



## Vantix™ Line Air Handlers



### **SB2CY**

Constant Torque Motor (ECM)

Two-Stage Airflow

Efficiencies: 13.4–16.0 SEER2

Expansion Device: Thermal Expansion Valve (TXV)

Refrigerant Type: R-454B



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## Features and Benefits

- **Quiet Operation<sup>1</sup>:** Provided by a cabinet construction with 1.0 inch foil faced insulation for quieter sound characteristics
- **Rugged Steel Cabinet Construction:** Designed for added strength and versatility
- **Compact Design and 4-Way Field Convertible Design:** Stands at only 35" tall and convertible options include vertical upflow, vertical downflow, horizontal left hand or right hand air supply
- **Less than 2% Cabinet Air Leakage at 1-inch H<sub>2</sub>O:** When tested in accordance with ASHRAE Standard 193
- **Designing for Sustainability with Low GWP:** For 2025, the Environmental Protection Agency (EPA) has set a global warming potential (GWP) limit of 700 for refrigerant used in heating and cooling systems. This new requirement will result in a 78%<sup>2</sup> lower GWP than previous-generation refrigerants — with only minimal changes to system installation. For us, this is another step toward our continued sustainability goal of reducing greenhouse gas emissions, while still delivering an exceptional level of energy efficient, dependable comfort
- **Refrigerant Detection System<sup>3</sup>:** An integrated one-box, patented design featuring the A2L sensor and mitigation board, offering easier commissioning with a single component and simplified wiring configuration, compatibility with any 24V thermostat application and system protection by automatically pausing outdoor unit operation — if excess refrigerant is detected

<sup>1</sup>Based on manufacturer's air handler offering, and the product's airflow stages, motor type and cabinet insulation. Sound levels are also dependent on air handler location and installation. <sup>2</sup>When comparing the GWP of R-454B to R-410A refrigerant. <sup>3</sup>Factory or field installed in the furnace coil or air handler and is applicable to the complete heating and cooling system featuring Low GWP Refrigerant (A2L).

# Air Handlers

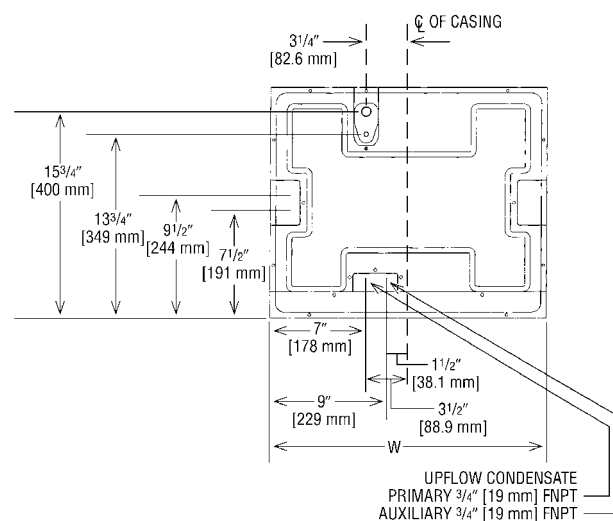
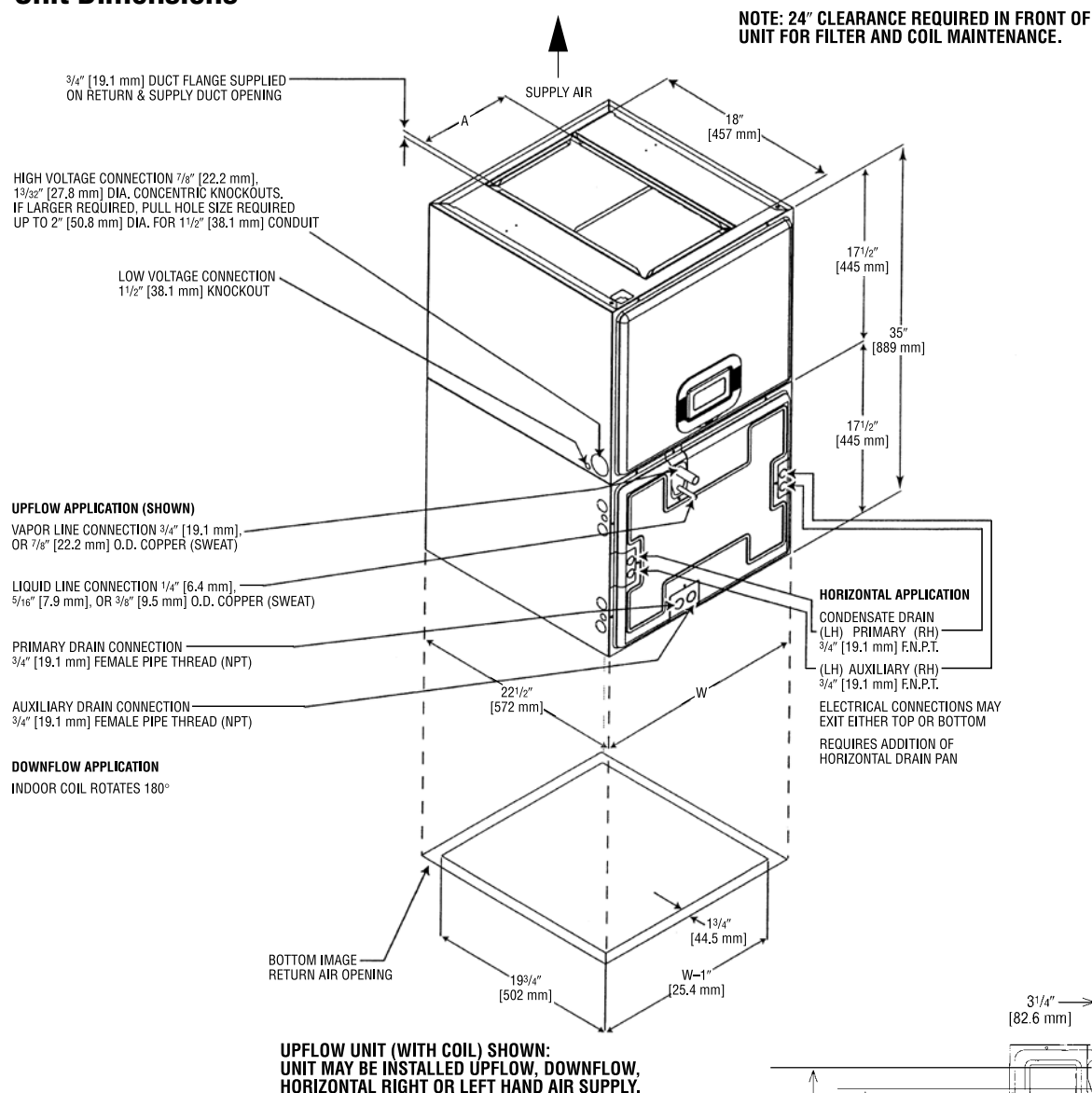
| <u>S</u>              | <u>B</u>         | <u>2</u>          | <u>C</u>            | <u>Y</u>    | <u>24</u>                                                                                           | <u>17</u>                            | <u>S</u>     | <u>T</u> | <u>A</u>       | <u>N</u>      | <u>M</u>      | <u>A</u>                         | <u>B</u>                | <u>00</u>                                            | <u>BLANK</u>                                            |
|-----------------------|------------------|-------------------|---------------------|-------------|-----------------------------------------------------------------------------------------------------|--------------------------------------|--------------|----------|----------------|---------------|---------------|----------------------------------|-------------------------|------------------------------------------------------|---------------------------------------------------------|
| Brand                 | Product Category | Stages Of Airflow | Motor Type          | Refrigerant | Capacity                                                                                            | Width                                | Efficiency   | Metering | Major Series   | Controls      | Coil Series   | Voltage                          | Disconnect              | Factory Heat                                         | Option Code                                             |
| S - Russell® By Rheem | B - Low Boy 34"  | 2 - Two-Stage     | C - Constant Torque | Y - R-454B  | 24 - 24,000 [7.03 kW]<br>36 - 36,000 [10.55 kW]<br>48 - 48,000 [14.07 kW]<br>60 - 60,000 [17.58 kW] | 17 - 17.5"<br>21 - 21"<br>24 - 24.5" | S - Standard | T - TXV  | A - 1st Design | N - Non-Comm. | M - Multiflex | A - 115/1/60<br>J - 208-240/1/60 | B - Breaker<br>N - None | 00 - No Heat<br>05 - 5 kW<br>07 - 7 kW<br>10 - 10 kW | Blank - Factory-Installed Sensor<br>L - Less A2L Sensor |

