

*First Co.*

# COOL-PAK HP

*Space Constrained Heat Pump  
with Electric Heating*

3/4 - 2.5 Tons

3 - 10 kW Electric Heat

11.9 SEER2

R454B

**eco**series  
COOL-PAK  
HP



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# NOMENCLATURE

|                                                                                                                     |          |          |           |          |           |          |          |          |                                                                               |           |          |
|---------------------------------------------------------------------------------------------------------------------|----------|----------|-----------|----------|-----------|----------|----------|----------|-------------------------------------------------------------------------------|-----------|----------|
| <b>E</b>                                                                                                            | <b>H</b> | <b>E</b> | <b>24</b> | <b>2</b> | <b>05</b> | <b>D</b> | <b>0</b> | <b>0</b> | <b>B0</b>                                                                     | <b>00</b> | <b>F</b> |
| <b>SERIES</b><br>E - Eco Series                                                                                     |          |          |           |          |           |          |          |          | <b>BRAND</b><br>F - First Co.                                                 |           |          |
| <b>UNIT TYPE</b><br>H - Heat Pump                                                                                   |          |          |           |          |           |          |          |          | <b>OPTIONS: GENERAL</b><br>00 - None                                          |           |          |
| <b>HEAT TYPE</b><br>E - Electric Heat                                                                               |          |          |           |          |           |          |          |          | <b>OPTIONS: CABINET</b><br>A0 - 20x20 w/Fiberglass<br>B0 - 20x26 w/Fiberglass |           |          |
| <b>UNIT SIZE</b><br>09 - 9,000 BTUH<br>12 - 12,000 BTUH<br>18 - 18,000 BTUH<br>24 - 24,000 BTUH<br>30 - 30,000 BTUH |          |          |           |          |           |          |          |          | <b>OPTIONS: CONTROL</b><br>0 - Standard                                       |           |          |
| <b>VOLTAGE</b><br>2 - 208/230V 1 Ph                                                                                 |          |          |           |          |           |          |          |          | <b>ACCESSORY CONNECTIONS</b><br>0 - Standard                                  |           |          |
| <b>HEAT OPTION</b><br>03 - 3 kW<br>05 - 5 kW<br>07 - 7 kW<br>10 - 10 kW                                             |          |          |           |          |           |          |          |          | <b>MAJOR REVISION</b><br>D - R454B                                            |           |          |

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# ECO SERIES COOL-PAK HP

## SPACE CONSTRAINED HEAT PUMP W/ELECTRIC HEATING

### PRODUCT FEATURES / DESCRIPTION

- Space constrained low ambient heat pump with electric heating.
- Pre-wired and pre-charged with R-454B refrigerant, capable of delivering conditioned air to multiple rooms.
- Easily installs into a closet or mechanical room on an exterior wall, utilizing a minimal amount of floor space.
- Controlled by a standard low voltage thermostat with high and low temperature limits.

### APPLICATIONS

Hospitality, Apartments/Condominiums, Assisted Living/Memory Care, Student Housing, Senior Living and Modular/Prefabricated Buildings.

### STANDARD FEATURES

- Shipped ready for top supply and front return (with optional ducted return)
- Insulated compartment to improve cooling performance, reduce noise, and prevent sweating
- ECM indoor blower & outdoor fan motor to provide precise airflow selection and improve system efficiency
- High efficiency single stage scroll and rotary compressors with double isolated compressor mount to reduce compressor noise and vibration. (Two Stage Scroll available for reduced cabinet size 2-ton unit.)
- Larger evaporator coil with low face velocity for improved cooling performance
- Drain pan with corrosion resistant coating to drain condensate in cooling and heating operations
- Thermal expansion valve (TXV) for both cooling and heating to optimize performance
- Operates down to as low as 5°F ambient temperature with time-temperature defrost board with selectable defrost interval times
- High pressure switch protection
- Electric heat with automatic reset limit switch and non-resettable fuse link
- Filter brackets and disposable filter shipped with unit for field installation; no tool needed to replace filter.
- Multi-function microprocessor control board
- Make-up air vent when fully opened allows up to 50 CFM of ventilation air to be introduced into the closet
- Unit comes standard with one pull out service switch, 10kW units have additional terminal block.
- Units charged with over 4lbs of refrigerant have factory installed leak mitigation sensors

### WARNING:

This service switch does not de-energize the incoming power supply to the unit.

