



# MODEL: SH1P/SH1Q Standard Efficiency Air Handler

FORM NO. HRR-552



## Russell™ By Rheem SH1P/SH1Q\* Standard Efficiency Air Handler

- PSC Motor
- Efficiencies up to 15 SEER
- Constant Torque Motor
- Efficiencies up to 15 SEER



- **Versatile 4-Way Convertible Design** for upflow, downflow, horizontal left and horizontal right applications.
- **Factory-Installed Indoor Coil.**
- **Sturdy Cabinet Construction** with 1.0 inch [25.4 mm] of foil faced insulation for excellent sound and insulating characteristics.
- **Field-Installed Auxiliary Electric Heater Kits** provide exact heat for indoor comfort. Kits include circuit breakers which meet U.L. and cUL requirements for service disconnect.
- **1½ Ton [5.3 kW] Through 5 Ton [17.6 kW] Models** are between 42½ to 55½ inches [1080 to 1410 mm] tall and 22 inches [559 mm] deep.
- **All Models Meet Or Exceed 330 To 400 CFM [156 to 189 L/s]** per ton at .3 inches [.7 kPa] of external static pressure.
- **Enhanced Airflow** up to .7" external static pressure.
- **Evaporator** is constructed of aluminum fins bonded to internally grooved aluminum tubing.
- **Cabinet Air Leakage Less Than 2%** at 1 inch H<sub>2</sub>O when tested in accordance with ASHRAE standard 193

\*SH1Q4221STANJA Model Only

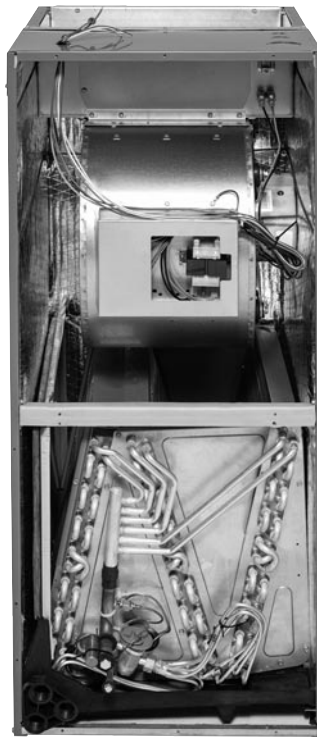
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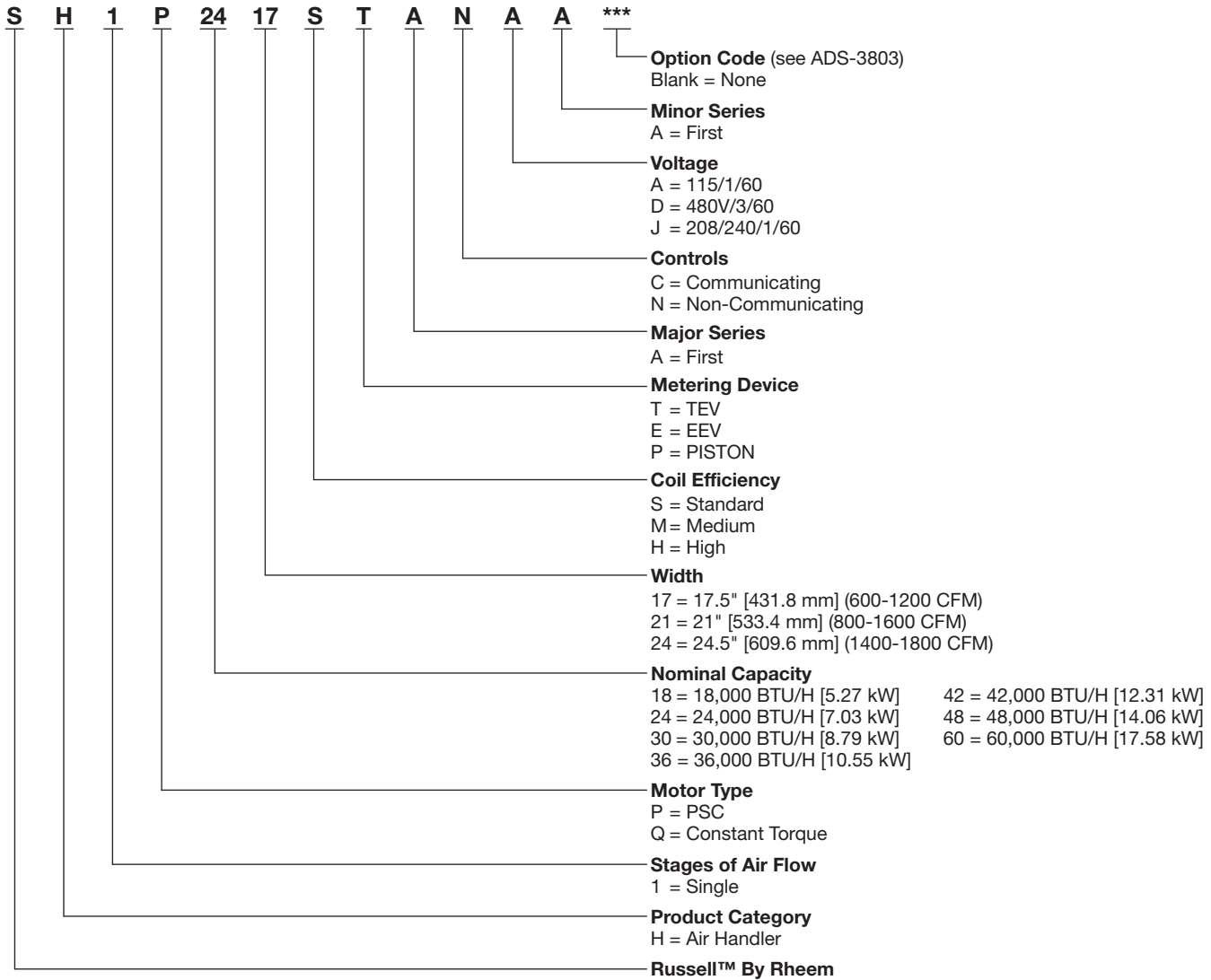
## Engineering Features

- The most compact unit design available, all standard heat air handler models only 42<sup>1</sup>/<sub>2</sub> to 55<sup>1</sup>/<sub>2</sub> inches [1079 to 1409 mm] high.
- Attractive pre-painted cabinet exterior.
- Rugged wall steel cabinet construction, designed for added strength and versatility.
- 1.0" foil faced insulation mechanically retained in blower compartment for excellent thermal and sound performance.
- Four leg blower motor mount.
- Blower housing with controls, motor and blower. Slide out design for service and maintenance convenience.
- Traditional open wire element design for heat applications.
- Field convertible for vertical downflow, horizontal left hand or right hand air supply.
- 3 combustible floor base accessories fit all model sizes when required for downflow installations on combustible floors.
- Indoor coil design provides low air side pressure drop, high performance and extremely compact size.
- Expansion valve on indoor coil provides for operation with air conditioning.
- Coils are constructed of aluminum fins bonded to internally grooved aluminum tubing.
- Coils are tested at the factory with an extensive refrigerant leak check.
- Coils have copper sweat refrigerant connections.
- Coils utilize chatleff metering device connections.
- Molded polymer corrosion resistant condensate drain pan is provided on all indoor coils.
- Supply duct flanges provided as standard on air handler cabinet.
- Provisions for field electrical, connections available from either side or top of the air handler cabinet.
- Connection point for high voltage wiring is inside the air handler cabinet. Low voltage connection is made on the outside of the air handler cabinet.
- Concentric knockouts are provided for power connection to cabinet. Installer may pull desired hole size up to 2 inches [51 mm] for 1<sup>1</sup>/<sub>2</sub> inch [38 mm] conduit.
- Front refrigerant and drain connections.

[ ] Designates Metric Conversions



# Russell™ By Rheem | SH1P/SH1Q Air Handler



[ ] Designates Metric Conversions

| Available Models at 115V A Voltage |
|------------------------------------|
| SH1P1817STANAA                     |
| SH1P2417STANAA                     |
| SH1P3017STANAA                     |
| SH1P3617STANAA                     |
| SH1P4221STANAA                     |
| SH1P4821STANAA                     |

| Available Models at 218V J Voltage |
|------------------------------------|
| SH1P1817STANJA                     |
| SH1P2417STANJA                     |
| SH1P3017STANJA                     |
| SH1P3617STANJA                     |
| SH1P3621STANJA                     |
| SH1P4221STANJA                     |
| SH1P4821STANJA                     |
| SH1P4824STANJA                     |
| SH1P6024STANJA                     |
| SH1Q4221STANJA                     |

| Available Models at D Voltage |
|-------------------------------|
| SH1P3617STANDA                |
| SH1P4221STANDA                |
| SH1P4821STANDA                |
| SH1P4824STANDA                |
| SH1P6024STANDA                |

# Unit Dimensions

ELECTRICAL CONNECTIONS  
MAY EXIT TOP OR EITHER SIDE  
HIGH VOLTAGE CONNECTION 7/8" [22.2 mm],  
1 3/32" [27.8 mm], 1 1/2" [50 mm] DIA. KNOCKOUTS.

LOW VOLTAGE CONNECTION  
5/8" [15.9 mm] AND 7/8" [22.2 mm] KNOCKOUT

AUXILIARY DRAIN CONNECTION  
3/4" [19.1 mm] FEMALE PIPE THREAD (NPT)  
HORIZONTAL APPLICATION ONLY

PRIMARY DRAIN CONNECTION  
3/4" [19.1 mm] FEMALE PIPE THREAD (NPT)

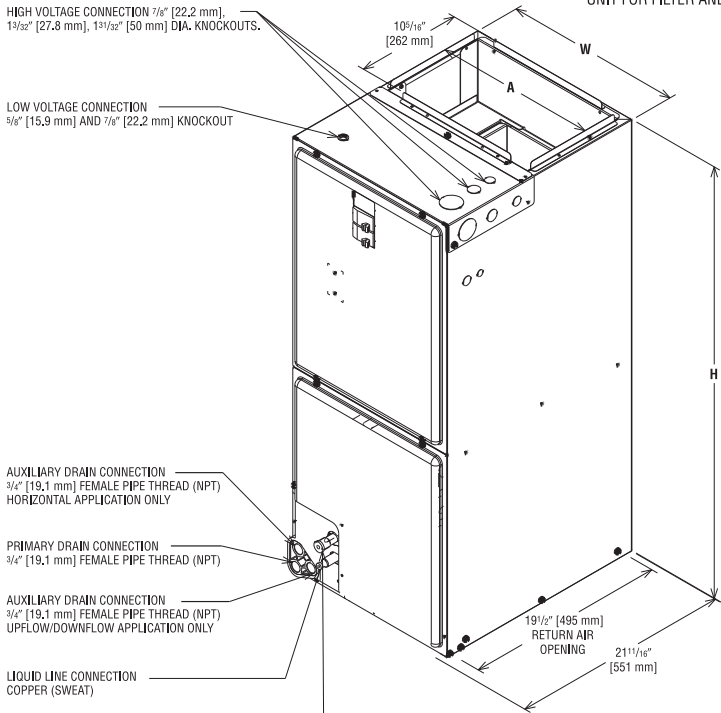
AUXILIARY DRAIN CONNECTION  
3/4" [19.1 mm] FEMALE PIPE THREAD (NPT)  
UPFLOW/DOWNFLOW APPLICATION ONLY

LIQUID LINE CONNECTION  
COPPER (SWEAT)

VAPOR LINE CONNECTION  
COPPER (SWEAT)

SUPPLY AIR ↑

NOTE: 24" CLEARANCE REQUIRED IN FRONT OF UNIT FOR FILTER AND COIL MAINTENANCE.



UPFLOW UNIT SHOWN:  
UNIT MAY BE INSTALLED UPFLOW, DOWNFLOW,  
HORIZONTAL RIGHT OR LEFT AIR SUPPLY.