[ ] Designates Metric Conversions

| Available Models    |
|---------------------|
| SB2CY2417STANMAN00  |
| SB2CY2417STANMJB05  |
| SB2CY2417STANMJB07  |
| SB2CY2417STANMAN00L |
| SB2CY2417STANMJB05L |
| SB2CY2417STANMJB07L |
| SB2CY3621STANMAN00  |
| SB2CY3621STANMJB05  |
| SB2CY3621STANMJB07  |
| SB2CY3621STANMJB10  |
| SB2CY3621STANMAN00L |
| SB2CY3621STANMJB05L |
| SB2CY3621STANMJB07L |
| SB2CY3621STANMJB10L |
| SB2CY4824STANMAN00  |
| SB2CY4824STANMJB05  |
| SB2CY4824STANMJB07  |
| SB2CY4824STANMJB10  |
| SB2CY4824STANMAN00L |
| SB2CY4824STANMJB05L |
| SB2CY4824STANMJB07L |
| SB2CY4824STANMJB10L |
| SB2CY6024STANMAN00  |
| SB2CY6024STANMJB10  |
| SB2CY6024STANMAN00L |
| SB2CY6024STANMJB10L |

| Standard Equipment                                                                                    |
|-------------------------------------------------------------------------------------------------------|
| Compact Unit Design                                                                                   |
| Quiet, efficient ECM Motor provides nominal airflow to 0.58 inch [12 kPa] of external static pressure |
| Field selectable airflow                                                                              |
| Low continuous fan speed                                                                              |
| Rugged steel cabinet construction 1" foil faced insulation                                            |
| Four leg rubber insulated wire motor mount                                                            |
| Circuit breakers are standard on all electric heat models                                             |
| Provisions for field electrical connections from both sides of cabinet                                |
| Slide out blower design for easy service & maintenance                                                |
| Tab lock blower housing with integrated electric heaters, controls, motor and blower                  |

