



# **BROCK**

HEATING & COOLING



**BROPH14NB**

**14 SEER Single-Stage  
Heat Pump**

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# HEAT PUMP



# BROPH14NB

## 14 SEER Single-Stage Heat Pump

With R-410A Refrigerant  
1-1/2 To 5 Nominal Tons

### FEATURES AND BENEFITS

#### Efficiency

- 14 SEER / 11.5 - 11.7 EER / 8.2 HSPF
- Microtube Technology™ refrigeration system
- Indoor air quality accessories available

#### Sound

- Sound level as low as 69 dBA
- Sound levels as low as 68 dBA with accessory sound blanket

#### Comfort

- System supports programmable or standard thermostat controls

#### Reliability

- Non-ozone depleting R-410A refrigerant
- Scroll compressor
- Internal pressure relief valve
- Internal thermal overload

- Loss of charge switch
- Filter drier
- Balanced refrigeration system for maximum reliability

#### Durability

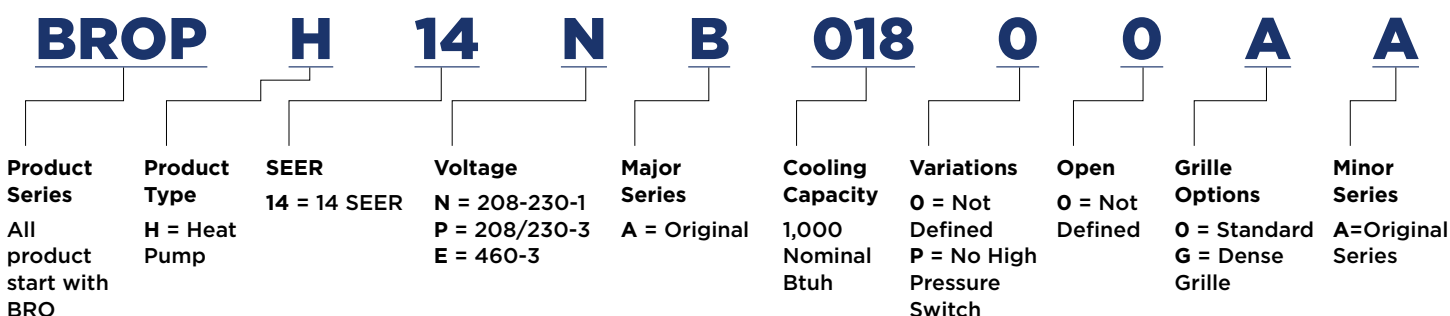
- Protection package
- Solid, durable sheet metal construction
- Dense wire coil guard

#### Applications

- Long-line - up to 250 feet (76.20 m) total equivalent length, up to 200 feet (60.96 m) condenser above evaporator, or up to 80 ft. (24.38 m) evaporator above condenser (See Longline Guide for more information.)
- Low ambient (down to -20°F/-28.9°C) with accessory kit

*NOTE: Ratings contained in this document are subject to change at any time. Always refer to the AHRI directory ([www.ahridirectory.org](http://www.ahridirectory.org)) for the most up-to-date ratings information.*

### MODEL NUMBER NOMENCLATURE



## Standard Features & Physical Data

### STANDARD FEATURES

| Feature                         | 18 | 24 | 30 | 36 | 42 | 48 | 60 |
|---------------------------------|----|----|----|----|----|----|----|
| R-410A Refrigerant              | X  | X  | X  | X  | X  | X  | X  |
| Scroll Compressor               | X  | X  | X  | X  | X  | X  | X  |
| Field Installed Filter Drier    | X  | X  | X  | X  | X  | X  | X  |
| Front Seating Service Valves    | X  | X  | X  | X  | X  | X  | X  |
| Internal Pressure Relief Valve  | X  | X  | X  | X  | X  | X  | X  |
| Internal Thermal Overload       | X  | X  | X  | X  | X  | X  | X  |
| Long Line capability            | X  | X  | X  | X  | X  | X  | X  |
| Low Ambient capability with Kit | X  | X  | X  | X  | X  | X  | X  |
| Suction Line Accumulator        | X  | X  | X  | X  | X  | X  | X  |
| Loss of Charge Switch           | X  | X  | X  | X  | X  | X  | X  |

X = Standard

### Physical Data

| UNIT SIZE SERIES                   | 18-A                                          | 24-A      | 30-A      | 36-B        | 42-A        | 48-A        | 60-A        |
|------------------------------------|-----------------------------------------------|-----------|-----------|-------------|-------------|-------------|-------------|
| <b>Compressor Type</b>             | Scroll                                        |           |           |             |             |             |             |
| <b>Refrigerant</b>                 | R-410A                                        |           |           |             |             |             |             |
| <b>Control</b>                     | TXV (R-410A Hard Shutoff)                     |           |           |             |             |             |             |
| Outdoor Heating Piston #           | 42                                            | 46        | 49        | 57          | 61          | 65          | 73          |
| Charge lb (kg)                     | 5.3 (2.4)                                     | 5.6 (2.5) | 6.4 (2.9) | 7.67 (3.48) | 8.25 (3.74) | 8.68 (3.94) | 10.6 (4.81) |
| <b>Cond Fan</b>                    | Forward Swept or Propeller Type, Direct Drive |           |           |             |             |             |             |
| Air Discharge                      | Vertical                                      |           |           |             |             |             |             |
| Motor HP                           | 1/12                                          | 1/10      | 1/4       | 1/5         | 1/4         | 1/4         | 1/4         |
| Motor RPM                          | 1100                                          | 1100      | 1100      | 1100        | 1100        | 1100        | 800         |
| CFM                                | 1700                                          | 2195      | 3365      | 3165        | 3800        | 3365        | 4470        |
| <b>Valve Connect. (In. ID)</b>     |                                               |           |           |             |             |             |             |
| Vapor                              | 5/8                                           | 5/8       | 3/4       | 3/4         | 7/8         | 7/8         | 7/8         |
| Liquid                             | 3/8                                           |           |           |             |             |             |             |
| <b>Refrigerant Tubes* (In. OD)</b> |                                               |           |           |             |             |             |             |
| Rated Vapor                        | 5/8                                           | 5/8       | 3/4       | 3/4         | 7/8         | 7/8         | 1-1/8       |
| Max Liquid Line                    | 3/8                                           |           |           |             |             |             |             |

\*Units are rated with 25 ft (7.6 m) of lineset length. See Vapor Line Sizing and Cooling Capacity Loss table when using other sizes and lengths of lineset.

Note: See unit Installation Instructions for proper installation

## VAPOR LINE SIZING AND COOLING CAPACITY LOSS

Acceptable vapor line diameters provide adequate oil return to the compressor while avoiding excessive capacity loss. The suction line diameters shown in the chart below are acceptable for HP systems with R-410A refrigerant:

### Vapor Line Sizing and Cooling Capacity Losses - R-410A Refrigerant 1- Stage Heat Pump Applications

| Unit<br>Nominal<br>Size<br>(Btuh) | Acceptable<br>Vapor Line<br>Diameters<br>(In. OD) | Cooling Capacity Loss (%)         |              |              |                                            |                |                |                |                |                |                |                |
|-----------------------------------|---------------------------------------------------|-----------------------------------|--------------|--------------|--------------------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
|                                   |                                                   | Total Equivalent Line Length (ft) |              |              |                                            |                |                |                |                |                |                |                |
|                                   |                                                   | Standard Application              |              |              | Long Line Application Requires Accessories |                |                |                |                |                |                |                |
|                                   |                                                   | 25<br>(7.62)                      | 50<br>(15.2) | 80<br>(24.4) | 80+<br>(24.4+)                             | 100<br>(30.48) | 125<br>(38.10) | 150<br>(45.72) | 175<br>(53.34) | 200<br>(60.96) | 225<br>(68.58) | 250<br>(76.20) |
| 18,000                            | 1/2                                               | 1                                 | 2            | 3            | 3                                          | 4              | 6              | 7              | 8              | 9              | 10             | 12             |
|                                   | 5/8                                               | 0                                 | 0            | 1            | 1                                          | 1              | 1              | 2              | 2              | 3              | 3              | 3              |
| 24,000                            | 5/8                                               | 0                                 | 1            | 1            | 1                                          | 2              | 3              | 3              | 4              | 4              | 5              | 6              |
|                                   | 3/4                                               | 0                                 | 0            | 0            | 0                                          | 0              | 1              | 1              | 1              | 1              | 1              | 2              |
| 30,000                            | 5/8                                               | 1                                 | 2            | 3            | 3                                          | 3              | 4              | 5              | 6              | 7              | 8              | 9              |
|                                   | 3/4                                               | 0                                 | 0            | 1            | 1                                          | 1              | 1              | 2              | 2              | 2              | 3              | 3              |
|                                   | 7/8                                               | 0                                 | 0            | 0            | 0                                          | 0              | 1              | 1              | 1              | 1              | 1              | 1              |
| 36,000                            | 5/8                                               | 1                                 | 2            | 4            | 4                                          | 5              | 6              | 7              | 9              | 10             | 11             | 13             |
|                                   | 3/4                                               | 0                                 | 0            | 1            | 1                                          | 1              | 2              | 2              | 3              | 3              | 4              | 4              |
|                                   | 7/8                                               | 0                                 | 0            | 0            | 0                                          | 0              | 1              | 1              | 1              | 1              | 2              | 2              |
| 42,000                            | 3/4                                               | 0                                 | 1            | 2            | 2                                          | 2              | 3              | 4              | 4              | 5              | 6              | 6              |
|                                   | 7/8                                               | 0                                 | 0            | 1            | 1                                          | 1              | 1              | 2              | 2              | 2              | 3              | 3              |
| 48,000                            | 3/4                                               | 0                                 | 1            | 2            | 2                                          | 3              | 4              | 5              | 5              | 6              | 7              | 8              |
|                                   | 7/8                                               | 0                                 | 0            | 1            | 1                                          | 1              | 2              | 2              | 2              | 3              | 3              | 4              |
| 60,000                            | 3/4                                               | 1                                 | 2            | 4            | 4                                          | 5              | 6              | 7              | 9              | 10             | 11             | 12             |
|                                   | 7/8                                               | 0                                 | 1            | 2            | 2                                          | 2              | 3              | 4              | 4              | 5              | 5              | 6              |
|                                   | 1 1/8                                             | 0                                 | 0            | 0            | 0                                          | 1              | 1              | 1              | 1              | 1              | 1              | 2              |

Applications in this area are long line. Accessories are required as shown recommended on Long Line Application Guidelines

Applications in this area may have height restrictions that limit allowable total equivalent length, when outdoor unit is below indoor unit  
See Long Line Application Guidelines

Standard Length = 80 ft. (24.4 m) or less total equivalent length

## Refrigerant Piping Length Limitations

### Maximum Line Lengths

The maximum allowable total equivalent length for heat pumps varies depending on the vertical separation. See

the tables below for allowable lengths depending on whether the outdoor unit is on the same level, above or below the outdoor unit.

### Maximum Line Lengths for Heat Pump Applications

|                                | Maximum Actual Length* Ft (M)                                               | Maximum Equivalent Length Ft (M) | Maximum Vertical Separation Ft (M) |
|--------------------------------|-----------------------------------------------------------------------------|----------------------------------|------------------------------------|
| Units on equal level           | 200 (61)                                                                    | 250 (76.2)                       | N/A                                |
| Outdoor unit ABOVE indoor unit | 200 (61)                                                                    | 250 (76.2)                       | 200 (61)                           |
| Outdoor unit BELOW indoor unit | See Table 'Maximum Total Equivalent Length: Outdoor Unit BELOW Indoor Unit' |                                  |                                    |

\* Maximum actual length not to exceed 200 ft. (51 m)

### Maximum Total Equivalent Length<sup>+</sup> – Outdoor Unit Below Indoor Unit

| Size   | Liquid Line Diameter w/ TXV | HP with R-410A Refrigerant – Maximum Total Equivalent Length*<br>Vertical Separation ft (m) Outdoor unit BELOW indoor unit; |                 |                  |                   |                  |                   |                   |
|--------|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------|-----------------|------------------|-------------------|------------------|-------------------|-------------------|
|        |                             | 0-20 (0-6.1)                                                                                                                | 21-30 (6.4-9.1) | 31-40 (9.4-12.2) | 41-50 (12.5-15.2) | 51-60 (15.5-8.3) | 61-70 (18.6-21.3) | 71-80 (21.6-24.4) |
| 18,000 | 3/8                         | 250*                                                                                                                        | 250*            | 250*             | 250*              | 250*             | 250*              | 250*              |
| 24,000 | 3/8                         | 250*                                                                                                                        | 250*            | 250*             | 250*              | 250*             | 250*              | 250*              |
| 30,000 | 3/8                         | 250*                                                                                                                        | 250*            | 250*             | 250*              | 250*             | 250*              | 250*              |
| 36,000 | 3/8                         | 250*                                                                                                                        | 250*            | 250*             | 250*              | 250*             | 250*              | 250*              |
| 42,000 | 3/8                         | 250*                                                                                                                        | 250*            | 250*             | 250*              | 250*             | 250*              | 150               |
| 48,000 | 3/8                         | 250*                                                                                                                        | 250*            | 250*             | 250*              | 230              | 160               | -                 |
| 60,000 | 3/8                         | 250*                                                                                                                        | 225*            | 190              | 150               | 110              | -                 | -                 |

\* Total equivalent length accounts for losses due to elbows or fitting. See the Long Line Guideline for details.

- = outside acceptable range

### Long Line Applications

An application is considered Long Line when the refrigerant level in the system requires the use of accessories to maintain acceptable refrigerant management for systems reliability. Defining a system as long line depends on the

liquid line diameter, actual length of the tubing, and vertical separation between the indoor and outdoor units.

For Heat Pump systems, the chart below shows when an application is considered Long Line. Beyond these lengths, long line accessories are required:

### Hp With R-410A Refrigerant Long Line Description Ft (M)

Beyond these lengths, long line accessories are required

| Liquid Line Size | Units On Same Level | Outdoor Below Indoor                 | Outdoor Above Indoor |
|------------------|---------------------|--------------------------------------|----------------------|
| 3/8              | 80 (24.4)           | 20 (6.1) vertical or 80 (24.4) total | 80 (24.4)            |

Note: See Long Line Guideline for details

## ACCESSORY USAGE GUIDELINE

| Accessory                                   | Required for Low Ambient Cooling Applications (Below 55° F / 12.8° C) | Required for Long Line Applications* | Required for Sea Coast Applications (within 2 miles/3.2 km) |
|---------------------------------------------|-----------------------------------------------------------------------|--------------------------------------|-------------------------------------------------------------|
| Accumulator                                 | Standard                                                              | Standard                             | Standard                                                    |
| Ball Bearing Fan Motor                      | Yes†                                                                  | No                                   | No                                                          |
| Compressor Start Assist Capacitor and Relay | Yes                                                                   | Yes                                  | No                                                          |
| Crankcase Heater                            | Yes                                                                   | Yes                                  | No                                                          |
| Evaporator Freeze Thermostat                | Yes                                                                   | No                                   | No                                                          |
| Hard Shutoff TXV                            | Yes                                                                   | Yes                                  | No                                                          |
| Isolation Relay                             | Yes                                                                   | No                                   | No                                                          |
| Liquid Line Solenoid Valve                  | No                                                                    | See Long-Line Application Guideline  | No                                                          |
| Motor Master® Control or Low Ambient Switch | Yes                                                                   | No                                   | No                                                          |
| Support Feet                                | Recommended                                                           | No                                   | Recommended                                                 |

\* For tubing line sets between 80 and 200 ft. (24.38 and 60.96 m) and/or 20 ft. (6.09 m) vertical differential, refer to Residential Split-System Longline Application Guideline.

† Additional requirement for Low-Ambient Controller (full modulation feature) MotorMaster® Control.