## 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                                   |

HORIZONTAL ADAPTER KIT

VAPOR LINE CONNECTION

AUXILIARY HORIZONTAL DRAIN CONNECTION

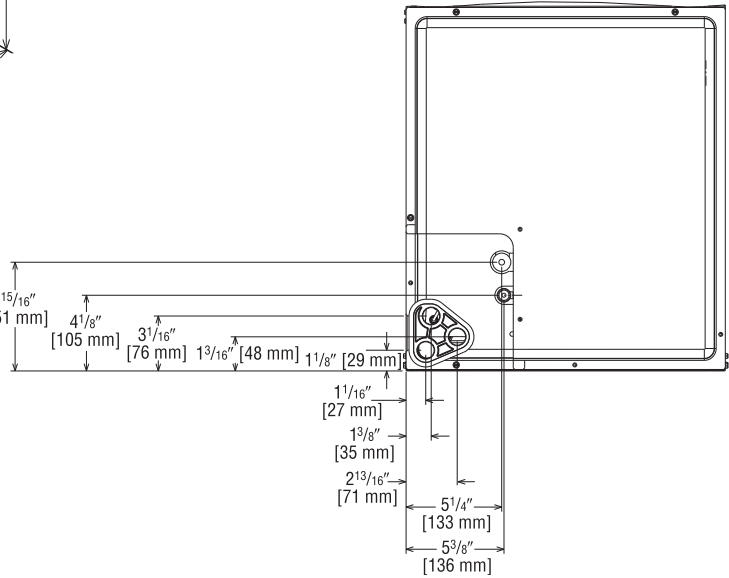
PRIMARY DRAIN CONNECTION

AUXILIARY UPFLOW/DOWNFLOW DRAIN CONNECTION

LIQUID LINE CONNECTION

VERTICAL DRAIN PAN

UPFLOW UNIT SHOWN:  
UNIT MAY BE INSTALLED UPFLOW,  
DOWNFLOW, HORIZONTAL RIGHT  
OR LEFT AIR SUPPLY.



[ ] Designates Metric Conversions  
( ) Designates Unit with Double Coil Cabinet

## Unit Dimensions & Weights

| Model Size SH1P | Refrigerant Connections Sweat (In.) [mm] ID |             | Unit Width "W" In. [mm] | Unit Height "H" In. [mm] | Supply Duct "A" In. [mm] | Air Flow CFM (Nom.) [L/s] |            | Unit Weight/Shipping Weight (Lbs.) [kg] |
|-----------------|---|-------------|-------------------------|--------------------------|--------------------------|---------------------------|------------|---|
|                 | Liquid                                      | Vapor       |                         |                          |                          | Lo                        | Hi         | Unit With Coil (Max. KW)                |
| 1817ST/2417ST   | 3/8 [9.53]                                  | 3/4 [19.05] | 17 1/2 [445]            | 42 1/2 [1080]            | 16 [406]                 | 600 [283]                 | 800 [378]  | 81/95 [37/43]                           |
| 3017ST/3617ST   | 3/8 [9.53]                                  | 3/4 [19.05] | 17 1/2 [445]            | 42 1/2 [1080]            | 16 [406]                 | 1000 [472]                | 1200 [566] | 90/104 [41/47]                          |
| 3621ST          | 3/8 [9.53]                                  | 7/8 [22.23] | 21 [533]                | 42 1/2 [1080]            | 19 1/2 [495]             | 1200 [566]                | —          | 109/124 [49/56]                         |
| 4221ST/4821ST   | 3/8 [9.53]                                  | 7/8 [22.23] | 21 [533]                | 50 1/2 [1282]            | 19 1/2 [495]             | 1400 [661]                | 1600 [755] | 130/146 [59/66]                         |
| 4824ST          | 3/8 [9.53]                                  | 7/8 [22.23] | 24 1/2 [622]            | 50 1/2 [1282]            | 23 [584]                 | 1600 [755]                | —          | 143/161 [65/73]                         |
| 6024ST          | 3/8 [9.53]                                  | 7/8 [22.23] | 24 1/2 [622]            | 55 1/2 [1410]            | 23 [584]                 | —                         | 1800 [850] | 164/181 [75/82]                         |

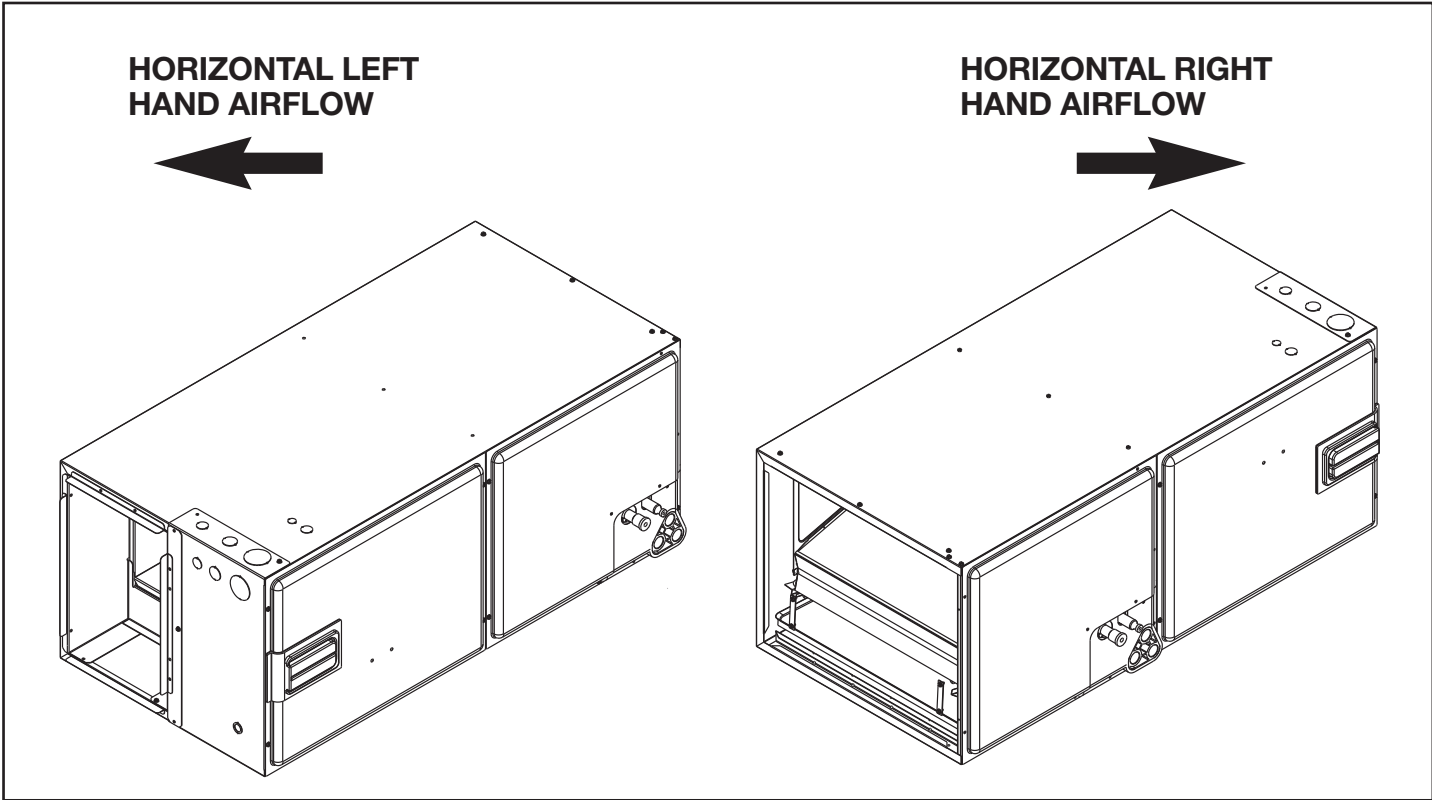
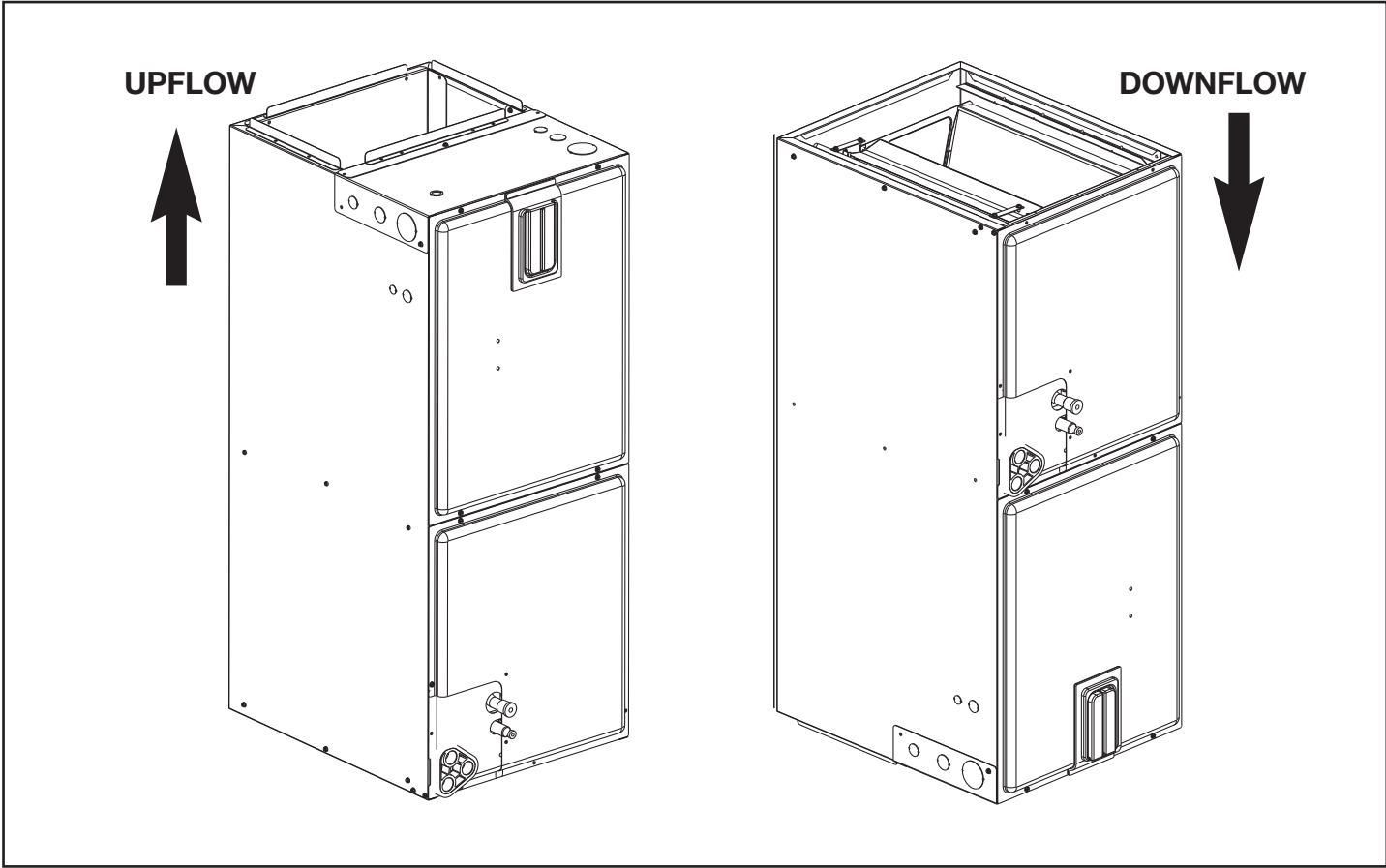
\*Maximum dehumidification airflow.