## Unit Dimensions



## Return Air Opening Dimensions

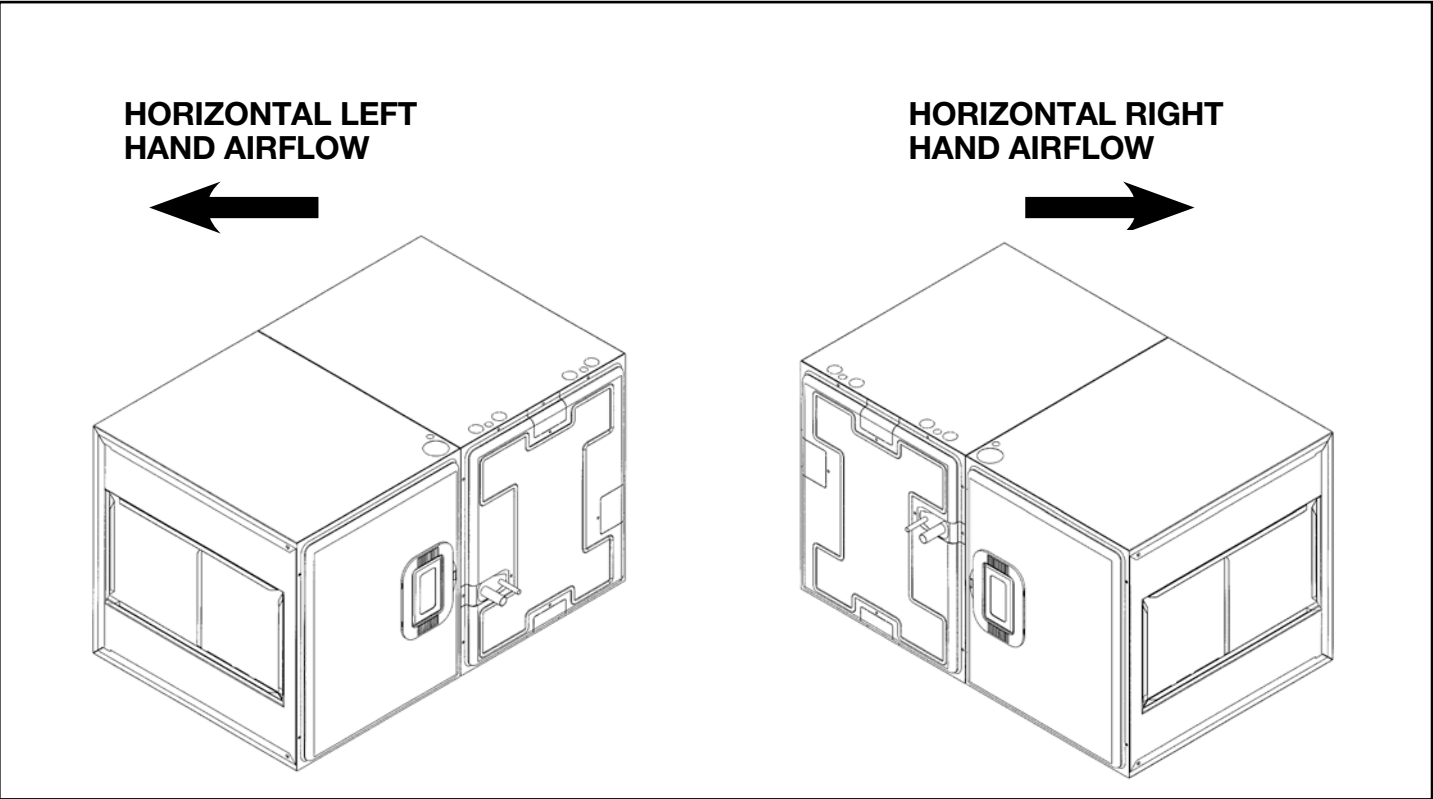
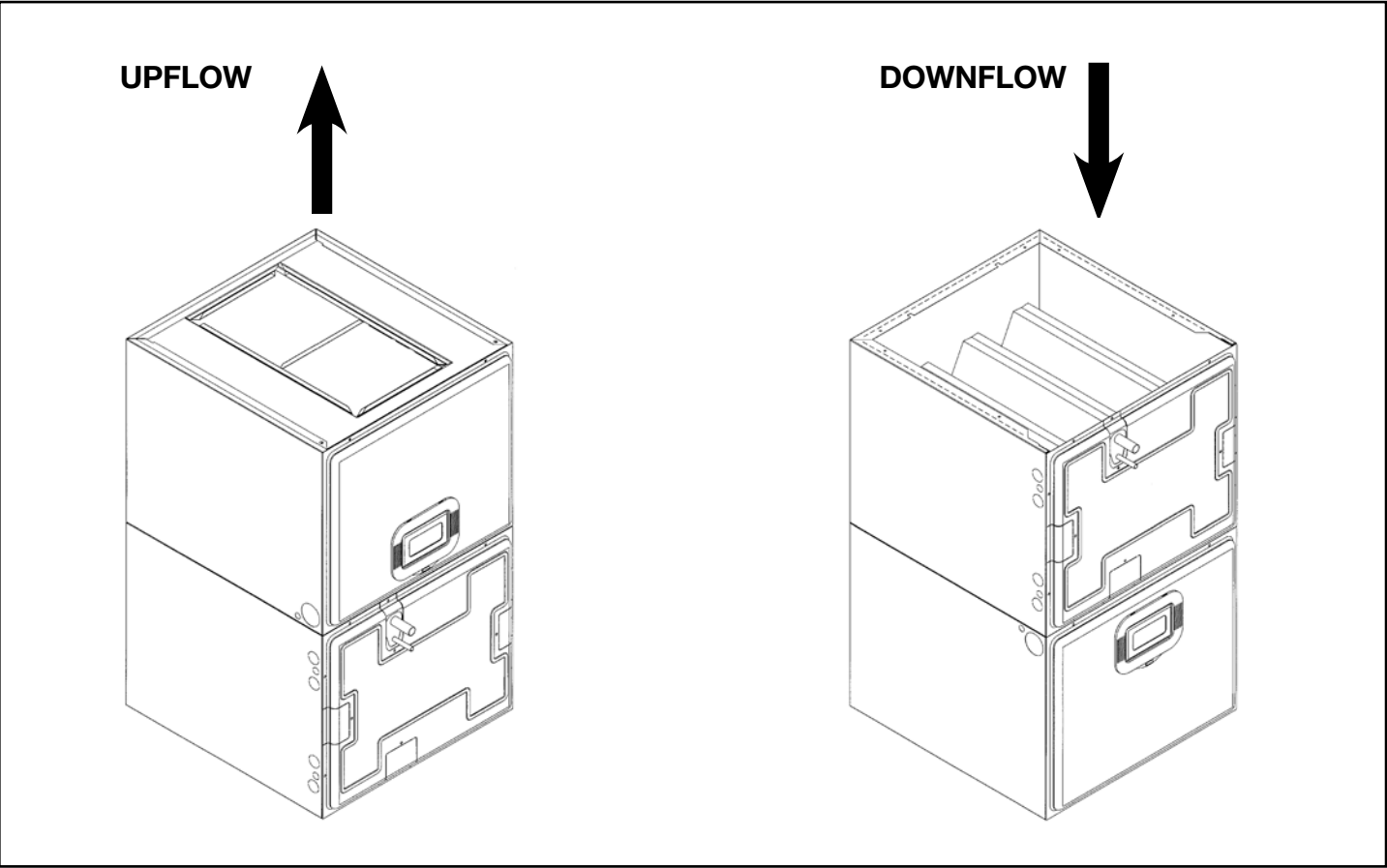
| Model Cabinet Size | Return Air Opening Width (Inches) | Return Air Opening Depth/Length (Inches) |
|--------------------|-----------------------------------|------------------------------------------|
| 17                 | 15 7/8                            | 19 3/4                                   |
| 21                 | 19 3/8                            | 19 3/4                                   |
| 24                 | 22 7/8                            | 19 3/4                                   |