## Accessory Description and Usage (Listed Alphabetically)

### 1. Ball-Bearing Fan Motor

A fan motor with ball bearings which permits speed reduction while maintaining bearing lubrication.

#### Usage Guideline:

- Required on all units when using MotorMaster®

### 2. Compressor Start Assist - Capacitor and Relay

Start capacitor and relay gives a hard boost to compressor motor at each start up.

#### Usage Guideline:

- Required for reciprocating compressors in the following applications:
  - Long line
  - Low ambient cooling
  - Hard shut off expansion valve on indoor coil
  - Liquid line solenoid on indoor coil
- Required for single-phase scroll compressors in the following applications:
  - Long line
  - Low ambient cooling
- Suggested for all compressors in areas with a history of low voltage problems.

### 3. Compressor Start Assist — PTC Type

Solid state electrical device which gives a soft boost to the compressor at each start-up.

#### Usage Guideline:

Suggested in installations with marginal power supply.

### 4. Crankcase Heater

An electric resistance heater which mounts to the base of the compressor to keep the lubricant warm during off cycles. Improves compressor lubrication on restart and minimizes the chance of liquid slugging.

#### Usage Guideline:

- Required in low ambient cooling applications.
- Required in long line applications.
- Suggested in all commercial applications.

### 5. Evaporator Freeze Thermostat

An SPST temperature-actuated switch that stops unit operation when evaporator reaches freeze-up conditions.

#### Usage Guideline:

- Required when low ambient kit has been added.

### 6. Isolation Relay

An SPDT relay which switches the low-ambient controller out of the outdoor fan motor circuit when the heat pump switches to heating mode.

#### Usage Guideline:

- Required in all heat pumps where low ambient kit has been added.



## 7. Liquid-Line Solenoid Valve (LLS)

An electrically operated shutoff valve which stops and starts refrigerant liquid flow in response to compressor operation. It is to be installed at the outdoor unit to control refrigerant off cycle migration in the heating mode.

### Usage Guideline:

- A LLS is required in all long line heat pump applications to control refrigerant off-cycle migration in heating mode. See Long Line Guideline.

## 8. Low-Ambient Pressure Switch Kit

A long life pressure switch which is mounted to outdoor unit service valve. It is designed to cycle the outdoor fan motor in order to maintain head pressure within normal operating limits. The control will maintain working head pressure at low-ambient temperatures down to 0°F (-18°C) when properly installed.

### Usage Guideline:

- A Low-Ambient Pressure Switch or MotorMaster® Low-Ambient Controller must be used when cooling operation is used at outdoor temperatures below 55°F (12.8°C).

## 9. MotorMaster Low-Ambient Controller

A fan-speed control device activated by a temperature sensor, designed to control condenser fan motor speed in response to the saturated, condensing temperature during operation in cooling mode only. For outdoor temperatures down to -20°F (-28.9°C), it maintains condensing temperature at 100°F±10°F (37.8°C ± 6.5°C).

### Usage Guideline:

- A MotorMaster® Low Ambient Controller or Low-Ambient Pressure Switch must be used when cooling operation is used at outdoor temperatures below 55°F (12.8°C).
- Suggested for all commercial applications.

## 10. Outdoor Air Temperature Sensor

This device enables the thermostat to display the outdoor temperature. This device also is required to enable special thermostat features such as auxiliary heat lock out.

### Usage Guideline:

- Suggested for all capable thermostats used with this unit.

## 11. Outdoor Thermostat

An SPDT temperature-actuated switch which turns on supplemental electric heaters when outdoor air temperature drops below a user-selected set point.

### Usage Guideline:

- Electric supplemental heat applications in non-variable speed indoor units when electric heat staging is desired.

## 12. Secondary Outdoor Thermostat

An SPDT temperature-actuated switch which turns on third-stage of supplemental electric heaters when outdoor air temperature drops below the second-stage set point.

### Usage Guideline:

- Outdoor thermostat applications where electric heater is capable of 3-stage operation.

## 13. Snow Stand Rack

Coated wire rack which supports unit 18 in. (457.2 mm) above mounting pad to allow for drainage from unit base.

### Usage Guideline:

- Suggested in the following applications:
  - Heat pump installations in heavy snowfall areas.
  - Heat pump installations in snow drift locations.
  - Heat pump installations in areas of prolonged subfreezing temperatures.
- All commercial installations.

## 14. Sound Hood

Wraparound sound reducing cover for the compressor. Reduces the sound level by about 2 dBA.

### Usage Guideline:

- Suggested when unit is installed closer than 15 ft. (4.577 m) to quiet areas, bedrooms, etc.
- Suggested when unit is installed between two houses less than 10 ft. (3.05 m) apart.

## 15. Thermostatic Expansion Valve (TXV) Bi-Flow

A modulating flow-control valve which meters refrigerant liquid flow rate into the evaporator in response to the superheat of the refrigerant gas leaving the evaporator.

### Usage Guideline:

- Accessory required to meet AHRI rating and system reliability, where indoor not equipped.
- Required in all heat pump applications designed with R-410A refrigerant.

## 16. Time-Delay Relay

An SPST delay relay which briefly continues operation of indoor blower motor to provide additional cooling after the compressor cycles off.

NOTE: Most indoor unit controls include this feature. For those that do not, use the guideline below.

### Usage Guideline:

- Accessory required to meet AHRI rating, where indoor not equipped.

## ELECTRICAL DATA

| Unit Size | V/PH      | Oper Volts* |     | Compr |       | Fan  | MCA    | Max Fuse <sup>†</sup> or<br>CKT BRK AMPS |
|-----------|-----------|-------------|-----|-------|-------|------|--------|------------------------------------------|
|           |           | Max         | Min | LRA   | RLA   | FLA  |        |                                          |
| 18        | 208/230/1 | 253         | 197 | 48.0  | 9.00  | 0.50 | 11.8   | 20                                       |
| 24        |           |             |     | 62.9  | 10.90 | 0.60 | 14.2   | 25                                       |
| 30        |           |             |     | 72.5  | 13.50 | 1.40 | 18.3   | 30                                       |
| 36        |           |             |     | 75.0  | 15.10 | 1.10 | 20.0   | 30                                       |
| 42        |           |             |     | 105.5 | 18.10 | 1.40 | 24.0   | 40                                       |
| 48        |           |             |     | 108.0 | 19.00 | 1.40 | 25.2   | 40                                       |
| 60        |           |             |     | 144.2 | 24.40 | 1.52 | 32.0   | 50                                       |
| 36        | 208/230-3 | 253         | 187 | 70.0  | 8.46  | 1.10 | 11.7   | 20                                       |
| 48        |           |             |     | 123.0 | 10.44 | 1.40 | 14.5   | 25                                       |
| 60        |           |             |     | 110.0 | 15.96 | 1.52 | 21.5   | 30                                       |
| 36        | 460-3     | 506         | 414 | 31.0  | 3.85  | 0.60 | 5.4    | 15                                       |
| 48        |           |             |     | 60.0  | 6.00  | 0.77 | 8.3    | 15                                       |
| 60        |           |             |     | 52.0  | 7.75  | 0.77 | 10.5 1 | 5                                        |

\* Permissible limits of the voltage range at which the unit will operate satisfactorily †. Time-Delay fuse. FLA- Full Load Amps LRA- Locked Rotor Amps  
MCA- Minimum Circuit Amps RLA- Rated Load Amps NOTE: Control circuit is 24-V on all units and requires external power source. Copper wire must be used from service disconnect to unit. All motors/compressors contain internal overload protection. Complies with 2007 requirements of ASHRAE Standards 90.1

## A-WEIGHTED SOUND POWER WITHOUT SOUND HOOD

| Unit Size Series<br>(Voltage) | Standard<br>Rating (dBA) | Typical Octave Band Spectrum (dBA, without tone adjustment) |     |     |      |      |      |      |
|-------------------------------|--------------------------|-------------------------------------------------------------|-----|-----|------|------|------|------|
|                               |                          | 125                                                         | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
| 18-A (N)                      | 69                       | 45                                                          | 48  | 56  | 62   | 55   | 53   | 47   |
| 24-A (N)                      | 76                       | 46                                                          | 56  | 59  | 63   | 63   | 60   | 55   |
| 30-A (N)                      | 77                       | 52                                                          | 62  | 67  | 68   | 65   | 62   | 55   |
| 36-B (N,P,E)                  | 77                       | 51                                                          | 62  | 66  | 69   | 64   | 61   | 53   |
| 42-A (N)                      | 76                       | 49                                                          | 61  | 63  | 65   | 62   | 60   | 52   |
| 48-A (N)/48-B (P,E)           | 79                       | 53                                                          | 66  | 69  | 71   | 67   | 64   | 57   |
| 60-A (N)                      | 73                       | 50                                                          | 63  | 62  | 63   | 60   | 58   | 52   |
| 60-B (P,E)                    | 76                       | 52                                                          | 62  | 63  | 66   | 65   | 59   | 57   |

NOTE: Tested in accordance with AHRI Standard 270-08 (not listed in AHRI).

## A-WEIGHTED SOUND POWER WITH SOUND HOOD

| Unit Size Series<br>(Voltage) | Standard<br>Rating (dBA) | Typical Octave Band Spectrum (dBA, without tone adjustment) |     |     |      |      |      |      |
|-------------------------------|--------------------------|-------------------------------------------------------------|-----|-----|------|------|------|------|
|                               |                          | 125                                                         | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
| 18-A (N)                      | 68                       | 47                                                          | 48  | 56  | 61   | 55   | 52   | 46   |
| 24-A (N)                      | 74                       | 47                                                          | 57  | 59  | 62   | 61   | 58   | 51   |
| 30-A (N)                      | 77                       | 52                                                          | 62  | 67  | 67   | 65   | 62   | 54   |
| 36-B (N,P,E)                  | 76                       | 52                                                          | 62  | 66  | 67   | 64   | 60   | 52   |
| 42-A (N)                      | 74                       | 50                                                          | 61  | 63  | 64   | 61   | 58   | 49   |
| 48-A (N)/48-B (P,E)           | 79                       | 54                                                          | 66  | 69  | 70   | 67   | 64   | 56   |
| 60-A (N)                      | 73                       | 51                                                          | 64  | 62  | 63   | 59   | 56   | 49   |
| 60-B (P,E)                    | 76                       | 52                                                          | 62  | 63  | 66   | 65   | 59   | 57   |

NOTE: Tested in accordance with AHRI Standard 270-08 (not listed in AHRI).



CHARGING SUBCOOLING (TXV-TYPE EXPANSION DEVICE)

| Unit Size - Series | Required Subcooling °F (°C) |
|--------------------|-----------------------------|
| 18                 | 11 (6.1)                    |
| 24                 | 11 (6.1)                    |
| 30                 | 10 (5.6)                    |
| 36                 | 10 (5.6)                    |
| 42                 | 10 (5.6)                    |
| 48                 | 14 (7.8)                    |
| 60                 | 15 (8.3)                    |

HP ONLY REPLACEMENT  
WITH PISTON INDOORS

When the PH14NB is used as a replacement component in a system with a piston fan coil, use the indoor piston size specified below.

| Unit Size | FB4CNF | Piston Size |       |
|-----------|--------|-------------|-------|
|           |        | FFM         | FPMA  |
| 18        | 0.052  | 0.050       | 0.050 |
| 24        | 0.057  | 0.057       | 0.056 |
| 30        | 0.067  | 0.070       | 0.067 |
| 36        | 0.070  | 0.072       | 0.069 |
| 42        | 0.078  |             |       |
| 48        | 0.084  |             |       |
| 60        |        |             |       |

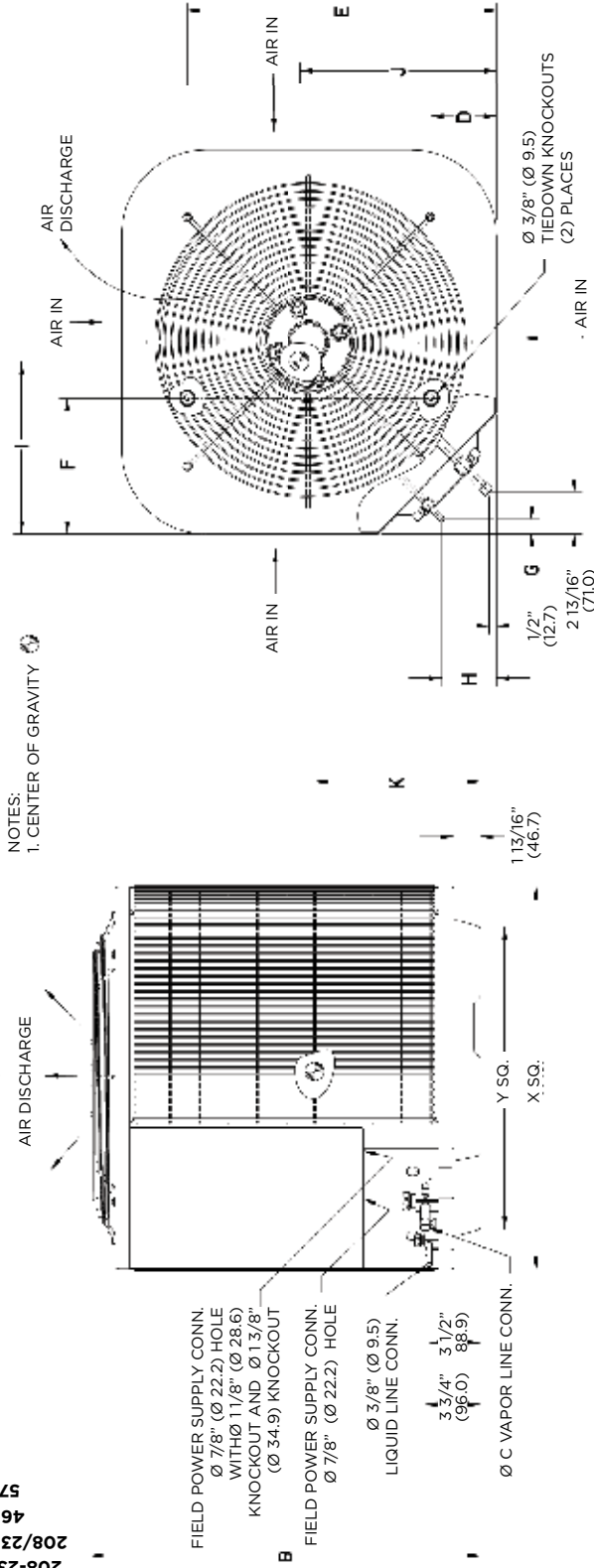
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## DIMENSIONS

