

# Bosch BOVA 2.0 Split System Heat Pump

Condensing Units Up to 20.5 SEER

2-3-4-5 Ton Capacity

R410A



**BOSCH**

## Product Specifications





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## 1 Product Features

### 1.1 Features and Benefits

- ▶ Premium efficiency – Up to 20.5 SEER
- ▶ Outdoor coil – copper tube with hydrophilic aluminum fins
- ▶ 10 speed ECM outdoor motor for quiet and efficient operation
- ▶ Inverter Drive Compressor (25% - 110% capacity), modulation in 1% increments
- ▶ Whisper Quiet operation – as low as 56 dB
- ▶ Small footprint – 29-1/8" (W) x 29-1/8" (D)
- ▶ Easy to install – compatible with most standard 24 VAC heat pump thermostats

### 1.2 Standard Features

- ▶ R-410A Chlorine-Free Refrigerant
- ▶ Load 25%-110%
- ▶ Intelligent Oil Return Technology
- ▶ Inverter Driven Rotary Compressor
- ▶ Crankcase Heater Standard
- ▶ Compressor Sound Blanket
- ▶ Multiple System Protection:
  - High pressure switch and low pressure transducer
  - Compressor liquid return protection
  - Compressor high or low compression ratio protection
  - Compressor high temperature protection
  - High / low voltage protection and over current protection
  - IPM and electronic control board high temperature protection
- ▶ AHRI certified; ETL listed

### 1.3 Cabinet Features

- ▶ Baked-on powder paint finish
- ▶ Wind Load compliant per Florida Building Code - 2010
- ▶ Wire fan discharge grille
- ▶ Steel louver coil guard

### 1.4 Limited Warranty

For Products installed in a one or two family residential dwelling BTC warrants that all compressors and internal components incorporated into the Product at the time of shipment by BTC shall remain free from defects in workmanship and materials for ten (10) years\* from the Commencement Date. If the Warranty Registration process has been completed and BTC determines that the Product or any part of the Product has a defect in workmanship or materials, BTC shall pay labor charges associated with the repair or replacement of the part in accordance with the Warranty Labor Allowance Schedule\*\* for the period of ninety (90) days from the Commencement Date.

\* Please refer to [www.bosch-climate.us](http://www.bosch-climate.us) for full warranty terms and conditions.

\*\* Warranty Labor Allowance Schedule details are available on [www.boschprohvac.com](http://www.boschprohvac.com)

## 2 Nomenclature

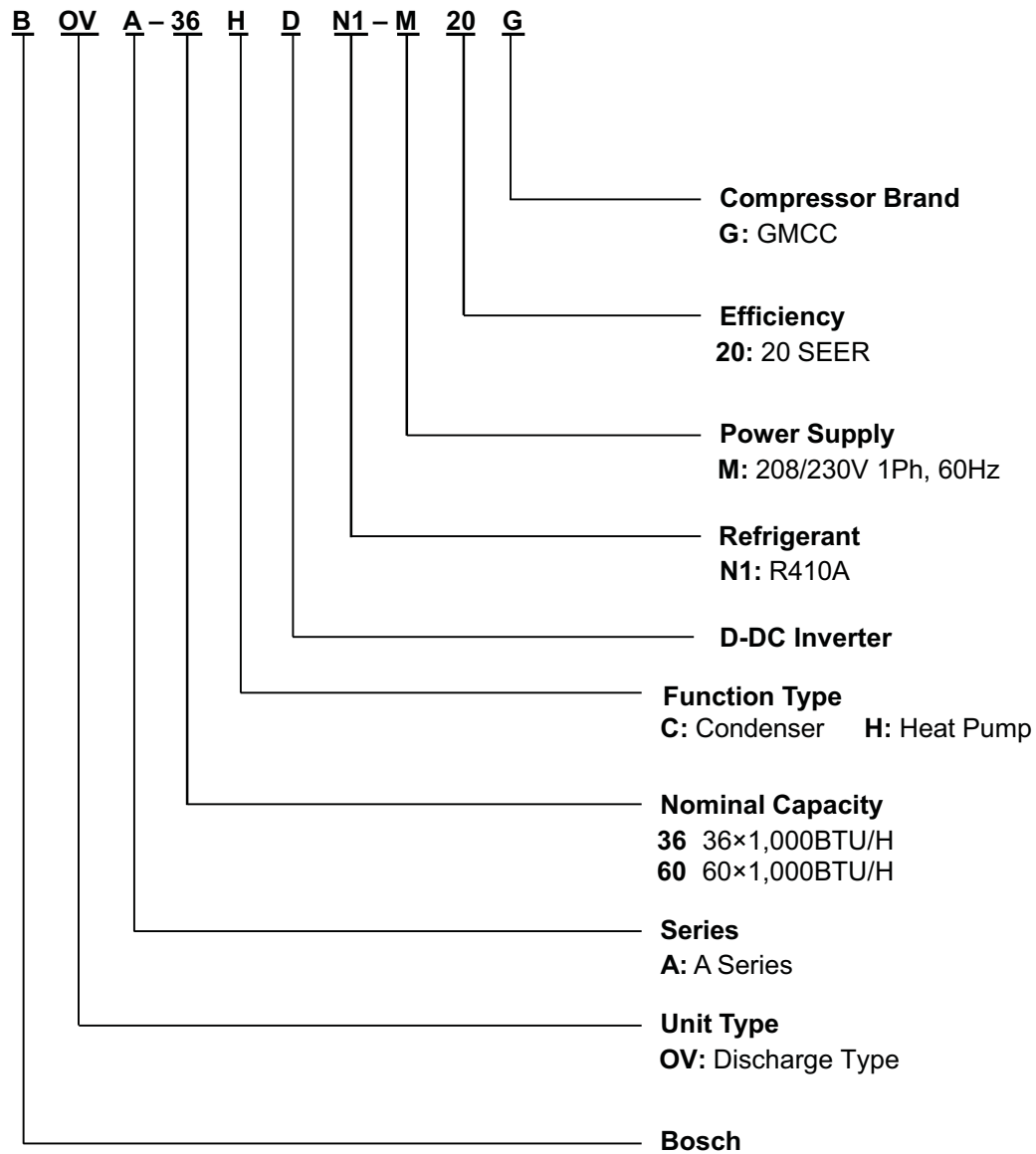


Figure 1

### 3 Product Specifications

|   | BOVA 36                    | BOVA 60                   |
|---|----------------------------|---------------------------|
| Cooling Capacity                                |                            |                           |
| Nominal Cooling (BTU/h)                         | 34,600                     | 54,500                    |
| Nominal Heating (BTU/h)                         | 34,200                     | 56,000                    |
| Decibels([dB(A)])                               |                            |                           |
| Max @ 100% load                                 | 77                         | 79                        |
| Min @ min load                                  | 56                         | 60                        |
| Compressor                                      |                            |                           |
| RLA   | 19                         | 29                        |
| LRA   | 44                         | 52                        |
| Condenser Fan Motor                             |                            |                           |
| Horsepower (HP)                                 | 1/3                        | 1/3                       |
| FLA   | 2.5                        | 2.5                       |
| Refrigeration System                            |                            |                           |
| Refrigerant Line Size <sup>1</sup>              |                            |                           |
| Liquid Line Size (OD)                           | 3/8"                       | 3/8"                      |
| Suction Line Size (OD)                          | 3/4"                       | 7/8"                      |
| Refrigerant Connection Size                     |                            |                           |
| Liquid Valve Size (OD)                          | 3/8"                       | 3/8"                      |
| Suction Valve Size (OD)                         | 3/4"                       | 7/8"                      |
| Refrigerant Charge (R410-A, oz)                 | 7 lbs. 9 oz.               | 11 lbs. 5 oz.             |
| Expansion Device                                | EEV                        | EEV                       |
| Maximum Line Length                             | 150 FT                     | 150 FT                    |
| Maximum Elevation Difference                    | 50 FT                      | 50 FT                     |
| Operating Range                                 |                            |                           |
| Cooling   | 15-125°F                   |                           |
| Heating   | -4-86°F                    |                           |
| Electrical Data                                 |                            |                           |
| Voltage-Phase-Hz                                | 208/230-1-60               | 208/230-1-60              |
| Minimum Circuit Ampacity <sup>2</sup>           | 26.3                       | 38.8                      |
| Max. Overcurrent Protection <sup>3</sup>        | 45                         | 60                        |
| Max Fuse Size                                   | 45                         | 60                        |
| Min/Max Volts                                   | 172V/270V                  |                           |
| Weight  |                            |                           |
| Net Weight (without packaging)                  | 150                        | 220                       |
| Gross Weight (including packaging) <sup>4</sup> | 180                        | 253                       |
| Dimensions                                      |                            |                           |
| Unit L x W x H (in.)                            | 29-1/8 x 29-1/8 x 24-15/16 | 29-1/8 x 29-1/8 x 33-3/16 |
| Outdoor Coil                                    |                            |                           |
| Net face area - sq.ft. Outer Coil               | 13.6                       | 18.4                      |
| Tube diameter-in.                               | 9/32" (7mm)                | 9/32" (7mm)               |
| No.of rows                                      | 2                          | 2.8                       |
| Fins per inch                                   | 17                         | 19                        |

Table 1

<sup>1</sup> Tested and rated in accordance with AHRI Standard 210/240.

<sup>2</sup> Wire size should be determined in accordance with National Electrical Codes; extensive wire runs will require larger wire sizes.

<sup>3</sup> Must use time-delay fuses or HACR-type circuit breakers of the same size as noted.

<sup>4</sup> Weight values are estimated.



- Always check the rating plate for electrical data on the unit being installed.
- Unit is factory charged with refrigerant for 15' of 3/8" liquid line. System charge must be adjusted per Installation Instructions Final Charge Procedure.
- TXV is required at indoor unit to match our outdoor unit.