## Unit Dimensions & Weights

| Model Cabinet Size | Unit Width "W" In. [mm] | Supply Duct "A" In. [mm] | Unit Weight/Shipping Weight (Lbs.) [kg] |
|--------------------|-------------------------|--------------------------|-----------------------------------------|
| 17                 | 17 1/2 [445]            | 7 9/16 [192]             | 92/99 [42/45]                           |
| 21                 | 21 [533]                | 9 7/16 [240]             | 109/117 [49/53]                         |
| 24                 | 24 1/2 [622]            | 11 3/4 [298]             | 125/134 [57/61]                         |

[ ] Designates Metric Conversions

Airflow Directional Data



**NOTE:** Coil and blower section are always in a draw through configuration.

## Airflow Performance

**Airflow performance data is based on cooling performance with a coil and no filter in place.** Select performance table for appropriate unit size, voltage and number of electric heaters to be used. Make sure external static applied to unit allows operation within the minimum and maximum limits shown in

table below for both cooling and electric heat operation. For optimum blower performance, operate the unit in the .3 [8 mm] to .7 inches [18 mm] W.C. external static range. Units with coils should be applied with a minimum of .1 inch [3 mm] W.C. external static range.

## General Airflow Operating Limits

| Model Cabinet Size                                                                                    | 17            |             | 21            |             | 24            |             | 24          |             |
|-------------------------------------------------------------------------------------------------------|---------------|-------------|---------------|-------------|---------------|-------------|-------------|-------------|
| Cooling BTUH<br>Cooling Tons Nominal                                                                  | 18,000<br>1.5 | 24,000<br>2 | 30,000<br>2.5 | 36,000<br>3 | 42,000<br>3.5 | 48,000<br>4 | 60,000<br>5 | 60,000<br>5 |
| Heat Pump or Air Conditioning Maximum<br>Heat/Cool CFM (37.5 CFM/1,000 BTUH)<br>(450 CFM/Ton Nominal) | 675           | 900         | 1125          | 1350        | 1575          | 1800        | 2025        | 2250        |
| Heat Pump or Air Conditioning Nominal<br>Heat/Cool CFM (33.3 CFM/1,000 BTUH)<br>(400 CFM/Ton Nominal) | 600           | 800         | 1000          | 1200        | 1400          | 1600        | 1800        | 2000        |
| Heat Pump or Air Conditioning Minimum<br>Heat/Cool CFM (30.0 CFM/1,000 BTUH)<br>(360 CFM/Ton Nominal) | 540           | 720         | 900           | 1080        | 1260          | 1440        | 1620        | 1800        |
| Maximum kW Electric Heating &<br>Minimum Electric Heat CFM                                            | 11<br>560     | 11<br>560   | 11<br>900     | 11<br>1220  | 18<br>1220    | 18<br>1220  | 18<br>1460  | 18<br>1460  |
| Maximum Electric Heat Rise °F                                                                         | 85            | 85          | 35            | 35          | 65            | 65          | 43          | 43          |