| Unit            | Series | Electrical Characteristics |    | A  |    | B       |       | C        |       | D   |      | E      |       | F        |       | G      |       | H     |      | I      |      | J      |       | K      |       | Operating Weight |       | Shipping Weight |      | Shipping L / W (sq.) |       | Shipping Height |       |          |        |
|-----------------|--------|----------------------------|----|----|----|---------|-------|----------|-------|-----|------|--------|-------|----------|-------|--------|-------|-------|------|--------|------|--------|-------|--------|-------|------------------|-------|-----------------|------|----------------------|-------|-----------------|-------|----------|--------|
|                 |        | IN                         | MM | IN | MM | IN      | MM    | IN       | MM    | IN  | MM   | IN     | MM    | IN       | MM    | IN     | MM    | IN    | MM   | IN     | MM   | IN     | MM    | IN     | MM    | LBS              | KGS   | IN              | MM   | IN                   | MM    | IN              | MM    |          |        |
| PH14NB08P0G4AAA | A      | Y                          | N  | N  | N  | 25 1/8  | 587.3 | 35 1/16  | 890.7 | 5/8 | 15.9 | 47/16  | 113.0 | 181/16   | 459.0 | 713/16 | 197.9 | 1 1/8 | 28.2 | 313/16 | 97.4 | 11     | 279.4 | 15 3/4 | 400.1 | 12               | 304.8 | 136             | 61.7 | 166                  | 75.3  | 24 1/8          | 612.7 | 36 11/16 | 931.3  |
| PH14NB02P0G4AAA | A      | Y                          | N  | N  | N  | 25 3/4  | 654.0 | 35 1/2   | 901.4 | 5/8 | 15.9 | 47/16  | 113.0 | 21 1/4   | 599.9 | 9 1/8  | 231.3 | 1 1/8 | 28.2 | 313/16 | 97.4 | 12     | 304.8 | 13 1/4 | 356.6 | 13 1/2           | 342.9 | 144             | 65.3 | 175                  | 79.4  | 26 3/4          | 679.9 | 37 3/16  | 944.0  |
| PH14NB03P0G4AAA | A      | Y                          | N  | N  | N  | 31 3/16 | 792.5 | 31 11/16 | 804.3 | 3/4 | 19.1 | 6 9/16 | 166.1 | 24 11/16 | 626.3 | 9 1/8  | 231.3 | 1 1/8 | 28.2 | 313/16 | 97.4 | 15     | 380.0 | 11     | 279.4 | 16               | 406.4 | 158             | 71.7 | 180                  | 81.6  | 32 3/16         | 817.9 | 33 1/4   | 844.9  |
| PH14NB03P0G4BAA | B      | Y                          | N  | N  | N  | 31 3/16 | 792.5 | 28 1/4   | 718.0 | 3/4 | 19.1 | 6 9/16 | 166.1 | 24 11/16 | 626.3 | 9 1/8  | 231.3 | 1 1/8 | 8.2  | 313/16 | 97.4 | 15 3/4 | 400.1 | 14     | 355.6 | 10 3/4           | 273.1 | 170             | 77.1 | 201                  | 91.2  | 32 3/16         | 817.9 | 29 7/8   | 758.5  |
| PH14NB04P0G4AAA | A      | Y                          | N  | N  | N  | 31 3/16 | 792.5 | 38 7/16  | 977.1 | 7/8 | 22.2 | 6 9/16 | 166.1 | 24 11/16 | 626.3 | 9 1/8  | 231.3 | 1 1/8 | 28.2 | 313/16 | 97.4 | 15 1/2 | 395.7 | 13 1/2 | 342.9 | 14               | 355.6 | 201             | 91.2 | 235                  | 106.6 | 32 3/16         | 817.9 | 40 1/16  | 1017.7 |
| PH14NB04P0G4AAA | A      | Y                          | N  | N  | N  | 31 3/16 | 792.5 | 28 1/4   | 718.0 | 7/8 | 22.2 | 6 9/16 | 166.1 | 24 11/16 | 626.3 | 9 1/8  | 231.3 | 1 1/8 | 28.2 | 313/16 | 97.4 | 16 1/2 | 409.1 | 11 1/2 | 292.1 | 15               | 380.0 | 197             | 89.4 | 232                  | 105.2 | 32 3/16         | 817.9 | 29 7/8   | 758.5  |
| PH14NB06P0G4AAA | A      | Y                          | N  | N  | N  | 31 3/16 | 792.5 | 31 11/16 | 804.3 | 7/8 | 22.2 | 6 9/16 | 166.1 | 24 11/16 | 626.3 | 9 1/8  | 231.3 | 1 1/8 | 28.2 | 313/16 | 97.4 | 14 3/4 | 374.7 | 15 3/4 | 400.1 | 16 1/4           | 412.8 | 212             | 96.2 | 248                  | 112.5 | 32 3/16         | 817.9 | 33 1/4   | 844.9  |
| PH14P803P0G4BAB | B      | N                          | Y  | N  | N  | 31 3/16 | 792.5 | 28 1/4   | 718.0 | 3/4 | 19.1 | 6 9/16 | 166.1 | 24 11/16 | 626.3 | 9 1/8  | 231.3 | 1 1/8 | 28.2 | 313/16 | 97.4 | 33 3/8 | 847.7 | 33 3/8 | 847.7 | 33 1/4           | 844.6 | 170             | 77.1 | 187                  | 84.8  | 32 3/16         | 817.9 | 29 7/8   | 758.5  |
| PH14P804P0G4BAB | B      | N                          | Y  | N  | N  | 31 3/16 | 792.5 | 28 1/4   | 718.0 | 7/8 | 22.2 | 6 9/16 | 166.1 | 24 11/16 | 626.3 | 9 1/8  | 231.3 | 1 1/8 | 28.2 | 313/16 | 97.4 | 33 3/8 | 847.7 | 33 3/8 | 847.7 | 33 1/4           | 844.6 | 197             | 89.4 | 217                  | 98.4  | 32 3/16         | 817.9 | 29 7/8   | 758.5  |
| PH14P806P0G4BAB | B      | N                          | Y  | N  | N  | 31 3/16 | 792.5 | 31 11/16 | 804.3 | 7/8 | 22.2 | 6 9/16 | 166.1 | 24 11/16 | 626.3 | 9 1/8  | 231.3 | 1 1/8 | 28.2 | 313/16 | 97.4 | 33 3/8 | 847.7 | 33 3/8 | 847.7 | 36 5/8           | 930.3 | 212             | 96.2 | 233                  | 105.7 | 32 3/16         | 817.9 | 33 1/4   | 844.9  |
| PH14E803P0G4BAB | B      | N                          | N  | Y  | N  | 31 3/16 | 792.5 | 28 1/4   | 718.0 | 3/4 | 19.1 | 6 9/16 | 166.1 | 24 11/16 | 626.3 | 9 1/8  | 231.3 | 1 1/8 | 28.2 | 313/16 | 97.4 | 33 3/8 | 847.7 | 33 3/8 | 847.7 | 33 1/4           | 844.6 | 170             | 77.1 | 187                  | 84.8  | 32 3/16         | 817.9 | 29 7/8   | 758.5  |
| PH14E804P0G4BAB | B      | N                          | N  | Y  | N  | 31 3/16 | 792.5 | 28 1/4   | 718.0 | 7/8 | 22.2 | 6 9/16 | 166.1 | 24 11/16 | 626.3 | 9 1/8  | 231.3 | 1 1/8 | 28.2 | 313/16 | 97.4 | 33 3/8 | 847.7 | 33 3/8 | 847.7 | 33 1/4           | 844.6 | 197             | 89.4 | 217                  | 98.4  | 32 3/16         | 817.9 | 29 7/8   | 758.5  |
| PH14E806P0G4BAB | B      | N                          | N  | Y  | N  | 31 3/16 | 792.5 | 31 11/16 | 804.3 | 7/8 | 22.2 | 6 9/16 | 166.1 | 24 11/16 | 626.3 | 9 1/8  | 231.3 | 1 1/8 | 28.2 | 313/16 | 97.4 | 33 3/8 | 847.7 | 33 3/8 | 847.7 | 36 5/8           | 930.3 | 212             | 96.2 | 233                  | 105.7 | 32 3/16         | 817.9 | 33 1/4   | 844.9  |

208-230-1-60  
208/230-3-60  
460-3-60  
575-3-60

Y = Yes  
N = No

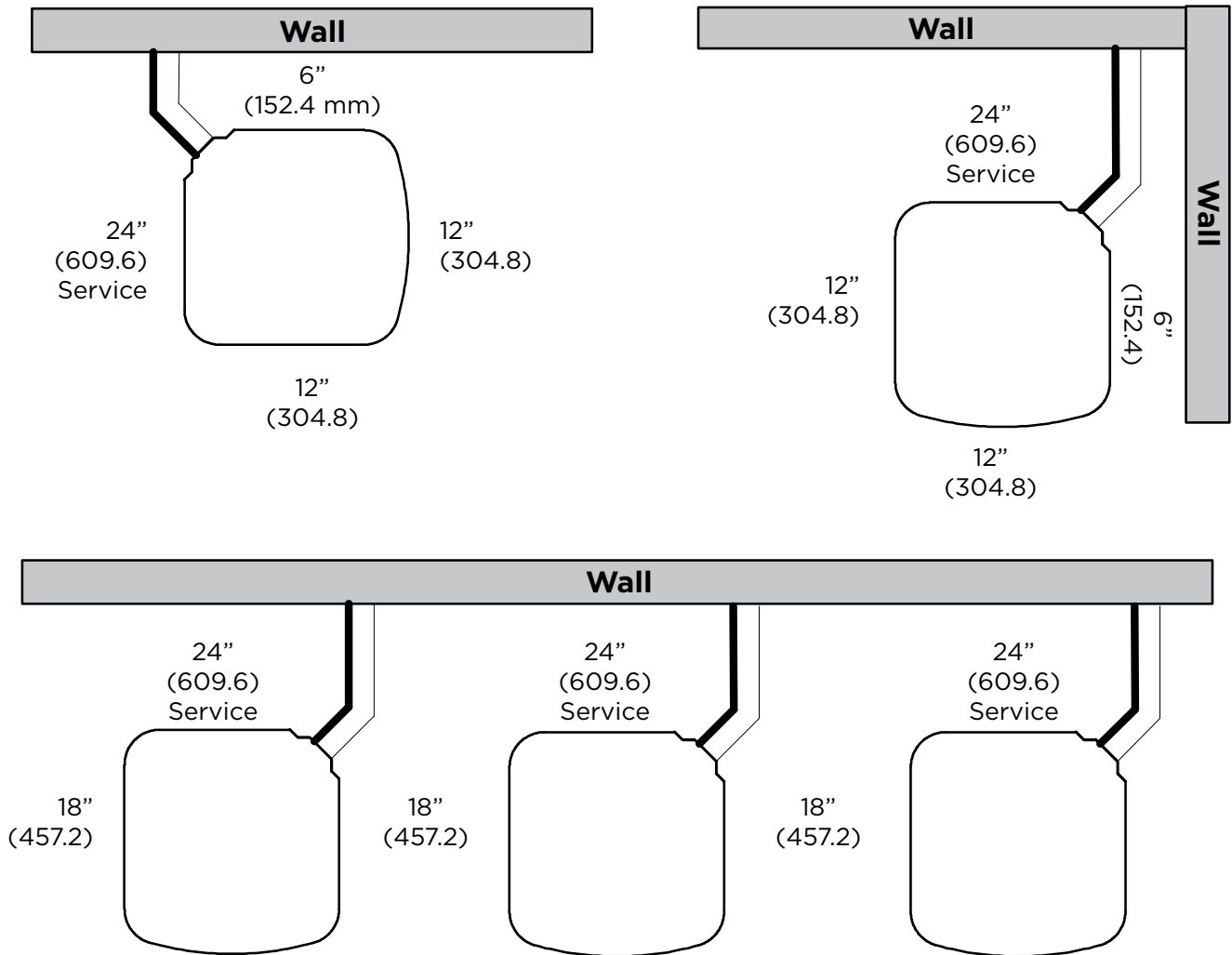


| Unit Size      | "X" Minimum Ground Mounting Pad Application Dimensions | "Y" Minimum Roof-Top Mounting Pad Application Dimensions |
|----------------|--------------------------------------------------------|----------------------------------------------------------|
| 18             | 23 1/8 587.3                                           | 17 7/8 454.6                                             |
| 24             | 25 3/4 654.0                                           | 20 7/16 518.5                                            |
| 30,36,42,48,60 | 31 3/16 792.5                                          | 22 15/16 583.2                                           |
| -              | 35 889.0                                               | 26 3/4 679.7                                             |

Note: All Dimensions In Inch (mm) U.S. ECCN: Not Subject to Regulation (N.S.R.)

## CLEARANCES

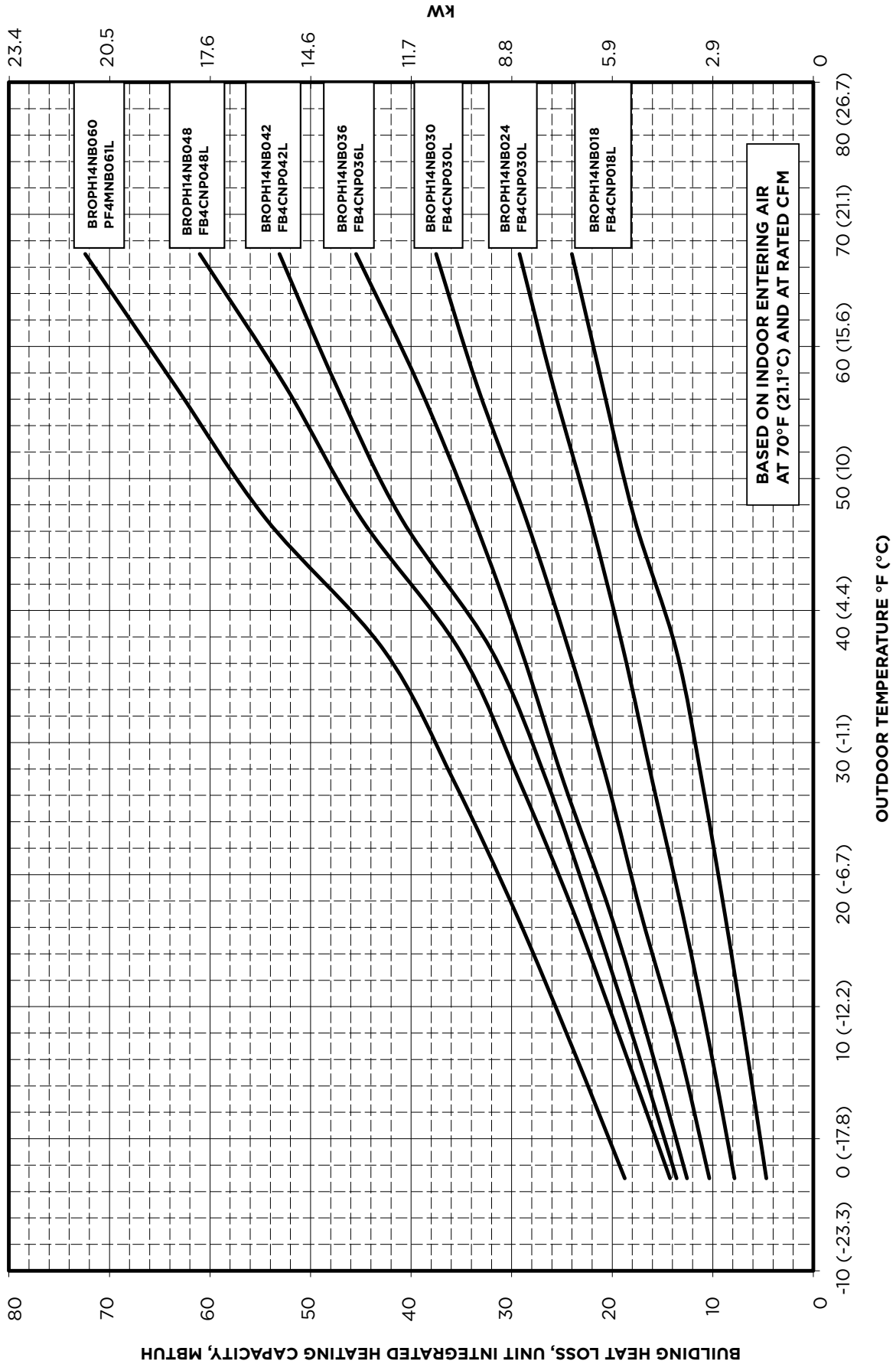
### Clearances (Various Examples)



Note: Numbers in ( ) = mm

IMPORTANT: When installing multiple units in an alcove, roof well, or partially enclosed area, ensure there is adequate ventilation to prevent re-circulation of discharge air.