## Unit Dimensions & Weights

| Model Size SH1Q | Refrigerant Connections Sweat (In.) [mm] ID |             | Unit Width "W" In. [mm] | Unit Height "H" In. [mm] | Supply Duct "A" In. [mm] | Air Flow CFM (Nom.) [L/s] |            | Unit Weight/Shipping Weight (Lbs.) [kg] |
|-----------------|---|-------------|-------------------------|--------------------------|--------------------------|---------------------------|------------|---|
|                 | Liquid                                      | Vapor       |                         |                          |                          | Lo                        | Hi         | Unit With Coil (Max. KW)                |
| 4221ST          | 3/8 [9.53]                                  | 7/8 [22.23] | 21 [533]                | 50 1/2 [1282]            | 19 1/2 [495]             | 1400 [661]                | 1600 [755] | 128/144 [56/65]                         |

[ ] Designates Metric Conversions

**Airflow Directional Data**



## 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.

## Airflow Operating Limits

| Model Cabinet Width   | 17              |                 | 17/21           |                  | 21               |                  | 24               |                  |
|---|-----------------|-----------------|-----------------|------------------|------------------|------------------|------------------|------------------|
| Cooling BTUH x 1,000<br>Cooling Tons Nominal  | -18<br>1.5      | -24<br>2        | -30<br>2.5      | -36<br>3         | -42<br>3.5       | -48<br>4         | -48<br>4         | -60<br>5         |
| Heat Pump or Air Conditioning<br>Maximum Heat/Cool CFM [L/s]<br>(37.5 CFM [18 L/s]/1,000 BTUH)<br>(450 CFM [212 L/s]/Ton Nominal) | 675<br>[319]    | 900<br>[425]    | 1125<br>[531]   | 1350<br>[637]    | 1575<br>[743]    | 1800<br>[850]    | 1800<br>[850]    | 1930<br>[911]    |
| Heat Pump or Air Conditioning<br>Nominal Heat/Cool CFM [L/s]<br>(33.3 CFM [16 L/s]/1,000 BTUH)<br>(400 CFM [189 L/s]/Ton Nominal) | 600<br>[283]    | 800<br>[378]    | 1000<br>[472]   | 1200<br>[566]    | 1400<br>[661]    | 1600<br>[755]    | 1600<br>[755]    | 1800<br>[850]    |
| Heat Pump or Air Conditioning<br>Minimum Heat/Cool CFM [L/s]<br>(30.0 CFM [14 L/s]/1,200 BTUH)<br>(360 CFM [170 L/s]/Ton Nominal) | 540<br>[255]    | 720<br>[340]    | 900<br>[425]    | 1080<br>[510]    | 1260<br>[595]    | 1440<br>[680]    | 1440<br>[680]    | 1620<br>[765]    |
| Maximum kW Electric Heating<br>& Minimum Electric Heat CFM [L/s]  | 13<br>487 [230] | 13<br>617 [291] | 18<br>814 [384] | 18<br>1054 [497] | 20<br>1171 [553] | 25<br>1502 [709] | 25<br>1502 [709] | 30<br>1666 [786] |
| Maximum Electric Heat Rise °F [°C]  | 80 [26.7]       | 63 [17.2]       | 66 [18.9]       | 51 [10.6]        | 49 [9.4]         | 50 [10]          | 50 [10]          | 54 [12.2]        |

[ ] Designates Metric Conversions



### 115V/208V/480V Airflow Performance Data—SH1P (PSC Motor)

| Model No. SH1P           | Motor Speed from Factory | Manufacturer Recommended Air-Flow Range (Min/Max) CFM | Blower Size/ Motor HP [W] # of Speed | Motor Speed | PSC CFM [L/s] Air Delivery/RPM/Watts—115V/208V/480V Volts |            |            |            |            |            |            |            |
|--------------------------|--------------------------|---|--------------------------------------|-------------|---|------------|------------|------------|------------|------------|------------|------------|
|                          |                          |   |                                      |             | External Static Pressure—Inches W.C. [kPa]                |            |            |            |            |            |            |            |
|                          |                          |   |                                      |             | 0.1 [.02]   | 0.2 [.05]  | 0.3 [.07]  | 0.4 [.10]  | 0.5 [.12]  | 0.6 [.15]  | 0.7 [.17]  |            |
| 1817ST No Heater         | High 240V                | 517/711 CFM [244/336 L/s]                             | 10x6 1/5 HP [149] 2 Speed            | Low         | CFM   | 668 [315]  | 637 [301]  | 595 [281]  | 560 [264]  | 517 [244]  | —          | —          |
|                          |                          |   |                                      |             | RPM   | 541        | 596        | 657        | 706        | 761        | —          | —          |
|                          |                          |   |                                      |             | Watts   | 180        | 171        | 166        | 161        | 109        | —          | —          |
|                          |                          |   |                                      | High        | CFM   | —          | —          | —          | —          | 711 [336]  | 662 [312]  | 614 [290]  |
|                          |                          |   |                                      |             | RPM   | —          | —          | —          | —          | 812        | 853        | 890        |
|                          |                          |   |                                      |             | Watts   | —          | —          | —          | —          | 243        | 227        | 210        |
| 1817ST with 13 kW Heater | High 240V                | 487/661 CFM [230/312 L/s]                             | 10x6 1/5 HP [149] 2 Speed            | Low         | CFM   | 638 [301]  | 607 [286]  | 565 [267]  | 530 [250]  | 487 [230]  | —          | —          |
|                          |                          |   |                                      |             | RPM   | 571        | 626        | 687        | 736        | 791        | —          | —          |
|                          |                          |   |                                      |             | Watts   | 171        | 162        | 157        | 152        | 146        | —          | —          |
|                          |                          |   |                                      | High        | CFM   | —          | —          | —          | —          | 661 [312]  | 612 [289]  | 564 [266]  |
|                          |                          |   |                                      |             | RPM   | —          | —          | —          | —          | 837        | 878        | 915        |
|                          |                          |   |                                      |             | Watts   | —          | —          | —          | —          | 232        | 216        | 199        |
| 2417ST No Heater         | High 240V                | 647/888 CFM [305/419 L/s]                             | 10x6 1/5 HP [149] 2 Speed            | Low         | CFM   | 817 [386]  | 779 [368]  | 757 [357]  | 693 [327]  | 647 [305]  | —          | —          |
|                          |                          |   |                                      |             | RPM   | 616        | 667        | 715        | 770        | 808        | —          | —          |
|                          |                          |   |                                      |             | Watts   | 239        | 230        | 221        | 206        | 205        | —          | —          |
|                          |                          |   |                                      | High        | CFM   | —          | —          | —          | —          | 888 [419]  | 828 [391]  | 774 [365]  |
|                          |                          |   |                                      |             | RPM   | —          | —          | —          | —          | 875        | 908        | 958        |
|                          |                          |   |                                      |             | Watts   | —          | —          | —          | —          | 331        | 313        | 301        |
| 2417ST with 13 kW Heater | High 240V                | 617/838 CFM [291/395 L/s]                             | 10x6 1/5 HP [149] 2 Speed            | Low         | CFM   | 787 [371]  | 749 [353]  | 727 [343]  | 663 [313]  | 617 [291]  | —          | —          |
|                          |                          |   |                                      |             | RPM   | 646        | 697        | 745        | 800        | 838        | —          | —          |
|                          |                          |   |                                      |             | Watts   | 230        | 221        | 212        | 197        | 187        | —          | —          |
|                          |                          |   |                                      | High        | CFM   | —          | —          | —          | —          | 838 [395]  | 778 [367]  | 724 [342]  |
|                          |                          |   |                                      |             | RPM   | —          | —          | —          | —          | 900        | 933        | 983        |
|                          |                          |   |                                      |             | Watts   | —          | —          | —          | —          | 320        | 302        | 290        |
| 3017ST No Heater         | High 240V                | 864/1004 CFM [408/474 L/s]                            | 10x8 1/4 HP [186] 2 Speed            | Low         | CFM   | 1022 [482] | 987 [466]  | 940 [444]  | 903 [426]  | 864 [408]  | —          | —          |
|                          |                          |   |                                      |             | RPM   | 700        | 754        | 794        | 633        | 870        | —          | —          |
|                          |                          |   |                                      |             | Watts   | 344        | 313        | 302        | 309        | 288        | —          | —          |
|                          |                          |   |                                      | High        | CFM   | —          | —          | —          | —          | 1004 [474] | 951 [449]  | 883 [417]  |
|                          |                          |   |                                      |             | RPM   | —          | —          | —          | —          | 924        | 953        | 975        |
|                          |                          |   |                                      |             | Watts   | —          | —          | —          | —          | 364        | 352        | 344        |
| 3017ST with 18 kW Heater | High 240V                | 814/904 CFM [384/427 L/s]                             | 10x8 1/4 HP [186] 2 Speed            | Low         | CFM   | 972 [459]  | 937 [442]  | 890 [420]  | 853 [403]  | 814 [384]  | —          | —          |
|                          |                          |   |                                      |             | RPM   | 750        | 804        | 844        | 883        | 920        | —          | —          |
|                          |                          |   |                                      |             | Watts   | 324        | 293        | 282        | 274        | 268        | —          | —          |
|                          |                          |   |                                      | High        | CFM   | —          | —          | —          | —          | 904 [427]  | 851 [402]  | 783 [370]  |
|                          |                          |   |                                      |             | RPM   | —          | —          | —          | —          | 949        | 978        | 1000       |
|                          |                          |   |                                      |             | Watts   | —          | —          | —          | —          | 334        | 322        | 314        |
| 3617ST/ 3621ST No Heater | High                     | 1104/1248 CFM [521/589 L/s]                           | 10x8 1/3 HP [249] 2 Speed            | Low         | CFM   | 1201 [567] | 1170 [552] | 1141 [538] | 1104 [521] | 1062 [501] | —          | —          |
|                          |                          |   |                                      |             | RPM   | 833        | 872        | 909        | 951        | 965        | —          | —          |
|                          |                          |   |                                      |             | Watts   | 462        | 427        | 406        | 396        | 385        | —          | —          |
|                          |                          |   |                                      | High        | CFM   | —          | —          | —          | —          | 1194 [563] | 1134 [535] | 1078 [509] |
|                          |                          |   |                                      |             | RPM   | —          | —          | —          | —          | 1024       | 1042       | 1060       |
|                          |                          |   |                                      |             | Watts   | —          | —          | —          | —          | 475        | 454        | 417        |

- Notes:
- All 208/240V PSC motors have voltage taps for 208 and 240 volts.
  - All 208/240V PSC motors are shipped on high speed and 240 volts.
  - If the application external static is less than 0.5" WC, adjust the motor speed to the low static speed as described below:
    - Unplug the black motor wire off the relay on the control board and plug in the red motor wire.
    - Replace the cap on the black motor wire.
  - Voltage change (208/240V motors):
    - Move the orange lead to transformer 208V tap from 240V tap. Replace the wire cap on 240V tap.
    - Unplug the purple motor wire off the transformer and plug in the yellow motor wire.
    - Replace the cap on the purple motor wire.
  - The above airflow table lists the airflow information for air handlers without heater and air handler with maximum heater allowed for each model.
  - The following formula can be used to calculate the approximate airflow, if a smaller (N kW) than the maximum heater kit is installed.  
 Approximate Airflow = Airflow without heater - (Airflow without heater - Airflow with maximum heater) x (N kW/maximum heater kW)

