannot exceed total capacity.

# Cooling Performance Data

| RCCU-C5091S @ 2600 CFM [1227 L/s] |                                    |                            |                                  |                                    |             |             |             |              |              |
|-----------------------------------|------------------------------------|----------------------------|----------------------------------|------------------------------------|-------------|-------------|-------------|--------------|--------------|
| EVAP<br>TEMP<br>°F [°C]           | EVAP<br>INLET<br>AIR WB<br>°F [°C] | TOTAL<br>CAPAC<br>MBH [kW] | EVAP<br>LVG<br>AIR WB<br>°F [°C] | EVAPORATOR ENTERING AIR DB—°F [°C] |             |             |             |              |              |
|                                   |                                    |                            |                                  | 70 [21.1]                          | 75 [23.9]   | 80 [26.7]   | 85 [29.4]   | 90 [32.2]    | 95 [35.0]    |
|                                   |                                    |                            |                                  | SENSIBLE CAPACITY                  |             |             |             |              |              |
|                                   |                                    |                            |                                  | MBH [kW]                           | MBH [kW]    | MBH [kW]    | MBH [kW]    | MBH [kW]     | MBH [kW]     |
| 35 [1.7]                          | 59 [15.0]                          | 89.7 [26.3]                | 44.2 [6.8]                       | 63.1 [18.5]                        | 75.3 [22.1] | 87.8 [25.7] | 89.7 [26.3] | 89.7 [26.3]  | 89.7 [26.3]  |
|                                   | 63 [17.2]                          | 100.9 [29.6]               | 47.6 [8.7]                       | 56.1 [16.4]                        | 68.2 [20.0] | 80.4 [23.6] | 92.8 [27.2] | 100.9 [29.6] | 100.9 [29.6] |
|                                   | 67 [19.4]                          | 112.5 [33.0]               | 51.3 [10.7]                      | 46.2 [13.5]                        | 60.7 [17.8] | 72.6 [21.3] | 84.7 [24.8] | 96.8 [28.4]  | 109.1 [32.0] |
|                                   | 71 [21.7]                          | 123.1 [36.1]               | 55.3 [12.9]                      | 0.0 [0.0]                          | 50.3 [14.7] | 64.5 [18.9] | 76.0 [22.3] | 87.8 [25.7]  | 99.8 [29.2]  |
|                                   | 75 [23.9]                          | 131.8 [38.6]               | 59.7 [15.4]                      | 0.0 [0.0]                          | 38.3 [11.2] | 53.3 [15.6] | 67.5 [19.8] | 87.8 [25.7]  | 99.8 [29.2]  |
| 40 [4.4]                          | 59 [15.0]                          | 88.0 [25.8]                | 44.5 [6.9]                       | 58.1 [17.0]                        | 70.4 [20.6] | 88.0 [25.8] | 88.0 [25.8] | 88.0 [25.8]  | 88.0 [25.8]  |
|                                   | 63 [17.2]                          | 91.4 [26.8]                | 49.3 [9.6]                       | 51.7 [15.2]                        | 64.2 [18.8] | 76.7 [22.5] | 89.2 [26.1] | 91.4 [26.8]  | 91.4 [26.8]  |