## 4 Extended Performance Data

### 4.1 Outdoor Unit (BOVA) + Indoor Unit (BVA) – Cooling Mode

| BOVA 36 + BVA 24 For Cooling |            |          |      |      |      |      |      |      |      |      |      |      |      |      |    |      |      |      |
|------------------------------|------------|----------|------|------|------|------|------|------|------|------|------|------|------|------|----|------|------|------|
| Indoor Airflow (CFM)         | Outdoor DB | IWB (°F) | 59   |      |      |      | 63   |      |      |      | 67   |      |      |      | 71 |      |      |      |
|                              |            | IDB (°F) | 70   | 75   | 80   | 85   | 70   | 75   | 80   | 85   | 70   | 75   | 80   | 85   | 70 | 75   | 80   | 85   |
| 660                          | 65         | TC       | 18.2 | 18.4 | 18.8 | 19.0 | 18.8 | 19.0 | 19.2 | 19.4 | 20.0 | 20.2 | 20.4 | 20.6 | \  | 26.2 | 26.4 | 26.7 |
|                              |            | S/T      | 1.00 | 1.00 | 1.00 | 1.00 | 0.65 | 1.00 | 1.00 | 1.00 | 0.40 | 0.57 | 0.75 | 0.92 | \  | 0.39 | 0.52 | 0.66 |
|                              |            | kW       | 0.77 | 0.77 | 0.78 | 0.78 | 0.78 | 0.79 | 0.80 | 0.81 | 0.80 | 0.81 | 0.82 | 0.83 | \  | 1.05 | 1.06 | 1.08 |
|                              | 75         | TC       | 18.4 | 18.6 | 19.0 | 19.2 | 19.0 | 19.2 | 19.4 | 19.6 | 20.2 | 20.4 | 20.6 | 20.8 | \  | 25.8 | 26.1 | 26.3 |
|                              |            | S/T      | 1.00 | 1.00 | 1.00 | 1.00 | 0.64 | 1.00 | 1.00 | 1.00 | 0.40 | 0.57 | 0.75 | 0.92 | \  | 0.39 | 0.53 | 0.66 |
|                              |            | kW       | 0.93 | 0.94 | 0.95 | 0.95 | 0.95 | 0.96 | 0.97 | 0.98 | 0.98 | 0.99 | 1.00 | 1.01 | \  | 1.31 | 1.33 | 1.35 |
|                              | 85         | TC       | 18.4 | 18.6 | 19.0 | 19.2 | 19.0 | 19.2 | 19.4 | 19.6 | 20.2 | 20.4 | 20.6 | 20.8 | \  | 25.8 | 26.0 | 26.3 |
|                              |            | S/T      | 1.00 | 1.00 | 1.00 | 1.00 | 0.64 | 1.00 | 1.00 | 1.00 | 0.40 | 0.57 | 0.75 | 0.92 | \  | 0.39 | 0.53 | 0.66 |
|                              |            | kW       | 1.10 | 1.11 | 1.13 | 1.13 | 1.13 | 1.14 | 1.15 | 1.16 | 1.16 | 1.17 | 1.18 | 1.19 | \  | 1.45 | 1.46 | 1.48 |
|                              | 95         | TC       | 18.3 | 18.5 | 18.9 | 19.1 | 18.9 | 19.1 | 19.3 | 19.5 | 20.1 | 20.4 | 20.5 | 20.8 | \  | 25.7 | 25.9 | 26.1 |
|                              |            | S/T      | 1.00 | 1.00 | 1.00 | 1.00 | 0.64 | 1.00 | 1.00 | 1.00 | 0.40 | 0.57 | 0.75 | 0.92 | \  | 0.39 | 0.53 | 0.66 |
|                              |            | kW       | 1.33 | 1.35 | 1.36 | 1.36 | 1.36 | 1.38 | 1.39 | 1.40 | 1.41 | 1.42 | 1.43 | 1.45 | \  | 1.76 | 1.77 | 1.79 |
|                              | 105        | TC       | 18.2 | 18.4 | 18.8 | 19.0 | 18.8 | 19.0 | 19.2 | 19.4 | 20.1 | 20.3 | 20.5 | 20.7 | \  | 25.4 | 25.7 | 25.9 |
|                              |            | S/T      | 0.99 | 1.00 | 1.00 | 1.00 | 0.64 | 0.99 | 1.00 | 1.00 | 0.40 | 0.57 | 0.75 | 0.92 | \  | 0.39 | 0.53 | 0.67 |
|                              |            | kW       | 1.60 | 1.61 | 1.63 | 1.63 | 1.63 | 1.65 | 1.67 | 1.68 | 1.69 | 1.70 | 1.72 | 1.73 | \  | 2.11 | 2.13 | 2.15 |
|                              | 115        | TC       | 17.9 | 18.1 | 18.5 | 18.7 | 18.5 | 18.7 | 18.9 | 19.1 | 19.8 | 20.0 | 20.1 | 20.3 | \  | 25.2 | 25.4 | 25.7 |
|                              |            | S/T      | 1.00 | 1.00 | 1.00 | 1.00 | 0.64 | 0.99 | 1.00 | 1.00 | 0.40 | 0.58 | 0.76 | 0.93 | \  | 0.39 | 0.53 | 0.67 |
|                              |            | kW       | 1.87 | 1.89 | 1.91 | 1.91 | 1.91 | 1.94 | 1.96 | 1.98 | 1.98 | 2.00 | 2.02 | 2.04 | \  | 2.52 | 2.54 | 2.56 |
| 760                          | 65         | TC       | 20.1 | 20.3 | 20.8 | 21.0 | 20.8 | 21.0 | 21.2 | 21.5 | 22.2 | 22.4 | 22.6 | 22.9 | \  | 28.6 | 28.9 | 29.1 |
|                              |            | S/T      | 1.00 | 1.00 | 1.00 | 1.00 | 0.66 | 1.00 | 1.00 | 1.00 | 0.39 | 0.58 | 0.76 | 0.94 | \  | 0.39 | 0.53 | 0.67 |
|                              |            | kW       | 0.91 | 0.92 | 0.93 | 0.93 | 0.93 | 0.94 | 0.95 | 0.96 | 0.95 | 0.96 | 0.97 | 0.99 | \  | 1.22 | 1.23 | 1.24 |
|                              | 75         | TC       | 20.3 | 20.5 | 21.0 | 21.2 | 21.0 | 21.2 | 21.4 | 21.7 | 22.4 | 22.6 | 22.8 | 23.0 | \  | 28.7 | 29.0 | 29.2 |
|                              |            | S/T      | 1.00 | 1.00 | 1.00 | 1.00 | 0.65 | 1.00 | 1.00 | 1.00 | 0.39 | 0.58 | 0.76 | 0.94 | \  | 0.39 | 0.53 | 0.67 |
|                              |            | kW       | 1.08 | 1.09 | 1.10 | 1.10 | 1.10 | 1.12 | 1.13 | 1.14 | 1.14 | 1.15 | 1.16 | 1.18 | \  | 1.45 | 1.47 | 1.49 |
|                              | 85         | TC       | 20.3 | 20.5 | 21.0 | 21.2 | 21.0 | 21.2 | 21.4 | 21.7 | 22.3 | 22.6 | 22.8 | 23.0 | \  | 28.4 | 28.6 | 28.9 |
|                              |            | S/T      | 0.99 | 1.00 | 1.00 | 1.00 | 0.65 | 1.00 | 1.00 | 1.00 | 0.39 | 0.58 | 0.76 | 0.94 | \  | 0.39 | 0.53 | 0.68 |
|                              |            | kW       | 1.24 | 1.25 | 1.26 | 1.26 | 1.26 | 1.28 | 1.29 | 1.30 | 1.31 | 1.32 | 1.33 | 1.34 | \  | 1.63 | 1.64 | 1.66 |
|                              | 95         | TC       | 20.2 | 20.4 | 20.9 | 21.1 | 20.9 | 21.1 | 21.3 | 21.6 | 22.2 | 22.5 | 22.7 | 22.8 | \  | 28.1 | 28.4 | 28.6 |
|                              |            | S/T      | 0.99 | 1.00 | 1.00 | 1.00 | 0.65 | 1.00 | 1.00 | 1.00 | 0.39 | 0.58 | 0.75 | 0.95 | \  | 0.39 | 0.53 | 0.68 |
|                              |            | kW       | 1.49 | 1.51 | 1.52 | 1.52 | 1.52 | 1.54 | 1.55 | 1.57 | 1.58 | 1.59 | 1.60 | 1.61 | \  | 1.96 | 1.99 | 2.00 |
|                              | 105        | TC       | 19.8 | 20.1 | 20.5 | 20.7 | 20.5 | 20.7 | 20.9 | 21.2 | 21.9 | 22.1 | 22.3 | 22.5 | \  | 27.8 | 28.1 | 28.3 |
|                              |            | S/T      | 0.99 | 1.00 | 1.00 | 1.00 | 0.65 | 1.00 | 1.00 | 1.00 | 0.39 | 0.58 | 0.77 | 0.95 | \  | 0.39 | 0.53 | 0.68 |
|                              |            | kW       | 1.76 | 1.78 | 1.80 | 1.80 | 1.80 | 1.82 | 1.83 | 1.85 | 1.86 | 1.88 | 1.89 | 1.91 | \  | 2.35 | 2.37 | 2.40 |
|                              | 115        | TC       | 19.7 | 19.9 | 20.4 | 20.6 | 20.4 | 20.6 | 20.8 | 21.0 | 21.7 | 21.9 | 22.1 | 22.4 | \  | 27.5 | 27.7 | 28.0 |
|                              |            | S/T      | 1.00 | 1.00 | 1.00 | 1.00 | 0.65 | 1.00 | 1.00 | 1.00 | 0.39 | 0.58 | 0.77 | 0.96 | \  | 0.39 | 0.54 | 0.69 |
|                              |            | kW       | 2.09 | 2.11 | 2.13 | 2.13 | 2.13 | 2.16 | 2.18 | 2.20 | 2.21 | 2.23 | 2.25 | 2.27 | \  | 2.82 | 2.85 | 2.88 |
| 860                          | 65         | TC       | 22.3 | 22.5 | 23.0 | 23.3 | 23.0 | 23.3 | 23.5 | 23.8 | 24.6 | 24.8 | 25.0 | 25.3 | \  | 31.1 | 31.4 | 31.7 |
|                              |            | S/T      | 1.00 | 1.00 | 1.00 | 1.00 | 0.66 | 1.00 | 1.00 | 1.00 | 0.39 | 0.58 | 0.77 | 0.95 | \  | 0.39 | 0.54 | 0.68 |
|                              |            | kW       | 0.99 | 1.00 | 1.01 | 1.01 | 1.01 | 1.02 | 1.04 | 1.05 | 1.04 | 1.06 | 1.07 | 1.08 | \  | 1.41 | 1.43 | 1.45 |
|                              | 75         | TC       | 22.0 | 22.3 | 22.8 | 23.0 | 22.8 | 23.0 | 23.3 | 23.5 | 24.4 | 24.7 | 24.8 | 24.8 | \  | 31.2 | 31.4 | 31.7 |
|                              |            | S/T      | 1.00 | 1.00 | 1.00 | 1.00 | 0.66 | 1.00 | 1.00 | 1.00 | 0.39 | 0.58 | 0.77 | 1.00 | \  | 0.39 | 0.54 | 0.68 |
|                              |            | kW       | 1.23 | 1.25 | 1.26 | 1.26 | 1.26 | 1.27 | 1.29 | 1.30 | 1.31 | 1.32 | 1.33 | 1.33 | \  | 1.66 | 1.68 | 1.70 |
|                              | 85         | TC       | 21.9 | 22.1 | 22.6 | 22.9 | 22.6 | 22.9 | 23.1 | 23.4 | 24.4 | 24.5 | 24.6 | 24.8 | \  | 30.8 | 31.1 | 31.3 |
|                              |            | S/T      | 1.00 | 1.00 | 1.00 | 1.00 | 0.66 | 1.00 | 1.00 | 1.00 | 0.39 | 0.59 | 0.78 | 1.00 | \  | 0.39 | 0.54 | 0.69 |
|                              |            | kW       | 1.36 | 1.38 | 1.39 | 1.39 | 1.39 | 1.41 | 1.42 | 1.44 | 1.46 | 1.46 | 1.46 | 1.48 | \  | 1.81 | 1.83 | 1.85 |
|                              | 95         | TC       | 21.7 | 22.0 | 22.5 | 22.7 | 22.5 | 22.7 | 22.9 | 23.2 | 24.0 | 24.2 | 24.4 | 24.6 | \  | 30.5 | 30.7 | 30.9 |
|                              |            | S/T      | 1.00 | 1.00 | 0.99 | 1.00 | 0.66 | 1.00 | 1.00 | 1.00 | 0.39 | 0.59 | 0.78 | 1.00 | \  | 0.39 | 0.54 | 0.69 |
|                              |            | kW       | 1.62 | 1.64 | 1.66 | 1.66 | 1.66 | 1.68 | 1.69 | 1.71 | 1.73 | 1.74 | 1.75 | 1.77 | \  | 2.19 | 2.21 | 2.22 |
|                              | 105        | TC       | 21.5 | 21.8 | 22.3 | 22.5 | 22.3 | 22.5 | 22.8 | 23.0 | 23.8 | 24.0 | 24.2 | 24.5 | \  | 30.0 | 30.2 | 30.5 |
|                              |            | S/T      | 0.99 | 1.00 | 1.00 | 1.00 | 0.66 | 1.00 | 1.00 | 1.00 | 0.39 | 0.59 | 0.78 | 1.00 | \  | 0.39 | 0.54 | 0.70 |
|                              |            | kW       | 1.95 | 1.97 | 1.99 | 1.99 | 1.99 | 2.01 | 2.03 | 2.05 | 2.06 | 2.08 | 2.09 | 2.11 | \  | 2.63 | 2.65 | 2.68 |
|                              | 115        | TC       | 21.4 | 21.6 | 22.1 | 22.3 | 22.1 | 22.3 | 22.6 | 22.8 | 23.6 | 23.8 | 24.0 | 24.2 | \  | 28.8 | 28.8 | 28.7 |
|                              |            | S/T      | 0.99 | 1.00 | 1.00 | 1.00 | 0.66 | 1.00 | 1.00 | 1.00 | 0.39 | 0.59 | 0.79 | 0.99 | \  | 0.39 | 0.55 | 0.72 |
|                              |            | kW       | 2.31 | 2.33 | 2.36 | 2.36 | 2.36 | 2.38 | 2.41 | 2.43 | 2.44 | 2.46 | 2.48 | 2.50 | \  | 3.00 | 3.00 | 3.00 |

Table 2

TC refer to total capacity S/T: refer to the ratio of sensible heat and total capacity kW: refer to total input power