# BALANCE POINT WORKSHEET



## TESTED AHRI\* COMBINATION RATINGS

NOTE: Ratings contained in this document are subject to change at any time. For AHRI ratings certificates, please refer to the AHRI directory [www.ahridirectory.org](http://www.ahridirectory.org).

| Model Number        | Indoor Coil Model Number | Cooling Capacity | EER  | SEER | E Capacity | High Temp E COP | HSPF | Low Temp H Capacity | H COP |
|---------------------|--------------------------|------------------|------|------|------------|-----------------|------|---------------------|-------|
| PH14NB018PO**A*     | FB4CNP018L               | 17,800           | 11.7 | 14   | 17,600     | 3.72            | 8.2  | 10,400              | 2.40  |
| PH14NB024PO**A*     | FB4CNP030L               | 22,200           | 11.5 | 14   | 2,200      | 3.84            | 8.2  | 13,200              | 2.54  |
| PH14NB030PO**A*     | FB4CNP030L               | 28,600           | 11.7 | 14   | 28,600     | 3.62            | 8.2  | 17,100              | 2.44  |
| PH14NB036PO**B*     | FB4CNP036L               | 33,000           | 11.7 | 14   | 33,800     | 3.62            | 8.2  | 21,000              | 2.40  |
| PH14(P,E)B036PO**B* | FB4CNP036L               | 33,000           | 11.0 | 14   | 33,800     | 3.62            | 8.2  | 21,000              | 2.40  |
| PH14NB042PO**A*     | FB4CNP042L               | 40,000           | 11.5 | 14   | 41,000     | 3.62            | 8.2  | 25,200              | 2.50  |
| PH14NB048PO**A*     | FB4CNP048L               | 46,000           | 11.7 | 14   | 45,500     | 3.64            | 8.2  | 27,800              | 2.56  |
| PH14(P,E)B048PO**B* |                          |                  |      |      |            |                 |      |                     |       |
| PH14NB060PO**A*     | FX4DN(B,F)061L           | 57,000           | 11.7 | 14   | 54,500     | 3.70            | 8.2  | 33,000              | 2.56  |
| PH14(P,E)B060PO**B* |                          |                  |      |      |            |                 |      |                     |       |

\* AHRI = Air Conditioning, Heating & Refrigeration Institute

Ratings are net values reflecting the effects of circulating fan heat. Supplemental electric heat is not included. Ratings are based on:

Cooling Standard: 80°F (27°C) db 67°F (19°C) wb indoor entering air temperature and 95°F (35°C) db air entering outdoor unit.

High-Temp Heating Standard: 70°F (21°C) db indoor entering air temperature and 47°F (8°C) db 43°F (6°C) wb air entering outdoor unit.

Low-Temp Heating Standard: 70°F (21°C) db indoor entering air temperature and 17°F (-8°C) db 15°F (-9°C) wb air entering outdoor unit.

COP — Coefficient of Performance

EER — Energy Efficiency Ratio

HSPF — Heating Seasonal Performance Factor

SEER — Seasonal Energy Efficiency Ratio

# DETAILED COOLING CAPACITIES#

| EVAPORATOR AIR<br>CFM EWB<br>° F (° C)                   |             | CONDENSER ENTERING AIR TEMPERATURES ° F (° C) |                      |                          |                      |                          |                      |                          |                      |                          |                      |                          |                      |                          |                      |                          |                      |      |
|----------------------------------------------------------|-------------|-----------------------------------------------|----------------------|--------------------------|----------------------|--------------------------|----------------------|--------------------------|----------------------|--------------------------|----------------------|--------------------------|----------------------|--------------------------|----------------------|--------------------------|----------------------|------|
|                                                          |             | 75 (23.9)                                     |                      | 85 (29.4)                |                      | 95 (35)                  |                      | 105 (40.6)               |                      | 115 (46.1)               |                      |                          |                      |                          |                      | 125 (51.7)               |                      |      |
|                                                          |             | Capacity MBtuh†<br>Total                      | Total System<br>KW** | Capacity MBtuh†<br>Total | Total System<br>KW** | Capacity MBtuh†<br>Total | Total System<br>KW** | Capacity MBtuh†<br>Total | Total System<br>KW** | Capacity MBtuh†<br>Total | Total System<br>KW** | Capacity MBtuh†<br>Total | Total System<br>KW** | Capacity MBtuh†<br>Total | Total System<br>KW** | Capacity MBtuh†<br>Total | Total System<br>KW** |      |
| PH14NB018 Outdoor Section With FB4CNP018L Indoor Section |             |                                               |                      |                          |                      |                          |                      |                          |                      |                          |                      |                          |                      |                          |                      |                          |                      |      |
| 525                                                      | 72 (22.2)   | 21.43                                         | 10.44                | 1.20                     | 20.38                | 10.06                    | 1.36                 | 19.27                    | 9.66                 | 1.54                     | 18.10                | 9.26                     | 1.74                 | 16.86                    | 8.83                 | 15.56                    | 8.39                 | 2.22 |
|                                                          | 67 (19.4)   | 19.44                                         | 12.77                | 1.19                     | 18.48                | 12.39                    | 1.36                 | 17.47                    | 11.99                | 1.53                     | 16.40                | 11.58                    | 1.73                 | 15.26                    | 11.15                | 14.06                    | 10.69                | 2.21 |
|                                                          | 63 (17.2)** | 17.99                                         | 12.27                | 1.19                     | 17.10                | 11.90                    | 1.35                 | 16.16                    | 11.50                | 1.53                     | 15.16                | 11.08                    | 1.73                 | 14.10                    | 10.65                | 12.98                    | 10.19                | 2.20 |
|                                                          | 62 (16.7)   | 17.64                                         | 15.03                | 1.19                     | 16.78                | 14.64                    | 1.35                 | 15.88                    | 14.22                | 1.53                     | 14.93                | 13.76                    | 1.73                 | 14.00                    | 14.00                | 13.10                    | 13.10                | 2.20 |
|                                                          | 57 (13.9)   | 16.97                                         | 16.97                | 1.19                     | 16.30                | 16.30                    | 1.35                 | 15.58                    | 15.58                | 1.52                     | 14.81                | 14.81                    | 1.73                 | 13.98                    | 13.98                | 13.08                    | 13.08                | 2.20 |
| 600                                                      | 72 (22.2)   | 21.88                                         | 10.96                | 1.21                     | 20.77                | 10.58                    | 1.38                 | 19.62                    | 10.18                | 1.56                     | 18.40                | 9.76                     | 1.76                 | 17.12                    | 9.33                 | 15.77                    | 8.88                 | 2.23 |
|                                                          | 67 (19.4)   | 19.86                                         | 13.61                | 1.20                     | 18.86                | 13.22                    | 1.37                 | 17.80                    | 12.82                | 1.55                     | 16.69                | 12.39                    | 1.75                 | 15.51                    | 11.95                | 14.27                    | 11.48                | 2.22 |
|                                                          | 63 (17.2)** | 18.40                                         | 13.06                | 1.20                     | 17.47                | 12.67                    | 1.36                 | 16.49                    | 12.27                | 1.54                     | 15.44                | 11.84                    | 1.74                 | 14.34                    | 11.39                | 13.19                    | 10.92                | 2.21 |
|                                                          | 62 (16.7)   | 18.08                                         | 16.13                | 1.20                     | 17.20                | 15.71                    | 1.36                 | 16.27                    | 16.27                | 1.54                     | 15.43                | 15.43                    | 1.74                 | 14.54                    | 14.54                | 13.59                    | 13.59                | 2.22 |
|                                                          | 57 (13.9)   | 17.73                                         | 17.73                | 1.20                     | 17.01                | 17.01                    | 1.36                 | 16.24                    | 16.24                | 1.54                     | 15.41                | 15.41                    | 1.74                 | 14.52                    | 14.52                | 13.57                    | 13.57                | 2.22 |
| 675                                                      | 72 (22.2)   | 22.22                                         | 11.46                | 1.22                     | 21.08                | 11.07                    | 1.39                 | 19.88                    | 10.66                | 1.57                     | 18.63                | 10.24                    | 1.77                 | 17.31                    | 9.80                 | 15.92                    | 9.35                 | 2.25 |
|                                                          | 67 (19.4)   | 20.19                                         | 14.41                | 1.22                     | 19.15                | 14.01                    | 1.38                 | 18.06                    | 13.60                | 1.56                     | 16.91                | 13.16                    | 1.76                 | 15.70                    | 12.71                | 14.44                    | 12.22                | 2.23 |
|                                                          | 63 (17.2)** | 18.71                                         | 13.81                | 1.21                     | 17.75                | 13.41                    | 1.38                 | 16.74                    | 12.99                | 1.56                     | 15.66                | 12.55                    | 1.75                 | 14.53                    | 12.09                | 13.35                    | 11.59                | 2.23 |
|                                                          | 62 (16.7)   | 18.48                                         | 17.11                | 1.21                     | 17.63                | 17.63                    | 1.38                 | 16.80                    | 16.80                | 1.56                     | 15.93                | 15.93                    | 1.76                 | 14.99                    | 14.99                | 13.99                    | 13.99                | 2.23 |
|                                                          | 57 (13.9)   | 18.36                                         | 18.36                | 1.21                     | 17.60                | 17.60                    | 1.38                 | 16.78                    | 16.78                | 1.56                     | 15.91                | 15.91                    | 1.75                 | 14.97                    | 14.97                | 13.97                    | 13.97                | 2.23 |
| PH14NB024 Outdoor Section With FB4CNP030L Indoor Section |             |                                               |                      |                          |                      |                          |                      |                          |                      |                          |                      |                          |                      |                          |                      |                          |                      |      |
| 700                                                      | 72 (22.2)   | 26.47                                         | 13.51                | 1.53                     | 25.28                | 13.08                    | 1.71                 | 24.03                    | 12.62                | 1.91                     | 22.72                | 12.15                    | 2.14                 | 21.30                    | 11.65                | 19.77                    | 11.11                | 2.72 |
|                                                          | 67 (19.4)   | 24.06                                         | 16.68                | 1.53                     | 22.96                | 16.24                    | 1.71                 | 21.82                    | 15.78                | 1.91                     | 20.62                | 15.31                    | 2.15                 | 19.33                    | 14.80                | 17.93                    | 14.25                | 2.72 |
|                                                          | 63 (17.2)** | 22.32                                         | 16.04                | 1.53                     | 21.30                | 15.60                    | 1.72                 | 20.23                    | 15.14                | 1.92                     | 19.11                | 14.66                    | 2.16                 | 17.91                    | 14.15                | 16.62                    | 13.60                | 2.73 |
|                                                          | 62 (16.7)   | 21.92                                         | 19.75                | 1.53                     | 20.94                | 19.28                    | 1.72                 | 19.93                    | 18.78                | 1.92                     | 18.88                | 18.78                    | 2.16                 | 17.88                    | 17.88                | 16.83                    | 16.83                | 2.73 |
|                                                          | 57 (13.9)   | 21.31                                         | 21.31                | 1.54                     | 20.52                | 20.52                    | 1.72                 | 19.70                    | 19.70                | 1.92                     | 18.81                | 18.81                    | 2.16                 | 17.86                    | 17.86                | 16.81                    | 16.81                | 2.73 |
| 800                                                      | 72 (22.2)   | 26.97                                         | 14.20                | 1.55                     | 25.73                | 13.76                    | 1.72                 | 24.44                    | 13.30                | 1.92                     | 23.07                | 12.82                    | 2.16                 | 21.60                    | 12.31                | 20.01                    | 11.76                | 2.74 |
|                                                          | 67 (19.4)   | 24.53                                         | 17.79                | 1.55                     | 23.38                | 17.34                    | 1.73                 | 22.20                    | 16.87                | 1.93                     | 20.95                | 16.38                    | 2.16                 | 19.61                    | 15.86                | 18.18                    | 15.29                | 2.74 |
|                                                          | 63 (17.2)** | 22.77                                         | 17.07                | 1.55                     | 21.70                | 16.62                    | 1.73                 | 20.60                    | 16.15                | 1.94                     | 19.43                | 15.65                    | 2.17                 | 18.19                    | 15.13                | 16.86                    | 14.56                | 2.75 |
|                                                          | 62 (16.7)   | 22.45                                         | 21.17                | 1.55                     | 21.45                | 21.27                    | 1.73                 | 20.50                    | 20.50                | 1.94                     | 19.55                | 19.55                    | 2.17                 | 18.53                    | 18.53                | 17.41                    | 17.41                | 2.74 |
|                                                          | 57 (13.9)   | 22.20                                         | 22.20                | 1.55                     | 21.35                | 21.35                    | 1.73                 | 20.47                    | 20.47                | 1.94                     | 19.53                | 19.53                    | 2.17                 | 18.51                    | 18.51                | 17.39                    | 17.39                | 2.74 |
| 900                                                      | 72 (22.2)   | 27.35                                         | 14.86                | 1.56                     | 26.08                | 14.41                    | 1.74                 | 24.73                    | 13.94                | 1.94                     | 23.33                | 13.46                    | 2.17                 | 21.82                    | 12.94                | 20.18                    | 12.38                | 2.75 |
|                                                          | 67 (19.4)   | 24.89                                         | 18.85                | 1.57                     | 23.71                | 18.38                    | 1.75                 | 22.49                    | 17.91                | 1.95                     | 21.20                | 17.40                    | 2.18                 | 19.84                    | 16.86                | 18.37                    | 16.26                | 2.76 |
|                                                          | 63 (17.2)** | 23.12                                         | 18.05                | 1.57                     | 22.02                | 17.59                    | 1.75                 | 20.88                    | 17.10                | 1.96                     | 19.68                | 16.59                    | 2.19                 | 18.41                    | 16.05                | 17.05                    | 15.45                | 2.77 |
|                                                          | 62 (16.7)   | 22.97                                         | 22.97                | 1.57                     | 22.08                | 22.08                    | 1.75                 | 21.14                    | 21.14                | 1.95                     | 20.14                | 20.14                    | 2.19                 | 19.07                    | 19.07                | 17.88                    | 17.88                | 2.76 |
|                                                          | 57 (13.9)   | 22.94                                         | 22.94                | 1.57                     | 22.05                | 22.05                    | 1.75                 | 21.11                    | 21.11                | 1.95                     | 20.12                | 20.12                    | 2.19                 | 19.04                    | 19.04                | 17.86                    | 17.86                | 2.76 |