[ ] Designates Metric Conversions

### 115V/208V/480V Airflow Performance Data—SH1P (PSC Motor)

| Model No. SH1P                  | Motor Speed from Factory | Manufacturer Recommended Air-Flow Range (Min/Max) CFM | Blower Size/ Motor HP [W] # of Speed | Motor Speed | PSC CFM [L/s] Air Delivery/RPM/Watts—115/208/480V Volts |            |            |            |            |            |            |            |
|---------------------------------|--------------------------|---|--------------------------------------|-------------|---|------------|------------|------------|------------|------------|------------|------------|
|                                 |                          |   |                                      |             | External Static Pressure—Inches W.C. [kPa]              |            |            |            |            |            |            |            |
|                                 |                          |   |                                      |             | 0.1 [.02]   | 0.2 [.05]  | 0.3 [.07]  | 0.4 [.10]  | 0.5 [.12]  | 0.6 [.15]  | 0.7 [.17]  |            |
| 3617ST/3621ST with 18 kW Heater | High                     | 1060/1148 CFM [500/542 L/s]                           | 10x8 1/3 HP [249] 2 Speed            | Low         | CFM   | 1151 [543] | 1120 [529] | 1091 [515] | 1054 [497] | 1012 [478] | —          | —          |
|                                 |                          |   |                                      |             | RPM   | 883        | 922        | 959        | 1001       | 1015       | —          | —          |
|                                 |                          |   |                                      |             | Watts   | 442        | 407        | 386        | 376        | 365        | —          | —          |
|                                 |                          |   |                                      | High        | CFM   | —          | —          | —          | —          | 1094 [516] | 1034 [488] | 978 [462]  |
|                                 |                          |   |                                      |             | RPM   | —          | —          | —          | —          | 1049       | 1067       | 1085       |
|                                 |                          |   |                                      |             | Watts   | —          | —          | —          | —          | 445        | 424        | 387        |
| 4221ST No Heater                | High                     | 1241/1537 CFM [586/725 L/s]                           | 10x10 1/2 HP [373] 2 Speed           | Low         | CFM   | 1493 [705] | 1449 [684] | 1363 [643] | 1287 [607] | 1211 [571] | —          | —          |
|                                 |                          |   |                                      |             | RPM   | 822        | 858        | 885        | 931        | 958        | —          | —          |
|                                 |                          |   |                                      |             | Watts   | 540        | 519        | 506        | 484        | 459        | —          | —          |
|                                 |                          |   |                                      | High        | CFM   | —          | —          | —          | —          | 1514 [714] | 1411 [666] | 1315 [621] |
|                                 |                          |   |                                      |             | RPM   | —          | —          | —          | —          | 1061       | 1069       | 1078       |
|                                 |                          |   |                                      |             | Watts   | —          | —          | —          | —          | 710        | 702        | 677        |
| 4221ST with 20 kW Heater        | High                     | 1225/1500 CFM [579/708 L/s]                           | 10x10 1/2 HP [373] 2 Speed           | Low         | CFM   | 1423 [672] | 1379 [651] | 1293 [610] | 1217 [574] | 1141 [538] | —          | —          |
|                                 |                          |   |                                      |             | RPM   | 870        | 882        | 925        | 957        | 992        | —          | —          |
|                                 |                          |   |                                      |             | Watts   | 514        | 508        | 490        | 461        | 431        | —          | —          |
|                                 |                          |   |                                      | High        | CFM   | —          | —          | —          | —          | 1414 [667] | 1311 [619] | 1215 [573] |
|                                 |                          |   |                                      |             | RPM   | —          | —          | —          | —          | 1067       | 1080       | 1094       |
|                                 |                          |   |                                      |             | Watts   | —          | —          | —          | —          | 700        | 678        | 665        |
| 4821ST/4824ST No Heater         | High                     | 1395/1824 CFM [658/861 L/s]                           | 10x10 3/4 HP [559] 2 Speed           | Low         | CFM   | 1488 [702] | 1419 [670] | 1466 [692] | 1430 [675] | 1395 [658] | —          | —          |
|                                 |                          |   |                                      |             | RPM   | 812        | 861        | 912        | 943        | 973        | —          | —          |
|                                 |                          |   |                                      |             | Watts   | 554        | 545        | 526        | 508        | 491        | —          | —          |
|                                 |                          |   |                                      | High        | CFM   | —          | —          | —          | —          | 1824 [861] | 1767 [834] | 1653 [780] |
|                                 |                          |   |                                      |             | RPM   | —          | —          | —          | —          | 1102       | 1112       | 1121       |
|                                 |                          |   |                                      |             | Watts   | —          | —          | —          | —          | 871        | 830        | 770        |
| 4821ST/4824ST with 25 kW Heater | High                     | 1225/1500 CFM [579/708 L/s]                           | 10x10 3/4 HP [559] 2 Speed           | Low         | CFM   | 1418 [669] | 1349 [637] | 1396 [659] | 1360 [642] | 1325 [625] | —          | —          |
|                                 |                          |   |                                      |             | RPM   | 862        | 899        | 935        | 965        | 995        | —          | —          |
|                                 |                          |   |                                      |             | Watts   | 534        | 525        | 506        | 488        | 471        | —          | —          |
|                                 |                          |   |                                      | High        | CFM   | —          | —          | —          | —          | 1724 [814] | 1667 [787] | 1553 [733] |
|                                 |                          |   |                                      |             | RPM   | —          | —          | —          | —          | 1116       | 1119       | 1130       |
|                                 |                          |   |                                      |             | Watts   | —          | —          | —          | —          | 810        | 780        | 730        |
| 6024ST No Heater                | High                     | 1710/1967 CFM [807/928 L/s]                           | 11x11 3/4 HP [559] 2 Speed           | Low         | CFM   | 1866 [881] | 1833 [865] | 1806 [852] | 1772 [836] | 1710 [807] | —          | —          |
|                                 |                          |   |                                      |             | RPM   | 764        | 803        | 824        | 856        | 886        | —          | —          |
|                                 |                          |   |                                      |             | Watts   | 778        | 756        | 733        | 715        | 701        | —          | —          |
|                                 |                          |   |                                      | High        | CFM   | —          | —          | —          | —          | 1967 [928] | 1916 [904] | 1863 [879] |
|                                 |                          |   |                                      |             | RPM   | —          | —          | —          | —          | 948        | 959        | 991        |
|                                 |                          |   |                                      |             | Watts   | —          | —          | —          | —          | 850        | 827        | 816        |
| 6024ST with 30 kW Heater        | High                     | 1640/1796 CFM [773/847 L/s]                           | 11x11 3/4 HP [559] 2 Speed           | Low         | CFM   | 1796 [848] | 1763 [832] | 1736 [819] | 1702 [803] | 1640 [774] | —          | —          |
|                                 |                          |   |                                      |             | RPM   | 828        | 860        | 878        | 890        | 1001       | —          | —          |
|                                 |                          |   |                                      |             | Watts   | 735        | 718        | 705        | 695        | 678        | —          | —          |
|                                 |                          |   |                                      | High        | CFM   | —          | —          | —          | —          | 1867 [881] | 1816 [857] | 1763 [832] |
|                                 |                          |   |                                      |             | RPM   | —          | —          | —          | —          | 989        | 1005       | 1020       |
|                                 |                          |   |                                      |             | Watts   | —          | —          | —          | —          | 818        | 795        | 780        |

- Notes:
- All 208/240V PSC motors have voltage taps for 208 and 240 volts.
  - All 208/240V PSC motors are shipped on high speed and 240 volts.
  - All 115V PSC motors are shipped on high speed.
  - If the application external static is less than 0.5" WC, adjust the motor speed to the low static speed as described below:
    - Unplug the black motor wire off the relay on the control board and plug in the red motor wire.
    - Replace the cap on the black motor wire.
  - Voltage change (208/240V motors):
    - Move the orange lead to transformer 208V tap from 240V tap. Replace the wire cap on 240V tap.
    - Unplug the purple motor wire off the transformer and plug in the yellow motor wire.
    - Replace the cap on the purple motor wire.
  - All 480V PSC motors are shipped on high speed.
  - If the application external static is less than 0.5" WC, adjust the motor speed to the low static speed as described below for 3-ton through 4-ton air handlers.

- Unplug the black motor wire off the relay and remove the cap from the red motor wire.
- Plug the red motor wire to the relay and connect the black motor wire with the yellow motor wire.
- For 5-ton air handler, unplug the black motor wire off the relay and plug in the red motor wire, then cap the black motor wire. There is no yellow motor wire on 5-ton air handler.

**WARNING:** Do not connect red motor wire with yellow motor wire in any circumstance on 480V PSC motors. Connecting red motor wire with yellow motor wire will result in permanent motor damage.

- The above airflow table lists the airflow information for air handlers without heater and air handler with maximum heater allowed for each model.
- The following formula can be used to calculate the approximate airflow, if a smaller (N kW) than the maximum heater kit is installed. Approximate Airflow = Airflow without heater - (Airflow without heater - Airflow with maximum heater) x (N kW/maximum heater kW)

[ ] Designates Metric Conversions

## 240V Airflow Performance Data—SH1P (PSC Motor)

| Model No. SH1P           | Motor Speed from Factory | Manufacturer Recommended Air-Flow Range (Min/Max) CFM | Blower Size/ Motor HP [W] # of Speed | Motor Speed | PSC CFM [L/s] Air Delivery/RPM/Watts—240 Volts |            |            |            |            |            |            |            |
|--------------------------|--------------------------|---|--------------------------------------|-------------|--|------------|------------|------------|------------|------------|------------|------------|
|                          |                          |   |                                      |             | External Static Pressure—Inches W.C. [kPa]     |            |            |            |            |            |            |            |
|                          |                          |   |                                      |             | 0.1 [.02]                                      | 0.2 [.05]  | 0.3 [.07]  | 0.4 [.10]  | 0.5 [.12]  | 0.6 [.15]  | 0.7 [.17]  |            |
| 1817ST No Heater         | High 240V                | 523/705 CFM [247/333 L/s]                             | 10x6 1/5 HP [149] 2 Speed            | Low         | CFM  | 681 [321]  | 636 [300]  | 606 [286]  | 567 [268]  | 523 [247]  | —          | —          |
|                          |                          |   |                                      |             | RPM  | 541        | 601        | 670        | 714        | 768        | —          | —          |
|                          |                          |   |                                      |             | Watts  | 193        | 181        | 173        | 164        | 157        | —          | —          |
|                          |                          |   |                                      | High        | CFM  | —          | —          | —          | —          | 705 [333]  | 650 [307]  | 599 [283]  |
|                          |                          |   |                                      |             | RPM  | —          | —          | —          | —          | 815        | 861        | 989        |
|                          |                          |   |                                      |             | Watts  | —          | —          | —          | —          | 239        | 227        | 204        |
| 1817ST with 13 kW Heater | High 240V                | 493/655 CFM [233/309 L/s]                             | 10x6 1/5 HP [149] 2 Speed            | Low         | CFM  | 651 [307]  | 606 [286]  | 576 [272]  | 537 [253]  | 493 [233]  | —          | —          |
|                          |                          |   |                                      |             | RPM  | 571        | 631        | 700        | 744        | 798        | —          | —          |
|                          |                          |   |                                      |             | Watts  | 184        | 172        | 164        | 155        | 148        | —          | —          |
|                          |                          |   |                                      | High        | CFM  | —          | —          | —          | —          | 655 [309]  | 600 [283]  | 549 [259]  |
|                          |                          |   |                                      |             | RPM  | —          | —          | —          | —          | 840        | 886        | 1014       |
|                          |                          |   |                                      |             | Watts  | —          | —          | —          | —          | 228        | 216        | 193        |
| 2417ST No Heater         | High 240V                | 682/897 CFM [322/423 L/s]                             | 10x6 1/5 HP [149] 2 Speed            | Low         | CFM  | 875 [413]  | 806 [380]  | 787 [371]  | 739 [349]  | 682 [322]  | —          | —          |
|                          |                          |   |                                      |             | RPM  | 648        | 700        | 745        | 794        | 827        | —          | —          |
|                          |                          |   |                                      |             | Watts  | 259        | 255        | 243        | 234        | 227        | —          | —          |
|                          |                          |   |                                      | High        | CFM  | —          | —          | —          | —          | 897 [423]  | 851 [402]  | 765 [361]  |
|                          |                          |   |                                      |             | RPM  | —          | —          | —          | —          | 906        | 925        | 955        |
|                          |                          |   |                                      |             | Watts  | —          | —          | —          | —          | 332        | 318        | 306        |
| 2417ST with 13 kW Heater | High 240V                | 652/847 CFM [308/400 L/s]                             | 10x6 1/5 HP [149] 2 Speed            | Low         | CFM  | 845 [399]  | 776 [366]  | 757 [357]  | 709 [335]  | 652 [308]  | —          | —          |
|                          |                          |   |                                      |             | RPM  | 678        | 730        | 775        | 824        | 857        | —          | —          |
|                          |                          |   |                                      |             | Watts  | 250        | 246        | 234        | 225        | 218        | —          | —          |
|                          |                          |   |                                      | High        | CFM  | —          | —          | —          | —          | 847 [400]  | 801 [378]  | 715 [337]  |
|                          |                          |   |                                      |             | RPM  | —          | —          | —          | —          | 931        | 950        | 980        |
|                          |                          |   |                                      |             | Watts  | —          | —          | —          | —          | 321        | 307        | 295        |
| 3017ST No Heater         | High 240V                | 883/1015 CFM [417/479 L/s]                            | 10x8 1/4 HP [186] 2 Speed            | Low         | CFM  | 1038 [490] | 1010 [477] | 976 [461]  | 925 [437]  | 883 [417]  | —          | —          |
|                          |                          |   |                                      |             | RPM  | 721        | 771        | 799        | 848        | 880        | —          | —          |
|                          |                          |   |                                      |             | Watts  | 325        | 314        | 303        | 290        | 286        | —          | —          |
|                          |                          |   |                                      | High        | CFM  | —          | —          | —          | —          | 1015 [479] | 963 [454]  | 890 [420]  |
|                          |                          |   |                                      |             | RPM  | —          | —          | —          | —          | 928        | 955        | 974        |
|                          |                          |   |                                      |             | Watts  | —          | —          | —          | —          | 356        | 341        | 329        |
| 3017ST with 18 kW Heater | High 240V                | 833/915 CFM [393/432 L/s]                             | 10x8 1/4 HP [186] 2 Speed            | Low         | CFM  | 988 [466]  | 960 [453]  | 926 [437]  | 875 [413]  | 833 [393]  | —          | —          |
|                          |                          |   |                                      |             | RPM  | 771        | 821        | 849        | 898        | 930        | —          | —          |
|                          |                          |   |                                      |             | Watts  | 305        | 294        | 283        | 270        | 266        | —          | —          |
|                          |                          |   |                                      | High        | CFM  | —          | —          | —          | —          | 915 [432]  | 863 [407]  | 790 [373]  |
|                          |                          |   |                                      |             | RPM  | —          | —          | —          | —          | 953        | 980        | 999        |
|                          |                          |   |                                      |             | Watts  | —          | —          | —          | —          | 326        | 311        | 299        |
| 3617ST/ 3621ST No Heater | High 240V                | 1104/1194 CFM [521/563 L/s]                           | 10x8 1/3 HP [249] 2 Speed            | Low         | CFM  | 1229 [580] | 1201 [567] | 1170 [552] | 1141 [538] | 1104 [521] | —          | —          |
|                          |                          |   |                                      |             | RPM  | 788        | 833        | 872        | 909        | 951        | —          | —          |
|                          |                          |   |                                      |             | Watts  | 466        | 462        | 427        | 406        | 395        | —          | —          |
|                          |                          |   |                                      | High        | CFM  | —          | —          | —          | —          | 1248 [589] | 1194 [563] | 1133 [535] |
|                          |                          |   |                                      |             | RPM  | —          | —          | —          | —          | 1008       | 1028       | 1042       |
|                          |                          |   |                                      |             | Watts  | —          | —          | —          | —          | 488        | 475        | 454        |

- Notes:
- All 208/240V PSC motors have voltage taps for 208 and 240 volts.
  - All 208/240V PSC motors are shipped on high speed and 240 volts.
  - All 115V PSC motors are shipped on high speed.
  - If the application external static is less than 0.5" WC, adjust the motor speed to the low static speed as described below:
    - Unplug the black motor wire off the relay on the control board and plug in the red motor wire.
    - Replace the cap on the black motor wire.
  - Voltage change (208/240V motors):
    - Move the orange lead to transformer 208V tap from 240V tap.
    - Replace the wire cap on 240V tap.
    - Unplug the purple motor wire off the transformer and plug in the yellow motor wire.
    - Replace the cap on the purple motor wire.
  - All 480V PSC motors are shipped on high speed.
  - If the application external static is less than 0.5" WC, adjust the motor speed to the low static speed as described below for 3-ton through 4-ton air handlers.