| BOVA 36 + BVA 36 For Cooling |               |          |      |      |      |      |      |      |      |      |      |      |      |      |    |      |      |      |
|------------------------------|---------------|----------|------|------|------|------|------|------|------|------|------|------|------|------|----|------|------|------|
| Indoor<br>Airflow<br>(CFM)   | Outdoor<br>DB | IWB (°F) | 59   |      |      |      | 63   |      |      |      | 67   |      |      |      | 71 |      |      |      |
|                              |               | IDB (°F) | 70   | 75   | 80   | 85   | 70   | 75   | 80   | 85   | 70   | 75   | 80   | 85   | 70 | 75   | 80   | 85   |
| 1020                         | 65            | TC       | 29.4 | 29.7 | 30.3 | 30.7 | 30.3 | 30.7 | 31.0 | 31.3 | 32.4 | 32.7 | 33.0 | 33.2 | \  | 39.5 | 39.8 | 40.1 |
|                              |               | S/T      | 0.99 | 1.00 | 1.00 | 1.00 | 0.61 | 0.83 | 1.00 | 1.00 | 0.39 | 0.57 | 0.73 | 0.90 | \  | 0.39 | 0.53 | 0.67 |
|                              |               | kW       | 1.54 | 1.56 | 1.57 | 1.57 | 1.57 | 1.59 | 1.60 | 1.62 | 1.62 | 1.63 | 1.65 | 1.67 | \  | 2.04 | 2.06 | 2.09 |
|                              | 75            | TC       | 29.4 | 29.8 | 30.4 | 30.7 | 30.4 | 30.7 | 31.1 | 31.4 | 32.5 | 32.8 | 33.1 | 33.3 | \  | 39.1 | 39.4 | 39.7 |
|                              |               | S/T      | 1.00 | 1.00 | 0.99 | 1.00 | 0.62 | 0.83 | 1.00 | 1.00 | 0.39 | 0.56 | 0.73 | 0.90 | \  | 0.39 | 0.53 | 0.67 |
|                              |               | kW       | 1.71 | 1.73 | 1.75 | 1.75 | 1.75 | 1.77 | 1.79 | 1.80 | 1.79 | 1.82 | 1.84 | 1.86 | \  | 2.25 | 2.27 | 2.29 |
|                              | 85            | TC       | 29.0 | 29.3 | 29.9 | 30.3 | 29.9 | 30.3 | 30.6 | 30.9 | 32.0 | 32.3 | 32.6 | 32.8 | \  | 38.4 | 38.7 | 38.9 |
|                              |               | S/T      | 1.00 | 1.00 | 1.00 | 1.00 | 0.62 | 0.84 | 1.00 | 1.00 | 0.39 | 0.57 | 0.74 | 0.91 | \  | 0.39 | 0.53 | 0.67 |
|                              |               | kW       | 1.93 | 1.95 | 1.97 | 1.97 | 1.97 | 1.99 | 2.01 | 2.03 | 2.03 | 2.05 | 2.07 | 2.09 | \  | 2.55 | 2.58 | 2.60 |
|                              | 95            | TC       | 28.5 | 28.8 | 29.4 | 29.8 | 29.4 | 29.8 | 30.1 | 30.4 | 31.5 | 31.8 | 32.0 | 32.3 | \  | 37.5 | 37.8 | 38.0 |
|                              |               | S/T      | 1.00 | 1.00 | 1.00 | 1.00 | 0.62 | 0.84 | 1.00 | 1.00 | 0.39 | 0.57 | 0.74 | 0.92 | \  | 0.39 | 0.53 | 0.68 |
|                              |               | kW       | 2.32 | 2.34 | 2.37 | 2.37 | 2.37 | 2.39 | 2.42 | 2.44 | 2.45 | 2.47 | 2.49 | 2.52 | \  | 3.04 | 3.06 | 3.09 |
|                              | 105           | TC       | 27.9 | 28.3 | 28.9 | 29.2 | 28.9 | 29.2 | 29.5 | 29.8 | 30.9 | 31.2 | 31.4 | 31.6 | \  | 36.2 | 36.3 | 36.5 |
|                              |               | S/T      | 0.99 | 1.00 | 1.00 | 1.00 | 0.62 | 0.84 | 1.00 | 1.00 | 0.39 | 0.57 | 0.75 | 0.93 | \  | 0.39 | 0.54 | 0.69 |
|                              |               | kW       | 2.76 | 2.79 | 2.82 | 2.82 | 2.82 | 2.85 | 2.88 | 2.91 | 2.91 | 2.94 | 2.96 | 2.99 | \  | 3.52 | 3.53 | 3.54 |
|                              | 115           | TC       | 25.0 | 25.3 | 25.9 | 26.1 | 25.9 | 26.1 | 26.4 | 26.7 | 27.8 | 28.0 | 28.1 | 28.3 | \  | 30.1 | 30.3 | 30.4 |
|                              |               | S/T      | 1.00 | 1.00 | 1.00 | 1.00 | 0.62 | 0.85 | 1.00 | 1.00 | 0.40 | 0.60 | 0.79 | 0.99 | \  | 0.39 | 0.58 | 0.76 |
|                              |               | kW       | 2.81 | 2.84 | 2.87 | 2.87 | 2.87 | 2.91 | 2.94 | 2.97 | 2.99 | 3.01 | 3.03 | 3.04 | \  | 3.13 | 3.15 | 3.16 |
| 1150                         | 65            | TC       | 31.6 | 31.9 | 32.7 | 33.0 | 32.7 | 33.0 | 33.4 | 33.7 | 35.0 | 35.2 | 35.5 | 35.8 | \  | 42.2 | 42.5 | 42.8 |
|                              |               | S/T      | 0.99 | 1.00 | 1.00 | 1.00 | 0.63 | 0.86 | 1.00 | 1.00 | 0.39 | 0.58 | 0.76 | 0.94 | \  | 0.39 | 0.54 | 0.69 |
|                              |               | kW       | 1.80 | 1.82 | 1.84 | 1.84 | 1.84 | 1.86 | 1.88 | 1.90 | 1.89 | 1.92 | 1.94 | 1.96 | \  | 2.34 | 2.37 | 2.39 |
|                              | 75            | TC       | 31.6 | 32.0 | 32.7 | 33.0 | 32.7 | 33.0 | 33.4 | 33.8 | 35.0 | 35.3 | 35.5 | 35.8 | \  | 41.9 | 42.2 | 42.5 |
|                              |               | S/T      | 1.00 | 1.00 | 1.00 | 1.00 | 0.62 | 0.85 | 1.00 | 1.00 | 0.39 | 0.58 | 0.76 | 0.94 | \  | 0.39 | 0.54 | 0.69 |
|                              |               | kW       | 1.97 | 1.99 | 2.01 | 2.01 | 2.01 | 2.03 | 2.05 | 2.07 | 2.07 | 2.09 | 2.12 | 2.14 | \  | 2.46 | 2.49 | 2.51 |
|                              | 85            | TC       | 31.1 | 31.4 | 32.1 | 32.5 | 32.1 | 32.5 | 32.8 | 33.2 | 34.4 | 34.7 | 34.9 | 35.2 | \  | 40.8 | 41.1 | 41.4 |
|                              |               | S/T      | 1.00 | 1.00 | 1.00 | 1.00 | 0.63 | 0.86 | 1.00 | 1.00 | 0.39 | 0.58 | 0.76 | 0.95 | \  | 0.39 | 0.54 | 0.70 |
|                              |               | kW       | 2.17 | 2.19 | 2.22 | 2.22 | 2.22 | 2.24 | 2.26 | 2.29 | 2.29 | 2.31 | 2.33 | 2.36 | \  | 2.84 | 2.86 | 2.89 |
|                              | 95            | TC       | 30.7 | 31.1 | 31.8 | 32.1 | 31.8 | 32.1 | 32.4 | 32.8 | 33.7 | 34.2 | 34.5 | 34.7 | \  | 39.8 | 40.0 | 40.2 |
|                              |               | S/T      | 1.00 | 1.00 | 0.99 | 1.00 | 0.63 | 0.87 | 1.00 | 1.00 | 0.39 | 0.58 | 0.76 | 1.00 | \  | 0.39 | 0.55 | 0.71 |
|                              |               | kW       | 2.58 | 2.61 | 2.64 | 2.64 | 2.64 | 2.66 | 2.69 | 2.72 | 2.73 | 2.75 | 2.78 | 2.80 | \  | 3.34 | 3.37 | 3.39 |
|                              | 105           | TC       | 29.9 | 30.3 | 31.0 | 31.3 | 31.0 | 31.3 | 31.6 | 32.0 | 33.0 | 33.4 | 33.6 | 33.9 | \  | 36.9 | 36.9 | 37.1 |
|                              |               | S/T      | 0.99 | 1.00 | 0.99 | 1.00 | 0.63 | 0.87 | 1.00 | 1.00 | 0.39 | 0.59 | 0.78 | 1.00 | \  | 0.39 | 0.57 | 0.74 |
|                              |               | kW       | 3.05 | 3.08 | 3.11 | 3.11 | 3.11 | 3.15 | 3.18 | 3.21 | 3.22 | 3.25 | 3.28 | 3.30 | \  | 3.61 | 3.59 | 3.61 |
|                              | 115           | TC       | 24.8 | 25.1 | 25.6 | 25.9 | 25.6 | 25.9 | 26.2 | 26.5 | 28.2 | 28.3 | 27.9 | 28.0 | \  | 29.1 | 29.2 | 29.3 |
|                              |               | S/T      | 1.00 | 1.00 | 1.00 | 1.00 | 0.64 | 0.88 | 1.00 | 1.00 | 0.40 | 0.62 | 0.86 | 1.00 | \  | 0.40 | 0.62 | 0.84 |
|                              |               | kW       | 2.86 | 2.89 | 2.92 | 2.92 | 2.92 | 2.95 | 2.98 | 3.01 | 3.06 | 3.08 | 3.07 | 3.09 | \  | 3.12 | 3.13 | 3.14 |
| 1350                         | 65            | TC       | 33.6 | 34.0 | 34.7 | 35.1 | 34.7 | 35.1 | 35.5 | 35.9 | 37.2 | 37.5 | 37.7 | 38.0 | \  | 44.5 | 44.8 | 45.5 |
|                              |               | S/T      | 0.99 | 1.00 | 1.00 | 1.00 | 0.64 | 0.88 | 1.00 | 1.00 | 0.39 | 0.59 | 0.78 | 0.99 | \  | 0.38 | 0.55 | 0.71 |
|                              |               | kW       | 2.11 | 2.13 | 2.15 | 2.15 | 2.15 | 2.18 | 2.20 | 2.22 | 2.22 | 2.24 | 2.27 | 2.29 | \  | 2.68 | 2.70 | 2.56 |
|                              | 75            | TC       | 33.7 | 34.1 | 34.9 | 35.2 | 34.9 | 35.2 | 35.6 | 36.0 | 37.4 | 37.6 | 37.9 | 38.2 | \  | 45.6 | 45.8 | 45.9 |
|                              |               | S/T      | 0.99 | 1.00 | 1.00 | 1.00 | 0.63 | 0.88 | 1.00 | 1.00 | 0.39 | 0.59 | 0.78 | 1.00 | \  | 0.38 | 0.55 | 0.71 |
|                              |               | kW       | 2.17 | 2.19 | 2.22 | 2.22 | 2.22 | 2.24 | 2.26 | 2.29 | 2.29 | 2.31 | 2.33 | 2.36 | \  | 2.95 | 2.96 | 2.96 |
|                              | 85            | TC       | 33.0 | 33.4 | 34.1 | 34.5 | 34.1 | 34.5 | 34.8 | 35.2 | 36.6 | 36.8 | 37.1 | 37.3 | \  | 43.0 | 43.2 | 43.5 |
|                              |               | S/T      | 0.99 | 1.00 | 1.00 | 1.00 | 0.64 | 0.89 | 1.00 | 1.00 | 0.39 | 0.59 | 0.79 | 1.00 | \  | 0.39 | 0.56 | 0.73 |
|                              |               | kW       | 2.45 | 2.47 | 2.50 | 2.50 | 2.50 | 2.53 | 2.55 | 2.58 | 2.59 | 2.61 | 2.63 | 2.65 | \  | 3.15 | 3.18 | 3.20 |
|                              | 95            | TC       | 32.2 | 32.5 | 33.2 | 33.6 | 33.2 | 33.6 | 34.0 | 34.3 | 35.7 | 35.9 | 36.1 | 36.4 | \  | 40.9 | 41.1 | 41.1 |
|                              |               | S/T      | 1.00 | 1.00 | 1.00 | 1.00 | 0.64 | 0.90 | 1.00 | 1.00 | 0.39 | 0.60 | 0.80 | 1.00 | \  | 0.39 | 0.57 | 0.75 |
|                              |               | kW       | 2.88 | 2.91 | 2.94 | 2.94 | 2.94 | 2.97 | 3.00 | 3.03 | 3.05 | 3.07 | 3.09 | 3.11 | \  | 3.56 | 3.57 | 3.57 |
|                              | 105           | TC       | 31.3 | 31.6 | 32.3 | 32.7 | 32.3 | 32.7 | 33.0 | 33.4 | 34.7 | 34.9 | 35.1 | 35.4 | \  | 37.4 | 37.6 | 37.4 |
|                              |               | S/T      | 1.00 | 1.00 | 1.00 | 1.00 | 0.65 | 0.90 | 1.00 | 1.00 | 0.39 | 0.60 | 0.81 | 1.00 | \  | 0.39 | 0.59 | 0.79 |
|                              |               | kW       | 3.36 | 3.39 | 3.43 | 3.43 | 3.43 | 3.47 | 3.50 | 3.54 | 3.56 | 3.59 | 3.61 | 3.64 | \  | 3.74 | 3.76 | 3.70 |
|                              | 115           | TC       | 25.0 | 25.2 | 25.8 | 26.1 | 25.8 | 26.1 | 26.4 | 26.6 | 27.8 | 27.9 | 28.0 | 28.2 | \  | 29.8 | 29.9 | 30.0 |
|                              |               | S/T      | 1.00 | 1.00 | 1.00 | 1.00 | 0.66 | 1.00 | 1.00 | 1.00 | 0.40 | 0.66 | 0.93 | 1.00 | \  | 0.40 | 0.65 | 0.90 |
|                              |               | kW       | 2.97 | 3.00 | 3.04 | 3.04 | 3.04 | 3.07 | 3.10 | 3.13 | 3.17 | 3.18 | 3.20 | 3.21 | \  | 3.31 | 3.32 | 3.33 |

Table 3

TC refer to total capacity S/T: refer to the ratio of sensible heat and total capacity kW: refer to total input power