|                                   | 67 [19.4]                          | 104.8 [30.7]               | 52.5 [11.4]                      | 43.2 [12.7]                        | 57.4 [16.8] | 69.6 [20.4] | 82.1 [24.1] | 94.6 [27.7]  | 104.8 [30.7] |
|                                   | 71 [21.7]                          | 117.0 [34.3]               | 56.2 [13.4]                      | 0.0 [0.0]                          | 47.9 [14.0] | 62.2 [18.2] | 74.2 [21.7] | 86.2 [25.3]  | 98.6 [28.9]  |
|                                   | 75 [23.9]                          | 127.9 [37.5]               | 60.3 [15.7]                      | 0.0 [0.0]                          | 36.9 [10.8] | 51.9 [15.2] | 65.9 [19.3] | 77.6 [22.7]  | 89.6 [26.3]  |
| 45 [7.2]                          | 59 [15.0]                          | 78.4 [23.0]                | 46.3 [7.9]                       | 51.5 [15.1]                        | 67.3 [19.7] | 78.4 [23.0] | 78.4 [23.0] | 78.4 [23.0]  | 78.4 [23.0]  |
|                                   | 63 [17.2]                          | 79.0 [23.2]                | 51.3 [10.7]                      | 45.9 [13.5]                        | 58.7 [17.2] | 71.6 [21.0] | 79.0 [23.2] | 79.0 [23.2]  | 79.0 [23.2]  |
|                                   | 67 [19.4]                          | 93.9 [27.5]                | 54.2 [12.3]                      | 38.7 [11.3]                        | 52.7 [15.4] | 65.4 [19.2] | 78.1 [22.9] | 90.8 [26.6]  | 93.9 [27.5]  |
|                                   | 71 [21.7]                          | 108.0 [31.7]               | 57.5 [14.2]                      | 0.0 [0.0]                          | 44.5 [13.0] | 58.7 [17.2] | 71.0 [20.8] | 83.5 [24.5]  | 96.1 [28.2]  |
|                                   | 75 [23.9]                          | 120.7 [35.4]               | 61.3 [16.3]                      | 0.0 [0.0]                          | 34.3 [10.1] | 49.5 [14.5] | 63.6 [18.6] | 75.6 [22.2]  | 87.8 [25.7]  |
| 50 [10.0]                         | 59 [15.0]                          | 67.9 [19.9]                | 48.1 [8.9]                       | 43.6 [12.8]                        | 56.6 [16.6] | 67.9 [19.9] | 67.9 [19.9] | 67.9 [19.9]  | 67.9 [19.9]  |
|                                   | 63 [17.2]                          | 69.7 [20.4]                | 53.1 [11.7]                      | 38.5 [11.3]                        | 52.0 [15.2] | 65.5 [19.2] | 69.7 [20.4] | 69.7 [20.4]  | 69.7 [20.4]  |
|                                   | 67 [19.4]                          | 79.5 [23.3]                | 56.4 [13.6]                      | 32.8 [9.6]                         | 46.9 [13.7] | 59.7 [17.5] | 72.6 [21.3] | 79.5 [23.3]  | 79.5 [23.3]  |
|                                   | 71 [21.7]                          | 95.4 [28.0]                | 59.3 [15.2]                      | 0.0 [0.0]                          | 39.9 [11.7] | 53.8 [15.8] | 66.6 [19.5] | 79.2 [23.2]  | 92.1 [27.0]  |
|                                   | 75 [23.9]                          | 110.0 [32.2]               | 62.6 [17.0]                      | 0.0 [0.0]                          | 30.7 [9.0]  | 45.9 [13.5] | 59.9 [17.6] | 72.3 [21.2]  | 84.8 [24.9]  |