| EVAPORATOR AIR<br>CFM EWB                                |       | CONDENSER ENTERING AIR TEMPERATURES °F (°C) |              |                              |              |                              |              |                              |              |                              |              |                              |              |                              |              |                              |              |
|----------------------------------------------------------|-------|---------------------------------------------|--------------|------------------------------|--------------|------------------------------|--------------|------------------------------|--------------|------------------------------|--------------|------------------------------|--------------|------------------------------|--------------|------------------------------|--------------|
|                                                          |       | 75 (23.9)                                   |              |                              |              | 85 (29.4)                    |              |                              |              | 95 (35)                      |              |                              |              | 105 (40.6)                   |              |                              |              |
|                                                          |       | Capacity MBtu/h <sup>†</sup>                | Total System | Capacity MBtu/h <sup>†</sup> | Total System | Capacity MBtu/h <sup>†</sup> | Total System | Capacity MBtu/h <sup>†</sup> | Total System | Capacity MBtu/h <sup>†</sup> | Total System | Capacity MBtu/h <sup>†</sup> | Total System | Capacity MBtu/h <sup>†</sup> | Total System | Capacity MBtu/h <sup>†</sup> | Total System |
| °F (°C)                                                  |       | Total                                       | KW**         | Total                        | KW**         | Total                        | KW**         | Total                        | KW**         | Total                        | KW**         | Total                        | KW**         | Total                        | KW**         | Total                        | KW**         |
| PH14NB030 Outdoor Section With FB4CNP030L Indoor Section |       |                                             |              |                              |              |                              |              |                              |              |                              |              |                              |              |                              |              |                              |              |
| 875 72 (22.2)                                            | 33.97 | 17.32                                       | 1.97         | 32.47                        | 16.75        | 2.17                         | 30.87        | 16.16                        | 2.40         | 29.15                        | 15.54        | 2.67                         | 27.30        | 14.87                        | 2.98         | 25.29                        | 14.15        |
| 67 (19.4)                                                | 30.80 | 21.30                                       | 1.97         | 29.42                        | 20.72        | 2.17                         | 27.96        | 20.13                        | 2.40         | 26.39                        | 19.50        | 2.67                         | 24.69        | 18.82                        | 2.98         | 22.86                        | 18.10        |
| 63 (17.2)**                                              | 28.51 | 20.46                                       | 1.97         | 27.22                        | 19.89        | 2.17                         | 25.86        | 19.29                        | 2.41         | 24.39                        | 18.66        | 2.67                         | 22.82        | 17.98                        | 2.97         | 21.12                        | 17.25        |
| 62 (16.7)                                                | 27.99 | 25.15                                       | 1.97         | 26.74                        | 24.55        | 2.17                         | 25.44        | 23.90                        | 2.41         | 24.07                        | 23.17        | 2.67                         | 22.67        | 22.67                        | 2.97         | 21.30                        | 21.30        |
| 57 (13.9)                                                | 27.05 | 27.05                                       | 1.97         | 26.06                        | 26.06        | 2.18                         | 25.01        | 25.01                        | 2.41         | 23.88                        | 23.88        | 2.67                         | 22.64        | 22.64                        | 2.97         | 21.27                        | 21.27        |
| 1050 72 (22.2)                                           | 34.85 | 18.48                                       | 2.00         | 33.25                        | 17.90        | 2.21                         | 31.57        | 17.30                        | 2.44         | 29.76                        | 16.66        | 2.71                         | 27.81        | 15.97                        | 3.02         | 25.71                        | 15.24        |
| 67 (19.4)                                                | 31.61 | 23.17                                       | 2.01         | 30.15                        | 22.59        | 2.21                         | 28.60        | 21.97                        | 2.44         | 26.95                        | 21.32        | 2.71                         | 25.18        | 20.61                        | 3.02         | 23.27                        | 19.84        |
| 63 (17.2)**                                              | 29.28 | 22.21                                       | 2.01         | 27.91                        | 21.62        | 2.21                         | 26.47        | 21.00                        | 2.45         | 24.94                        | 20.34        | 2.71                         | 23.29        | 19.63                        | 3.01         | 21.52                        | 18.86        |
| 62 (16.7)                                                | 28.88 | 27.53                                       | 2.01         | 27.62                        | 27.37        | 2.21                         | 26.36        | 26.36                        | 2.45         | 25.12                        | 25.12        | 2.71                         | 23.77        | 23.77                        | 3.01         | 22.28                        | 22.28        |
| 57 (13.9)                                                | 28.55 | 28.55                                       | 2.01         | 27.48                        | 27.48        | 2.21                         | 26.33        | 26.33                        | 2.45         | 25.09                        | 25.09        | 2.71                         | 23.74        | 23.74                        | 3.01         | 22.26                        | 22.26        |
| 1125 72 (22.2)                                           | 35.15 | 18.97                                       | 2.02         | 33.53                        | 18.39        | 2.23                         | 31.81        | 17.78                        | 2.46         | 29.96                        | 17.13        | 2.73                         | 27.99        | 16.44                        | 3.03         | 25.85                        | 15.70        |
| 67 (19.4)                                                | 31.89 | 23.96                                       | 2.02         | 30.39                        | 23.37        | 2.23                         | 28.82        | 22.74                        | 2.46         | 27.14                        | 22.07        | 2.73                         | 25.34        | 21.35                        | 3.03         | 23.41                        | 20.56        |
| 63 (17.2)**                                              | 29.55 | 22.94                                       | 2.03         | 28.15                        | 22.34        | 2.23                         | 26.69        | 21.71                        | 2.46         | 25.12                        | 21.03        | 2.73                         | 23.45        | 20.30                        | 3.03         | 21.66                        | 19.51        |
| 62 (16.7)                                                | 29.18 | 29.18                                       | 2.03         | 28.02                        | 28.02        | 2.23                         | 26.83        | 26.83                        | 2.46         | 25.55                        | 25.55        | 2.73                         | 24.15        | 24.15                        | 3.03         | 22.63                        | 22.63        |
| 57 (13.9)                                                | 29.10 | 29.10                                       | 2.03         | 27.98                        | 27.98        | 2.23                         | 26.80        | 26.80                        | 2.46         | 25.52                        | 25.52        | 2.73                         | 24.13        | 24.13                        | 3.03         | 22.60                        | 22.60        |
| PH14NB036 Outdoor Section With FB4CNP036L Indoor Section |       |                                             |              |                              |              |                              |              |                              |              |                              |              |                              |              |                              |              |                              |              |
| 1050 72 (22.2)                                           | 39.42 | 20.36                                       | 2.23         | 37.61                        | 19.67        | 2.50                         | 35.70        | 18.96                        | 2.79         | 33.63                        | 18.20        | 3.10                         | 31.37        | 17.37                        | 3.46         | 28.97                        | 16.51        |
| 67 (19.4)                                                | 35.87 | 25.19                                       | 2.24         | 34.23                        | 24.50        | 2.50                         | 32.48        | 23.78                        | 2.78         | 30.59                        | 23.01        | 3.09                         | 28.52        | 22.17                        | 3.44         | 26.33                        | 21.29        |
| 63 (17.2)**                                              | 33.28 | 24.23                                       | 2.25         | 31.76                        | 23.54        | 2.50                         | 30.14        | 22.82                        | 2.77         | 28.38                        | 22.05        | 3.08                         | 26.45        | 21.21                        | 3.43         | 24.41                        | 20.32        |
| 62 (16.7)                                                | 32.68 | 29.85                                       | 2.25         | 31.22                        | 29.12        | 2.50                         | 29.67        | 28.32                        | 2.77         | 28.03                        | 27.40        | 3.08                         | 26.31        | 26.31                        | 3.43         | 24.65                        | 24.65        |
| 57 (13.9)                                                | 31.63 | 31.63                                       | 2.26         | 30.46                        | 30.46        | 2.50                         | 29.20        | 29.20                        | 2.77         | 27.82                        | 27.82        | 3.08                         | 26.28        | 26.28                        | 3.43         | 24.62                        | 24.62        |
| 1200 72 (22.2)                                           | 40.13 | 21.34                                       | 2.27         | 38.25                        | 20.63        | 2.54                         | 36.25        | 19.90                        | 2.83         | 34.10                        | 19.12        | 3.14                         | 31.76        | 18.28                        | 3.50         | 29.28                        | 17.40        |
| 67 (19.4)                                                | 36.53 | 26.77                                       | 2.28         | 34.82                        | 26.07        | 2.54                         | 33.00        | 25.34                        | 2.82         | 31.03                        | 24.54        | 3.13                         | 28.88        | 23.67                        | 3.49         | 26.62                        | 22.75        |
| 63 (17.2)**                                              | 33.92 | 25.70                                       | 2.29         | 32.33                        | 25.00        | 2.54                         | 30.64        | 24.26                        | 2.82         | 28.81                        | 23.47        | 3.13                         | 26.81        | 22.59                        | 3.48         | 24.71                        | 21.66        |
| 62 (16.7)                                                | 33.39 | 31.85                                       | 2.29         | 31.89                        | 31.02        | 2.54                         | 30.31        | 30.31                        | 2.82         | 28.80                        | 28.80        | 3.12                         | 27.16        | 27.16                        | 3.48         | 25.40                        | 25.40        |
| 57 (13.9)                                                | 32.83 | 32.83                                       | 2.29         | 31.58                        | 31.58        | 2.54                         | 30.24        | 30.24                        | 2.82         | 28.77                        | 28.77        | 3.12                         | 27.13        | 27.13                        | 3.48         | 25.37                        | 25.37        |
| 1350 72 (22.2)                                           | 40.68 | 22.25                                       | 2.31         | 38.72                        | 21.53        | 2.58                         | 36.66        | 20.80                        | 2.87         | 34.45                        | 20.01        | 3.19                         | 32.03        | 19.15                        | 3.54         | 29.50                        | 18.26        |
| 67 (19.4)                                                | 37.04 | 28.29                                       | 2.32         | 35.25                        | 27.57        | 2.58                         | 33.37        | 26.81                        | 2.86         | 31.35                        | 25.98        | 3.17                         | 29.14        | 25.07                        | 3.53         | 26.85                        | 24.10        |
| 63 (17.2)**                                              | 34.40 | 27.11                                       | 2.33         | 32.75                        | 26.38        | 2.58                         | 31.00        | 25.62                        | 2.86         | 29.12                        | 24.79        | 3.17                         | 27.07        | 23.87                        | 3.52         | 24.93                        | 22.89        |
| 62 (16.7)                                                | 33.95 | 33.95                                       | 2.33         | 32.55                        | 32.55        | 2.58                         | 31.13        | 31.13                        | 2.86         | 29.57                        | 29.57        | 3.17                         | 27.85        | 27.85                        | 3.52         | 26.00                        | 26.00        |
| 57 (13.9)                                                | 33.84 | 33.84                                       | 2.33         | 32.51                        | 32.51        | 2.58                         | 31.10        | 31.10                        | 2.86         | 29.54                        | 29.54        | 3.17                         | 27.82        | 27.82                        | 3.52         | 25.98                        | 25.98        |

**16 | BROPH14NB**  
**14 SEER Single-Stage Heat Pump**

| EVAPORATOR AIR<br>CFM EWB<br>° F (° C)                       |             | CONDENSER ENTERING AIR TEMPERATURES ° F (° C) |                |                          |                |                          |                |                          |                |                          |                |                          |                |                          |                |                          |                |                          |                |                          |                |
|--------------------------------------------------------------|-------------|-----------------------------------------------|----------------|--------------------------|----------------|--------------------------|----------------|--------------------------|----------------|--------------------------|----------------|--------------------------|----------------|--------------------------|----------------|--------------------------|----------------|--------------------------|----------------|--------------------------|----------------|
|                                                              |             | 75 (23.9)                                     |                | 85 (29.4)                |                | 95 (35)                  |                | 105 (40.6)               |                | 115 (46.1)               |                | 125 (51.7)               |                |                          |                |                          |                |                          |                |                          |                |
|                                                              |             | Capacity MBtuh†<br>Total                      | System<br>KW** | Capacity MBtuh†<br>Total | System<br>KW** | Capacity MBtuh†<br>Total | System<br>KW** | Capacity MBtuh†<br>Total | System<br>KW** | Capacity MBtuh†<br>Total | System<br>KW** | Capacity MBtuh†<br>Total | System<br>KW** | Capacity MBtuh†<br>Total | System<br>KW** | Capacity MBtuh†<br>Total | System<br>KW** | Capacity MBtuh†<br>Total | System<br>KW** | Capacity MBtuh†<br>Total | System<br>KW** |
| PH14NB060 Outdoor Section With FX4DN(B,F)061L Indoor Section |             |                                               |                |                          |                |                          |                |                          |                |                          |                |                          |                |                          |                |                          |                |                          |                |                          |                |
| 1750                                                         | 72 (22.2)   | 64.47                                         | 36.36          | 3.53                     | 61.69          | 35.21                    | 3.88           | 58.75                    | 34.01          | 4.30                     | 55.61          | 32.74                    | 4.78           | 52.18                    | 31.36          | 5.34                     | 48.43          | 29.90                    | 5.99           | 44.10                    | 38.44          |
|                                                              | 67 (19.4)   | 58.76                                         | 44.97          | 3.50                     | 56.25          | 43.82                    | 3.86           | 53.58                    | 42.62          | 4.27                     | 50.71          | 41.34                    | 4.76           | 47.58                    | 39.96          | 5.32                     | 44.10          | 38.44                    | 5.96           | 40.98                    | 36.76          |
|                                                              | 63 (17.2)†† | 54.60                                         | 43.31          | 3.48                     | 52.27          | 42.16                    | 3.84           | 49.79                    | 40.96          | 4.25                     | 47.13          | 39.68                    | 4.74           | 44.21                    | 38.28          | 5.29                     | 40.98          | 36.76                    | 5.94           | 41.19                    | 41.19          |
|                                                              | 62 (16.7)   | 53.59                                         | 53.34          | 3.48                     | 51.34          | 52.14                    | 3.84           | 48.98                    | 50.87          | 4.25                     | 46.43          | 49.42                    | 4.73           | 43.81                    | 43.81          | 5.29                     | 41.19          | 41.19                    | 5.94           | 41.14                    | 41.14          |
|                                                              | 57 (13.9)   | 51.87                                         | 51.87          | 3.47                     | 50.08          | 50.08                    | 3.83           | 48.17                    | 48.17          | 4.25                     | 46.08          | 46.08                    | 4.73           | 43.74                    | 43.74          | 5.29                     | 41.14          | 41.14                    | 5.94           | 41.14                    | 41.14          |
| 2000                                                         | 72 (22.2)   | 65.61                                         | 38.13          | 3.59                     | 62.71          | 36.95                    | 3.95           | 59.66                    | 35.74          | 4.37                     | 56.39          | 34.44                    | 4.85           | 52.83                    | 33.04          | 5.41                     | 48.97          | 31.55                    | 6.06           | 44.64                    | 41.17          |
|                                                              | 67 (19.4)   | 59.86                                         | 47.88          | 3.57                     | 57.21          | 46.69                    | 3.92           | 54.43                    | 45.47          | 4.34                     | 51.45          | 44.16                    | 4.82           | 48.19                    | 42.72          | 5.38                     | 44.64          | 41.17                    | 6.03           | 41.52                    | 39.29          |
|                                                              | 63 (17.2)†† | 55.66                                         | 46.01          | 3.55                     | 53.22          | 44.83                    | 3.91           | 50.64                    | 43.61          | 4.32                     | 47.87          | 42.29                    | 4.80           | 44.85                    | 40.86          | 5.36                     | 41.52          | 39.29                    | 6.01           | 42.54                    | 42.54          |
|                                                              | 62 (16.7)   | 54.79                                         | 57.14          | 3.55                     | 52.47          | 55.78                    | 3.90           | 50.08                    | 50.08          | 4.32                     | 47.80          | 47.80                    | 4.80           | 45.32                    | 45.32          | 5.36                     | 42.54          | 42.54                    | 6.02           | 42.49                    | 42.49          |
|                                                              | 57 (13.9)   | 53.97                                         | 53.97          | 3.54                     | 52.05          | 52.05                    | 3.90           | 49.99                    | 49.99          | 4.32                     | 47.74          | 47.74                    | 4.80           | 45.26                    | 45.26          | 5.36                     | 42.49          | 42.49                    | 6.02           | 42.49                    | 42.49          |
| 2250                                                         | 72 (22.2)   | 66.47                                         | 39.80          | 3.66                     | 63.48          | 38.61                    | 4.02           | 60.32                    | 37.37          | 4.43                     | 56.96          | 36.06                    | 4.91           | 53.30                    | 34.64          | 5.47                     | 49.33          | 33.13                    | 6.12           | 45.03                    | 43.74          |
|                                                              | 67 (19.4)   | 60.67                                         | 50.65          | 3.63                     | 57.94          | 49.44                    | 3.99           | 55.07                    | 48.18          | 4.40                     | 51.99          | 46.83                    | 4.89           | 48.67                    | 45.37          | 5.45                     | 45.03          | 43.74                    | 6.09           | 41.91                    | 41.63          |
|                                                              | 63 (17.2)†† | 56.46                                         | 48.58          | 3.61                     | 53.93          | 47.38                    | 3.97           | 51.26                    | 46.11          | 4.38                     | 48.41          | 44.76                    | 4.87           | 45.32                    | 43.28          | 5.43                     | 41.91          | 41.63                    | 6.07           | 43.63                    | 43.63          |
|                                                              | 62 (16.7)   | 55.83                                         | 55.83          | 3.61                     | 53.75          | 53.75                    | 3.97           | 51.56                    | 51.56          | 4.39                     | 49.17          | 49.17                    | 4.87           | 46.57                    | 46.57          | 5.44                     | 43.63          | 43.63                    | 6.09           | 43.58                    | 43.58          |
|                                                              | 57 (13.9)   | 55.71                                         | 55.71          | 3.61                     | 53.68          | 53.68                    | 3.97           | 51.49                    | 51.49          | 4.39                     | 49.12          | 49.12                    | 4.87           | 46.49                    | 46.49          | 5.43                     | 43.58          | 43.58                    | 6.09           | 43.58                    | 43.58          |

† Total and sensible capacities are net capacities. Blower motor heat has been subtracted.