| BOVA 60 + BVA 48 For Cooling |            |          |      |      |      |      |      |      |      |      |      |      |      |      |    |      |      |      |
|------------------------------|------------|----------|------|------|------|------|------|------|------|------|------|------|------|------|----|------|------|------|
| Indoor Airflow (CFM)         | Outdoor DB | IWB (°F) | 59   |      |      |      | 63   |      |      |      | 67   |      |      |      | 71 |      |      |      |
|                              |            | IDB (°F) | 70   | 75   | 80   | 85   | 70   | 75   | 80   | 85   | 70   | 75   | 80   | 85   | 70 | 75   | 80   | 85   |
| 1330                         | 65         | TC       | 40.6 | 41.0 | 41.9 | 42.4 | 41.9 | 42.4 | 42.9 | 43.3 | 45.3 | 45.4 | 45.6 | 46.0 | \  | 55.3 | 55.7 | 56.2 |
|                              |            | S/T      | 1.00 | 1.00 | 1.00 | 1.00 | 0.60 | 0.81 | 1.00 | 1.00 | 0.39 | 0.55 | 0.71 | 0.87 | \  | 0.38 | 0.52 | 0.64 |
|                              |            | kW       | 2.01 | 2.03 | 2.05 | 2.05 | 2.05 | 2.07 | 2.09 | 2.11 | 2.14 | 2.15 | 2.16 | 2.19 | \  | 2.58 | 2.61 | 2.64 |
|                              | 75         | TC       | 40.8 | 41.2 | 42.1 | 42.6 | 42.1 | 42.6 | 43.1 | 43.5 | 45.0 | 45.4 | 45.8 | 46.2 | \  | 55.0 | 55.4 | 55.8 |
|                              |            | S/T      | 1.00 | 1.00 | 1.00 | 1.00 | 0.60 | 0.81 | 1.00 | 1.00 | 0.39 | 0.55 | 0.71 | 0.87 | \  | 0.38 | 0.52 | 0.65 |
|                              |            | kW       | 2.17 | 2.19 | 2.22 | 2.22 | 2.22 | 2.24 | 2.26 | 2.29 | 2.28 | 2.31 | 2.33 | 2.36 | \  | 2.80 | 2.83 | 2.86 |
|                              | 85         | TC       | 40.2 | 40.7 | 41.6 | 42.0 | 41.6 | 42.0 | 42.5 | 42.9 | 44.4 | 44.8 | 45.2 | 45.6 | \  | 54.1 | 54.5 | 54.9 |
|                              |            | S/T      | 1.00 | 1.00 | 1.00 | 1.00 | 0.60 | 0.81 | 1.00 | 1.00 | 0.39 | 0.56 | 0.72 | 0.88 | \  | 0.38 | 0.52 | 0.65 |
|                              |            | kW       | 2.41 | 2.44 | 2.46 | 2.46 | 2.46 | 2.49 | 2.52 | 2.54 | 2.55 | 2.57 | 2.59 | 2.62 | \  | 3.16 | 3.19 | 3.22 |
|                              | 95         | TC       | 39.7 | 40.2 | 41.1 | 41.5 | 41.1 | 41.5 | 42.0 | 42.4 | 43.9 | 44.3 | 44.6 | 45.0 | \  | 53.0 | 53.4 | 53.8 |
|                              |            | S/T      | 1.00 | 1.00 | 1.00 | 1.00 | 0.61 | 0.81 | 1.00 | 1.00 | 0.39 | 0.56 | 0.72 | 0.88 | \  | 0.38 | 0.52 | 0.66 |
|                              |            | kW       | 2.90 | 2.93 | 2.96 | 2.96 | 2.96 | 2.99 | 3.02 | 3.05 | 3.06 | 3.09 | 3.12 | 3.14 | \  | 3.77 | 3.80 | 3.83 |
|                              | 105        | TC       | 39.1 | 39.6 | 40.5 | 40.9 | 40.5 | 40.9 | 41.3 | 41.8 | 43.3 | 43.6 | 44.0 | 44.3 | \  | 51.9 | 52.3 | 52.6 |
|                              |            | S/T      | 1.00 | 1.00 | 1.00 | 1.00 | 0.61 | 0.82 | 1.00 | 1.00 | 0.39 | 0.56 | 0.73 | 0.89 | \  | 0.38 | 0.52 | 0.66 |
|                              |            | kW       | 3.45 | 3.49 | 3.53 | 3.53 | 3.53 | 3.57 | 3.60 | 3.64 | 3.65 | 3.68 | 3.71 | 3.74 | \  | 4.48 | 4.52 | 4.55 |
|                              | 115        | TC       | 38.3 | 38.8 | 39.6 | 40.0 | 39.6 | 40.0 | 40.5 | 40.9 | 42.6 | 42.9 | 43.1 | 43.0 | \  | 45.3 | 45.5 | 45.7 |
|                              |            | S/T      | 1.00 | 1.00 | 1.00 | 1.00 | 0.61 | 0.83 | 1.00 | 1.00 | 0.39 | 0.56 | 0.73 | 0.90 | \  | 0.39 | 0.55 | 0.71 |
|                              |            | kW       | 4.07 | 4.11 | 4.15 | 4.15 | 4.15 | 4.20 | 4.24 | 4.28 | 4.33 | 4.36 | 4.37 | 4.36 | \  | 4.39 | 4.41 | 4.43 |
| 1530                         | 65         | TC       | 43.2 | 43.7 | 44.6 | 45.1 | 44.6 | 45.1 | 45.6 | 46.1 | 47.7 | 48.1 | 48.5 | 48.9 | \  | 58.5 | 58.9 | 59.4 |
|                              |            | S/T      | 1.00 | 1.00 | 1.00 | 1.00 | 0.61 | 0.84 | 1.00 | 1.00 | 0.39 | 0.57 | 0.74 | 0.91 | \  | 0.38 | 0.53 | 0.67 |
|                              |            | kW       | 2.30 | 2.33 | 2.35 | 2.35 | 2.35 | 2.37 | 2.40 | 2.42 | 2.41 | 2.44 | 2.47 | 2.50 | \  | 2.92 | 2.95 | 2.98 |
|                              | 75         | TC       | 43.4 | 43.9 | 44.8 | 45.3 | 44.8 | 45.3 | 45.8 | 46.3 | 47.9 | 48.3 | 48.7 | 49.1 | \  | 58.1 | 58.5 | 58.9 |
|                              |            | S/T      | 1.00 | 1.00 | 1.00 | 1.00 | 0.62 | 0.84 | 1.00 | 1.00 | 0.39 | 0.57 | 0.74 | 0.91 | \  | 0.38 | 0.53 | 0.67 |
|                              |            | kW       | 2.44 | 2.47 | 2.50 | 2.50 | 2.50 | 2.52 | 2.55 | 2.58 | 2.57 | 2.60 | 2.63 | 2.65 | \  | 3.11 | 3.13 | 3.16 |
|                              | 85         | TC       | 42.7 | 43.2 | 44.2 | 44.7 | 44.2 | 44.7 | 45.1 | 45.6 | 47.2 | 47.7 | 48.0 | 48.4 | \  | 57.0 | 57.5 | 57.9 |
|                              |            | S/T      | 1.00 | 1.00 | 1.00 | 1.00 | 0.62 | 0.84 | 1.00 | 1.00 | 0.39 | 0.57 | 0.74 | 0.91 | \  | 0.38 | 0.53 | 0.67 |
|                              |            | kW       | 2.67 | 2.70 | 2.73 | 2.73 | 2.73 | 2.76 | 2.78 | 2.81 | 2.82 | 2.85 | 2.87 | 2.90 | \  | 3.47 | 3.50 | 3.52 |
|                              | 95         | TC       | 42.2 | 42.7 | 43.7 | 44.1 | 43.7 | 44.1 | 44.6 | 45.1 | 46.6 | 47.0 | 47.5 | 47.8 | \  | 55.8 | 56.2 | 56.6 |
|                              |            | S/T      | 1.00 | 1.00 | 1.00 | 1.00 | 0.62 | 0.84 | 1.00 | 1.00 | 0.39 | 0.57 | 0.75 | 0.92 | \  | 0.38 | 0.53 | 0.68 |
|                              |            | kW       | 3.18 | 3.21 | 3.25 | 3.25 | 3.25 | 3.28 | 3.32 | 3.35 | 3.37 | 3.39 | 3.42 | 3.45 | \  | 4.12 | 4.16 | 4.19 |
|                              | 105        | TC       | 41.4 | 41.9 | 42.8 | 43.3 | 42.8 | 43.3 | 43.7 | 44.2 | 45.7 | 46.2 | 46.5 | 46.9 | \  | 54.5 | 54.8 | 55.1 |
|                              |            | S/T      | 1.00 | 1.00 | 1.00 | 1.00 | 0.62 | 0.85 | 1.00 | 1.00 | 0.39 | 0.57 | 0.75 | 0.93 | \  | 0.38 | 0.54 | 0.69 |
|                              |            | kW       | 3.77 | 3.81 | 3.85 | 3.85 | 3.85 | 3.89 | 3.93 | 3.97 | 3.98 | 4.02 | 4.05 | 4.08 | \  | 4.87 | 4.90 | 4.93 |
|                              | 115        | TC       | 38.9 | 39.3 | 40.2 | 40.6 | 40.2 | 40.6 | 41.1 | 41.5 | 43.3 | 43.4 | 43.7 | 43.4 | \  | 46.7 | 46.9 | 47.1 |
|                              |            | S/T      | 1.00 | 1.00 | 1.00 | 1.00 | 0.62 | 0.86 | 1.00 | 1.00 | 0.39 | 0.59 | 0.78 | 1.00 | \  | 0.39 | 0.57 | 0.75 |
|                              |            | kW       | 4.19 | 4.23 | 4.28 | 4.28 | 4.28 | 4.32 | 4.37 | 4.41 | 4.49 | 4.48 | 4.50 | 4.45 | \  | 4.62 | 4.64 | 4.65 |
| 1760                         | 65         | TC       | 45.5 | 46.0 | 47.0 | 47.5 | 47.0 | 47.5 | 48.0 | 48.5 | 50.4 | 50.7 | 51.1 | 52.3 | \  | 61.3 | 61.7 | 62.7 |
|                              |            | S/T      | 1.00 | 1.00 | 1.00 | 1.00 | 0.62 | 0.86 | 1.00 | 1.00 | 0.39 | 0.58 | 0.76 | 0.94 | \  | 0.38 | 0.54 | 0.69 |
|                              |            | kW       | 2.62 | 2.65 | 2.68 | 2.68 | 2.68 | 2.70 | 2.73 | 2.76 | 2.76 | 2.79 | 2.82 | 2.62 | \  | 3.27 | 3.30 | 3.08 |
|                              | 75         | TC       | 45.9 | 46.4 | 47.4 | 47.9 | 47.4 | 47.9 | 48.4 | 49.0 | 50.5 | 50.9 | 51.5 | 51.9 | \  | 61.2 | 61.6 | 62.0 |
|                              |            | S/T      | 1.00 | 1.00 | 1.00 | 1.00 | 0.63 | 0.86 | 1.00 | 1.00 | 0.39 | 0.58 | 0.76 | 0.94 | \  | 0.38 | 0.54 | 0.69 |
|                              |            | kW       | 2.62 | 2.65 | 2.68 | 2.68 | 2.68 | 2.71 | 2.74 | 2.76 | 2.89 | 2.92 | 2.82 | 2.85 | \  | 3.32 | 3.34 | 3.37 |
|                              | 85         | TC       | 45.0 | 45.5 | 46.5 | 47.0 | 46.5 | 47.0 | 47.5 | 48.0 | 49.8 | 50.2 | 50.5 | 50.9 | \  | 59.7 | 60.1 | 60.5 |
|                              |            | S/T      | 1.00 | 1.00 | 1.00 | 1.00 | 0.63 | 0.86 | 1.00 | 1.00 | 0.39 | 0.58 | 0.77 | 0.95 | \  | 0.38 | 0.54 | 0.70 |
|                              |            | kW       | 2.95 | 2.98 | 3.01 | 3.01 | 3.01 | 3.04 | 3.07 | 3.11 | 3.12 | 3.15 | 3.17 | 3.20 | \  | 3.80 | 3.84 | 3.87 |
|                              | 95         | TC       | 44.1 | 44.6 | 45.6 | 46.1 | 45.6 | 46.1 | 46.6 | 47.1 | 48.9 | 49.2 | 49.6 | 50.0 | \  | 58.2 | 58.6 | 59.0 |
|                              |            | S/T      | 1.00 | 1.00 | 1.00 | 1.00 | 0.63 | 0.87 | 1.00 | 1.00 | 0.39 | 0.58 | 0.77 | 1.00 | \  | 0.38 | 0.55 | 0.71 |
|                              |            | kW       | 3.48 | 3.52 | 3.56 | 3.56 | 3.56 | 3.59 | 3.63 | 3.67 | 3.69 | 3.72 | 3.74 | 3.78 | \  | 4.49 | 4.53 | 4.56 |
|                              | 105        | TC       | 43.2 | 43.7 | 44.7 | 45.1 | 44.7 | 45.1 | 45.6 | 46.1 | 47.9 | 48.2 | 48.5 | 48.9 | \  | 56.5 | 56.5 | 56.7 |
|                              |            | S/T      | 1.00 | 1.00 | 1.00 | 1.00 | 0.63 | 0.88 | 1.00 | 1.00 | 0.39 | 0.59 | 0.78 | 1.00 | \  | 0.38 | 0.55 | 0.72 |
|                              |            | kW       | 4.09 | 4.14 | 4.18 | 4.18 | 4.18 | 4.22 | 4.27 | 4.31 | 4.33 | 4.37 | 4.40 | 4.43 | \  | 5.24 | 5.24 | 5.25 |
|                              | 115        | TC       | 38.9 | 39.3 | 40.2 | 40.6 | 40.2 | 40.6 | 41.1 | 41.5 | 43.3 | 43.5 | 43.7 | 43.9 | \  | 47.8 | 44.3 | 44.5 |
|                              |            | S/T      | 1.00 | 1.00 | 1.00 | 1.00 | 0.64 | 0.89 | 1.00 | 1.00 | 0.39 | 0.61 | 0.83 | 1.00 | \  | 0.39 | 0.61 | 0.82 |
|                              |            | kW       | 4.26 | 4.31 | 4.35 | 4.35 | 4.35 | 4.40 | 4.45 | 4.49 | 4.61 | 4.63 | 4.58 | 4.60 | \  | 4.86 | 4.57 | 4.59 |