| RCCU-C5013S @ 3800 CFM [1793 L/s] |                                    |                            |                                  |                                    |              |              |              |              |              |
|-----------------------------------|------------------------------------|----------------------------|----------------------------------|------------------------------------|--------------|--------------|--------------|--------------|--------------|
| EVAP<br>TEMP<br>°F [°C]           | EVAP<br>INLET<br>AIR WB<br>°F [°C] | TOTAL<br>CAPAC<br>MBH [kW] | EVAP<br>LVG<br>AIR WB<br>°F [°C] | EVAPORATOR ENTERING AIR DB—°F [°C] |              |              |              |              |              |
|                                   |                                    |                            |                                  | 70 [21.1]                          | 75 [23.9]    | 80 [26.7]    | 85 [29.4]    | 90 [32.2]    | 95 [35.0]    |
|                                   |                                    |                            |                                  | SENSIBLE CAPACITY                  |              |              |              |              |              |
|                                   |                                    |                            |                                  | MBH [kW]                           | MBH [kW]     | MBH [kW]     | MBH [kW]     | MBH [kW]     | MBH [kW]     |
| 35 [1.7]                          | 59 [15.0]                          | 129.6 [38.0]               | 45.7 [7.6]                       | 92.0 [27.0]                        | 110.0 [32.3] | 128.2 [37.6] | 129.6 [38.0] | 129.6 [38.0] | 129.6 [38.0] |
|                                   | 63 [17.2]                          | 146.9 [43.1]               | 49.0 [9.4]                       | 81.8 [24.0]                        | 99.7 [29.2]  | 118.2 [34.6] | 136.8 [40.1] | 146.9 [43.1] | 146.9 [43.1] |
|                                   | 67 [19.4]                          | 164.5 [48.2]               | 52.7 [11.5]                      | 68.0 [19.9]                        | 89.0 [26.1]  | 106.7 [31.3] | 124.9 [36.6] | 143.2 [42.0] | 161.6 [47.4] |
|                                   | 71 [21.7]                          | 180.7 [53.0]               | 56.6 [13.7]                      | 0.0 [0.0]                          | 74.2 [21.7]  | 95.1 [27.9]  | 112.4 [32.9] | 130.0 [38.1] | 148.1 [43.4] |
|                                   | 75 [23.9]                          | 195.3 [57.2]               | 60.9 [16.1]                      | 0.0 [0.0]                          | 56.0 [16.4]  | 79.5 [23.3]  | 99.7 [29.2]  | 116.6 [34.2] | 134.1 [39.3] |
| 40 [4.4]                          | 59 [15.0]                          | 127.1 [37.2]               | 46.0 [7.8]                       | 84.0 [24.6]                        | 102.2 [30.0] | 127.1 [37.2] | 127.1 [37.2] | 127.1 [37.2] | 127.1 [37.2] |
|                                   | 63 [17.2]                          | 131.3 [38.5]               | 50.7 [10.4]                      | 74.5 [21.8]                        | 93.2 [27.3]  | 111.8 [32.8] | 130.5 [38.2] | 131.3 [38.5] | 131.3 [38.5] |
|                                   | 67 [19.4]                          | 151.7 [44.5]               | 53.9 [12.2]                      | 62.7 [18.4]                        | 83.3 [24.4]  | 101.7 [29.8] | 120.2 [35.2] | 138.7 [40.6] | 151.7 [44.5] |
|                                   | 71 [21.7]                          | 170.2 [49.9]               | 57.6 [14.2]                      | 0.0 [0.0]                          | 70.4 [20.6]  | 90.8 [26.6]  | 108.8 [31.9] | 126.8 [37.2] | 145.5 [42.6] |
|                                   | 75 [23.9]                          | 186.9 [54.8]               | 61.6 [16.4]                      | 0.0 [0.0]                          | 53.3 [15.6]  | 76.8 [22.5]  | 97.0 [28.4]  | 114.5 [33.6] | 132.3 [38.8] |
| 45 [7.2]                          | 59 [15.0]                          | 112.9 [33.4]               | 47.6 [8.7]                       | 74.2 [21.7]                        | 96.7 [28.3]  | 112.8 [33.1] | 112.9 [37.2] | 112.9 [37.2] | 112.9 [37.2] |
|                                   | 63 [17.2]                          | 121.8 [35.7]               | 52.7 [11.5]                      | 65.6 [19.2]                        | 84.7 [24.8]  | 103.6 [30.4] | 121.8 [35.7] | 121.8 [35.7] | 121.8 [35.7] |
|                                   | 67 [19.4]                          | 134.0 [39.3]               | 55.6 [13.1]                      | 55.8 [16.4]                        | 75.9 [22.2]  | 94.6 [27.7]  | 113.5 [33.3] | 132.3 [38.8] | 134.0 [39.3] |
|                                   | 71 [21.7]                          | 155.4 [45.5]               | 58.9 [14.9]                      | 0.0 [0.0]                          | 64.8 [19.0]  | 84.9 [24.9]  | 103.3 [30.3] | 122.0 [35.8] | 140.6 [41.2] |
|                                   | 75 [23.9]                          | 174.5 [51.1]               | 62.6 [17.0]                      | 0.0 [0.0]                          | 49.1 [14.4]  | 72.6 [21.3]  | 92.6 [27.1]  | 110.6 [32.4] | 128.8 [37.7] |
| 50 [10.0]                         | 59 [15.0]                          | 97.6 [28.6]                | 49.2 [9.6]                       | 64.9 [19.0]                        | 81.0 [23.7]  | 97.6 [28.6]  | 97.6 [28.6]  | 97.6 [28.6]  | 97.6 [28.6]  |
|                                   | 63 [17.2]                          | 107.6 [31.5]               | 54.1 [12.3]                      | 54.7 [16.0]                        | 74.4 [21.8]  | 97.6 [28.6]  | 107.6 [31.5] | 107.6 [31.5] | 107.6 [31.5] |
|                                   | 67 [19.4]                          | 111.8 [32.7]               | 57.7 [14.3]                      | 47.3 [13.9]                        | 66.8 [19.6]  | 85.9 [25.2]  | 105.1 [30.8] | 111.8 [32.8] | 111.8 [32.8] |
|                                   | 71 [21.7]                          | 135.2 [39.6]               | 60.7 [15.9]                      | 0.0 [0.0]                          | 58.6 [17.2]  | 77.2 [22.6]  | 96.1 [28.2]  | 115.1 [33.7] | 134.1 [39.3] |
|                                   | 75 [23.9]                          | 156.9 [46.0]               | 64.0 [17.8]                      | 0.0 [0.0]                          | 43.1 [12.6]  | 66.9 [19.6]  | 86.4 [25.3]  | 104.9 [30.7] | 123.6 [36.2] |