## 115V/208V/240V Airflow Performance Data—SB2CY (Constant Torque (ECM) Motor)

| Model        |            |            | Blower Motor               |         |       | External Static Pressure—Inches W.C. [kPa] with filter & indoor coil |              |              |              |              |              |              |              |              |              |
|--------------|------------|------------|----------------------------|---------|-------|----------------------------------------------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Cabinet Size | Tonnage    | Heaters    | Electric Nominal Speed Tap | Voltage |       | 0.1<br>[.02]                                                         | 0.2<br>[.05] | 0.3<br>[.07] | 0.4<br>[.10] | 0.5<br>[.12] | 0.6<br>[.15] | 0.7<br>[.17] | 0.8<br>[.20] | 0.9<br>[.23] | 1.0<br>[.25] |
| -17          | 1.5<br>Ton | none       | 2                          | 208/240 | CFM   | —                                                                    | 519          | 476          | 433          | 391          | 348          | 301          | 257          | 181          | 120          |
|              |            |            |                            |         | WATTS | —                                                                    | 52.8         | 57.1         | 61.5         | 66.3         | 71.7         | 76.7         | 80.1         | 84.0         | 86.4         |
|              |            | none       | 3                          | 208/240 | CFM   | —                                                                    | 720          | 689          | 656          | 623          | 591          | 559          | 526          | 495          | 463          |
|              |            |            |                            |         | WATTS | —                                                                    | 99.3         | 104.5        | 109.8        | 115.4        | 120.8        | 126.2        | 132.1        | 138.5        | 145.1        |
|              |            | 3<br>(max) | 2                          | 208/240 | CFM   | —                                                                    | 509          | 466          | 423          | 381          | 338          | 291          | 247          | 171          | 110          |
|              |            |            |                            |         | WATTS | —                                                                    | 47.8         | 52.1         | 56.5         | 61.3         | 66.7         | 71.7         | 75.1         | 79.0         | 81.4         |
|              |            | 3<br>(max) | 3                          | 208/240 | CFM   | —                                                                    | 710          | 679          | 646          | 613          | 581          | 549          | 516          | 485          | 453          |
|              |            |            |                            |         | WATTS | —                                                                    | 94.3         | 99.5         | 104.8        | 110.4        | 115.8        | 121.2        | 127.1        | 133.5        | 140.1        |
|              |            | none       | 2                          | 115     | CFM   | —                                                                    | 550          | 509          | 468          | 429          | 390          | 347          | 255          | 303          | 183          |
|              |            |            |                            |         | WATTS | —                                                                    | 49.1         | 54.2         | 59.1         | 63.8         | 68.8         | 74.5         | 84.4         | 80.4         | 88.3         |
|              |            | none       | 3                          | 115     | CFM   | 745                                                                  | 712          | 678          | 645          | 613          | 581          | 548          | 517          | 488          | 451          |
|              |            |            |                            |         | WATTS | 92.9                                                                 | 98.8         | 105.6        | 111.6        | 117.6        | 123.3        | 129.1        | 135.5        | 141.3        | 149.3        |
|              | 2.0<br>Ton | none       | 4                          | 208/240 | CFM   | —                                                                    | 602          | 563          | 525          | 490          | 452          | 414          | 374          | 334          | 292          |
|              |            |            |                            |         | WATTS | —                                                                    | 68.6         | 73.3         | 78.0         | 82.4         | 87.4         | 93.3         | 99.4         | 105.1        | 108.6        |
|              |            | none       | 5                          | 208/240 | CFM   | —                                                                    | —            | 845          | 818          | 792          | 764          | 735          | 707          | 680          | 654          |
|              |            |            |                            |         | WATTS | —                                                                    | —            | 158.4        | 164.5        | 170.7        | 176.9        | 183.9        | 190.7        | 197.0        | 203.6        |
|              |            | 3<br>(max) | 4                          | 208/240 | CFM   | —                                                                    | 592          | 553          | 515          | 480          | 442          | 404          | 364          | 324          | 282          |
|              |            |            |                            |         | WATTS | —                                                                    | 63.6         | 68.3         | 73.0         | 77.4         | 82.4         | 88.3         | 94.4         | 100.1        | 103.6        |
|              |            | 3<br>(max) | 5                          | 208/240 | CFM   | —                                                                    | —            | 835          | 808          | 782          | 754          | 725          | 697          | 670          | 644          |
|              |            |            |                            |         | WATTS | —                                                                    | —            | 153.4        | 159.5        | 165.7        | 171.9        | 178.9        | 185.7        | 192.0        | 198.6        |
|              |            | none       | 4                          | 115     | CFM   | 641                                                                  | 605          | 567          | 530          | 496          | 460          | 427          | 387          | 349          | 305          |
|              |            |            |                            |         | WATTS | 67.1                                                                 | 72.7         | 78.5         | 83.8         | 88.8         | 94.6         | 99.8         | 106.6        | 113.2        | 118.1        |
|              |            | none       | 5                          | 115     | CFM   | 896                                                                  | 870          | 840          | 810          | 782          | 754          | 727          | 699          | 674          | 648          |
|              |            |            |                            |         | WATTS | 147.5                                                                | 154.0        | 161.9        | 169.5        | 176.9        | 183.9        | 191.1        | 197.9        | 205.2        | 212.4        |

[ ] Designates Metric Conversions

# 115V/208V/240V Airflow Performance Data—SB2CY (Constant Torque (ECM) Motor) (Con't.)

| Model        |            |            | Blower Motor               |         |       | External Static Pressure—Inches W.C. [kPa] with filter & indoor coil |              |              |              |              |              |              |              |              |              |
|--------------|------------|------------|----------------------------|---------|-------|----------------------------------------------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Cabinet Size | Tonnage    | Heaters    | Electric Nominal Speed Tap | Voltage |       | 0.1<br>[.02]                                                         | 0.2<br>[.05] | 0.3<br>[.07] | 0.4<br>[.10] | 0.5<br>[.12] | 0.6<br>[.15] | 0.7<br>[.17] | 0.8<br>[.20] | 0.9<br>[.23] | 1.0<br>[.25] |
| -21          | 2.5<br>Ton | none       | 2                          | 208/240 | CFM   | 789                                                                  | 743          | 699          | 605          | 557          | 497          | 451          | 391          | 322          | 254          |
|              |            |            |                            |         | WATTS | 57.9                                                                 | 63.2         | 68.4         | 79.0         | 85.3         | 91.8         | 96.8         | 105.1        | 110.0        | 113.2        |
|              |            | none       | 3                          | 208/240 | CFM   | 1060                                                                 | 1027         | 994          | 963          | 927          | 894          | 859          | 826          | 793          | 760          |
|              |            |            |                            |         | WATTS | 145.7                                                                | 152.4        | 160.0        | 167.5        | 175.3        | 182.0        | 189.5        | 197.0        | 204.7        | 212.4        |
|              |            | 3<br>(max) | 2                          | 208/240 | CFM   | 819                                                                  | 773          | 729          | 635          | 587          | 527          | 481          | 421          | 352          | 284          |
|              |            |            |                            |         | WATTS | 67.9                                                                 | 73.2         | 78.4         | 89.0         | 95.3         | 101.8        | 106.8        | 115.1        | 120.0        | 123.2        |
|              |            | 3<br>(max) | 3                          | 208/240 | CFM   | 1090                                                                 | 1057         | 1024         | 993          | 957          | 924          | 889          | 856          | 823          | 790          |
|              |            |            |                            |         | WATTS | 155.7                                                                | 162.4        | 170.0        | 177.5        | 185.3        | 192.0        | 199.5        | 207.0        | 214.7        | 222.4        |
|              |            | none       | 2                          | 115     | CFM   | 737                                                                  | 693          | 650          | 602          | 554          | 492          | 450          | 391          | 325          | 239          |
|              |            |            |                            |         | WATTS | 67.4                                                                 | 73.5         | 79.4         | 85.5         | 91.9         | 99.4         | 105.2        | 113.6        | 120.0        | 123.7        |
|              |            | none       | 3                          | 115     | CFM   | 1076                                                                 | 1042         | 1010         | 977          | 944          | 911          | 877          | 841          | 805          | 768          |
|              |            |            |                            |         | WATTS | 158.3                                                                | 166.3        | 174.2        | 182.3        | 190.2        | 198.5        | 206.5        | 215.0        | 223.4        | 232.3        |
|              | 3.0<br>Ton | none       | 4                          | 208/240 | CFM   | 790                                                                  | 749          | 706          | 661          | 617          | 572          | 511          | 474          | 417          | 357          |
|              |            |            |                            |         | WATTS | 72.3                                                                 | 77.9         | 83.5         | 88.9         | 94.7         | 101.1        | 108.3        | 113.0        | 122.0        | 127.4        |
|              |            | none       | 5                          | 208/240 | CFM   | 1197                                                                 | 1171         | 1143         | 1114         | 1086         | 1057         | 1025         | 994          | 964          | 934          |
|              |            |            |                            |         | WATTS | 202.2                                                                | 209.9        | 218.3        | 227.1        | 235.3        | 243.8        | 252.1        | 260.1        | 269.1        | 278.4        |
|              |            | 3<br>(max) | 4                          | 208/240 | CFM   | 820                                                                  | 779          | 736          | 691          | 647          | 602          | 541          | 504          | 447          | 387          |
|              |            |            |                            |         | WATTS | 85.3                                                                 | 90.9         | 96.5         | 101.9        | 107.7        | 114.1        | 121.3        | 126.0        | 135.0        | 140.4        |
|              |            | 3<br>(max) | 5                          | 208/240 | CFM   | 1227                                                                 | 1201         | 1173         | 1144         | 1116         | 1087         | 1055         | 1024         | 994          | 964          |
|              |            |            |                            |         | WATTS | 215.2                                                                | 222.9        | 231.3        | 240.1        | 248.3        | 256.8        | 265.1        | 273.1        | 282.1        | 291.4        |
|              |            | none       | 4                          | 115     | CFM   | 808                                                                  | 767          | 738          | 726          | 684          | 640          | 594          | 532          | 493          | 453          |
|              |            |            |                            |         | WATTS | 81.6                                                                 | 88.0         | 92.4         | 94.3         | 100.7        | 107.3        | 114.1        | 122.5        | 128.6        | 135.9        |
|              |            | none       | 5                          | 115     | CFM   | 1201                                                                 | 1172         | 1141         | 1113         | 1083         | 1060         | 1055         | 1026         | 995          | 963          |
|              |            |            |                            |         | WATTS | 216.4                                                                | 224.5        | 233.9        | 242.5        | 251.7        | 258.9        | 260.5        | 269.3        | 278.6        | 288.4        |