Table 4

TC refer to total capacity S/T: refer to the ratio of sensible heat and total capacity kW: refer to total input power

| BOVA 60 + BVA 60 For Cooling |               |          |      |      |      |      |      |      |      |      |      |      |      |      |    |      |      |      |
|------------------------------|---------------|----------|------|------|------|------|------|------|------|------|------|------|------|------|----|------|------|------|
| Indoor<br>Airflow<br>(CFM)   | Outdoor<br>DB | IWB (°F) | 59   |      |      |      | 63   |      |      |      | 67   |      |      |      | 71 |      |      |      |
|                              |               | IDB (°F) | 70   | 75   | 80   | 85   | 70   | 75   | 80   | 85   | 70   | 75   | 80   | 85   | 70 | 75   | 80   | 85   |
| 1520                         | 65            | TC       | 48.0 | 48.5 | 49.6 | 50.1 | 49.6 | 50.1 | 50.7 | 51.2 | 53.1 | 53.5 | 53.9 | 54.3 | \  | 62.9 | 63.4 | 63.8 |
|                              |               | S/T      | 1.00 | 1.00 | 1.00 | 1.00 | 0.60 | 0.80 | 1.00 | 1.00 | 0.39 | 0.55 | 0.70 | 0.85 | \  | 0.38 | 0.51 | 0.64 |
|                              |               | kW       | 2.55 | 2.57 | 2.60 | 2.60 | 2.60 | 2.63 | 2.66 | 2.68 | 2.68 | 2.71 | 2.74 | 2.77 | \  | 3.13 | 3.17 | 3.20 |
|                              | 75            | TC       | 47.6 | 48.2 | 49.2 | 49.8 | 49.2 | 49.8 | 50.3 | 50.8 | 52.7 | 53.2 | 53.5 | 53.9 | \  | 62.3 | 62.7 | 63.1 |
|                              |               | S/T      | 1.00 | 1.00 | 1.00 | 1.00 | 0.60 | 0.80 | 1.00 | 1.00 | 0.39 | 0.55 | 0.70 | 0.86 | \  | 0.38 | 0.52 | 0.65 |
|                              |               | kW       | 2.75 | 2.78 | 2.81 | 2.81 | 2.81 | 2.84 | 2.87 | 2.90 | 2.91 | 2.93 | 2.96 | 2.98 | \  | 3.43 | 3.46 | 3.50 |
|                              | 85            | TC       | 46.8 | 47.3 | 48.4 | 48.9 | 48.4 | 48.9 | 49.4 | 49.9 | 51.8 | 52.2 | 52.6 | 53.0 | \  | 60.8 | 61.3 | 61.7 |
|                              |               | S/T      | 1.00 | 1.00 | 1.00 | 1.00 | 0.60 | 0.80 | 1.00 | 1.00 | 0.39 | 0.55 | 0.71 | 0.87 | \  | 0.38 | 0.52 | 0.65 |
|                              |               | kW       | 3.09 | 3.12 | 3.15 | 3.15 | 3.15 | 3.19 | 3.22 | 3.25 | 3.27 | 3.30 | 3.32 | 3.35 | \  | 3.94 | 3.98 | 4.01 |
|                              | 95            | TC       | 45.9 | 46.4 | 47.4 | 48.0 | 47.4 | 48.0 | 48.5 | 49.0 | 50.8 | 51.2 | 51.6 | 51.9 | \  | 59.3 | 59.7 | 60.1 |
|                              |               | S/T      | 1.00 | 1.00 | 1.00 | 1.00 | 0.60 | 0.81 | 1.00 | 1.00 | 0.39 | 0.55 | 0.72 | 0.87 | \  | 0.38 | 0.52 | 0.66 |
|                              |               | kW       | 3.66 | 3.70 | 3.74 | 3.74 | 3.74 | 3.78 | 3.82 | 3.86 | 3.87 | 3.90 | 3.93 | 3.96 | \  | 4.66 | 4.69 | 4.72 |
|                              | 105           | TC       | 44.8 | 45.3 | 46.3 | 46.8 | 46.3 | 46.8 | 47.4 | 47.9 | 49.7 | 50.0 | 50.4 | 50.7 | \  | 57.7 | 57.9 | 57.9 |
|                              |               | S/T      | 1.00 | 1.00 | 1.00 | 1.00 | 0.60 | 0.81 | 1.00 | 1.00 | 0.39 | 0.56 | 0.72 | 0.89 | \  | 0.38 | 0.53 | 0.67 |
|                              |               | kW       | 4.31 | 4.36 | 4.40 | 4.40 | 4.40 | 4.45 | 4.50 | 4.54 | 4.56 | 4.60 | 4.64 | 4.67 | \  | 5.46 | 5.48 | 5.48 |
|                              | 115           | TC       | 38.4 | 38.9 | 39.7 | 40.2 | 39.7 | 40.2 | 40.6 | 41.0 | 42.8 | 43.0 | 43.2 | 43.3 | \  | 44.7 | 44.8 | 45.0 |
|                              |               | S/T      | 1.00 | 1.00 | 1.00 | 1.00 | 0.61 | 0.82 | 1.00 | 1.00 | 0.39 | 0.59 | 0.78 | 1.00 | \  | 0.39 | 0.58 | 0.76 |
|                              |               | kW       | 4.25 | 4.30 | 4.34 | 4.34 | 4.34 | 4.39 | 4.43 | 4.48 | 4.53 | 4.55 | 4.57 | 4.46 | \  | 4.60 | 4.62 | 4.63 |
| 1750                         | 65            | TC       | 51.0 | 51.6 | 52.7 | 53.3 | 52.7 | 53.3 | 53.9 | 54.4 | 56.5 | 56.9 | 57.3 | 57.7 | \  | 66.5 | 66.9 | 67.3 |
|                              |               | S/T      | 1.00 | 1.00 | 1.00 | 1.00 | 0.60 | 0.82 | 1.00 | 1.00 | 0.39 | 0.55 | 0.72 | 0.88 | \  | 0.38 | 0.52 | 0.66 |
|                              |               | kW       | 2.91 | 2.94 | 2.97 | 2.97 | 2.97 | 3.01 | 3.04 | 3.07 | 3.07 | 3.10 | 3.13 | 3.16 | \  | 3.55 | 3.58 | 3.62 |
|                              | 75            | TC       | 50.6 | 51.1 | 52.3 | 52.8 | 52.3 | 52.8 | 53.4 | 54.0 | 56.0 | 56.4 | 56.8 | 57.2 | \  | 65.7 | 66.1 | 66.9 |
|                              |               | S/T      | 0.99 | 1.00 | 1.00 | 1.00 | 0.60 | 0.82 | 1.00 | 1.00 | 0.39 | 0.56 | 0.72 | 0.89 | \  | 0.38 | 0.52 | 0.66 |
|                              |               | kW       | 3.09 | 3.12 | 3.16 | 3.16 | 3.16 | 3.19 | 3.22 | 3.26 | 3.27 | 3.30 | 3.32 | 3.35 | \  | 3.83 | 3.87 | 3.78 |
|                              | 85            | TC       | 49.6 | 50.2 | 51.3 | 51.8 | 51.3 | 51.8 | 52.4 | 53.0 | 54.9 | 55.3 | 55.7 | 56.1 | \  | 64.1 | 64.5 | 64.8 |
|                              |               | S/T      | 1.00 | 1.00 | 1.00 | 1.00 | 0.61 | 0.82 | 1.00 | 1.00 | 0.39 | 0.56 | 0.73 | 0.90 | \  | 0.38 | 0.53 | 0.67 |
|                              |               | kW       | 3.43 | 3.47 | 3.50 | 3.50 | 3.50 | 3.54 | 3.58 | 3.61 | 3.63 | 3.65 | 3.69 | 3.72 | \  | 4.35 | 4.39 | 4.42 |
|                              | 95            | TC       | 48.5 | 49.0 | 50.1 | 50.7 | 50.1 | 50.7 | 51.2 | 51.7 | 53.7 | 54.0 | 54.5 | 54.7 | \  | 62.2 | 62.6 | 62.9 |
|                              |               | S/T      | 1.00 | 1.00 | 1.00 | 1.00 | 0.61 | 0.83 | 1.00 | 1.00 | 0.39 | 0.56 | 0.73 | 0.91 | \  | 0.38 | 0.53 | 0.68 |
|                              |               | kW       | 4.03 | 4.08 | 4.12 | 4.12 | 4.12 | 4.17 | 4.21 | 4.25 | 4.27 | 4.31 | 4.34 | 4.37 | \  | 5.09 | 5.13 | 5.16 |
|                              | 105           | TC       | 47.2 | 47.7 | 48.8 | 49.3 | 48.8 | 49.3 | 49.8 | 50.4 | 52.3 | 52.7 | 53.0 | 53.3 | \  | 58.5 | 58.8 | 58.7 |
|                              |               | S/T      | 0.99 | 1.00 | 1.00 | 1.00 | 0.61 | 0.83 | 1.00 | 1.00 | 0.39 | 0.57 | 0.75 | 0.92 | \  | 0.38 | 0.54 | 0.71 |
|                              |               | kW       | 4.72 | 4.77 | 4.83 | 4.83 | 4.83 | 4.88 | 4.93 | 4.98 | 5.01 | 5.05 | 5.08 | 5.11 | \  | 5.62 | 5.66 | 5.62 |
|                              | 115           | TC       | 39.6 | 40.0 | 40.9 | 41.3 | 40.9 | 41.3 | 41.8 | 42.2 | 44.1 | 44.3 | 44.5 | 44.6 | \  | 45.7 | 45.8 | 46.0 |
|                              |               | S/T      | 1.00 | 1.00 | 1.00 | 1.00 | 0.62 | 0.85 | 1.00 | 1.00 | 0.39 | 0.60 | 0.81 | 1.00 | \  | 0.39 | 0.60 | 0.80 |
|                              |               | kW       | 4.38 | 4.42 | 4.47 | 4.47 | 4.47 | 4.52 | 4.56 | 4.61 | 4.67 | 4.69 | 4.71 | 4.72 | \  | 4.84 | 4.85 | 4.86 |
| 1880                         | 65            | TC       | 53.2 | 53.8 | 55.0 | 55.5 | 55.0 | 55.5 | 56.1 | 56.7 | 59.0 | 59.3 | 59.7 | 60.1 | \  | 69.1 | 69.5 | 69.9 |
|                              |               | S/T      | 1.00 | 1.00 | 1.00 | 1.00 | 0.61 | 0.83 | 1.00 | 1.00 | 0.39 | 0.56 | 0.73 | 0.90 | \  | 0.38 | 0.53 | 0.68 |
|                              |               | kW       | 3.18 | 3.21 | 3.24 | 3.24 | 3.24 | 3.28 | 3.31 | 3.35 | 3.35 | 3.38 | 3.41 | 3.45 | \  | 3.86 | 3.89 | 3.92 |
|                              | 75            | TC       | 53.0 | 53.5 | 54.7 | 55.3 | 54.7 | 55.3 | 55.9 | 56.5 | 58.7 | 59.1 | 59.5 | 59.9 | \  | 68.6 | 69.0 | 69.4 |
|                              |               | S/T      | 1.00 | 1.00 | 1.00 | 1.00 | 0.61 | 0.83 | 1.00 | 1.00 | 0.39 | 0.56 | 0.73 | 0.91 | \  | 0.38 | 0.53 | 0.68 |
|                              |               | kW       | 3.22 | 3.26 | 3.29 | 3.29 | 3.29 | 3.33 | 3.36 | 3.40 | 3.42 | 3.44 | 3.47 | 3.50 | \  | 4.00 | 4.03 | 4.06 |
|                              | 85            | TC       | 51.6 | 52.2 | 53.4 | 54.0 | 53.4 | 54.0 | 54.5 | 55.1 | 57.3 | 57.6 | 58.0 | 58.4 | \  | 66.4 | 66.8 | 67.1 |
|                              |               | S/T      | 1.00 | 1.00 | 1.00 | 1.00 | 0.61 | 0.84 | 1.00 | 1.00 | 0.39 | 0.57 | 0.74 | 0.92 | \  | 0.38 | 0.54 | 0.69 |
|                              |               | kW       | 3.68 | 3.72 | 3.76 | 3.76 | 3.76 | 3.80 | 3.84 | 3.88 | 3.90 | 3.93 | 3.96 | 3.99 | \  | 4.65 | 4.68 | 4.71 |
|                              | 95            | TC       | 50.3 | 50.8 | 52.0 | 52.5 | 52.0 | 52.5 | 53.1 | 53.7 | 55.8 | 56.2 | 56.5 | 56.8 | \  | 64.2 | 64.6 | 64.9 |
|                              |               | S/T      | 1.00 | 1.00 | 1.00 | 1.00 | 0.62 | 0.84 | 1.00 | 1.00 | 0.39 | 0.57 | 0.75 | 0.93 | \  | 0.38 | 0.54 | 0.70 |
|                              |               | kW       | 4.31 | 4.36 | 4.40 | 4.40 | 4.40 | 4.45 | 4.50 | 4.54 | 4.57 | 4.60 | 4.64 | 4.67 | \  | 5.40 | 5.43 | 5.47 |
|                              | 105           | TC       | 48.8 | 49.4 | 50.5 | 51.0 | 50.5 | 51.0 | 51.6 | 52.1 | 54.2 | 54.5 | 54.8 | 55.2 | \  | 59.6 | 58.6 | 58.9 |
|                              |               | S/T      | 1.00 | 1.00 | 1.00 | 1.00 | 0.62 | 0.85 | 1.00 | 1.00 | 0.39 | 0.58 | 0.76 | 0.95 | \  | 0.38 | 0.56 | 0.73 |
|                              |               | kW       | 5.02 | 5.07 | 5.13 | 5.13 | 5.13 | 5.18 | 5.24 | 5.29 | 5.33 | 5.36 | 5.40 | 5.43 | \  | 5.78 | 5.69 | 5.72 |
|                              | 115           | TC       | 40.5 | 40.9 | 41.8 | 42.3 | 41.8 | 42.3 | 42.7 | 43.2 | 45.1 | 45.3 | 45.5 | 45.7 | \  | 46.4 | 46.6 | 46.7 |
|                              |               | S/T      | 1.00 | 1.00 | 1.00 | 1.00 | 0.63 | 0.88 | 1.00 | 1.00 | 0.39 | 0.62 | 0.84 | 1.00 | \  | 0.39 | 0.61 | 0.84 |
|                              |               | kW       | 4.54 | 4.59 | 4.64 | 4.64 | 4.64 | 4.69 | 4.74 | 4.79 | 4.86 | 4.87 | 4.89 | 4.90 | \  | 5.00 | 4.70 | 4.71 |

Table 5

TC refer to total capacity S/T: refer to the ratio of sensible heat and total capacity kW: refer to total input power