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-C5091S @ 2600 CFM [1227 L/s] |                |                |                |                |                |                |                |  |
|-----------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|--|
| ACTUAL—CFM<br>[L/s]               | 2000<br>[944]  | 2200<br>[1038] | 2400<br>[1133] | 2600<br>[1227] | 2800<br>[1321] | 3000<br>[1416] | 3200<br>[1510] |  |
| TOTAL MBH<br>[kW]                 | 0.84<br>[0.25] | 0.90<br>[0.26] | 0.95<br>[0.28] | 1.00<br>[0.29] | 1.05<br>[0.31] | 1.09<br>[0.32] | 1.13<br>[0.33] |  |
| SENSIBLE MBH<br>[kW]              | 0.83<br>[0.24] | 0.89<br>[0.26] | 0.94<br>[0.28] | 1.00<br>[0.29] | 1.05<br>[0.31] | 1.10<br>[0.32] | 1.15<br>[0.34] |  |

| RCCU-C5013S @ 3800 CFM [1793 L/s] |                |                |                |                |                |                |                |                |                |                |                |                |                |
|-----------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| ACTUAL—CFM<br>[L/s]               | 2400<br>[1133] | 2600<br>[1227] | 2800<br>[1321] | 3000<br>[1416] | 3200<br>[1510] | 3400<br>[1605] | 3600<br>[1699] | 3800<br>[1793] | 4000<br>[1888] | 4200<br>[1982] | 4400<br>[2077] | 4600<br>[2171] | 4800<br>[2265] |
| TOTAL MBH<br>[kW]                 | 0.80<br>[0.23] | 0.84<br>[0.24] | 0.87<br>[0.25] | 0.90<br>[0.26] | 0.92<br>[0.27] | 0.95<br>[0.28] | 0.97<br>[0.28] | 1.00<br>[0.29] | 1.03<br>[0.30] | 1.05<br>[0.31] | 1.07<br>[0.31] | 1.09<br>[0.32] | 1.11<br>[0.33] |
| SENSIBLE MBH<br>[kW]              | 0.75<br>[0.22] | 0.80<br>[0.23] | 0.84<br>[0.24] | 0.87<br>[0.25] | 0.90<br>[0.26] | 0.94<br>[0.28] | 0.97<br>[0.28] | 1.00<br>[0.29] | 1.03<br>[0.30] | 1.06<br>[0.31] | 1.09<br>[0.32] | 1.12<br>[0.33] | 1.14<br>[0.33] |