- Unplug the black motor wire off the relay and remove the cap from the red motor wire.
- Plug the red motor wire to the relay and connect the black motor wire with the yellow motor wire.
- For 5-ton air handler, unplug the black motor wire off the relay and plug in the red motor wire, then cap the black motor wire. There is no yellow motor wire on 5-ton air handler.

**WARNING:** Do not connect red motor wire with yellow motor wire in any circumstance on 480V PSC motors. Connecting red motor wire with yellow motor wire will result in permanent motor damage.

- The above airflow table lists the airflow information for air handlers without heater and air handler with maximum heater allowed for each model.
- The following formula can be used to calculate the approximate airflow, if a smaller (N kW) than the maximum heater kit is installed. Approximate Airflow = Airflow without heater - (Airflow without heater - Airflow with maximum heater) x (N kW/maximum heater kW)

[ ] Designates Metric Conversions

### 240V Airflow Performance Data—SH1P (PSC Motor)

| Model No. SH1P                            | Motor Speed from Factory | Manufacturer Recommended Air-Flow Range (Min/Max) CFM | Blower Size/ Motor HP [W] # of Speed | Motor Speed | PSC CFM [L/s] Air Delivery/RPM/Watts—240 Volts |            |            |            |            |            |            |            |
|---|--------------------------|---|--------------------------------------|-------------|--|------------|------------|------------|------------|------------|------------|------------|
|   |                          |   |                                      |             | External Static Pressure—Inches W.C. [kPa]     |            |            |            |            |            |            |            |
|   |                          |   |                                      |             | 0.1 [.02]                                      | 0.2 [.05]  | 0.3 [.07]  | 0.4 [.10]  | 0.5 [.12]  | 0.6 [.15]  | 0.7 [.17]  |            |
| 3617ST/<br>3621ST<br>with 18 kW<br>Heater | High<br>240V             | 1054/1094 CFM<br>[497/516 L/s]                        | 10x8<br>1/3 HP [249]<br>2 Speed      | Low         | CFM  | 1179 [556] | 1151 [543] | 1120 [529] | 1091 [515] | 1054 [497] | —          | —          |
|   |                          |   |                                      |             | RPM  | 838        | 883        | 922        | 959        | 1001       | —          | —          |
|   |                          |   |                                      |             | Watts  | 446        | 442        | 407        | 386        | 375        | —          | —          |
|   |                          |   |                                      | High        | CFM  | —          | —          | —          | —          | 1148 [542] | 1094 [516] | 1033 [487] |
|   |                          |   |                                      |             | RPM  | —          | —          | —          | —          | 1033       | 1053       | 1067       |
|   |                          |   |                                      |             | Watts  | —          | —          | —          | —          | 458        | 445        | 424        |
| 4221ST<br>No Heater                       | High<br>240V             | 1211/1514 CFM<br>[571/714 L/s]                        | 10x10<br>1/2 HP [373]<br>2 Speed     | Low         | CFM  | 1526 [720] | 1474 [696] | 1427 [673] | 1307 [617] | 1241 [586] | —          | —          |
|   |                          |   |                                      |             | RPM  | 834        | 870        | 902        | 948        | 968        | —          | —          |
|   |                          |   |                                      |             | Watts  | 560        | 549        | 535        | 476        | 462        | —          | —          |
|   |                          |   |                                      | High        | CFM  | —          | —          | —          | —          | 1537 [725] | 1418 [669] | 1334 [630] |
|   |                          |   |                                      |             | RPM  | —          | —          | —          | —          | 1072       | 1077       | 1085       |
|   |                          |   |                                      |             | Watts  | —          | —          | —          | —          | 860        | 835        | 820        |
| 4221ST<br>with 20 kW<br>Heater            | High<br>240V             | 1225/1500 CFM<br>[579/708 L/s]                        | 10x10<br>1/2 HP [373]<br>2 Speed     | Low         | CFM  | 1456 [687] | 1404 [663] | 1357 [640] | 1237 [584] | 1171 [553] | —          | —          |
|   |                          |   |                                      |             | RPM  | 886        | 906        | 925        | 959        | 992        | —          | —          |
|   |                          |   |                                      |             | Watts  | 542        | 524        | 505        | 468        | 431        | —          | —          |
|   |                          |   |                                      | High        | CFM  | —          | —          | —          | —          | 1437 [678] | 1318 [622] | 1234 [582] |
|   |                          |   |                                      |             | RPM  | —          | —          | —          | —          | 1080       | 1090       | 1105       |
|   |                          |   |                                      |             | Watts  | —          | —          | —          | —          | 840        | 800        | 785        |
| 4821ST/<br>4824ST<br>No Heater            | High<br>240V             | 1455/1787 CFM<br>[687/843 L/s]                        | 10x10<br>3/4 HP [559]<br>2 Speed     | Low         | CFM  | 1560 [736] | 1550 [731] | 1543 [728] | 1510 [713] | 1455 [687] | —          | —          |
|   |                          |   |                                      |             | RPM  | 807        | 840        | 914        | 941        | 989        | —          | —          |
|   |                          |   |                                      |             | Watts  | 601        | 589        | 553        | 541        | 507        | —          | —          |
|   |                          |   |                                      | High        | CFM  | —          | —          | —          | —          | 1787 [843] | 1679 [792] | 1575 [743] |
|   |                          |   |                                      |             | RPM  | —          | —          | —          | —          | 1089       | 1098       | 1110       |
|   |                          |   |                                      |             | Watts  | —          | —          | —          | —          | 695        | 665        | 630        |
| 4821ST/<br>4824ST<br>with 25 kW<br>Heater | High<br>240V             | 1225/1500 CFM<br>[579/708 L/s]                        | 10x10<br>3/4 HP [559]<br>2 Speed     | Low         | CFM  | 1490 [703] | 1480 [698] | 1473 [695] | 1440 [680] | 1385 [654] | —          | —          |
|   |                          |   |                                      |             | RPM  | 857        | 897        | 937        | 974        | 1011       | —          | —          |
|   |                          |   |                                      |             | Watts  | 581        | 569        | 533        | 521        | 487        | —          | —          |
|   |                          |   |                                      | High        | CFM  | —          | —          | —          | —          | 1687 [796] | 1579 [745] | 1475 [696] |
|   |                          |   |                                      |             | RPM  | —          | —          | —          | —          | 1095       | 1107       | 1120       |
|   |                          |   |                                      |             | Watts  | —          | —          | —          | —          | 670        | 635        | 615        |
| 6024ST<br>No Heater                       | High<br>240V             | 1766/1965 CFM<br>[833/927 L/s]                        | 11x11<br>3/4 HP [559]<br>2 Speed     | Low         | CFM  | 1944 [917] | 1912 [902] | 1860 [878] | 1813 [856] | 1766 [833] | —          | —          |
|   |                          |   |                                      |             | RPM  | 764        | 803        | 838        | 865        | 889        | —          | —          |
|   |                          |   |                                      |             | Watts  | 779        | 763        | 747        | 729        | 708        | —          | —          |
|   |                          |   |                                      | High        | CFM  | —          | —          | —          | —          | 1965 [927] | 1908 [900] | 1854 [875] |
|   |                          |   |                                      |             | RPM  | —          | —          | —          | —          | 943        | 967        | 977        |
|   |                          |   |                                      |             | Watts  | —          | —          | —          | —          | 828        | 799        | 795        |
| 6024ST<br>with 30 kW<br>Heater            | High<br>240V             | 1666/1844 CFM<br>[786/870 L/s]                        | 11x11<br>3/4 HP [559]<br>2 Speed     | Low         | CFM  | 1844 [870] | 1812 [855] | 1760 [831] | 1713 [808] | 1666 [786] | —          | —          |
|   |                          |   |                                      |             | RPM  | 839        | 865        | 890        | 913        | 935        | —          | —          |
|   |                          |   |                                      |             | Watts  | 745        | 729        | 713        | 696        | 678        | —          | —          |
|   |                          |   |                                      | High        | CFM  | —          | —          | —          | —          | 1865 [880] | 1808 [853] | 1754 [828] |
|   |                          |   |                                      |             | RPM  | —          | —          | —          | —          | 987        | 1001       | 1014       |
|   |                          |   |                                      |             | Watts  | —          | —          | —          | —          | 788        | 766        | 744        |

- Notes:
- All 208/240V PSC motors have voltage taps for 208 and 240 volts.
  - All 208/240V PSC motors are shipped on high speed and 240 volts.
  - If the application external static is less than 0.5" WC, adjust the motor speed to the low static speed as described below:
    - Unplug the black motor wire off the relay on the control board and plug in the red motor wire.
    - Replace the cap on the black motor wire.
  - Voltage change (208/240V motors):
    - Move the orange lead to transformer 208V tap from 240V tap. Replace the wire cap on 240V tap.
    - Unplug the purple motor wire off the transformer and plug in the yellow motor wire.
    - Replace the cap on the purple motor wire.
  - The above airflow table lists the airflow information for air handlers without heater and air handler with maximum heater allowed for each model.
  - The following formula can be used to calculate the approximate airflow, if a smaller (N kW) than the maximum heater kit is installed.  
 Approximate Airflow = Airflow without heater - (Airflow without heater - Airflow with maximum heater) x (N kW/maximum heater kW)

[ ] Designates Metric Conversions

## 208/240V Airflow Performance Data—SH1Q

| Model No. SH1Q           | Tonnage Application | Motor Speed From Factory | Blower Size/ Motor HP [W] # of Speed | Motor Speed | CFM [L/s] Air Delivery/RPM/Watts (No Filter) |            |            |            |            |            |            |            |
|--------------------------|---------------------|--------------------------|--------------------------------------|-------------|--|------------|------------|------------|------------|------------|------------|------------|
|                          |                     |                          |                                      |             | External Static Pressure—Inches W.C. [kPa]   |            |            |            |            |            |            |            |
|                          |                     |                          |                                      |             | 0.1 [.02]                                    | 0.2 [.05]  | 0.3 [.07]  | 0.4 [.10]  | 0.5 [.12]  | 0.6 [.15]  | 0.7 [.17]  |            |
| 4221ST No Heater         | 3.5 Ton             | 5                        | 10x10<br>3/4 HP [559]<br>5 Speed     | 2           | CFM  | 1473 [695] | 1442 [681] | 1401 [661] | 1373 [648] | 1337 [631] | —          | —          |
|                          |                     |                          |                                      |             | RPM  | 781        | 825        | 867        | 905        | 949        | —          | —          |
|                          |                     |                          |                                      |             | Watts  | 257        | 271        | 303        | 307        | 315        | —          | —          |
|                          |                     |                          |                                      | 3           | CFM  | —          | —          | —          | —          | 1447 [683] | 1433 [676] | 1402 [662] |
|                          |                     |                          |                                      |             | RPM  | —          | —          | —          | —          | 987        | 1034       | 1065       |
|                          |                     |                          |                                      |             | Watts  | —          | —          | —          | —          | 394        | 406        | 405        |
| 4221ST with 20 kW Heater | 3.5 Ton             | 5                        | 10x10<br>3/4 HP [559]<br>5 Speed     | 2           | CFM  | 1433 [676] | 1402 [662] | 1361 [642] | 1333 [629] | 1297 [612] | —          | —          |
|                          |                     |                          |                                      |             | RPM  | 831        | 875        | 919        | 954        | 989        | —          | —          |
|                          |                     |                          |                                      |             | Watts  | 277        | 295        | 313        | 319        | 325        | —          | —          |
|                          |                     |                          |                                      | 3           | CFM  | —          | —          | —          | —          | 1333 [629] | 1300 [613] | 1267 [598] |
|                          |                     |                          |                                      |             | RPM  | —          | —          | —          | —          | 1011       | 1046       | 1080       |
|                          |                     |                          |                                      |             | Watts  | —          | —          | —          | —          | 350        | 364        | 377        |
| 4221ST No Heater         | 4 Ton               | 5                        | 10x10<br>3/4 HP [559]<br>5 Speed     | 4           | CFM  | 1665 [786] | 1631 [770] | 1601 [756] | 1572 [742] | 1535 [724] | —          | —          |
|                          |                     |                          |                                      |             | RPM  | 853        | 893        | 934        | 968        | 1015       | —          | —          |
|                          |                     |                          |                                      |             | Watts  | 351        | 387        | 401        | 406        | 422        | —          | —          |
|                          |                     |                          |                                      | 5           | CFM  | —          | —          | —          | —          | 1654 [781] | 1624 [766] | 1563 [738] |
|                          |                     |                          |                                      |             | RPM  | —          | —          | —          | —          | 1036       | 1078       | 1095       |
|                          |                     |                          |                                      |             | Watts  | —          | —          | —          | —          | 500        | 513        | 523        |
| 4221ST with 25 kW Heater | 4 Ton               | 5                        | 10x10<br>3/4 HP [559]<br>5 Speed     | 4           | CFM  | 1625 [767] | 1591 [751] | 1561 [737] | 1532 [723] | 1495 [706] | —          | —          |
|                          |                     |                          |                                      |             | RPM  | 894        | 932        | 970        | 1020       | 1052       | —          | —          |
|                          |                     |                          |                                      |             | Watts  | 389        | 400        | 410        | 430        | 450        | —          | —          |
|                          |                     |                          |                                      | 5           | CFM  | —          | —          | —          | —          | 1614 [762] | 1584 [748] | 1523 [719] |
|                          |                     |                          |                                      |             | RPM  | —          | —          | —          | —          | 1085       | 1090       | 1105       |
|                          |                     |                          |                                      |             | Watts  | —          | —          | —          | —          | 514        | 520        | 530        |