## 4.2 Outdoor Unit (BOVA) + Indoor Unit (BVA) – Heating Mode

| BOVA 36 + BVA 24 For Heating |         |         |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|------------------------------|---------|---------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Airflow (CFM)                | ID (°F) | OD (°F) | 72   | 67   | 62   | 57   | 52   | 47   | 42   | 37   | 32   | 27   | 22   | 17   | 12   | 7    | 2    | -4   |
| 660                          | 60      | TC      | 27.2 | 27.1 | 27.2 | 27.2 | 27.1 | 27.2 | 27.0 | 27.0 | 25.7 | 26.2 | 24.5 | 24.4 | 23.2 | 22.1 | 21.1 | 19.5 |
|                              |         | kW      | 1.21 | 1.31 | 1.44 | 1.60 | 1.71 | 1.86 | 2.02 | 2.23 | 2.22 | 2.52 | 2.44 | 2.36 | 2.29 | 2.22 | 2.15 | 2.10 |
|                              | 70      | TC      | 20.1 | 20.1 | 20.2 | 20.2 | 20.1 | 20.1 | 20.1 | 20.0 | 20.0 | 20.1 | 20.0 | 19.1 | 18.0 | 17.2 | 16.8 | 16.0 |
|                              |         | kW      | 0.89 | 0.96 | 1.05 | 1.16 | 1.25 | 1.37 | 1.53 | 1.65 | 1.76 | 1.88 | 2.03 | 2.20 | 2.38 | 2.39 | 2.31 | 2.25 |
|                              | 75      | TC      | 16.5 | 16.5 | 16.5 | 16.5 | 16.5 | 16.5 | 16.5 | 16.4 | 16.4 | 16.5 | 16.5 | 16.5 | 16.3 | 16.3 | 16.3 | 15.6 |
|                              |         | kW      | 0.73 | 0.79 | 0.87 | 0.97 | 1.05 | 1.15 | 1.24 | 1.36 | 1.48 | 1.56 | 1.70 | 1.81 | 1.93 | 2.10 | 2.30 | 2.34 |
|                              | 80      | TC      | 13.1 | 13.1 | 13.1 | 13.1 | 13.1 | 13.1 | 13.0 | 13.0 | 12.9 | 13.0 | 13.0 | 13.0 | 13.0 | 13.0 | 12.9 | 12.9 |
|                              |         | kW      | 0.58 | 0.64 | 0.70 | 0.78 | 0.84 | 0.93 | 1.02 | 1.13 | 1.19 | 1.28 | 1.36 | 1.45 | 1.58 | 1.70 | 1.82 | 1.96 |
|                              | 60      | TC      | 29.9 | 29.9 | 29.9 | 29.9 | 29.8 | 29.7 | 29.7 | 27.8 | 26.0 | 26.6 | 24.8 | 24.7 | 23.4 | 22.3 | 21.3 | 19.7 |
|                              |         | kW      | 1.37 | 1.49 | 1.61 | 1.77 | 1.88 | 2.06 | 2.28 | 2.25 | 2.18 | 2.48 | 2.41 | 2.34 | 2.27 | 2.21 | 2.14 | 2.10 |
|                              | 70      | TC      | 22.2 | 22.2 | 22.2 | 22.2 | 22.1 | 22.1 | 22.1 | 22.0 | 22.2 | 22.0 | 22.0 | 21.2 | 19.9 | 19.1 | 18.6 | 17.7 |
|                              |         | kW      | 1.00 | 1.08 | 1.18 | 1.29 | 1.41 | 1.57 | 1.69 | 1.83 | 1.93 | 2.11 | 2.27 | 2.46 | 2.45 | 2.38 | 2.30 | 2.24 |
| 760                          | 75      | TC      | 18.2 | 18.2 | 18.2 | 18.2 | 18.2 | 18.2 | 18.1 | 18.1 | 18.1 | 18.1 | 18.2 | 18.0 | 18.0 | 18.0 | 17.1 | 15.8 |
|                              |         | kW      | 0.82 | 0.89 | 0.97 | 1.08 | 1.17 | 1.27 | 1.37 | 1.54 | 1.63 | 1.75 | 1.87 | 1.99 | 2.15 | 2.34 | 2.40 | 2.33 |
|                              | 80      | TC      | 14.4 | 14.4 | 14.4 | 14.4 | 14.4 | 14.4 | 14.4 | 14.3 | 14.4 | 14.4 | 14.4 | 14.4 | 14.4 | 14.3 | 14.2 | 14.2 |
|                              |         | kW      | 0.66 | 0.72 | 0.79 | 0.87 | 0.94 | 1.05 | 1.13 | 1.24 | 1.31 | 1.41 | 1.50 | 1.63 | 1.74 | 1.82 | 2.01 | 2.17 |
|                              | 60      | TC      | 32.6 | 32.7 | 32.6 | 32.7 | 32.4 | 32.4 | 30.4 | 28.2 | 26.1 | 26.9 | 25.0 | 24.8 | 23.5 | 22.5 | 21.4 | 19.9 |
|                              |         | kW      | 1.54 | 1.66 | 1.80 | 1.96 | 2.11 | 2.30 | 2.29 | 2.23 | 2.17 | 2.46 | 2.40 | 2.34 | 2.27 | 2.21 | 2.15 | 2.10 |
|                              | 70      | TC      | 24.2 | 24.3 | 24.2 | 24.3 | 24.2 | 24.2 | 24.1 | 24.1 | 24.0 | 24.0 | 24.0 | 22.9 | 21.6 | 20.6 | 19.7 | 18.2 |
|                              |         | kW      | 1.13 | 1.22 | 1.32 | 1.48 | 1.58 | 1.73 | 1.86 | 2.01 | 2.14 | 2.35 | 2.53 | 2.52 | 2.45 | 2.38 | 2.31 | 2.26 |
|                              | 75      | TC      | 19.9 | 19.9 | 19.9 | 19.9 | 19.9 | 19.9 | 19.8 | 19.8 | 19.8 | 19.8 | 19.7 | 19.7 | 19.7 | 19.0 | 17.4 | 16.1 |
|                              |         | kW      | 0.93 | 1.00 | 1.09 | 1.20 | 1.29 | 1.41 | 1.57 | 1.69 | 1.79 | 1.93 | 2.05 | 2.20 | 2.39 | 2.48 | 2.40 | 2.34 |
|                              | 80      | TC      | 15.8 | 15.8 | 15.8 | 15.8 | 15.8 | 15.7 | 15.7 | 15.7 | 15.7 | 15.7 | 15.8 | 15.8 | 15.8 | 15.6 | 15.6 | 15.6 |
|                              |         | kW      | 0.75 | 0.82 | 0.89 | 0.97 | 1.06 | 1.16 | 1.24 | 1.36 | 1.44 | 1.55 | 1.68 | 1.79 | 1.89 | 2.04 | 2.23 | 2.40 |

Table 6

| BOVA 36 + BVA 36 For Heating |         |         |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|------------------------------|---------|---------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Airflow (CFM)                | ID (°F) | OD (°F) | 72   | 67   | 62   | 57   | 52   | 47   | 42   | 37   | 32   | 27   | 22   | 17   | 12   | 7    | 2    | -4   |
| 1020                         | 60      | TC      | 41.0 | 41.0 | 40.9 | 40.9 | 40.8 | 39.3 | 36.1 | 33.4 | 31.0 | 31.1 | 29.2 | 27.9 | 26.1 | 24.2 | 22.6 | 21.1 |
|                              |         | kW      | 2.18 | 2.33 | 2.53 | 2.74 | 2.96 | 2.98 | 2.87 | 2.77 | 2.69 | 2.96 | 2.88 | 2.80 | 2.72 | 2.65 | 2.57 | 2.52 |
|                              | 70      | TC      | 31.7 | 31.5 | 31.7 | 31.6 | 31.3 | 31.2 | 31.2 | 31.2 | 30.5 | 30.5 | 28.4 | 27.5 | 25.6 | 23.8 | 22.3 | 20.7 |
|                              |         | kW      | 1.63 | 1.72 | 1.89 | 2.02 | 2.17 | 2.36 | 2.60 | 2.83 | 2.94 | 3.22 | 3.12 | 3.03 | 2.93 | 2.85 | 2.76 | 2.69 |
|                              | 75      | TC      | 26.7 | 26.6 | 26.6 | 26.6 | 26.6 | 26.6 | 26.2 | 26.2 | 26.2 | 26.2 | 26.2 | 26.1 | 24.2 | 22.3 | 20.4 | 18.9 |
|                              |         | kW      | 1.36 | 1.46 | 1.58 | 1.70 | 1.86 | 2.01 | 2.14 | 2.34 | 2.50 | 2.74 | 2.95 | 3.16 | 3.06 | 2.97 | 2.88 | 2.80 |
|                              | 80      | TC      | 21.9 | 21.9 | 21.9 | 21.9 | 21.8 | 21.8 | 21.7 | 21.7 | 21.8 | 21.5 | 21.5 | 21.5 | 21.5 | 21.5 | 20.1 | 18.6 |
|                              |         | kW      | 1.13 | 1.20 | 1.30 | 1.41 | 1.51 | 1.64 | 1.76 | 1.95 | 2.07 | 2.20 | 2.37 | 2.56 | 2.76 | 3.01 | 3.00 | 2.92 |
|                              | 60      | TC      | 45.8 | 45.8 | 45.7 | 44.5 | 42.0 | 39.8 | 36.7 | 33.9 | 31.7 | 31.6 | 29.3 | 28.5 | 26.6 | 24.7 | 23.1 | 21.5 |
|                              |         | kW      | 2.58 | 2.73 | 2.95 | 3.03 | 2.95 | 2.92 | 2.83 | 2.74 | 2.68 | 2.94 | 2.86 | 2.79 | 2.72 | 2.65 | 2.58 | 2.53 |
|                              | 70      | TC      | 35.5 | 35.3 | 35.0 | 35.0 | 35.0 | 34.8 | 34.7 | 33.1 | 31.0 | 30.9 | 28.9 | 28.2 | 26.0 | 24.1 | 22.6 | 21.0 |
|                              |         | kW      | 1.88 | 2.01 | 2.13 | 2.31 | 2.51 | 2.66 | 3.00 | 2.99 | 2.91 | 3.18 | 3.10 | 3.01 | 2.93 | 2.85 | 2.77 | 2.71 |
| 1150                         | 75      | TC      | 29.9 | 29.8 | 29.6 | 29.8 | 29.7 | 29.3 | 29.3 | 29.4 | 29.4 | 29.4 | 28.5 | 26.5 | 24.6 | 22.6 | 20.6 | 19.2 |
|                              |         | kW      | 1.58 | 1.68 | 1.79 | 1.97 | 2.08 | 2.24 | 2.46 | 2.68 | 2.87 | 3.15 | 3.23 | 3.14 | 3.05 | 2.96 | 2.88 | 2.81 |
|                              | 80      | TC      | 24.5 | 24.5 | 24.5 | 24.5 | 24.5 | 24.4 | 24.4 | 24.1 | 24.1 | 24.0 | 24.1 | 24.1 | 24.1 | 22.3 | 20.3 | 18.9 |
|                              |         | kW      | 1.30 | 1.38 | 1.50 | 1.61 | 1.73 | 1.86 | 2.05 | 2.17 | 2.32 | 2.52 | 2.72 | 2.92 | 3.16 | 3.09 | 2.99 | 2.92 |
|                              | 60      | TC      | 51.0 | 50.2 | 47.4 | 45.3 | 42.7 | 40.5 | 37.2 | 34.4 | 32.2 | 32.1 | 30.0 | 28.9 | 27.0 | 25.1 | 23.5 | 21.9 |
|                              |         | kW      | 3.03 | 3.10 | 3.03 | 3.01 | 2.94 | 2.92 | 2.83 | 2.76 | 2.70 | 2.96 | 2.89 | 2.83 | 2.77 | 2.70 | 2.64 | 2.59 |
|                              | 70      | TC      | 39.2 | 39.1 | 39.1 | 39.1 | 39.0 | 39.0 | 36.4 | 33.6 | 31.5 | 31.4 | 29.4 | 28.4 | 26.5 | 24.6 | 23.0 | 21.4 |
|                              |         | kW      | 2.16 | 2.30 | 2.50 | 2.70 | 2.91 | 3.14 | 3.09 | 3.00 | 2.93 | 3.20 | 3.12 | 3.04 | 2.97 | 2.90 | 2.82 | 2.77 |
|                              | 75      | TC      | 33.4 | 33.3 | 33.3 | 32.9 | 32.9 | 32.8 | 32.9 | 32.8 | 31.1 | 31.0 | 29.0 | 27.0 | 25.0 | 23.0 | 21.2 | 19.7 |
|                              |         | kW      | 1.84 | 1.95 | 2.12 | 2.22 | 2.40 | 2.60 | 2.85 | 3.09 | 3.06 | 3.34 | 3.25 | 3.17 | 3.09 | 3.01 | 2.93 | 2.87 |
|                              | 80      | TC      | 27.5 | 27.4 | 27.4 | 27.4 | 27.4 | 27.3 | 26.9 | 26.9 | 27.0 | 26.9 | 26.9 | 26.6 | 24.7 | 22.7 | 20.8 | 19.3 |
|                              |         | kW      | 1.53 | 1.62 | 1.75 | 1.86 | 2.02 | 2.17 | 2.31 | 2.51 | 2.67 | 2.91 | 3.12 | 3.30 | 3.21 | 3.13 | 3.04 | 2.97 |