‡ Sensible capacities shown are based on 80°F (27°C) entering air at the indoor coil. For sensible capacities at other than 80°F (27°C), deduct 835 Btuh (245 kW) per 1000 CFM (480 L/S) of indoor coil air for each degree below 80°F (27°C), or add 835 Btuh (245 kW) per 1000 CFM (480 L/S) of indoor coil air per degree above 80°F (27°C).

# Detailed cooling capacities are based on indoor and outdoor unit at the same elevation per AHRI standard 210/240-2008. If additional tubing length and/or indoor unit is located above outdoor unit, a slight variation in capacity may occur.

\*\* Sys. kw is total of indoor and outdoor unit kilowatts.

†† At TVA rating indoor condition (75°F edb/63°F ewb). All other indoor air temperatures are at 80°F edb.

NOTE: When the required data falls between the published data, interpolation may be performed. Extrapolation is not an acceptable practice.

EWB — Entering Wet Bulb

# HEAT PUMP HEATING PERFORMANCE

| INDOOR AIR<br>EDB<br>°F (°C)                             |      | -3 (-19.4)      |       |              |       |                          | 7 (-13.9)       |       |              |       |                          | OUTDOOR COIL ENTERING AIR TEMPERATURES °F(°C) |       |              |       |                          | 37 (2.8)        |       |              |       |                          | 47 (8.3)        |       |              |       |                          | 57 (13.9)       |       |              |       |    | 67 (19.4) |    |       |  |  |
|----------------------------------------------------------|------|-----------------|-------|--------------|-------|--------------------------|-----------------|-------|--------------|-------|--------------------------|-----------------------------------------------|-------|--------------|-------|--------------------------|-----------------|-------|--------------|-------|--------------------------|-----------------|-------|--------------|-------|--------------------------|-----------------|-------|--------------|-------|----|-----------|----|-------|--|--|
|                                                          |      | Capacity MBtu/h |       | Total System |       | Capacity MBtu/h<br>Total | Capacity MBtu/h |       | Total System |       | Capacity MBtu/h<br>Total | Capacity MBtu/h                               |       | Total System |       | Capacity MBtu/h<br>Total | Capacity MBtu/h |       | Total System |       | Capacity MBtu/h<br>Total | Capacity MBtu/h |       | Total System |       | Capacity MBtu/h<br>Total | Capacity MBtu/h |       | Total System |       |    |           |    |       |  |  |
|                                                          |      | Total           | Integ | KW           | Integ |                          | KW              | Integ | KW           | Integ |                          | KW                                            | Integ | KW           | Integ |                          | KW              | Integ | KW           | Integ |                          | KW              | Integ | KW           | Integ |                          | KW              | Integ | KW           | Integ | KW | Integ     | KW | Integ |  |  |
| PH14NB018 Outdoor Section With FB4CNP018L Indoor Section |      |                 |       |              |       |                          |                 |       |              |       |                          |                                               |       |              |       |                          |                 |       |              |       |                          |                 |       |              |       |                          |                 |       |              |       |    |           |    |       |  |  |
| 65                                                       | 525  | 5.26            | 4.84  | 1.03         | 7.45  | 6.84                     | 1.09            | 9.80  | 8.94         | 1.14  | 12.54                    | 11.14                                         | 1.21  | 15.07        | 13.71 | 1.27                     | 17.87           | 17.87 | 1.35         | 21.00 | 21.00                    | 1.44            | 24.19 | 24.19        | 1.53  |                          |                 |       |              |       |    |           |    |       |  |  |
| 600                                                      | 600  | 5.36            | 4.93  | 1.04         | 7.57  | 6.95                     | 1.09            | 9.96  | 9.08         | 1.13  | 12.70                    | 11.28                                         | 1.19  | 15.26        | 13.89 | 1.24                     | 18.13           | 18.13 | 1.31         | 21.35 | 21.35                    | 1.40            | 24.32 | 24.32        | 1.47  |                          |                 |       |              |       |    |           |    |       |  |  |
| 675                                                      | 675  | 5.44            | 5.01  | 1.04         | 7.66  | 7.04                     | 1.09            | 10.09 | 9.20         | 1.13  | 12.83                    | 11.40                                         | 1.18  | 15.43        | 14.04 | 1.23                     | 18.33           | 18.33 | 1.29         | 21.54 | 21.54                    | 1.37            | 24.32 | 24.32        | 1.43  |                          |                 |       |              |       |    |           |    |       |  |  |
| 70                                                       | 525  | 4.98            | 4.58  | 1.08         | 7.15  | 6.57                     | 1.14            | 9.49  | 8.65         | 1.20  | 12.28                    | 10.90                                         | 1.27  | 14.78        | 13.45 | 1.33                     | 17.54           | 17.54 | 1.41         | 20.61 | 20.61                    | 1.47            | 23.84 | 23.84        | 1.61  |                          |                 |       |              |       |    |           |    |       |  |  |
| 600                                                      | 600  | 5.08            | 4.67  | 1.08         | 7.27  | 6.68                     | 1.14            | 9.64  | 8.79         | 1.19  | 12.45                    | 11.05                                         | 1.25  | 14.98        | 13.63 | 1.31                     | 17.80           | 17.80 | 1.38         | 20.95 | 20.95                    | 1.47            | 23.84 | 23.84        | 1.55  |                          |                 |       |              |       |    |           |    |       |  |  |
| 675                                                      | 675  | 5.16            | 4.75  | 1.09         | 7.38  | 6.78                     | 1.14            | 9.77  | 8.91         | 1.18  | 12.58                    | 11.17                                         | 1.24  | 15.14        | 13.78 | 1.29                     | 18.01           | 18.01 | 1.36         | 21.21 | 21.21                    | 1.44            | 24.05 | 24.05        | 1.50  |                          |                 |       |              |       |    |           |    |       |  |  |
| 75                                                       | 525  | 4.65            | 4.28  | 1.13         | 6.83  | 6.27                     | 1.19            | 9.15  | 8.35         | 1.25  | 11.98                    | 10.64                                         | 1.33  | 14.49        | 13.19 | 1.40                     | 17.21           | 17.21 | 1.48         | 20.22 | 20.22                    | 1.58            | 23.47 | 23.47        | 1.69  |                          |                 |       |              |       |    |           |    |       |  |  |
| 600                                                      | 600  | 4.74            | 4.36  | 1.13         | 6.95  | 6.39                     | 1.19            | 9.31  | 8.49         | 1.24  | 12.16                    | 10.80                                         | 1.31  | 14.69        | 13.37 | 1.37                     | 17.46           | 17.46 | 1.45         | 20.55 | 20.55                    | 1.54            | 23.68 | 23.68        | 1.62  |                          |                 |       |              |       |    |           |    |       |  |  |
| 675                                                      | 675  | 4.84            | 4.45  | 1.14         | 7.05  | 6.48                     | 1.19            | 9.44  | 8.61         | 1.24  | 12.30                    | 10.93                                         | 1.30  | 14.86        | 13.52 | 1.36                     | 17.67           | 17.67 | 1.42         | 20.82 | 20.82                    | 1.51            | 23.75 | 23.75        | 1.58  |                          |                 |       |              |       |    |           |    |       |  |  |
| PH14NB024 Outdoor Section With FB4CNP030L Indoor Section |      |                 |       |              |       |                          |                 |       |              |       |                          |                                               |       |              |       |                          |                 |       |              |       |                          |                 |       |              |       |                          |                 |       |              |       |    |           |    |       |  |  |
| 65                                                       | 700  | 8.09            | 7.45  | 1.53         | 10.51 | 9.65                     | 1.59            | 13.25 | 12.08        | 1.65  | 16.10                    | 14.30                                         | 1.71  | 18.99        | 17.28 | 1.79                     | 22.27           | 22.27 | 1.88         | 26.02 | 26.02                    | 1.98            | 29.55 | 29.55        | 2.06  |                          |                 |       |              |       |    |           |    |       |  |  |
| 800                                                      | 800  | 8.23            | 7.57  | 1.54         | 10.66 | 9.80                     | 1.58            | 13.63 | 12.43        | 1.64  | 16.28                    | 14.46                                         | 1.70  | 19.22        | 17.49 | 1.76                     | 22.55           | 22.55 | 1.84         | 26.19 | 26.19                    | 1.92            | 29.49 | 29.49        | 2.00  |                          |                 |       |              |       |    |           |    |       |  |  |
| 900                                                      | 900  | 8.35            | 7.69  | 1.54         | 10.81 | 9.93                     | 1.59            | 13.78 | 12.56        | 1.64  | 16.44                    | 14.60                                         | 1.69  | 19.41        | 17.67 | 1.74                     | 22.78           | 22.78 | 1.82         | 26.20 | 26.20                    | 1.89            | 29.26 | 29.26        | 1.95  |                          |                 |       |              |       |    |           |    |       |  |  |
| 70                                                       | 700  | 7.69            | 7.08  | 1.60         | 10.12 | 9.30                     | 1.66            | 12.77 | 11.64        | 1.72  | 15.81                    | 14.04                                         | 1.80  | 18.67        | 16.99 | 1.87                     | 21.95           | 21.95 | 1.96         | 25.62 | 25.62                    | 2.08            | 29.23 | 29.23        | 2.16  |                          |                 |       |              |       |    |           |    |       |  |  |
| 800                                                      | 784  | 7.81            | 7.21  | 1.60         | 10.29 | 9.45                     | 1.65            | 12.99 | 11.84        | 1.71  | 15.99                    | 14.20                                         | 1.78  | 18.89        | 17.19 | 1.84                     | 22.20           | 22.20 | 1.93         | 25.88 | 25.88                    | 2.02            | 29.23 | 29.23        | 2.10  |                          |                 |       |              |       |    |           |    |       |  |  |
| 900                                                      | 900  | 7.96            | 7.32  | 1.61         | 10.43 | 9.59                     | 1.66            | 13.21 | 12.05        | 1.71  | 16.16                    | 14.35                                         | 1.77  | 19.08        | 17.37 | 1.83                     | 22.42           | 22.42 | 1.91         | 25.96 | 25.96                    | 1.98            | 29.10 | 29.10        | 2.05  |                          |                 |       |              |       |    |           |    |       |  |  |
| 75                                                       | 700  | 7.30            | 6.71  | 1.67         | 9.74  | 8.95                     | 1.73            | 12.37 | 11.28        | 1.80  | 15.54                    | 13.80                                         | 1.88  | 18.37        | 16.72 | 1.96                     | 21.60           | 21.60 | 2.06         | 25.21 | 25.21                    | 2.18            | 28.90 | 28.90        | 2.26  |                          |                 |       |              |       |    |           |    |       |  |  |
| 800                                                      | 744  | 6.84            | 6.84  | 1.67         | 9.90  | 9.10                     | 1.73            | 12.57 | 11.46        | 1.79  | 15.73                    | 13.97                                         | 1.86  | 18.58        | 16.91 | 1.93                     | 21.86           | 21.86 | 2.02         | 25.53 | 25.53                    | 2.12            | 28.93 | 28.93        | 2.20  |                          |                 |       |              |       |    |           |    |       |  |  |
| 900                                                      | 755  | 6.95            | 6.95  | 1.68         | 10.03 | 9.22                     | 1.73            | 12.73 | 11.61        | 1.79  | 15.88                    | 14.10                                         | 1.85  | 18.76        | 17.07 | 1.92                     | 22.08           | 22.08 | 2.00         | 25.68 | 25.68                    | 2.08            | 28.88 | 28.88        | 2.15  |                          |                 |       |              |       |    |           |    |       |  |  |
| PH14NB030 Outdoor Section With FB4CNP030L Indoor Section |      |                 |       |              |       |                          |                 |       |              |       |                          |                                               |       |              |       |                          |                 |       |              |       |                          |                 |       |              |       |                          |                 |       |              |       |    |           |    |       |  |  |
| 65                                                       | 875  | 10.54           | 9.70  | 1.80         | 13.55 | 12.45                    | 1.87            | 17.16 | 15.64        | 1.95  | 20.49                    | 18.19                                         | 2.04  | 24.30        | 22.12 | 2.14                     | 28.57           | 28.57 | 2.26         | 33.42 | 33.42                    | 2.40            | 37.91 | 37.91        | 2.51  |                          |                 |       |              |       |    |           |    |       |  |  |
| 1050                                                     | 1050 | 10.81           | 9.95  | 1.81         | 13.87 | 12.75                    | 1.88            | 17.44 | 15.90        | 1.95  | 20.83                    | 18.50                                         | 2.02  | 24.73        | 22.50 | 2.11                     | 29.10           | 29.10 | 2.22         | 33.84 | 33.84                    | 2.34            | 37.90 | 37.90        | 2.43  |                          |                 |       |              |       |    |           |    |       |  |  |
| 1125                                                     | 1125 | 10.91           | 10.04 | 1.82         | 13.99 | 12.85                    | 1.88            | 17.54 | 15.99        | 1.95  | 20.96                    | 18.61                                         | 2.02  | 24.88        | 22.64 | 2.11                     | 29.28           | 29.28 | 2.22         | 33.88 | 33.88                    | 2.32            | 37.80 | 37.80        | 2.41  |                          |                 |       |              |       |    |           |    |       |  |  |
| 70                                                       | 875  | 10.08           | 9.27  | 1.87         | 13.10 | 12.04                    | 1.95            | 16.82 | 15.34        | 2.04  | 20.13                    | 17.88                                         | 2.13  | 23.89        | 21.74 | 2.23                     | 28.09           | 28.09 | 2.35         | 32.88 | 32.88                    | 2.50            | 37.48 | 37.48        | 2.62  |                          |                 |       |              |       |    |           |    |       |  |  |
| 1050                                                     | 1034 | 9.51            | 1.89  | 13.40        | 12.31 | 1.95                     | 17.12           | 15.61 | 2.03         | 20.47 | 18.18                    | 2.11                                          | 24.31 | 22.12        | 2.20  | 28.60                    | 28.60           | 2.31  | 33.42        | 33.42 | 2.44                     | 37.51           | 37.51 | 2.53         |       |                          |                 |       |              |       |    |           |    |       |  |  |
| 1125                                                     | 1044 | 9.60            | 1.90  | 13.51        | 12.42 | 1.96                     | 17.23           | 15.71 | 2.04         | 20.59 | 18.29                    | 2.11                                          | 24.46 | 22.26        | 2.20  | 28.79                    | 28.79           | 2.31  | 33.53        | 33.53 | 2.42                     | 0.00            | 0.00  | 0.00         |       |                          |                 |       |              |       |    |           |    |       |  |  |
| 75                                                       | 875  | 9.61            | 8.84  | 1.95         | 12.64 | 11.62                    | 2.02            | 16.08 | 14.66        | 2.11  | 19.78                    | 17.57                                         | 2.22  | 23.48        | 21.37 | 2.32                     | 27.62           | 27.62 | 2.45         | 32.34 | 32.34                    | 2.60            | 37.01 | 37.01        | 2.73  |                          |                 |       |              |       |    |           |    |       |  |  |
| 1050                                                     | 986  | 9.07            | 1.96  | 12.94        | 11.89 | 2.03                     | 16.76           | 15.28 | 2.12         | 20.11 | 17.86                    | 2.20                                          | 23.89 | 21.74        | 2.30  | 28.11                    | 28.11           | 2.41  | 32.93        | 32.93 | 2.54                     | 37.11           | 37.11 | 2.64         |       |                          |                 |       |              |       |    |           |    |       |  |  |
| 1125                                                     | 995  | 9.16            | 1.97  | 13.05        | 11.99 | 2.04                     | 16.87           | 15.39 | 2.12         | 20.23 | 17.97                    | 2.20                                          | 24.04 | 21.88        | 2.29  | 28.30                    | 28.30           | 2.40  | 33.08        | 33.08 | 2.52                     | 37.07           | 37.07 | 2.62         |       |                          |                 |       |              |       |    |           |    |       |  |  |
| PH14NB036 Outdoor Section With FB4CNP036L Indoor Section |      |                 |       |              |       |                          |                 |       |              |       |                          |                                               |       |              |       |                          |                 |       |              |       |                          |                 |       |              |       |                          |                 |       |              |       |    |           |    |       |  |  |
| 65                                                       | 1050 | 12.92           | 11.89 | 2.18         | 16.50 | 15.16                    | 2.26            | 20.40 | 18.60        | 2.34  | 24.90                    | 22.12                                         | 2.45  | 29.12        | 26.50 | 2.55                     | 33.86           | 33.86 | 2.66         | 39.25 | 39.25                    | 2.81            | 45.49 | 45.49        | 3.02  |                          |                 |       |              |       |    |           |    |       |  |  |
| 1200                                                     | 1319 | 12.13           | 2.20  | 16.81        | 15.44 | 2.27                     | 20.77           | 18.94 | 2.35         | 25.23 | 22.40                    | 2.44                                          | 29.49 | 26.84        | 2.53  | 34.32                    | 34.32           | 2.63  | 39.87        | 39.87 | 2.76                     | 46.23           | 46.23 | 2.94         |       |                          |                 |       |              |       |    |           |    |       |  |  |
| 1350                                                     | 1343 | 12.35           | 2.23  | 17.08        | 15.69 | 2.29                     | 21.13           | 19.27 | 2.36         | 25.51 | 22.66                    | 2.44                                          | 29.82 | 27.14        | 2.52  | 34.70                    | 34.70           | 2.61  | 40.38        | 40.38 | 2.74                     | 46.70           | 46.70 | 2.88         |       |                          |                 |       |              |       |    |           |    |       |  |  |
| 70                                                       | 1050 | 12.30           | 11.32 | 2.26         | 15.91 | 14.62                    | 2.34            | 19.81 | 18.06        | 2.43  | 24.51                    | 21.77                                         | 2.55  | 28.67        | 26.09 | 2.65                     | 33.35           | 33.35 | 2.77         | 38.60 | 38.60                    | 2.93            | 44.71 | 44.71        | 3.15  |                          |                 |       |              |       |    |           |    |       |  |  |
| 1200                                                     | 1256 | 11.56           | 2.28  | 16.22        | 14.90 | 2.36                     | 20.15           | 18.38 | 2.44         | 24.82 | 22.05                    | 2.54                                          | 29.04 | 26.43        | 2.63  | 33.80                    | 33.80           | 2.74  | 39.20        | 39.20 | 2.88                     | 45.47           | 45.47 | 3.07         |       |                          |                 |       |              |       |    |           |    |       |  |  |
| 1350                                                     | 1280 | 11.77           | 2.31  | 16.48        | 15.15 | 2.38                     | 20.47           | 18.66 | 2.45         | 25.10 | 22.29                    | 2.55                                          | 29.36 | 26.72        | 2.63  | 34.19                    | 34.19           | 2.72  | 39.70        | 39.70 | 2.85                     | 46.01           | 46.01 | 3.02         |       |                          |                 |       |              |       |    |           |    |       |  |  |
| 75                                                       | 1050 | 11.66           | 10.73 | 2.35         | 15.30 | 14.06                    | 2.43            | 19.20 | 17.50        | 2.53  | 24.07                    | 21.37                                         | 2.66  | 28.23        | 25.69 | 2.77                     | 32.83           | 32.83 | 2.89         | 37.95 | 37.95                    | 3.06            | 43.92 | 43.92        | 3.29  |                          |                 |       |              |       |    |           |    |       |  |  |
| 1200                                                     | 1192 | 10.97           | 2.37  | 15.60        | 14.34 | 2.45                     | 19.54           | 17.82 | 2.53         | 24.41 | 21.68                    | 2.65                                          | 28.60 | 26.02        | 2.75  | 33.28                    | 33.28           | 2.85  | 38.54        | 38.54 | 3.00                     | 44.68           | 44.68 | 3.22         |       |                          |                 |       |              |       |    |           |    |       |  |  |
| 1350                                                     | 1215 | 11.18           | 2.40  | 15.87        | 14.58 | 2.47                     | 19.85           | 18.10 | 2.55         | 24.69 | 21.93                    | 2.65                                          | 28.91 | 26.31        | 2.74  | 33.66                    | 33.66           | 2.84  | 39.03        | 39.03 | 2.98                     | 44.58           | 44.58 | 3.16         |       |                          |                 |       |              |       |    |           |    |       |  |  |