[ ] Designates Metric Conversions

## 115V/208V/240V Airflow Performance Data—SB2CY (Constant Torque (ECM) Motor) (Con't.)

| Model        |            |            | Blower Motor               |         |       | External Static Pressure—Inches W.C. [kPa] with filter & indoor coil |              |              |              |              |              |              |              |              |              |
|--------------|------------|------------|----------------------------|---------|-------|----------------------------------------------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Cabinet Size | Tonnage    | Heaters    | Electric Nominal Speed Tap | Voltage |       | 0.1<br>[.02]                                                         | 0.2<br>[.05] | 0.3<br>[.07] | 0.4<br>[.10] | 0.5<br>[.12] | 0.6<br>[.15] | 0.7<br>[.17] | 0.8<br>[.20] | 0.9<br>[.23] | 1.0<br>[.25] |
| -24          | 3.5<br>Ton | none       | 2                          | 208/240 | CFM   | 901                                                                  | 835          | 782          | 731          | 681          | 620          | 565          | 515          | 472          | 420          |
|              |            |            |                            |         | WATTS | 72.1                                                                 | 80.6         | 87.7         | 94.3         | 100.7        | 108.1        | 115.2        | 121.2        | 127.0        | 133.4        |
|              |            | none       | 3                          | 208/240 | CFM   | 1531                                                                 | 1494         | 1444         | 1404         | 1370         | 1338         | 1306         | 1275         | 1245         | 1217         |
|              |            |            |                            |         | WATTS | 255.3                                                                | 267.6        | 284.5        | 298.6        | 310.5        | 322.3        | 333.7        | 344.7        | 354.9        | 365.2        |
|              |            | 3<br>(max) | 2                          | 208/240 | CFM   | 926                                                                  | 860          | 807          | 756          | 706          | 645          | 590          | 540          | 497          | 445          |
|              |            |            |                            |         | WATTS | 92.1                                                                 | 100.6        | 107.7        | 114.3        | 120.7        | 128.1        | 135.2        | 141.2        | 147.0        | 153.4        |
|              |            | 3<br>(max) | 3                          | 208/240 | CFM   | 1556                                                                 | 1519         | 1469         | 1429         | 1395         | 1363         | 1331         | 1300         | 1270         | 1242         |
|              |            |            |                            |         | WATTS | 275.3                                                                | 287.6        | 304.5        | 318.6        | 330.5        | 342.3        | 353.7        | 364.7        | 374.9        | 385.2        |
|              |            | none       | 2                          | 115     | CFM   | 896                                                                  | 835          | 783          | 733          | 678          | 632          | 579          | 519          | 481          | 438          |
|              |            |            |                            |         | WATTS | 76.3                                                                 | 85.7         | 93.6         | 100.9        | 108.7        | 115.6        | 124.1        | 132.7        | 138.9        | 145.7        |
|              |            | none       | 3                          | 115     | CFM   | 1504                                                                 | 1473         | 1433         | 1383         | 1350         | 1317         | 1286         | 1256         | 1227         | 1195         |
|              |            |            |                            |         | WATTS | 260.9                                                                | 271.6        | 286.6        | 305.5        | 317.2        | 329.3        | 341.9        | 352.7        | 363.4        | 373.6        |
|              | 4.0<br>Ton | none       | 4                          | 208/240 | CFM   | 1105                                                                 | 1043         | 998          | 957          | 915          | 875          | 824          | 780          | 737          | 693          |
|              |            |            |                            |         | WATTS | 113.0                                                                | 124.8        | 133.0        | 141.1        | 148.6        | 155.8        | 165.4        | 173.9        | 181.8        | 189.6        |
|              |            | none       | 5                          | 208/240 | CFM   | 1656                                                                 | 1629         | 1589         | 1544         | 1508         | 1482         | 1454         | 1424         | 1394         | 1365         |
|              |            |            |                            |         | WATTS | 322.7                                                                | 334.3        | 350.6        | 369.5        | 384.9        | 397.1        | 409.1        | 421.8        | 435.2        | 447.7        |
|              |            | 3<br>(max) | 4                          | 208/240 | CFM   | 1135                                                                 | 1073         | 1028         | 987          | 945          | 905          | 854          | 810          | 767          | 723          |
|              |            |            |                            |         | WATTS | 133.0                                                                | 144.8        | 153.0        | 161.1        | 168.6        | 175.8        | 185.4        | 193.9        | 201.8        | 209.6        |
|              |            | 3<br>(max) | 5                          | 208/240 | CFM   | 1686                                                                 | 1659         | 1619         | 1574         | 1538         | 1512         | 1484         | 1454         | 1424         | 1395         |
|              |            |            |                            |         | WATTS | 342.7                                                                | 354.3        | 370.6        | 389.5        | 404.9        | 417.1        | 429.1        | 441.8        | 455.2        | 467.7        |
|              |            | none       | 4                          | 115     | CFM   | 1119                                                                 | 1061         | 1016         | 974          | 934          | 884          | 842          | 798          | 756          | 711          |
|              |            |            |                            |         | WATTS | 121.8                                                                | 134.1        | 143.6        | 152.5        | 161.0        | 169.9        | 178.3        | 187.7        | 198.0        | 207.0        |
|              |            | none       | 5                          | 115     | CFM   | 1655                                                                 | 1625         | 1593         | 1544         | 1512         | 1479         | 1451         | 1423         | 1396         | 1369         |
|              |            |            |                            |         | WATTS | 342.7                                                                | 355.7        | 370.3        | 392.6        | 407.4        | 423.0        | 436.1        | 449.5        | 462.4        | 475.5        |