Table 7

| BOVA 60 + BVA 48 For Heating |         |         |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|------------------------------|---------|---------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Airflow (CFM)                | ID (°F) | OD (°F) | 72   | 67   | 62   | 57   | 52   | 47   | 42   | 37   | 32   | 27   | 22   | 17   | 12   | 7    | 2    | -4   |
| 1330                         | 60      | TC      | 57.2 | 57.2 | 57.1 | 57.1 | 56.8 | 56.9 | 53.3 | 49.2 | 46.1 | 43.8 | 42.4 | 40.6 | 39.2 | 37.4 | 35.5 | 33.7 |
|                              |         | kW      | 2.86 | 3.06 | 3.32 | 3.59 | 3.87 | 4.21 | 4.14 | 3.99 | 3.83 | 4.03 | 4.41 | 4.41 | 4.29 | 4.22 | 4.14 | 3.99 |
|                              | 70      | TC      | 44.0 | 44.0 | 44.0 | 43.9 | 43.8 | 43.8 | 43.7 | 43.7 | 43.7 | 41.6 | 40.2 | 38.5 | 37.2 | 35.4 | 33.7 | 31.9 |
|                              |         | kW      | 2.19 | 2.32 | 2.52 | 2.71 | 2.92 | 3.17 | 3.46 | 3.75 | 4.04 | 4.24 | 4.65 | 4.65 | 4.53 | 4.45 | 4.36 | 4.20 |
|                              | 75      | TC      | 37.1 | 37.0 | 37.0 | 37.0 | 37.0 | 36.9 | 36.8 | 37.0 | 37.0 | 36.8 | 36.8 | 36.8 | 35.0 | 33.5 | 31.7 | 29.8 |
|                              |         | kW      | 1.90 | 1.99 | 2.13 | 2.30 | 2.45 | 2.69 | 2.90 | 3.16 | 3.37 | 3.65 | 3.92 | 4.23 | 4.27 | 4.15 | 4.06 | 3.89 |
|                              | 80      | TC      | 30.5 | 30.5 | 30.4 | 30.4 | 30.4 | 30.3 | 30.2 | 30.4 | 30.4 | 30.4 | 30.4 | 30.4 | 30.2 | 30.3 | 30.2 | 28.2 |
|                              |         | kW      | 1.63 | 1.72 | 1.82 | 1.97 | 2.08 | 2.23 | 2.39 | 2.62 | 2.77 | 3.00 | 3.21 | 3.43 | 3.69 | 4.01 | 4.40 | 4.33 |
| 1530                         | 60      | TC      | 62.9 | 63.0 | 62.8 | 62.7 | 62.0 | 58.8 | 53.7 | 49.9 | 46.6 | 44.3 | 42.9 | 41.0 | 39.6 | 37.8 | 35.9 | 34.0 |
|                              |         | kW      | 3.27 | 3.49 | 3.76 | 4.07 | 4.31 | 4.25 | 4.08 | 3.96 | 3.85 | 4.04 | 4.43 | 4.43 | 4.31 | 4.24 | 4.16 | 4.00 |
|                              | 70      | TC      | 48.4 | 48.5 | 48.4 | 48.4 | 48.3 | 48.2 | 48.2 | 48.2 | 45.6 | 43.3 | 42.0 | 40.1 | 38.8 | 36.9 | 35.1 | 33.3 |
|                              |         | kW      | 2.46 | 2.63 | 2.83 | 3.07 | 3.30 | 3.61 | 3.91 | 4.25 | 4.19 | 4.40 | 4.82 | 4.82 | 4.70 | 4.61 | 4.53 | 4.36 |
|                              | 75      | TC      | 40.9 | 40.8 | 40.8 | 40.6 | 40.8 | 40.7 | 40.6 | 40.8 | 40.6 | 40.6 | 40.6 | 40.1 | 38.1 | 36.5 | 34.5 | 32.5 |
|                              |         | kW      | 2.13 | 2.24 | 2.39 | 2.56 | 2.78 | 3.01 | 3.27 | 3.54 | 3.77 | 4.12 | 4.43 | 4.76 | 4.81 | 4.66 | 4.57 | 4.38 |
|                              | 80      | TC      | 33.7 | 33.6 | 33.6 | 33.6 | 33.6 | 33.5 | 33.4 | 33.6 | 33.6 | 33.6 | 33.6 | 33.4 | 33.4 | 33.4 | 31.0 | 28.7 |
|                              |         | kW      | 1.83 | 1.92 | 2.04 | 2.19 | 2.33 | 2.49 | 2.72 | 2.93 | 3.12 | 3.38 | 3.60 | 3.85 | 4.16 | 4.53 | 4.63 | 4.67 |
| 1760                         | 60      | TC      | 68.7 | 68.7 | 68.7 | 66.8 | 63.0 | 59.7 | 54.8 | 50.6 | 46.8 | 44.4 | 43.0 | 41.2 | 39.8 | 37.9 | 36.0 | 34.1 |
|                              |         | kW      | 3.70 | 3.95 | 4.28 | 4.40 | 4.29 | 4.24 | 4.10 | 3.97 | 3.87 | 4.06 | 4.45 | 4.45 | 4.33 | 4.25 | 4.18 | 4.02 |
|                              | 70      | TC      | 53.0 | 53.2 | 53.0 | 53.0 | 52.9 | 52.7 | 52.8 | 49.4 | 46.3 | 44.0 | 42.6 | 40.7 | 39.3 | 37.5 | 35.6 | 33.8 |
|                              |         | kW      | 2.77 | 2.98 | 3.21 | 3.47 | 3.72 | 4.00 | 4.39 | 4.33 | 4.22 | 4.43 | 4.85 | 4.85 | 4.72 | 4.64 | 4.55 | 4.39 |
|                              | 75      | TC      | 44.8 | 44.9 | 44.8 | 44.8 | 44.7 | 44.6 | 44.5 | 44.6 | 44.5 | 44.5 | 44.5 | 42.0 | 40.6 | 38.6 | 36.9 | 34.9 |
|                              |         | kW      | 2.39 | 2.53 | 2.72 | 2.92 | 3.13 | 3.38 | 3.67 | 3.97 | 4.25 | 4.65 | 4.93 | 4.78 | 4.83 | 4.69 | 4.59 | 4.40 |
|                              | 80      | TC      | 37.0 | 36.9 | 36.9 | 36.9 | 36.9 | 36.8 | 36.7 | 36.9 | 36.9 | 36.7 | 36.7 | 36.7 | 36.7 | 34.5 | 31.6 | 29.3 |
|                              |         | kW      | 2.07 | 2.16 | 2.29 | 2.46 | 2.61 | 2.84 | 3.05 | 3.29 | 3.50 | 3.76 | 4.03 | 4.32 | 4.69 | 4.68 | 4.77 | 4.82 |

Table 8

| BOVA 60 + BVA 60 For Heating |         |         |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|------------------------------|---------|---------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Airflow (CFM)                | ID (°F) | OD (°F) | 72   | 67   | 62   | 57   | 52   | 47   | 42   | 37   | 32   | 27   | 22   | 17   | 12   | 7    | 2    | -4   |
| 1520                         | 60      | TC      | 69.0 | 68.5 | 68.5 | 68.4 | 68.3 | 67.4 | 61.6 | 56.6 | 53.0 | 52.2 | 52.7 | 49.1 | 45.6 | 42.1 | 38.7 | 36.0 |
|                              |         | kW      | 3.45 | 3.65 | 3.98 | 4.30 | 4.67 | 4.92 | 4.73 | 4.56 | 4.44 | 5.30 | 5.34 | 5.18 | 5.02 | 4.86 | 4.70 | 4.57 |
|                              | 70      | TC      | 52.0 | 52.0 | 52.0 | 52.0 | 51.9 | 51.3 | 51.5 | 51.4 | 51.4 | 48.9 | 45.8 | 42.7 | 41.6 | 40.6 | 38.0 | 36.0 |
|                              |         | kW      | 2.50 | 2.68 | 2.91 | 3.16 | 3.40 | 3.63 | 4.03 | 4.39 | 4.76 | 4.90 | 5.04 | 5.09 | 4.99 | 4.91 | 4.80 | 4.76 |
|                              | 75      | TC      | 43.2 | 43.2 | 43.1 | 43.1 | 43.1 | 43.0 | 42.9 | 42.8 | 42.6 | 42.6 | 42.6 | 42.6 | 40.5 | 38.8 | 36.7 | 34.5 |
|                              |         | kW      | 2.12 | 2.24 | 2.40 | 2.58 | 2.78 | 3.04 | 3.32 | 3.56 | 3.82 | 4.19 | 4.51 | 4.90 | 4.90 | 4.71 | 4.56 | 4.46 |
|                              | 80      | TC      | 34.8 | 34.8 | 34.8 | 34.7 | 34.7 | 34.7 | 34.4 | 34.7 | 34.7 | 34.7 | 34.2 | 34.2 | 34.2 | 34.2 | 34.2 | 33.9 |
|                              |         | kW      | 1.78 | 1.88 | 2.00 | 2.16 | 2.29 | 2.46 | 2.64 | 2.88 | 3.10 | 3.36 | 3.53 | 3.80 | 4.10 | 4.47 | 4.92 | 5.36 |
| 1750                         | 60      | TC      | 75.6 | 75.5 | 75.5 | 75.5 | 72.1 | 68.2 | 62.4 | 57.5 | 53.8 | 51.1 | 49.5 | 47.3 | 45.7 | 43.6 | 41.4 | 39.3 |
|                              |         | kW      | 3.97 | 4.22 | 4.58 | 4.96 | 4.95 | 4.88 | 4.71 | 4.56 | 4.45 | 2.10 | 5.12 | 5.12 | 4.98 | 4.90 | 4.81 | 4.63 |
|                              | 70      | TC      | 57.3 | 57.5 | 57.4 | 57.2 | 56.4 | 56.2 | 56.1 | 55.3 | 53.6 | 51.0 | 47.7 | 44.5 | 43.4 | 42.4 | 39.7 | 37.0 |
|                              |         | kW      | 2.87 | 3.08 | 3.33 | 3.60 | 3.82 | 4.13 | 4.56 | 4.77 | 4.84 | 4.99 | 5.13 | 5.18 | 5.08 | 5.00 | 4.89 | 4.84 |
|                              | 75      | TC      | 47.7 | 47.8 | 47.7 | 47.6 | 47.6 | 47.5 | 47.1 | 47.0 | 47.0 | 47.0 | 47.0 | 44.0 | 41.8 | 40.1 | 37.9 | 35.7 |
|                              |         | kW      | 2.40 | 2.55 | 2.74 | 2.96 | 3.20 | 3.45 | 3.73 | 4.04 | 4.34 | 4.78 | 5.17 | 5.42 | 5.42 | 5.20 | 5.04 | 4.93 |
|                              | 80      | TC      | 38.4 | 38.5 | 38.5 | 38.4 | 38.4 | 38.3 | 38.2 | 38.4 | 38.4 | 37.9 | 37.9 | 37.8 | 37.9 | 37.8 | 37.2 | 34.5 |
|                              |         | kW      | 2.02 | 2.13 | 2.27 | 2.43 | 2.58 | 2.76 | 3.01 | 3.29 | 3.51 | 3.74 | 4.01 | 4.30 | 4.68 | 5.09 | 5.54 | 5.39 |
| 1880                         | 60      | TC      | 81.0 | 81.0 | 81.0 | 77.1 | 72.6 | 68.6 | 62.6 | 58.0 | 54.2 | 54.4 | 53.8 | 50.0 | 46.5 | 43.1 | 39.7 | 37.0 |
|                              |         | kW      | 4.40 | 4.66 | 5.08 | 5.02 | 4.90 | 4.84 | 4.69 | 4.56 | 4.45 | 5.27 | 5.33 | 5.19 | 5.05 | 4.91 | 4.77 | 4.65 |
|                              | 70      | TC      | 61.6 | 61.7 | 61.6 | 61.0 | 60.8 | 60.9 | 61.0 | 56.8 | 54.2 | 51.5 | 48.2 | 45.0 | 43.9 | 42.8 | 40.1 | 37.9 |
|                              |         | kW      | 3.18 | 3.39 | 3.66 | 3.90 | 4.20 | 4.54 | 5.03 | 4.97 | 4.84 | 4.99 | 5.13 | 5.18 | 5.08 | 5.00 | 4.89 | 4.84 |
|                              | 75      | TC      | 51.2 | 51.3 | 50.9 | 51.1 | 51.1 | 51.0 | 50.5 | 50.5 | 50.6 | 50.5 | 50.6 | 44.6 | 42.4 | 40.6 | 38.4 | 36.1 |
|                              |         | kW      | 2.62 | 2.79 | 2.98 | 3.26 | 3.50 | 3.76 | 4.08 | 4.43 | 4.77 | 5.27 | 5.70 | 5.85 | 5.85 | 5.62 | 5.44 | 5.32 |
|                              | 80      | TC      | 41.4 | 41.4 | 41.4 | 41.3 | 41.2 | 41.2 | 41.2 | 41.3 | 40.9 | 40.7 | 40.7 | 40.7 | 40.7 | 40.7 | 37.7 | 34.9 |
|                              |         | kW      | 2.21 | 2.32 | 2.47 | 2.64 | 2.80 | 3.02 | 3.32 | 3.59 | 3.77 | 4.09 | 4.39 | 4.73 | 5.13 | 5.65 | 5.56 | 5.41 |