| INDOOR AIR<br>EDB CFM<br>°F (°C)                         |      | OUTDOOR COIL ENTERING AIR TEMPERATURES °F(°C) |                    |                         |                    |                         |                    |                         |                    |                         |                    | 7 (-13.9)               |                    |                         |                    | 17 (-8.3)               |                    |                         |                    | 27 (2.8)                |                    |                         |                    | 37 (2.8)                |                    |                         |                    | 47 (8.3)                |                    |                         |                    | 57 (13.9)               |                    |            |       | 67 (19.4) |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |      |       |       |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |       |        |        |       |        |        |       |        |        |      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   |         |         |       |         |         |       |         |         |       |         |         |       |         |         |       |         |         |       |         |         |       |         |         |       |         |         |       |         |         |       |         |         |       |         |
|----------------------------------------------------------|------|-----------------------------------------------|--------------------|-------------------------|--------------------|-------------------------|--------------------|-------------------------|--------------------|-------------------------|--------------------|-------------------------|--------------------|-------------------------|--------------------|-------------------------|--------------------|-------------------------|--------------------|-------------------------|--------------------|-------------------------|--------------------|-------------------------|--------------------|-------------------------|--------------------|-------------------------|--------------------|-------------------------|--------------------|-------------------------|--------------------|------------|-------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|------|--------|--------|------|--------|--------|------|--------|--------|------|--------|--------|------|--------|--------|------|--------|--------|------|--------|--------|------|--------|--------|------|--------|--------|------|--------|--------|------|--------|--------|------|--------|--------|------|--------|--------|------|--------|--------|------|--------|--------|------|--------|--------|------|--------|--------|------|--------|--------|------|--------|--------|------|--------|--------|------|--------|--------|------|--------|--------|------|--------|--------|------|--------|--------|------|--------|--------|------|--------|--------|------|--------|--------|------|--------|--------|------|--------|--------|------|--------|--------|------|--------|--------|------|--------|--------|------|--------|--------|------|--------|--------|------|--------|--------|------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|---------|---------|-------|---------|---------|-------|---------|---------|-------|---------|---------|-------|---------|---------|-------|---------|---------|-------|---------|---------|-------|---------|---------|-------|---------|---------|-------|---------|---------|-------|---------|---------|-------|---------|---------|-------|---------|---------|-------|---------|---------|-------|---------|---------|-------|---------|---------|-------|---------|---------|-------|---------|---------|-------|---------|---------|-------|---------|---------|-------|---------|---------|-------|---------|---------|-------|---------|---------|-------|---------|---------|-------|---------|---------|-------|---------|
|                                                          |      | -3 (-19.4)                                    |                    | 7 (-13.9)               |                    | 17 (-8.3)               |                    | 27 (2.8)                |                    | 37 (2.8)                |                    | 47 (8.3)                |                    | 57 (13.9)               |                    | 67 (19.4)               |                    | 77 (25.0)               |                    | 87 (30.6)               |                    | 97 (36.1)               |                    | 107 (41.7)              |                    | 117 (47.2)              |                    | 127 (52.2)              |                    | 137 (57.8)              |                    | 147 (63.3)              |                    | 157 (68.9) |       |           |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |      |       |       |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |       |        |        |       |        |        |       |        |        |      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   |         |         |       |         |         |       |         |         |       |         |         |       |         |         |       |         |         |       |         |         |       |         |         |       |         |         |       |         |         |       |         |         |       |         |
|                                                          |      | Capacity MBtuh<br>Total                       | Total System<br>KW | Capacity MBtuh<br>Total | Total System<br>KW | Capacity MBtuh<br>Total | Total System<br>KW | Capacity MBtuh<br>Total | Total System<br>KW | Capacity MBtuh<br>Total | Total System<br>KW | Capacity MBtuh<br>Total | Total System<br>KW | Capacity MBtuh<br>Total | Total System<br>KW | Capacity MBtuh<br>Total | Total System<br>KW | Capacity MBtuh<br>Total | Total System<br>KW | Capacity MBtuh<br>Total | Total System<br>KW | Capacity MBtuh<br>Total | Total System<br>KW | Capacity MBtuh<br>Total | Total System<br>KW | Capacity MBtuh<br>Total | Total System<br>KW | Capacity MBtuh<br>Total | Total System<br>KW | Capacity MBtuh<br>Total | Total System<br>KW | Capacity MBtuh<br>Total | Total System<br>KW |            |       |           |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |      |       |       |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |       |        |        |       |        |        |       |        |        |      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   |         |         |       |         |         |       |         |         |       |         |         |       |         |         |       |         |         |       |         |         |       |         |         |       |         |         |       |         |         |       |         |         |       |         |
| PH14NB042 Outdoor Section With FB4CNP042L Indoor Section |      |                                               |                    |                         |                    |                         |                    |                         |                    |                         |                    |                         |                    |                         |                    |                         |                    |                         |                    |                         |                    |                         |                    |                         |                    |                         |                    |                         |                    |                         |                    |                         |                    |            |       |           |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |      |       |       |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |       |        |        |       |        |        |       |        |        |      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      |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |         |         |       |         |         |       |         |         |       |         |         |       |         |         |       |         |         |       |         |         |       |         |         |       |         |         |       |         |         |       |         |         |       |         |         |       |         |         |       |         |         |       |         |         |       |         |         |       |         |         |       |         |         |       |         |         |       |         |         |       |         |         |       |         |         |       |         |         |       |         |         |       |         |         |       |         |
| 65                                                       | 1225 | 15.99                                         | 14.35              | 2.48                    | 19.93              | 18.31                   | 2.59               | 24.83                   | 22.64              | 2.71                    | 30.26              | 26.88                   | 2.87               | 35.66                   | 32.45              | 3.01                    | 41.58              | 41.58                   | 3.18               | 48.02                   | 48.02              | 3.34                    | 53.69              | 53.69                   | 3.47               | 59.36                   | 59.36              | 3.60                    | 65.03              | 65.03                   | 3.73               | 70.70                   | 70.70              | 3.86       | 76.37 | 76.37     | 3.99  | 82.04 | 82.04 | 4.12  | 87.71 | 87.71 | 4.25  | 93.38 | 93.38 |       |       |       |       |       |       |      |       |       |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |       |        |        |      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   |         |         |       |         |         |       |         |         |       |         |         |       |         |         |       |         |         |       |         |         |       |         |         |       |         |         |       |         |         |       |         |         |       |         |
| 1400                                                     | 1591 | 14.64                                         | 2.50               | 20.28                   | 18.64              | 2.59                    | 25.75              | 23.48                   | 2.72               | 30.60                   | 27.17              | 2.84                    | 36.05              | 32.81                   | 2.98               | 42.10                   | 42.10              | 3.14                    | 48.21              | 48.21                   | 3.26               | 53.51                   | 53.51              | 3.37                    | 59.24              | 59.24                   | 3.49               | 64.96                   | 64.96              | 3.61                    | 70.41              | 70.41                   | 3.73               | 75.86      | 75.86 | 3.85      | 81.21 | 81.21 | 3.97  | 86.06 | 86.06 | 4.09  | 90.81 | 90.81 | 4.21  | 95.36 | 95.36 |       |       |       |       |      |       |       |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |       |        |        |       |        |        |       |        |        |      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   |         |         |       |         |         |       |         |         |       |         |         |       |         |         |       |         |         |       |         |         |       |         |         |       |         |         |       |         |         |       |         |         |       |         |
| 1575                                                     | 1619 | 14.89                                         | 2.51               | 20.58                   | 18.91              | 2.60                    | 26.05              | 23.75                   | 2.72               | 30.91                   | 27.46              | 2.84                    | 36.39              | 33.12                   | 2.96               | 42.45                   | 42.45              | 3.10                    | 48.18              | 48.18                   | 3.20               | 53.24                   | 53.24              | 3.31                    | 58.97              | 58.97                   | 3.43               | 64.41                   | 64.41              | 3.55                    | 69.86              | 69.86                   | 3.67               | 74.65      | 74.65 | 3.79      | 79.24 | 79.24 | 3.91  | 83.77 | 83.77 | 4.03  | 87.71 | 87.71 | 4.15  | 91.58 | 91.58 | 4.27  | 95.24 | 95.24 |       |      |       |       |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |      |        |        |       |        |        |       |        |        |       |        |        |      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   |         |         |       |         |         |       |         |         |       |         |         |       |         |         |       |         |         |       |         |         |       |         |         |       |         |         |       |         |         |       |         |         |       |         |
| 70                                                       | 1225 | 14.78                                         | 13.60              | 2.58                    | 19.20              | 17.64                   | 2.69               | 24.06                   | 21.93              | 2.82                    | 29.80              | 26.47                   | 2.98               | 35.19                   | 32.02              | 3.14                    | 41.00              | 41.00                   | 3.32               | 47.42                   | 47.42              | 3.48                    | 53.09              | 53.09                   | 3.62               | 58.99                   | 58.99              | 3.76                    | 64.78              | 64.78                   | 3.90               | 70.27                   | 70.27              | 4.04       | 75.06 | 75.06     | 4.18  | 79.35 | 79.35 | 4.32  | 83.64 | 83.64 | 4.46  | 87.33 | 87.33 | 4.60  | 91.02 | 91.02 | 4.74  | 94.69 | 94.69 | 4.88 | 98.27 | 98.27 | 5.02 | 101.94 | 101.94 | 5.16 | 105.51 | 105.51 | 5.30 | 109.08 | 109.08 | 5.44 | 112.61 | 112.61 | 5.58 | 116.15 | 116.15 | 5.72 | 119.68 | 119.68 | 5.86 | 123.21 | 123.21 | 6.00 | 126.74 | 126.74 | 6.14 | 130.27 | 130.27 | 6.28 | 133.80 | 133.80 | 6.42 | 137.33 | 137.33 | 6.56 | 140.86 | 140.86 | 6.70 | 144.39 | 144.39 | 6.84 | 147.92 | 147.92 | 6.98 | 151.45 | 151.45 | 7.12 | 154.98 | 154.98 | 7.26 | 158.51 | 158.51 | 7.40 | 162.04 | 162.04 | 7.54 | 165.57 | 165.57 | 7.68 | 169.10 | 169.10 | 7.82 | 172.63 | 172.63 | 7.96 | 176.16 | 176.16 | 8.10 | 179.69 | 179.69 | 8.24 | 183.22 | 183.22 | 8.38 | 186.75 | 186.75 | 8.52 | 190.28 | 190.28 | 8.66 | 193.81 | 193.81 | 8.80 | 197.34 | 197.34 | 8.94 | 200.87 | 200.87 | 9.08 | 204.40 | 204.40 | 9.22 | 207.93 | 207.93 | 9.36 | 211.46 | 211.46 | 9.50 | 214.99 | 214.99 | 9.64 | 218.52 | 218.52 | 9.78 | 222.05 | 222.05 | 9.92 | 225.58 | 225.58 | 10.06 | 229.11 | 229.11 | 10.20 | 232.64 | 232.64 | 10.34 | 236.17 | 236.17 | 10.48 | 239.70 | 239.70 | 10.62 | 243.23 | 243.23 | 10.76 | 246.76 | 246.76 | 10.90 | 250.29 | 250.29 | 11.04 | 253.82 | 253.82 | 11.18 | 257.35 | 257.35 | 11.32 | 260.88 | 260.88 | 11.46 | 264.41 | 264.41 | 11.60 | 267.94 | 267.94 | 11.74 | 271.47 | 271.47 | 11.88 | 275.00 | 275.00 | 12.02 | 278.53 | 278.53 | 12.16 | 282.06 | 282.06 | 12.30 | 285.59 | 285.59 | 12.44 | 289.12 | 289.12 | 12.58 | 292.65 | 292.65 | 12.72 | 296.18 | 296.18 | 12.86 | 299.71 | 299.71 | 13.00 | 303.24 | 303.24 | 13.14 | 306.77 | 306.77 | 13.28 | 310.30 | 310.30 | 13.42 | 313.83 | 313.83 | 13.56 | 317.36 | 317.36 | 13.70 | 320.89 | 320.89 | 13.84 | 324.42 | 324.42 | 13.98 | 327.95 | 327.95 | 14.12 | 331.48 | 331.48 | 14.26 | 335.01 | 335.01 | 14.40 | 338.54 | 338.54 | 14.54 | 342.07 | 342.07 | 14.68 | 345.60 | 345.60 | 14.82 | 349.13 | 349.13 | 14.96 | 352.66 | 352.66 | 15.10 | 356.19 | 356.19 | 15.24 | 359.72 | 359.72 | 15.38 | 363.25 | 363.25 | 15.52 | 366.78 | 366.78 | 15.66 | 370.31 | 370.31 | 15.80 | 373.84 | 373.84 | 15.94 | 377.37 | 377.37 | 16.08 | 380.90 | 380.90 | 16.22 | 384.43 | 384.43 | 16.36 | 387.96 | 387.96 | 16.50 | 391.50 | 391.50 | 16.64 | 395.03 | 395.03 | 16.78 | 398.56 | 398.56 | 16.92 | 402.09 | 402.09 | 17.06 | 405.62 | 405.62 | 17.20 | 409.15 | 409.15 | 17.34 | 412.68 | 412.68 | 17.48 | 416.21 | 416.21 | 17.62 | 419.74 | 419.74 | 17.76 | 423.27 | 423.27 | 17.90 | 426.80 | 426.80 | 18.04 | 430.33 | 430.33 | 18.18 | 433.86 | 433.86 | 18.32 | 437.39 | 437.39 | 18.46 | 440.92 | 440.92 | 18.60 | 444.45 | 444.45 | 18.74 | 447.98 | 447.98 | 18.88 | 451.51 | 451.51 | 19.02 | 455.04 | 455.04 | 19.16 | 458.57 | 458.57 | 19.30 | 462.10 | 462.10 | 19.44 | 465.63 | 465.63 | 19.58 | 469.16 | 469.16 | 19.72 | 472.69 | 472.69 | 19.86 | 476.22 | 476.22 | 20.00 | 479.75 | 479.75 | 20.14 | 483.28 | 483.28 | 20.28 | 486.81 | 486.81 | 20.42 | 490.34 | 490.34 | 20.56 | 493.87 | 493.87 | 20.70 | 497.40 | 497.40 | 20.84 | 500.93 | 500.93 | 20.98 | 504.46 | 504.46 | 21.12 | 507.99 | 507.99 | 21.26 | 511.52 | 511.52 | 21.40 | 515.05 | 515.05 | 21.54 | 518.58 | 518.58 | 21.68 | 522.11 | 522.11 | 21.82 | 525.64 | 525.64 | 21.96 | 529.17 | 529.17 | 22.10 | 532.70 | 532.70 | 22.24 | 536.23 | 536.23 | 22.38 | 539.76 | 539.76 | 22.52 | 543.29 | 543.29 | 22.66 | 546.82 | 546.82 | 22.80 | 550.35 | 550.35 | 22.94 | 553.88 | 553.88 | 23.08 | 557.41 | 557.41 | 23.22 | 560.94 | 560.94 | 23.36 | 564.47 | 564.47 | 23.50 | 568.00 | 568.00 | 23.64 | 571.53 | 571.53 | 23.78 | 575.06 | 575.06 | 23.92 | 578.59 | 578.59 | 24.06 | 582.12 | 582.12 | 24.20 | 585.65 | 585.65 | 24.34 | 589.18 | 589.18 | 24.48 | 592.71 | 592.71 | 24.62 | 596.24 | 596.24 | 24.76 | 599.77 | 599.77 | 24.90 | 603.30 | 603.30 | 25.04 | 606.83 | 606.83 | 25.18 | 610.36 | 610.36 | 25.32 | 613.89 | 613.89 | 25.46 | 617.42 | 617.42 | 25.60 | 620.95 | 620.95 | 25.74 | 624.48 | 624.48 | 25.88 | 628.01 | 628.01 | 26.02 | 631.54 | 631.54 | 26.16 | 635.07 | 635.07 | 26.30 | 638.60 | 638.60 | 26.44 | 642.13 | 642.13 | 26.58 | 645.66 | 645.66 | 26.72 | 649.19 | 649.19 | 26.86 | 652.72 | 652.72 | 27.00 | 656.25 | 656.25 | 27.14 | 659.78 | 659.78 | 27.28 | 663.31 | 663.31 | 27.42 | 666.84 | 666.84 | 27.56 | 670.37 | 670.37 | 27.70 | 673.90 | 673.90 | 27.84 | 677.43 | 677.43 | 27.98 | 680.96 | 680.96 | 28.12 | 684.49 | 684.49 | 28.26 | 688.02 | 688.02 | 28.40 | 691.55 | 691.55 | 28.54 | 695.08 | 695.08 | 28.68 | 698.61 | 698.61 | 28.82 | 702.14 | 702.14 | 28.96 | 705.67 | 705.67 | 29.10 | 709.20 | 709.20 | 29.24 | 712.73 | 712.73 | 29.38 | 716.26 | 716.26 | 29.52 | 719.79 | 719.79 | 29.66 | 723.32 | 723.32 | 29.80 | 726.85 | 726.85 | 29.94 | 730.38 | 730.38 | 30.08 | 733.91 | 733.91 | 30.22 | 737.44 | 737.44 | 30.36 | 740.97 | 740.97 | 30.50 | 744.50 | 744.50 | 30.64 | 748.03 | 748.03 | 30.78 | 751.56 | 751.56 | 30.92 | 755.09 | 755.09 | 31.06 | 758.62 | 758.62 | 31.20 | 762.15 | 762.15 | 31.34 | 765.68 | 765.68 | 31.48 | 769.21 | 769.21 | 31.62 | 772.74 | 772.74 | 31.76 | 776.27 | 776.27 | 31.90 | 779.80 | 779.80 | 32.04 | 783.33 | 783.33 | 32.18 | 786.86 | 786.86 | 32.32 | 790.39 | 790.39 | 32.46 | 793.92 | 793.92 | 32.60 | 797.45 | 797.45 | 32.74 | 800.98 | 800.98 | 32.88 | 804.51 | 804.51 | 33.02 | 808.04 | 808.04 | 33.16 | 811.57 | 811.57 | 33.30 | 815.10 | 815.10 | 33.44 | 818.63 | 818.63 | 33.58 | 822.16 | 822.16 | 33.72 | 825.69 | 825.69 | 33.86 | 829.22 | 829.22 | 34.00 | 832.75 | 832.75 | 34.14 | 836.28 | 836.28 | 34.28 | 839.81 | 839.81 | 34.42 | 843.34 | 843.34 | 34.56 | 846.87 | 846.87 | 34.70 | 850.40 | 850.40 | 34.84 | 853.93 | 853.93 | 34.98 | 857.46 | 857.46 | 35.12 | 860.99 | 860.99 | 35.26 | 864.52 | 864.52 | 35.40 | 868.05 | 868.05 | 35.54 | 871.58 | 871.58 | 35.68 | 875.11 | 875.11 | 35.82 | 878.64 | 878.64 | 35.96 | 882.17 | 882.17 | 36.10 | 885.70 | 885.70 | 36.24 | 889.23 | 889.23 | 36.38 | 892.76 | 892.76 | 36.52 | 896.29 | 896.29 | 36.66 | 899.82 | 899.82 | 36.80 | 903.35 | 903.35 | 36.94 | 906.88 | 906.88 | 37.08 | 910.41 | 910.41 | 37.22 | 913.94 | 913.94 | 37.36 | 917.47 | 917.47 | 37.50 | 921.00 | 921.00 | 37.64 | 924.53 | 924.53 | 37.78 | 928.06 | 928.06 | 37.92 | 931.59 | 931.59 | 38.06 | 935.12 | 935.12 | 38.20 | 938.65 | 938.65 | 38.34 | 942.18 | 942.18 | 38.48 | 945.71 | 945.71 | 38.62 | 949.24 | 949.24 | 38.76 | 952.77 | 952.77 | 38.90 | 956.30 | 956.30 | 39.04 | 959.83 | 959.83 | 39.18 | 963.36 | 963.36 | 39.32 | 966.89 | 966.89 | 39.46 | 970.42 | 970.42 | 39.60 | 973.95 | 973.95 | 39.74 | 977.48 | 977.48 | 39.88 | 981.01 | 981.01 | 40.02 | 984.54 | 984.54 | 40.16 | 988.07 | 988.07 | 40.30 | 991.60 | 991.60 | 40.44 | 995.13 | 995.13 | 40.58 | 998.66 | 998.66 | 40.72 | 1002.19 | 1002.19 | 40.86 | 1005.72 | 1005.72 | 41.00 | 1009.25 | 1009.25 | 41.14 | 1012.78 | 1012.78 | 41.28 | 1016.31 | 1016.31 | 41.42 | 1019.84 | 1019.84 | 41.56 | 1023.37 | 1023.37 | 41.70 | 1026.90 | 1026.90 | 41.84 | 1030.43 | 1030.43 | 41.98 | 1033.96 | 1033.96 | 42.12 | 1037.49 | 1037.49 | 42.26 | 1041.02 | 1041.02 | 42.40 | 1044.55 | 1044.55 | 42.54 | 1048.08 | 1048.08 | 42.68 | 1051.61 | 1051.61 | 42.82 | 1055.14 | 1055.14 | 42.96 | 1058.67 | 1058.67 | 43.10 | 1062.20 | 1062.20 | 43.24 | 1065.73 | 1065.73 | 43.38 | 1069.26 | 1069.26 | 43.52 | 1072.79 | 1072.79 | 43.66 | 1076.32 | 1076.32 | 43.80 | 1079.85 | 1079.85 | 43.94 | 1083.38 | 1083.38 | 44.08 | 1086.91 | 1086.91 | 44.22 | 1090.44 |