- Notes:
- Constant Torque motor speed changes.
  - All Constant Torque motors have 5 speed tabs.
    - Speed tab 1 is for continuous fan.
    - Speed tab 2 (low static) and
    - Speed tab 3 (high static) are for lower tonnage.
    - Speed tab 4 (low static) and
    - Speed tab 5 (high static) are for higher tonnage.
  - Constant Torque air handlers are always shipped from factory at Speed tab 5, except for -4824, which is set at Speed tab 3. For instance, (-)H1T-HM2417JA is always shipped at high static 2-ton airflow (Speed tab 5). To change to 1.5-ton airflow, move the blue wire to Speed tab 2 or 3 on the Constant Torque motor.
  - The low static Speed tab 2 (lower tonnage) and 4 (higher tonnage) are used for external static below 0.5" WC. The high static Speed tab 3 (lower tonnage) and 5 (higher tonnage) are used for external static exceeding 0.5" WC. Move the blue wire to the appropriate
  - The airflow for continuous fan (Speed tab 1) is always set at 50% of the Speed tab 4.
  - The above airflow table lists the airflow information for air handlers without heater and air handler with maximum heater allowed for each model.
  - The following formula can be used to calculate the approximate airflow, if a smaller (N kW) than the maximum heater kit is installed.  
 Approximate Airflow = Airflow without heater – (Airflow without heater – Airflow with maximum heater) x (N kW/maximum heater)

[ ] Designates Metric Conversions

### Electrical Data – Blower Motor Only – No Electric Heat

| Model SH1P    | Voltage | Application Phase* | Hertz | HP [W]    | RPM  | Speeds | Circuit Amps. | Minimum Circuit Ampacity | Maximum Circuit Protector |
|---------------|---------|--------------------|-------|-----------|------|--------|---------------|--------------------------|---------------------------|
| 1817ST        | 115     | 1                  | 60    | 1/5 [149] | 1075 | 2      | 2.3           | 3.0                      | 15                        |
| 2417ST        |         |                    |       | 1/5 [149] | 1075 | 2      | 3.8           | 5.0                      | 15                        |
| 3017ST        |         |                    |       | 1/4 [186] | 1075 | 2      | 4.7           | 6.0                      | 15                        |
| 3617ST        |         |                    |       | 1/3 [249] | 1075 | 2      | 6.1           | 8.0                      | 15                        |
| 4221ST        |         |                    |       | 1/2 [373] | 1075 | 2      | 7.9           | 10.0                     | 15                        |
| 4821ST        |         |                    |       | 3/4 [559] | 1075 | 2      | 8.4           | 11.0                     | 15                        |
| 1817ST        | 208/240 | 1 & 3              | 60    | 1/5 [149] | 1075 | 2      | 1.7           | 3.0                      | 15                        |
| 2417ST        |         |                    |       | 1/5 [149] | 1075 | 2      | 1.7           | 3.0                      | 15                        |
| 3017ST        |         |                    |       | 1/4 [186] | 1075 | 2      | 2.5           | 4.0                      | 15                        |
| 3617ST/3621ST |         |                    |       | 1/3 [249] | 1075 | 2      | 2.5           | 4.0                      | 15                        |
| 4221ST        |         |                    |       | 1/2 [373] | 1075 | 2      | 5.2           | 7.0                      | 15                        |
| 4821ST/4824ST |         |                    |       | 3/4 [559] | 1075 | 2      | 5.2           | 7.0                      | 15                        |
| 3617ST        | 480     | 3                  | 60    | 1/3 [249] | 1075 | 2      | 1.4           | 2.0                      | 15                        |
| 4221ST        |         |                    |       | 1/2 [373] | 1075 | 2      | 2.1           | 3.0                      | 15                        |
| 4821ST/4824ST |         |                    |       | 3/4 [559] | 1075 | 2      | 2.2           | 3.0                      | 15                        |
| 6024ST        |         |                    |       | 3/4 [559] | 1075 | 2      | 2.2           | 3.0                      | 15                        |

\* Blower motors are all single phase motors.

### Blower Motor Data – SH1Q

| Model SH1Q | Voltage | Phase | Hertz | HP        | RPM      | Speeds | Motor Amps | Minimum Circuit Ampacity | Maximum Overcurrent Protection |
|------------|---------|-------|-------|-----------|----------|--------|------------|--------------------------|--------------------------------|
| 4221ST     | 208/240 | 1 & 3 | 60    | 3/4 [559] | 300-1100 | 4      | 4.0        | 5                        | 15                             |

[ ] Designates Metric Conversions

## Electrical Data – With Electric Heat

Installation of the U.L. Listed original equipment manufacturer provided heater kits listed in the following table is recommended for all auxiliary heating requirements.

| Air Handler Model (-)H1P | Heater Model No. | Heater kW (208/240V) (480V) | PH/HZ    | No. Elements kW Per | Type Supply Circuit<br>Single Circuit<br>Multiple Circuit | Heater Amps. | Motor Amps. | Minimum Circuit Ampacity | Maximum Overcurrent Protection |
|--------------------------|------------------|-----------------------------|----------|---------------------|---|--------------|-------------|--------------------------|--------------------------------|
| 1817S<br>2417S           | RXBH-17?03J      | 2.25/3.0                    | 1/60     | 1 - 3.0             | SINGLE  | 10.8/12.5    | 1.7         | 16/18                    | 20/20                          |
|                          | RXBH-1724?03J    | 2.25/3.0                    | 1/60     | 1 - 3.0             | SINGLE  | 10.8/12.5    | 1.7         | 16/18                    | 20/20                          |
|                          | RXBH-1724?05J    | 3.6/4.8                     | 1/60     | 1 - 4.8             | SINGLE  | 17.3/20.0    | 1.7         | 24/28                    | 25/30                          |
|                          | RXBH-1724?07J    | 5.4/7.2                     | 1/60     | 2 - 3.6             | SINGLE  | 26.0/30.0    | 1.7         | 35/40                    | 35/40                          |
|                          | RXBH-1724?10J    | 7.2/9.6                     | 1/60     | 2 - 4.8             | SINGLE  | 34.6/40.0    | 1.7         | 46/53                    | 50/60                          |
|                          | RXBH-1724A13J    | 9.4/12.5                    | 1/60     | 3 - 4.17            | SINGLE  | 45.1/52.1    | 1.7         | 59/68                    | 60/70                          |
|                          | RXBH-1724A13J    | 3.1/4.2                     | 1/60     | 1 - 4.17            | MULTIPLE CKT 1  | 15.0/17.4    | 1.7         | 21/24                    | 25/25                          |
|                          |                  | 6.3/8.3                     | 1/60     | 2 - 4.17            | MULTIPLE CKT 2  | 30.1/34.7    | 0.0         | 38/44                    | 40/45                          |
|                          | RXBH-1724A07C    | 5.4/7.2                     | 3/60     | 3 - 2.4             | SINGLE  | 15.0/17.3    | 1.7         | 21/24                    | 25/25                          |
|                          | RXBH-1724A10C    | 7.2/9.6                     | 3/60     | 3 - 3.2             | SINGLE  | 20.0/23.1    | 1.7         | 28/31                    | 30/35                          |
| RXBH-1724A13C            | 9.4/12.5         | 3/60                        | 3 - 4.17 | SINGLE              | 26.1/30.1   | 1.7          | 35/40       | 35/40                    |                                |
| 3017S/3617S              | RXBH-17?03J      | 2.25/3.0                    | 1/60     | 1 - 3.0             | SINGLE  | 10.8/12.5    | 2.5         | 17/19                    | 20/20                          |
| 3017S<br>3617S<br>3621S  | RXBH-1724?03J    | 2.25/3.0                    | 1/60     | 1 - 3.0             | SINGLE  | 10.8/12.5    | 2.5         | 17/19                    | 20/20                          |
|                          | RXBH-1724?05J    | 3.6/4.8                     | 1/60     | 1 - 4.8             | SINGLE  | 17.3/20.0    | 2.5         | 25/29                    | 25/30                          |
|                          | RXBH-1724?07J    | 5.4/7.2                     | 1/60     | 2 - 3.6             | SINGLE  | 26.0/30.0    | 2.5         | 36/41                    | 40/45                          |
|                          | RXBH-1724?10J    | 7.2/9.6                     | 1/60     | 2 - 4.8             | SINGLE  | 34.6/40.0    | 2.5         | 47/54                    | 50/60                          |
|                          | RXBH-1724A13J    | 9.4/12.5                    | 1/60     | 3 - 4.17            | SINGLE  | 45.1/52.1    | 2.5         | 60/69                    | 60/70                          |
|                          | RXBH-1724A13J    | 3.1/4.2                     | 1/60     | 1 - 4.17            | MULTIPLE CKT 1  | 15.0/17.4    | 2.5         | 22/25                    | 25/25                          |
|                          |                  | 6.3/8.3                     | 1/60     | 2 - 4.17            | MULTIPLE CKT 2  | 30.1/34.7    | 0.0         | 38/44                    | 40/45                          |
|                          | RXBH-1724A15J    | 10.8/14.4                   | 1/60     | 3 - 4.8             | SINGLE  | 51.9/60.0    | 2.5         | 68/79                    | 70/80                          |
|                          | RXBH-1724A15J    | 3.6/4.8                     | 1/60     | 1 - 4.8             | MULTIPLE CKT 1  | 17.3/20.0    | 2.5         | 25/29                    | 25/30                          |
|                          |                  | 7.2/9.6                     | 1/60     | 2 - 4.8             | MULTIPLE CKT 2  | 34.6/40.0    | 0.0         | 44/50                    | 45/50                          |
|                          | RXBH-1724A18J    | 12.8/17.0                   | 1/60     | 3 - 5.68            | SINGLE  | 61.6/70.8    | 2.5         | 81/92                    | 90/100                         |
|                          | RXBH-1724A18J    | 4.3/5.7                     | 1/60     | 1 - 5.68            | MULTIPLE CKT 1  | 20.5/23.6    | 2.5         | 29/33                    | 30/35                          |
|                          |                  | 8.5/11.3                    | 1/60     | 2 - 5.68            | MULTIPLE CKT 2  | 41.1/47.2    | 0.0         | 52/59                    | 60/60                          |
|                          | RXBH-1724A07C    | 5.4/7.2                     | 3/60     | 3 - 2.4             | SINGLE  | 15.0/17.3    | 2.5         | 22/25                    | 25/25                          |
|                          | RXBH-1724A10C    | 7.2/9.6                     | 3/60     | 3 - 3.2             | SINGLE  | 20.0/23.1    | 2.5         | 29/32                    | 30/35                          |
|                          | RXBH-1724A13C    | 9.4/12.5                    | 3/60     | 3 - 4.17            | SINGLE  | 26.1/30.1    | 2.5         | 36/41                    | 40/45                          |
|                          | RXBH-1724A15C    | 10.8/14.4                   | 3/60     | 3 - 4.8             | SINGLE  | 30.0/34.6    | 2.5         | 41/47                    | 45/50                          |
|                          | RXBH-1724A18C    | 12.8/17.0                   | 3/60     | 3 - 5.68            | SINGLE  | 35.5/41.0    | 2.5         | 48/55                    | 50/60                          |
| 3017S<br>3617S           | RXBH-17A07D      | 7.2                         | 3/60     | 3 - 2.4             | SINGLE  | 8.7          | 1.4         | 13                       | 15                             |
|                          | RXBH-17A10D      | 9.6                         | 3/60     | 3 - 3.2             | SINGLE  | 11.6         | 1.4         | 17                       | 20                             |
|                          | RXBH-17A15D      | 14.4                        | 3/60     | 3 - 4.8             | SINGLE  | 17.3         | 1.4         | 24                       | 25                             |
|                          | RXBH-17A18D      | 17.0                        | 3/60     | 3 - 5.68            | SINGLE  | 20.4         | 1.4         | 28                       | 30                             |
| 3621S                    | RXBH-24A07D      | 7.2                         | 3/60     | 3 - 2.4             | SINGLE  | 8.7          | 1.4         | 13                       | 15                             |
|                          | RXBH-24A10D      | 9.6                         | 3/60     | 3 - 3.2             | SINGLE  | 11.6         | 1.4         | 17                       | 20                             |
|                          | RXBH-24A15D      | 14.4                        | 3/60     | 3 - 4.8             | SINGLE  | 17.3         | 1.4         | 24                       | 25                             |
|                          | RXBH-24A18D      | 17.0                        | 3/60     | 6 - 2.84            | SINGLE  | 20.4         | 1.4         | 28                       | 30                             |