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

[ ] Designates Metric Conversions

# Coil Adapters

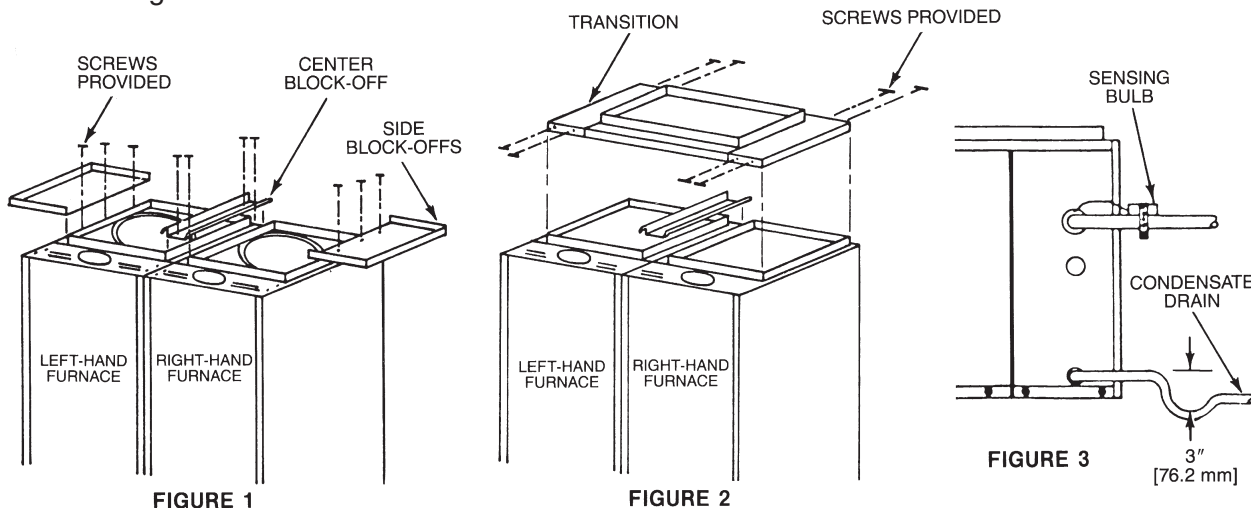
Models RCCU-A5090S and RCCU-A5012S cased coil assemblies are composed of an upflow coil installed in an insulated cabinet. Both coil models include several adapters and a transition which enable them to fit the furnace models listed below. The table illustrates the required adapter combinations. See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

| FURNACE              | CENTER BLOCK-OFF<br>(In.) [mm] | SIDE BLOCK-OFFS<br>(In.) [mm] |
|----------------------|--------------------------------|-------------------------------|
| (-)GRA/GRJ-06*MAE    | 2.25 [57.2]                    | 7 [177.8]                     |
| (-)GRA/GRJ-07*MAE    | 2.25 [57.2]                    | 7 [177.8]                     |
| (-)GRA/GRJ-07*YB     | 2.25 [57.2]                    | 3.5 [88.9]                    |
| (-)GRA/GRJ-09*ZAJ    | 2.25 [57.2]                    | 3.5 [88.9]                    |
| (-)GRA/GRJ-10*ZAJ    | 2.25 [57.2]                    | 3.5 [88.9]                    |
| (-)GRA/GRJ-12*ZAJ    | 2.25 [57.2]                    | None                          |
| (-)GPJ/(-)GPH-05*AUE | 2.25 [57.2]                    | 7 [177.8]                     |
| (-)GPJ/(-)GPH-07*AUE | 2.25 [57.2]                    | 7 [177.8]                     |
| (-)GPJ/(-)GPH-10*AME | 2.25 [57.2]                    | 7 [177.8]                     |
| (-)GPJ/(-)GPH-10*BRJ | 2.25 [57.2]                    | 3.5 [88.9]                    |
| (-)GPJ/(-)GPH-12*ARJ | 2.25 [57.2]                    | None                          |
| (-)GPJ/(-)GPH-15*ARJ | 2.25 [57.2]                    | None                          |
| (-)GPK-05*AUE        | 2.25 [57.2]                    | 7 [177.8]                     |
| (-)GPK-07*AUE        | 2.25 [57.2]                    | 7 [177.8]                     |
| (-)GPK-07*AMG        | 2.25 [57.2]                    | 7 [177.8]                     |
| (-)GPK-10*AME        | 2.25 [57.2]                    | 7 [177.8]                     |
| (-)GPK-10*BRJ        | 2.25 [57.2]                    | 3.5 [88.9]                    |
| (-)GPK-12*ARJ        | 2.25 [57.2]                    | None                          |
| (-)GPK-15*ARJ        | 2.25 [57.2]                    | None                          |
| (-)GPL-05*BMK        | 2.25 [57.2]                    | 7 [177.8]                     |
| (-)GPL-07*BRK        | 2.25 [57.2]                    | 7 [177.8]                     |
| (-)GPL-07*BRQ        | 2.25 [57.2]                    | 7 [177.8]                     |
| (-)GPL-10*BRM        | 2.25 [57.2]                    | 7 [177.8]                     |
| (-)GPL-12*ARM        | 2.25 [57.2]                    | 7 [177.8]                     |
| (-)OBD-084QBE        | 3.0 [76.2]                     | None                          |
| (-)OBD-095QBE        | 3.0 [76.2]                     | None                          |
| (-)OBD-112QBG        | 3.0 [76.2]                     | None                          |
| (-)OBD-130RBJ        | 1.5 [38.1]                     | Transition                    |
| (-)OBD-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.



**NOTES**