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## GUIDE SPECIFICATIONS

### General System Description

Outdoor-mounted, air-cooled, split-system heat pump unit suitable for ground or rooftop installation. Unit consists of a hermetic compressor, an air-cooled coil, propeller-type condenser fan, and a control box. Unit will discharge supply air upward as shown on contract drawings. Unit will be used in a refrigeration circuit to match up to a packaged fan coil or coil unit.

### Quality Assurance

- Unit will be rated in accordance with the latest edition of AHRI Standard 240.
- Unit will be certified for capacity and efficiency, and listed in the latest AHRI directory.
- Unit construction will comply with latest edition of ANSI/ASHRAE and with NEC.

- Unit will be constructed in accordance with UL standards and will carry the UL label of approval. Unit will have C-UL approval.
- Unit cabinet will be capable of withstanding Federal Test Method Standard No. 141 (Method 6061) 500-hr salt spray test.
- Air-cooled condenser coils are pressure tested and the outdoor unit is leak tested.
- Unit constructed in ISO9001 approved facility.

### Delivery, Storage, and Handling

- Unit will be shipped as single package only and is stored and handled per unit manufacturer's recommendations.

### Warranty (for inclusion by specifying engineer)

- U.S. and Canada only.

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## PRODUCTS

### Equipment

Factory assembled, single piece, air-cooled heat pump unit. Contained within the unit enclosure is all factory wiring, piping, controls, compressor, refrigerant charge R-410A, and special features required prior to field start-up.

#### Unit Cabinet

- Unit cabinet will be constructed of galvanized steel, bonderized, and coated with a powder coat paint.
- Available with dense grille only.

#### Fans

- Condenser fan will be direct-drive propeller type, discharging air upward.
- Condenser fan motors will be totally enclosed, 1-phase type with class B insulation and permanently lubricated bearings.
- Shafts will be corrosion resistant.
- Fan blades will be statically and dynamically balanced.
- Condenser fan openings will be equipped with steel wire safety guards.

#### Compressor

- Compressor will be hermetically sealed.
- Compressor will be mounted on rubber vibration isolators.

#### Condenser Coil

- Condenser coil will be air cooled.
- Coil will be constructed of aluminum fins mechanically bonded to copper tubes which are then cleaned, dehydrated, and sealed.

### Refrigeration Components

- Refrigeration circuit components will include liquid-line shutoff valve with sweat connections, vapor-line shutoff valve with sweat connections, system charge of R-410A refrigerant, POE compressor oil, accumulator, and reversing valve.

### Operating Characteristics

- The capacity of the unit will meet or exceed \_\_\_\_ Btuh at a suction temperature of \_\_\_\_ °F/°C. The power consumption at full load will not exceed \_\_\_\_ kW.
- Combination of the unit and the evaporator or fan coil unit will have a total net cooling capacity of \_\_\_\_ Btuh or greater at conditions of \_\_\_\_ CFM entering air temperature at the evaporator at \_\_\_\_ °F wet bulb and \_\_\_\_ °F/°C dry bulb, and air entering the unit at \_\_\_\_ °F/°C.
- The system will have a SEER of \_\_\_\_ Btuh/watt or greater at DOE conditions.

### Electrical Requirements

- Nominal unit electrical characteristics will be \_\_\_\_ v, single phase, 60 hz. The unit will be capable of satisfactory operation within voltage limits of \_\_\_\_ v to \_\_\_\_ v.
- Unit electrical power will be single point connection.
- Control circuit will be 24v.

## SYSTEM DESIGN SUMMARY

1. Intended for outdoor installation with free air inlet and outlet. Outdoor fan external static pressure available is less than 0.01-in. wc.
2. Minimum outdoor operating air temperature without low-ambient operation accessory is 55°F (12.8°C).
3. Maximum outdoor operating air temperature for cooling mode is 125°F (51.7°C).
4. Minimum outdoor operating air temperature for heating mode is -30°F (-34.4°C).
5. Maximum outdoor operating air temperature for heating mode is 66°F (18.9°C).
6. For reliable operation, unit should be level in all horizontal planes.
7. For interconnecting refrigerant tube lengths greater than 80 ft (23.4 m) and/or elevation differences between indoor and outdoor units greater than 20 ft (6.1 m), consult Residential Piping and Longline Guideline and Service Manual available from equipment distributor.
8. If any refrigerant tubing is buried, provide a 6 in. (152.4 mm) vertical rise to the valve connections at the unit. Refrigerant tubing lengths up to 36 in. (914.4 mm) may be buried without further consideration. Do not bury refrigerant lines longer than 36 in. (914.4 mm).
9. Use only copper wire for electric connection at unit. Aluminum and clad aluminum are not acceptable for the type of connector provided.
10. Do not apply capillary tube indoor coils to these units.
11. Factory-supplied filter drier must be installed.



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