• ? Heater Kit Connection Type A = Breaker B = Terminal Block C = Pullout Disconnect

① D Voltage = 480 Volts.

\*Values only. No single point kit available.

**NOTES:**

- Electric heater BTUH - (heater watts + motor watts) x 3.414 (see airflow table for motor watts).
- Supply circuit protective devices may be fuses or "HACR" type circuit breakers.
- If non-standard fuse size is specified, use next size larger standard fuse size.
- Largest motor load is included in single circuit or circuit 1 of multiple circuits.
- Heater loads are balanced on 3 phase models with 3 or 6 heaters only.
- No electrical heating elements are permitted to be used with A voltage (115V) air handler.

- J voltage (208/240V) single phase air handler is designed to be used with single or three phase 208/240V volt electric heaters. In the case of connecting 3 phase power to air handler terminal block without the heater, bring only two leads to terminal block, cap, insulate and fully secure the third lead.
- Do not use 480V electrical heaters on 208/240V air handlers.
- If the kit is listed under both single and multiple circuits, the kit is shipped from factory as multiple circuits. For single phase application, Jumper bar kit RXBJ-A21 and RXBJ-A31 can be used to convert multiple circuits to a single supply circuit. Refer to Accessory Section for details.

[ ] Designates Metric Conversions



## Electrical Data – With Electric Heat (Cont.)

Installation of the U.L. Listed original equipment manufacturer provided heater kits listed in the following table is recommended for all auxiliary heating requirements.

| Air Handler Model (-)H1P    | Heater Model No.            | Heater kW (208/240V) (480V) | PH/HZ   | No. Elements kW Per | Type Supply Circuit<br>Single Circuit<br>Multiple Circuit | Heater Amps. | Motor Amps. | Minimum Circuit Ampacity | Maximum Overcurrent Protection |
|-----------------------------|-----------------------------|-----------------------------|---------|---------------------|---|--------------|-------------|--------------------------|--------------------------------|
| 4221S<br>4821S<br>4824S     | RXBH-1724?05J               | 3.6/4.8                     | 1/60    | 1 - 4.8             | SINGLE  | 17.3/20.0    | 5.2         | 29/32                    | 30/35                          |
|                             | RXBH-1724?07J               | 5.4/7.2                     | 1/60    | 2 - 3.6             | SINGLE  | 26.0/30.0    | 5.2         | 39/44                    | 40/45                          |
|                             | RXBH-1724?10J               | 7.2/9.6                     | 1/60    | 2 - 4.8             | SINGLE  | 34.6/40.0    | 5.2         | 50/57                    | 50/60                          |
|                             | RXBH-1724A15J               | 10.8/14.4                   | 1/60    | 3 - 4.8             | SINGLE  | 51.9/60.0    | 5.2         | 72/82                    | 80/90                          |
|                             | RXBH-1724A15J               | 3.6/4.8                     | 1/60    | 1 - 4.8             | MULTIPLE CKT 1  | 17.3/20.0    | 5.2         | 29/32                    | 30/35                          |
|                             |                             | 7.2/9.6                     | 1/60    | 2 - 4.8             | MULTIPLE CKT 2  | 34.6/40.0    | 0.0         | 44/50                    | 45/50                          |
|                             | RXBH-1724A18J               | 12.8/17.0                   | 1/60    | 3 - 5.68            | SINGLE  | 61.6/70.8    | 5.2         | 84/95                    | 90/100                         |
|                             | RXBH-1724A18J               | 4.3/5.7                     | 1/60    | 1 - 5.68            | MULTIPLE CKT 1  | 20.5/23.6    | 5.2         | 33/36                    | 35/40                          |
|                             |                             | 8.5/11.3                    | 1/60    | 2 - 5.68            | MULTIPLE CKT 2  | 41.1/47.2    | 0.0         | 52/59                    | 60/60                          |
|                             | RXBH-24A20J                 | 14.4/19.2                   | 1/60    | 4 - 4.8             | SINGLE  | 69.2/80.0    | 5.2         | 93/107                   | 100/110                        |
|                             | RXBH-24A20J                 | 7.2/9.6                     | 1/60    | 2 - 4.8             | MULTIPLE CKT 1  | 34.6/40.0    | 5.2         | 50/57                    | 50/60                          |
|                             |                             | 7.2/9.6                     | 1/60    | 2 - 4.8             | MULTIPLE CKT 2  | 34.6/40.0    | 0.0         | 44/50                    | 45/50                          |
|                             | RXBH-24A25J                 | 18.0/24.0                   | 1/60    | 6 - 4.0             | SINGLE  | 86.4/99.9    | 5.2         | 115/132                  | 125/150                        |
|                             | RXBH-24A25J<br>(4-TON ONLY) | 6.0/8.0                     | 1/60    | 2 - 4.0             | MULTIPLE CKT 1  | 28.8/33.3    | 5.2         | 43/49                    | 45/50                          |
|                             |                             | 6.0/8.0                     | 1/60    | 2 - 4.0             | MULTIPLE CKT 2  | 28.8/33.3    | 0.0         | 36/42                    | 40/45                          |
|                             |                             | 6.0/8.0                     | 1/60    | 2 - 4.0             | MULTIPLE CKT 3  | 28.8/33.3    | 0.0         | 36/42                    | 40/45                          |
|                             | RXBH-1724A07C               | 5.4/7.2                     | 3/60    | 3 - 2.4             | SINGLE  | 15.0/17.3    | 5.2         | 26/29                    | 30/30                          |
|                             | RXBH-1724A10C               | 7.2/9.6                     | 3/60    | 3 - 3.2             | SINGLE  | 20.0/23.1    | 5.2         | 32/36                    | 35/40                          |
|                             | RXBH-1724A15C               | 10.8/14.4                   | 3/60    | 3 - 4.8             | SINGLE  | 30.0/34.6    | 5.2         | 44/50                    | 45/50                          |
|                             | RXBH-1724A18C               | 12.8/17.0                   | 3/60    | 3 - 5.68            | SINGLE  | 35.6/41.0    | 5.2         | 51/58                    | 60/60                          |
|                             | RXBH-24A20C*                | 14.4/19.2                   | 3/60    | 6 - 3.2             | SINGLE  | 40.0/46.2    | 5.2         | 57/65                    | 60/70                          |
|                             | RXBH-24A20C                 | 7.2/9.6                     | 3/60    | 3 - 3.2             | MULTIPLE CKT 1  | 20.0/23.1    | 5.2         | 32/36                    | 35/40                          |
|                             |                             | 7.2/9.6                     | 3/60    | 3 - 3.2             | MULTIPLE CKT 2  | 20.0/23.1    | 0.0         | 25/29                    | 25/30                          |
|                             | RXBH-24A25C*                | 18.0/24.0                   | 3/60    | 6 - 4.0             | SINGLE  | 50.0/57.8    | 5.2         | 69/79                    | 70/80                          |
|                             | RXBH-24A25C<br>(4-TON ONLY) | 9.0/12.0                    | 3/60    | 3 - 4.0             | MULTIPLE CKT 1  | 25.0/28.9    | 5.2         | 38/43                    | 40/45                          |
|                             |                             | 9.0/12.0                    | 3/60    | 3 - 4.0             | MULTIPLE CKT 2  | 25.0/28.9    | 0.0         | 32/37                    | 35/40                          |
|                             | RXBH-24A07D                 | 7.2                         | 3/60    | 3 - 2.4             | SINGLE  | 8.7          | 2.2         | 14                       | 15                             |
|                             | RXBH-24A10D                 | 9.6                         | 3/60    | 3 - 3.2             | SINGLE  | 11.6         | 2.2         | 18                       | 20                             |
|                             | RXBH-24A15D                 | 14.4                        | 3/60    | 3 - 4.8             | SINGLE  | 17.3         | 2.2         | 25                       | 25                             |
|                             | RXBH-24A18D                 | 17.0                        | 3/60    | 6 - 2.84            | SINGLE  | 20.4         | 2.2         | 29                       | 30                             |
| RXBH-24A20D                 | 19.2                        | 3/60                        | 6 - 3.2 | SINGLE              | 23.2  | 2.2          | 32          | 35                       |                                |
| RXBH-24A25D<br>(4-TON ONLY) | 24.0                        | 3/60                        | 6 - 4.0 | SINGLE              | 28.8  | 2.2          | 39          | 40                       |                                |

? Heater Kit Connection Type A = Breaker B = Terminal Block C = Pullout Disconnect  
 ① D Voltage = 480 Volts.

\*Values only. No single point kit available.

**NOTES:**

- Electric heater BTUH - (heater watts + motor watts) x 3.414 (see airflow table for motor watts.)
- Supply circuit protective devices may be fuses or "HACR" type circuit breakers.
- If non-standard fuse size is specified, use next size larger standard fuse size.
- Largest motor load is included in single circuit or circuit 1 of multiple circuits.
- Heater loads are balanced on 3 phase models with 3 or 6 heaters only.
- No electrical heating elements are permitted to be used with A voltage (115V) air handler.

- J voltage (208/240V) single phase air handler is designed to be used with single or three phase 208/240V volt electric heaters. In the case of connecting 3 phase power to air handler terminal block without the heater, bring only two leads to terminal block, cap, insulate and fully secure the third lead.
- Do not use 480V electrical heaters on 208/240V air handlers.
- If the kit is listed under both single and multiple circuits, the kit is shipped from factory as multiple circuits. For single phase application, Jumper bar kit RXBJ-A21 and RXBJ-A31 can be used to convert multiple circuits to a single supply circuit. Refer to Accessory Section for details.