Table 9

## 5 AHRI 210/240 Performance Data

| Nominal HP System Tonnage | Outdoor Unit Model | Indoor Unit Model  | Furnace Model | Cooling Capacity (BTU/h) |                  |                   | Heating Capacity |                   |                  | CFM       |
|---------------------------|--------------------|--------------------|---------------|--------------------------|------------------|-------------------|------------------|-------------------|------------------|-----------|
|                           |                    | Coils/Air Handlers |               | Total                    | EER <sup>2</sup> | SEER <sup>1</sup> | Hi               | HSPF <sup>3</sup> | Low <sup>4</sup> |           |
| 2                         | BOVA-36HDN1-M20G   | BVA-24WN1-M20      | /             | 24000                    | 14               | 20.5              | 24000            | 10.5              | 23000            | 860/680   |
| 3                         | BOVA-36HDN1-M20G   | BVA-36WN1-M20      | /             | 34600                    | 12.5             | 20                | 34200            | 10.5              | 28000            | 1150/820  |
| 4                         | BOVA-60HDN1-M20G   | BVA-48WN1-M20      | /             | 47500                    | 13.5             | 20                | 48000            | 10.5              | 40000            | 1530/1150 |
| 5                         | BOVA-60HDN1-M20G   | BVA-60WN1-M20      | /             | 54500                    | 12.5             | 19                | 56000            | 10.5              | 44000            | 1750/1350 |
| 3                         | BOVA-36HDN1-M20G   | BMAC2430ANTD       | /             | 23400                    | 11.8             | 16.5              | 23400            | 9.5               | 18000            | 750/600   |
|                           | BOVA-36HDN1-M20G   | BMAC2430BNTD       | /             | 23600                    | 11.8             | 16.5              | 23800            | 9.5               | 18000            | 800/600   |
|                           | BOVA-36HDN1-M20G   | BMAC3036ANTD       | /             | 32000                    | 10.8             | 16                | 33600            | 9.5               | 22000            | 900/750   |
|                           | BOVA-36HDN1-M20G   | BMAC3036BNTD       | /             | 32400                    | 11.2             | 16                | 33800            | 9.5               | 23000            | 1000/800  |
|                           | BOVA-36HDN1-M20G   | BMAC3036CNTD       | /             | 32600                    | 11.4             | 16                | 34000            | 9.5               | 23000            | 1050/800  |
| 4                         | BOVA-60HDN1-M20G   | BMAC4248BNTF       | /             | 43000                    | 11.2             | 16.5              | 44500            | 9.5               | 31500            | 1200/1050 |
|                           | BOVA-60HDN1-M20G   | BMAC4248CNTF       | /             | 44000                    | 11.8             | 16.5              | 46000            | 9.5               | 32000            | 1350/1050 |
|                           | BOVA-60HDN1-M20G   | BMAC4248DNTF       | /             | 45000                    | 11.8             | 16.5              | 46500            | 9.5               | 32000            | 1450/1050 |
| 5                         | BOVA-60HDN1-M20G   | BMAC4860CNTF       | /             | 55000                    | 10.5             | 16                | 55500            | 9.5               | 38000            | 1350/1150 |
|                           | BOVA-60HDN1-M20G   | BMAC4860CNTF       | /             | 56000                    | 10.5             | 16                | 56000            | 9.5               | 39000            | 1500/1150 |
| 2                         | BOVA-36HDN1-M20G   | BMAC2430ANTD       | BGH96M060B3A  | 24000                    | 13               | 18.5              | 24000            | 10                | 18000            | 820/630   |
|                           | BOVA-36HDN1-M20G   | BMAC2430ANTD       | BGH96M080B3A  | 24000                    | 13               | 18.5              | 24000            | 10                | 18000            | 800/580   |
|                           | BOVA-36HDN1-M20G   | BMAC2430BNTD       | BGH96M060B3A  | 24000                    | 13.5             | 19                | 24000            | 10                | 19000            | 860/680   |
|                           | BOVA-36HDN1-M20G   | BMAC2430BNTD       | BGH96M080B3A  | 24000                    | 13.5             | 19                | 24000            | 10                | 19000            | 840/630   |
| 3                         | BOVA-36HDN1-M20G   | BMAC3036ANTD       | BGH96M060B3A  | 32200                    | 11.2             | 17                | 34000            | 10                | 25000            | 1050/800  |
|                           | BOVA-36HDN1-M20G   | BMAC3036ANTD       | BGH96M080B3A  | 32200                    | 11.2             | 17                | 34000            | 10                | 25000            | 1020/800  |
|                           | BOVA-36HDN1-M20G   | BMAC3036BNTD       | BGH96M060B3A  | 33000                    | 11.6             | 17.5              | 34200            | 10                | 25000            | 1100/850  |
|                           | BOVA-36HDN1-M20G   | BMAC3036BNTD       | BGH96M080B3A  | 33000                    | 11.6             | 17.5              | 34200            | 10                | 25000            | 1070/850  |
|                           | BOVA-36HDN1-M20G   | BMAC3036CNTD       | BGH96M080C4A  | 33600                    | 12               | 18                | 34200            | 10                | 25000            | 1050/820  |
|                           | BOVA-36HDN1-M20G   | BMAC3036CNTD       | BGH96M100C5A  | 33600                    | 12               | 18                | 34200            | 10                | 25000            | 1150/750  |
|                           | BOVA-36HDN1-M20G   | BMAC4248BNTF       | BGH96M080B3A  | 33000                    | 12.5             | 18.5              | 34200            | 10                | 26000            | 1000/850  |
|                           | BOVA-36HDN1-M20G   | BMAC4248CNTF       | BGH96M100C5A  | 33000                    | 12.5             | 18.5              | 34200            | 10                | 26000            | 1100/800  |
| 4                         | BOVA-60HDN1-M20G   | BMAC4248BNTF       | BGH96M080B3A  | 43000                    | 11.2             | 18                | 45000            | 9.5               | 34000            | 1250/1050 |
|                           | BOVA-60HDN1-M20G   | BMAC4248CNTF       | BGH96M080C4A  | 44000                    | 12               | 18.5              | 46000            | 10                | 35000            | 1250/1050 |
|                           | BOVA-60HDN1-M20G   | BMAC4248CNTF       | BGH96M100C5A  | 45000                    | 12.5             | 18.5              | 46500            | 10                | 35000            | 1450/1150 |
|                           | BOVA-60HDN1-M20G   | BMAC4248DNTF       | BGH96M100D5A  | 45500                    | 12.5             | 18.5              | 47000            | 10                | 35000            | 1500/1200 |
|                           | BOVA-60HDN1-M20G   | BMAC4248DNTF       | BGH96M120D5A  | 45500                    | 12.5             | 18.5              | 47000            | 10                | 35000            | 1500/1200 |
| 5                         | BOVA-60HDN1-M20G   | BMAC4860CNTF       | BGH96M100C5A  | 52000                    | 12               | 18                | 53500            | 10                | 37000            | 1450/1150 |
|                           | BOVA-60HDN1-M20G   | BMAC4860DNTF       | BGH96M100D5A  | 52000                    | 12.5             | 18.5              | 54000            | 10                | 38000            | 1500/1200 |
|                           | BOVA-60HDN1-M20G   | BMAC4860DNTF       | BGH96M120D5A  | 52000                    | 12.5             | 18.5              | 54000            | 10                | 38000            | 1500/1200 |

Table 10

<sup>1</sup> Seasonal Energy Efficiency Ratio; Certified per AHRI 210/240<sup>2</sup> Energy Efficiency Ratio; Certified per AHRI 210/240<sup>3</sup> HSPF = Heating Seasonal Performance Factor; Certified per AHRI 210/240<sup>4</sup> Jumper cut or dip switch off

Always check the rating plate for electrical data on the unit being installed. The above data are for reference only.



Items in **bold** boxes meet the requirements for ENERGY STAR

## 6 Suction Corrected Factor

| Model Size                        |          | 2 Ton   | 3 Ton   | 4 Ton   | 5 Ton   |
|-----------------------------------|----------|---------|---------|---------|---------|
| BOVA-Suction Line Connection Size |          | 3/4     | 3/4     | 7/8     | 7/8     |
| Suction Line Run - Feet           |          | 3/4 STD | 3/4 STD | 7/8 STD | 7/8 STD |
|                                   |          | 5/8 OPT | 5/8 OPT | 3/4 OPT | 3/4 OPT |
| 25'                               | Standard | 1       | 1       | 1       | 1       |
|                                   | Optional | 1       | 0.99    | 0.99    | 0.98    |
| 50'                               | Standard | 0.99    | 0.99    | 0.99    | 0.99    |
|                                   | Optional | 0.99    | 0.98    | 0.98    | 0.97    |
| 100'                              | Standard | 0.99    | 0.98    | 0.98    | 0.97    |
|                                   | Optional | 0.98    | 0.95    | 0.97    | 0.95    |
| 150'                              | Standard | 0.97    | 0.96    | 0.96    | 0.95    |
|                                   | Optional | 0.96    | 0.93    | 0.95    | 0.93    |

Table 11

Std: Standard size

Opt: Optional size



Using suction line larger than shown in chart will result in poor oil return and is not recommended.

## 7 Sound Data

| Model | Sound Power Level [dB(A)] | Full Octave Linear Sound Power Level dB -Center Frequency -Hz |      |      |      |      |      |      |      | Sound Power Level [dB(A)] with Sound Blanket |
|-------|---------------------------|---|------|------|------|------|------|------|------|--|
|       |                           | 100   | 125  | 250  | 500  | 1000 | 2000 | 4000 | 8000 |  |
| 3 Ton | 56 (Low)                  | 26.1  | 28.9 | 37.5 | 44.4 | 48.1 | 42.5 | 47.1 | 40.7 | Sound Blanket - Standard                     |
|       | 77 (High)                 | 48.4  | 54.3 | 60.5 | 66.2 | 68.7 | 63.6 | 62.3 | 53.7 |  |
| 5 Ton | 60 (Low)                  | 30.5  | 36.0 | 47.6 | 50.1 | 48.5 | 50.1 | 50.5 | 41.3 |  |
|       | 79 (High)                 | 51.6  | 47.6 | 62.3 | 67.0 | 68.6 | 64.2 | 64.6 | 56.5 |  |

Table 12 IDS Sound power level

## 8 Dimensions

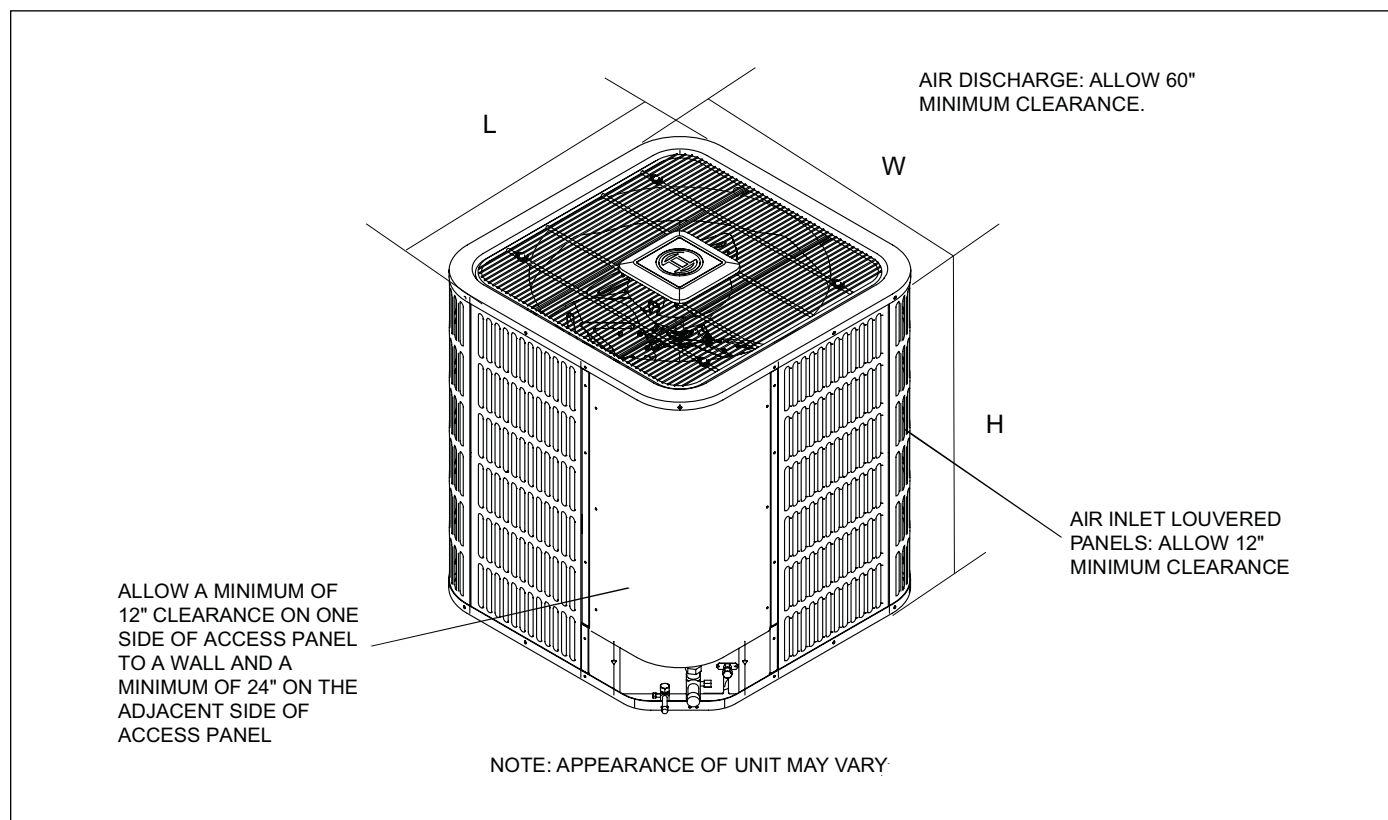


Figure 2

| Model Size | Dimensions (Inches) |              |              |
|------------|---------------------|--------------|--------------|
|            | "H" in. [mm]        | "W" in. [mm] | "L" in. [mm] |
| Heat Pump  |                     |              |              |
| BOVA 36    | 24-15/16 [633]      | 29-1/8 [740] | 29-1/8 [740] |
| BOVA 60    | 33-3/16 [843]       | 29-1/8 [740] | 29-1/8 [740] |

Table 13

**United States and Canada**

**Bosch Thermotechnology Corp.**  
**65 Grove St.**  
**Watertown, MA 02472**

**Tel: 866-642-3198**  
**Fax: 603-965-7581**  
**[www.boschheatingandcooling.com](http://www.boschheatingandcooling.com)**