[ ] Designates Metric Conversions

# 115V/208V/240V Airflow Performance Data—SB2CY (Constant Torque (ECM) Motor) (Con't.)

| Model        |         |            | Blower Motor               |         |       | External Static Pressure—Inches W.C. [kPa] with filter & indoor coil |              |              |              |              |              |              |              |              |              |
|--------------|---------|------------|----------------------------|---------|-------|----------------------------------------------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Cabinet Size | Tonnage | Heaters    | Electric Nominal Speed Tap | Voltage |       | 0.1<br>[.02]                                                         | 0.2<br>[.05] | 0.3<br>[.07] | 0.4<br>[.10] | 0.5<br>[.12] | 0.6<br>[.15] | 0.7<br>[.17] | 0.8<br>[.20] | 0.9<br>[.23] | 1.0<br>[.25] |
| -24          | 5 Ton   | none       | 2                          | 208/240 | CFM   | 1121                                                                 | 1062         | 1007         | 950          | 877          | 799          | 693          | 637          | 580          | 514          |
|              |         |            |                            |         | WATTS | 100.7                                                                | 110.1        | 118.7        | 127.9        | 138.8        | 149.5        | 161.4        | 168.3        | 174.8        | 182.2        |
|              |         | none       | 3                          | 208/240 | CFM   | 1657                                                                 | 1618         | 1582         | 1548         | 1516         | 1481         | 1437         | 1398         | 1343         | 1294         |
|              |         |            |                            |         | WATTS | 274.5                                                                | 287.4        | 300.0        | 311.9        | 324.4        | 336.7        | 350.7        | 364.8        | 382.7        | 398.4        |
|              |         | 3<br>(max) | 2                          | 208/240 | CFM   | 1079                                                                 | 1020         | 965          | 908          | 835          | 757          | 651          | 595          | 538          | 472          |
|              |         |            |                            |         | WATTS | 121                                                                  | 130          | 139          | 148          | 159          | 169          | 181          | 188          | 195          | 202          |
|              |         | 3<br>(max) | 3                          | 208/240 | CFM   | 1615                                                                 | 1576         | 1540         | 1506         | 1474         | 1439         | 1395         | 1356         | 1301         | 1252         |
|              |         |            |                            |         | WATTS | 295                                                                  | 307          | 320          | 332          | 344          | 357          | 371          | 385          | 403          | 418          |
|              |         | none       | 2                          | 115     | CFM   | 1111                                                                 | 1058         | 1004         | 938          | 874          | 791          | 692          | 626          | 573          | 501          |
|              |         |            |                            |         | WATTS | 104.3                                                                | 113.1        | 122.5        | 134.1        | 144.3        | 157.1        | 168.0        | 176.0        | 183.6        | 191.3        |
|              |         | none       | 3                          | 115     | CFM   | 1658                                                                 | 1620         | 1580         | 1546         | 1514         | 1478         | 1435         | 1393         | 1347         | 1299         |
|              |         |            |                            |         | WATTS | 283.2                                                                | 296.8        | 311.0        | 323.3        | 336.4        | 350.0        | 365.0        | 379.8        | 396.0        | 412.9        |
|              |         | none       | 4                          | 208/240 | CFM   | 1226                                                                 | 1179         | 1131         | 1080         | 1022         | 957          | 884          | 778          | 728          | 674          |
|              |         |            |                            |         | WATTS | 125.6                                                                | 134.5        | 144.2        | 153.9        | 164.7        | 176.4        | 188.1        | 201.9        | 208.9        | 217.7        |
|              |         | none       | 5                          | 208/240 | CFM   | 2010                                                                 | 1977         | 1944         | 1917         | 1887         | 1860         | 1838         | 1809         | 1787         | 1760         |
|              |         |            |                            |         | WATTS | 470.4                                                                | 485.6        | 504.6        | 520.4        | 537.8        | 554.0        | 569.8        | 587.5        | 603.5        | 621.0        |
|              |         | 3<br>(max) | 4                          | 208/240 | CFM   | 1184                                                                 | 1137         | 1089         | 1038         | 980          | 915          | 842          | 736          | 686          | 632          |
|              |         |            |                            |         | WATTS | 145.6                                                                | 154.5        | 164.2        | 173.9        | 184.7        | 196.4        | 208.1        | 221.9        | 228.9        | 237.7        |
|              |         | 3<br>(max) | 5                          | 208/240 | CFM   | 1968                                                                 | 1935         | 1902         | 1875         | 1845         | 1818         | 1796         | 1767         | 1745         | 1718         |
|              |         |            |                            |         | WATTS | 490.4                                                                | 505.6        | 524.6        | 540.4        | 557.8        | 574.0        | 589.8        | 607.5        | 623.5        | 641.0        |
|              |         | none       | 4                          | 115     | CFM   | 1213                                                                 | 1161         | 1110         | 1060         | 998          | 938          | 848          | 757          | 697          | 653          |
|              |         |            |                            |         | WATTS | 126.0                                                                | 136.1        | 146.3        | 156.3        | 168.3        | 179.3        | 194.2        | 206.3        | 215.6        | 222.8        |
|              |         | none       | 5                          | 115     | CFM   | 2014                                                                 | 1985         | 1953         | 1920         | 1887         | 1856         | 1829         | 1801         | 1774         | 1739         |
|              |         |            |                            |         | WATTS | 489.5                                                                | 505.8        | 524.3        | 542.5        | 560.6        | 578.9        | 594.6        | 611.9        | 629.1        | 649.3        |