[ ] Designates Metric Conversions



### Electrical Data – With Electric Heat (Cont.)

Installation of the U.L. Listed original equipment manufacturer provided heater kits listed in the following table is recommended for all auxiliary heating requirements.

| Air Handler Model (-)H1P | Heater Model No. | Heater kW (208/240V) (480V) | PH/HZ   | No. Elements kW Per | Type Supply Circuit<br>Single Circuit<br>Multiple Circuit | Heater Amps. | Motor Amps. | Minimum Circuit Ampacity | Maximum Overcurrent Protection |
|--------------------------|------------------|-----------------------------|---------|---------------------|---|--------------|-------------|--------------------------|--------------------------------|
| 6024S                    | RXBH-1724?05J    | 3.6/4.8                     | 1/60    | 1 - 4.8             | SINGLE  | 17.3/20.0    | 5.2         | 29/32                    | 30/35                          |
|                          | RXBH-1724?07J    | 5.4/7.2                     | 1/60    | 2 - 3.6             | SINGLE  | 26.0/30.0    | 5.2         | 39/44                    | 40/45                          |
|                          | RXBH-1724?10J    | 7.2/9.6                     | 1/60    | 2 - 4.8             | SINGLE  | 34.6/40.0    | 5.2         | 50/57                    | 50/60                          |
|                          | RXBH-1724A15J    | 10.8/14.4                   | 1/60    | 3 - 4.8             | SINGLE  | 51.9/60.0    | 5.2         | 72/82                    | 80/90                          |
|                          | RXBH-1724A15J    | 3.6/4.8                     | 1/60    | 1 - 4.8             | MULTIPLE CKT 1  | 17.3/20.0    | 5.2         | 29/32                    | 30/35                          |
|                          |                  | 7.2/9.6                     | 1/60    | 2 - 4.8             | MULTIPLE CKT 2  | 34.6/40.0    | 0.0         | 44/50                    | 45/50                          |
|                          | RXBH-1724A18J    | 12.8/17.0                   | 1/60    | 3 - 5.68            | SINGLE  | 61.6/70.8    | 5.2         | 84/95                    | 90/100                         |
|                          | RXBH-1724A18J    | 4.3/5.7                     | 1/60    | 1 - 5.68            | MULTIPLE CKT 1  | 20.5/23.6    | 5.2         | 33/36                    | 35/40                          |
|                          |                  | 8.5/11.3                    | 1/60    | 2 - 5.68            | MULTIPLE CKT 2  | 41.1/47.2    | 0.0         | 52/59                    | 60/60                          |
|                          | RXBH-24A20J      | 14.4/19.2                   | 1/60    | 4 - 4.8             | SINGLE  | 69.2/80.0    | 5.2         | 93/107                   | 100/110                        |
|                          | RXBH-24A20J      | 7.2/9.6                     | 1/60    | 2 - 4.8             | MULTIPLE CKT 1  | 34.6/40.0    | 5.2         | 50/57                    | 50/60                          |
|                          |                  | 7.2/9.6                     | 1/60    | 2 - 4.8             | MULTIPLE CKT 2  | 34.6/40.0    | 0.0         | 44/50                    | 45/50                          |
|                          | RXBH-24A25J      | 18.0/24.0                   | 1/60    | 6 - 4.0             | SINGLE  | 86.4/99.9    | 5.2         | 115/132                  | 125/150                        |
|                          | RXBH-24A25J      | 6.0/8.0                     | 1/60    | 2 - 4.0             | MULTIPLE CKT 1  | 28.8/33.3    | 5.2         | 43/49                    | 45/50                          |
|                          |                  | 6.0/8.0                     | 1/60    | 2 - 4.0             | MULTIPLE CKT 2  | 28.8/33.3    | 0.0         | 36/42                    | 40/45                          |
|                          |                  | 6.0/8.0                     | 1/60    | 2 - 4.0             | MULTIPLE CKT 3  | 28.8/33.3    | 0.0         | 36/42                    | 40/45                          |
|                          | RXBH-24A30J      | 21.6/28.8                   | 1/60    | 6 - 4.8             | SINGLE  | 103.8/120.0  | 5.2         | 137/157                  | 150/175                        |
|                          | RXBH-24A30J      | 7.2/9.6                     | 1/60    | 2 - 4.8             | MULTIPLE CKT 1  | 34.6/40.0    | 5.2         | 50/57                    | 50/60                          |
| 7.2/9.6                  |                  | 1/60                        | 2 - 4.8 | MULTIPLE CKT 2      | 34.6/40.0   | 0.0          | 44/50       | 45/50                    |                                |
| 7.2/9.6                  |                  | 1/60                        | 2 - 4.8 | MULTIPLE CKT 3      | 34.6/40.0   | 0.0          | 44/50       | 45/50                    |                                |

| Air Handler Model (-)H1Q | Heater Model No. | Heater kW (208/240V) (480V) | PH/HZ | No. Elements kW Per | Type Supply Circuit<br>Single Circuit<br>Multiple Circuit | Heater Amps. | Motor Amps. | Minimum Circuit Ampacity | Maximum Overcurrent Protection |
|--------------------------|------------------|-----------------------------|-------|---------------------|---|--------------|-------------|--------------------------|--------------------------------|
| 4221S                    | RXBH-1724?05J    | 3.6/4.8                     | 1/60  | 1-4.8               | SINGLE  | 17.3/20.0    | 4.0         | 27/30                    | 30/30                          |
|                          | RXBH-1724?07J    | 5.4/7.2                     | 1/60  | 2-3.6               | SINGLE  | 26.0/30.0    | 4.0         | 38/43                    | 40/45                          |
|                          | RXBH-1724?10J    | 7.2/9.6                     | 1/60  | 2-4.8               | SINGLE  | 34.6/40.0    | 4.0         | 49/55                    | 50/60                          |
|                          | RXBH-1724A15J    | 10.8/14.4                   | 1/60  | 3-4.8               | SINGLE  | 51.9/60.0    | 4.0         | 70/80                    | 70/80                          |
|                          | RXBH-1724A15J    | 3.6/4.8                     | 1/60  | 1-4.8               | MULTIPLE CKT 1  | 17.3/20.0    | 4.0         | 27/30                    | 30/30                          |
|                          |                  | 7.2/9.6                     | 1/60  | 2-4.8               | MULTIPLE CKT 2  | 34.6/40.0    | 0.0         | 44/50                    | 45/50                          |
|                          | RXBH-1724A18J    | 12.8/17.0                   | 1/60  | 3-5.68              | SINGLE  | 61.6/70.8    | 4.0         | 82/94                    | 90/100                         |
|                          | RXBJ-1724A18J    | 4.3/5.7                     | 1/60  | 1-5.68              | MULTIPLE CKT 1  | 20.5/23.6    | 4.0         | 31/35                    | 30/35                          |
|                          |                  | 8.5/11.3                    | 1/60  | 2-5.68              | MULTIPLE CKT 2  | 41.1/47.2    | 0.0         | 52/59                    | 60/60                          |
|                          | RXBH-24A20J      | 14.4/19.2                   | 1/60  | 4-4.8               | SINGLE  | 69.2/80      | 4.0         | 92/105                   | 100/110                        |
|                          | RXBH-24A20J      | 7.2/9.6                     | 1/60  | 2-4.8               | MULTIPLE CKT 1  | 34.6/40.0    | 4.0         | 49/55                    | 50/60                          |
|                          |                  | 7.2/9.6                     | 1/60  | 2-4.8               | MULTIPLE CKT 2  | 34.6/40.0    | 0.0         | 44/50                    | 45/50                          |
|                          | RXBH-24A25J      | 18.0/24.0                   | 1/60  | 6-4.0               | SINGLE  | 86.4/99.9    | 4.0         | 113/130                  | 125/150                        |
|                          | RXBH-24A25J      | 6.0/8.0                     | 1/60  | 2-4.0               | MULTIPLE CKT 1  | 28.8/33.3    | 4.0         | 41/47                    | 45/50                          |
|                          |                  | 6.0/8.0                     | 1/60  | 2-4.0               | MULTIPLE CKT 2  | 28.8/33.3    | 0.0         | 36/42                    | 40/45                          |
|                          |                  | 6.0/8.0                     | 1/60  | 2-4.0               | MULTIPLE CKT 3  | 28.8/33.3    | 0.0         | 36/42                    | 40/45                          |

• ? Heater Kit Connection Type A = Breaker B = Terminal Block C = Pullout Disconnect

① D Voltage = 480 Volts.

\*Values only. No single point kit available.

**NOTES:**

- Electric heater BTUH - (heater watts + motor watts) x 3.414 (see airflow table for motor watts.)
- Supply circuit protective devices may be fuses or "HACR" type circuit breakers.
- If non-standard fuse size is specified, use next size larger standard fuse size.
- Largest motor load is included in single circuit or circuit 1 of multiple circuits.
- Heater loads are balanced on 3 phase models with 3 or 6 heaters only.
- No electrical heating elements are permitted to be used with A voltage (115V) air handler.

- J voltage (208/240V) single phase air handler is designed to be used with single or three phase 208/240V volt electric heaters. In the case of connecting 3 phase power to air handler terminal block without the heater, bring only two leads to terminal block, cap, insulate and fully secure the third lead.
- Do not use 480V electrical heaters on 208/240V air handlers.
- If the kit is listed under both single and multiple circuits, the kit is shipped from factory as multiple circuits. For single phase application, Jumper bar kit RXBJ-A21 and RXBJ-A31 can be used to convert multiple circuits to a single supply circuit. Refer to Accessory Section for details.

[ ] Designates Metric Conversions

## 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.

## Accessories

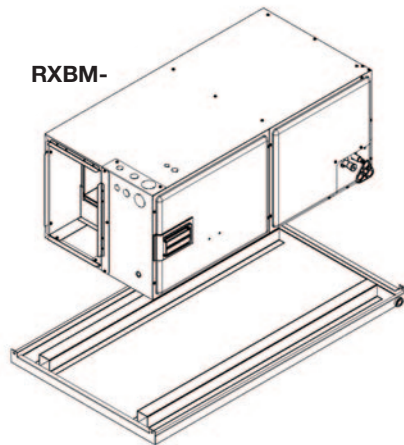
### • Combustible Floor Base RXHB-

| Model Cabinet Size | Combustible Floor Base Model Number |
|--------------------|-------------------------------------|
| 17                 | RXHB-17                             |
| 21                 | RXHB-21                             |
| 24                 | RXHB-24                             |

- **Jumper Bar Kit 3 Ckt. to 1 Ckt. RXBJ-A31** is used to convert single phase multiple three circuit units to a single supply circuit. Kit includes cover and screw for line side terminals.
- **Jumper Bar Kit 2 Ckt. to 1 Ckt. RXBJ-A21** is used to convert single phase multiple two circuit units to a single supply circuit. Kit includes cover and screw for line side terminals.
- **Note:** No jumper bar kit is available to convert three phase multiple two circuit units to a single supply circuit.

### • Auxiliary Horizontal Overflow Pan Accessory RXBM-

| Nominal Cooling Capacity-Tons | Auxiliary Horizontal Overflow Pan Accessory Model Number |
|-------------------------------|--|
| 1 1/2 - 3                     | RXBM-AC48  |
| 3 1/2 - 5                     | RXBM-AC61  |



### 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.

### • Auxiliary Electric Heater Kits RXBH-

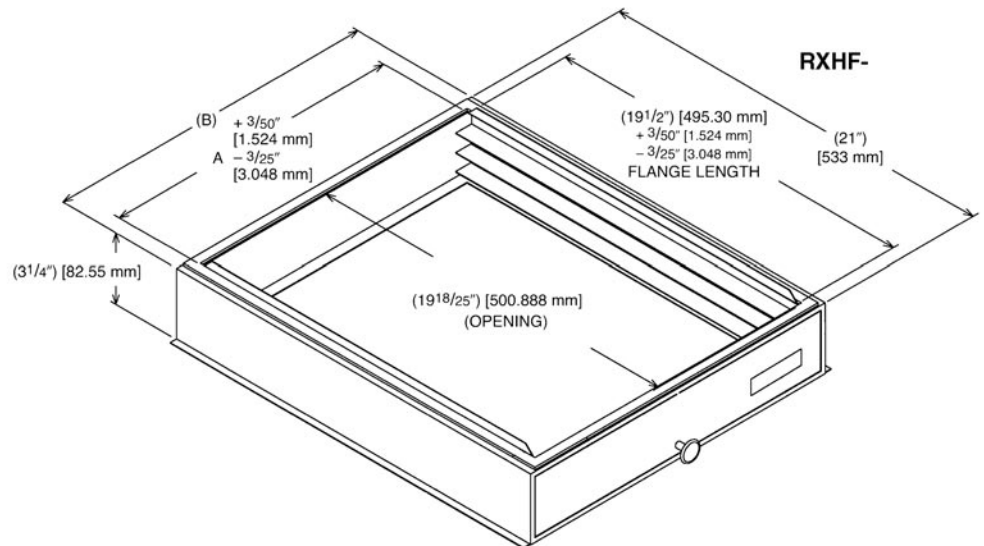
Heater Kits include circuit breakers which meet UL and cUL requirements for service disconnect. See the Electric Heat Electrical Data in this specification sheet for specific Heater Kit Model numbers.

### • External Filter Base RXHF-

| Model Cabinet Size | Filter Size In. [mm] | Part Number* | A     | B    |
|--------------------|----------------------|--------------|-------|------|
| 17                 | 16 x 20 [406 x 508]  | RXHF-17      | 15.70 | 17.5 |
| 21                 | 20 x 20 [508 x 508]  | RXHF-21      | 19.20 | 21.0 |
| 24                 | 25 x 20 [635 x 508]  | RXHF-24      | 22.70 | 25.5 |

\*Accommodates 1" or 2" filter

[ ] Designates Metric Conversions



**GENERAL TERMS OF LIMITED WARRANTY\***

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.**



***Russell™ By Rheem***

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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.

PRINTED IN U.S.A. 3/20 QG FORM NO. HRR-552