[ ] Designates Metric Conversions

Electrical Data—Blower Motor Only Without Electric Heat

| Model Size/Elec. Designation | Voltage | Phase | Hertz | HP [W]    | RPM      | Speeds | Motor Amps. | Minimum Circuit Ampacity | Maximum Circuit Protector |
|------------------------------|---------|-------|-------|-----------|----------|--------|-------------|--------------------------|---------------------------|
| SB2CY2417STANMAN00           | 115     | 1     | 60    | 1/3 [249] | 300-1100 | 5      | 3.2         | 5.0                      | 15                        |
| SB2CY3621STANMAN00           | 115     | 1     | 60    | 1/2 [373] | 300-1100 | 5      | 4.2         | 6.0                      | 15                        |
| SB2CY4824STANMAN00           | 115     | 1     | 60    | 3/4 [559] | 300-1100 | 5      | 6.4         | 8.0                      | 15                        |
| SB2CY6024STANMAN00           | 115     | 1     | 60    | 3/4 [559] | 300-1100 | 5      | 8.5         | 11.0                     | 15                        |

Electrical Data—With Electric Heat

| Model Size/Elec. Designation | Heater KW-Volts 208/240 | Voltage | Phase | Hertz | HP [W]    | RPM      | Speeds | Total Amps. | Minimum Circuit Ampacity | Maximum Circuit Protector |
|------------------------------|-------------------------|---------|-------|-------|-----------|----------|--------|-------------|--------------------------|---------------------------|
| SB2CY2417STANMJB05           | 3.7/4.9                 | 208-240 | 1     | 60    | 1/3 [249] | 300-1100 | 5      | 19.6/22.2   | 25/28                    | 25/30                     |
| SB2CY2417STANMJB07           | 5.3/7.0                 | 208-240 | 1     | 60    | 1/3 [249] | 300-1100 | 5      | 27.3/30.8   | 35/39                    | 35/40                     |
| SB2CY3621STANMJB05           | 3.7/4.9                 | 208-240 | 1     | 60    | 1/2 [373] | 300-1100 | 5      | 20.2/22.8   | 26/29                    | 30/30                     |
| SB2CY3621STANMJB07           | 5.3/7.0                 | 208-240 | 1     | 60    | 1/2 [373] | 300-1100 | 5      | 27.9/31.6   | 35/40                    | 35/40                     |
| SB2CY3621STANMJB10           | 7.5/10.0                | 208-240 | 1     | 60    | 1/2 [373] | 300-1100 | 5      | 38.5/44.1   | 49/56                    | 50/60                     |
| SB2CY4824STANMJB05           | 3.7/4.9                 | 208-240 | 1     | 60    | 3/4 [559] | 300-1100 | 5      | 21.6/24.2   | 27/31                    | 30/35                     |
| SB2CY4824STANMJB07           | 5.3/7.0                 | 208-240 | 1     | 60    | 3/4 [559] | 300-1100 | 5      | 29.3/33.0   | 37/42                    | 40/45                     |
| SB2CY4824STANMJB10           | 7.5/10.0                | 208-240 | 1     | 60    | 3/4 [559] | 300-1100 | 5      | 39.9/45.5   | 50/57                    | 50/60                     |
| SB2CY6024STANMJB10           | 7.5/10.0                | 208-240 | 1     | 60    | 3/4 [559] | 300-1100 | 5      | 41.1/46.7   | 52/59                    | 60/60                     |

Electrical Wiring

Power Wiring

- Field wiring must comply with the National Electrical Code (C.E.C. in Canada) and any applicable local ordinance.
- Supply wiring must be 75°C minimum copper conductors only.
- See electrical data for product Ampacity rating and Circuit Protector requirement.

Grounding

- This product must be sufficiently grounded in accordance with National Electrical Code (C.E.C. in Canada) and any applicable local ordinance.
- A grounding lug is provided.

ACCESSORIES

• A2L Sensor Kits

- RXHT-5    Alt. Orientation Brackets
- RXHY-6    A2L Sensor and Brackets

• External Auxiliary Horizontal Drain Pan. RXBM-AA06—Fits all models.

• Replacement Filters

| Model Cabinet Size | Filter Size In. [mm]   | Part Number |
|--------------------|------------------------|-------------|
| 17                 | 16.25 x 21 [413 x 533] | 54-23217-02 |
| 21                 | 19.75 x 21 [502 x 533] | 54-23217-03 |
| 24                 | 23.25 x 21 [591 x 533] | 54-23217-04 |

[ ] Designates Metric Conversions



## GENERAL TERMS OF LIMITED WARRANTY\*

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

Conditional Parts  
(Registration Required)..... Ten (10) Years

**\*For complete details of the Limited and Conditional Warranties, including applicable terms and conditions, contact your local contractor or the Manufacturer for a copy of the product warranty certificate.**

**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.**

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*In keeping with its policy of continuous progress and product improvement, Russell by Rheem reserves the right to make changes without notice.*

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