### SERVICEABILITY FEATURES

- Easy access for in-place service of most components
- Pull out service switch for service and maintenance convenience
- All electrical components and control boards are serviceable from front of the unit

### LIMITED WARRANTY

5 Years Compressor, 5 Years parts

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# ECO SERIES COOL-PAK HP

SPACE CONSTRAINED HEAT PUMP W/ELECTRIC HEATING

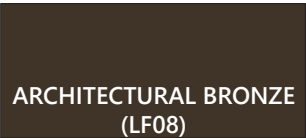
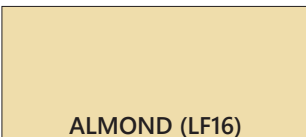
## REQUIRED ACCESSORIES

- Weight bearing wall sleeves for various wall thicknesses from 5" to 20" shipped with weather and debris guard
- Wall sleeves have primary condensate drain connection with secondary overflow to building exterior
- Flush type aluminum louver with finish and paint options
- Standard low voltage thermostat with high and low temperature limits

## OPTIONAL ACCESSORIES

### CUSTOM COLOR LOUVERS

#### STANDARD PAINT COLORS

|                                                                                                            |                                                                                                                    |                                                                                                              |
|------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| <br>SLATE BLUE (LF01)     | <br>MEDIUM BRONZE (LF02)          | <br>SANDSTONE (LF03)      |
| <br>LIGHT GRAY (LF04)    | <br>CHARCOAL (LF05)              | <br>BONE WHITE (LF06)    |
| <br>WESTERN TAN (LF07)  | <br>ARCHITECTURAL BRONZE (LF08) | <br>REGAL BLUE (LF09)   |
| <br>FOREST GREEN (LF10) | <br>SURREY BEIGE (LF11)         | <br>ROYAL BROWN (LF12)  |
| <br>BARN RED (LF13)     | <br>BURGUNDY (LF14)             | <br>CLAY (LF15)         |
| <br>ALMOND (LF16)       | <br>COASTAL WHITE (LF17)        | <br>VISTA GREEN (LF18)  |
| <br>BLACK (LF19)        | <br>GLOSS BLACK (LF20)          | <br>CAMPUS GREEN (LF21) |

Custom color options available

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# ECO SERIES COOL-PAK HP

## SPACE CONSTRAINED HEAT PUMP W/ELECTRIC HEATING

### OPTIONAL ACCESSORIES (CONT'D)

#### FILTER RACK

Filter Brackets and a disposable filter ship with each unit to be field installed over the evaporator coil.

**NOTE:** Do not use filters which will cause the total external static pressure including ducts, louvers, registers, and filters to exceed 0.5 in. H<sub>2</sub>O.

#### MULTI-FUNCTION MICROPROCESSOR CONTROL BOARD

**Evaporator coil low temperature protection** – During the cooling mode, should the evaporator coil experience either a low temperature condition that could result in ice buildup on the coil or a reduced air flow situation, a temperature sensor attached to the coil will de-energize the unit. The sensor will re-energize the unit when the coil warms back up.

**Random restart** – When power is turned on after a power outage, a built-in random restart delay of 3-4 minutes prevents all compressors from restarting simultaneously.

**Compressor restart delay** – This delay ensures that system pressures are allowed to equalize before a compressor restart, which extends compressor life.

**Fan delay** – A fan delay allows the evaporator blower to continue running for up to 45 seconds after the thermostat is satisfied, which maximizes cooling performance.

#### SERVICE PULL OUT SWITCH

Provides a visible disconnecting means when performing maintenance; models with 10 kW electric heat also have terminal block.

**WARNING:** The incoming conductors of the service switch remain energized when the service switch is pulled out. Always disconnect power at the main source as well as the service switch before servicing.

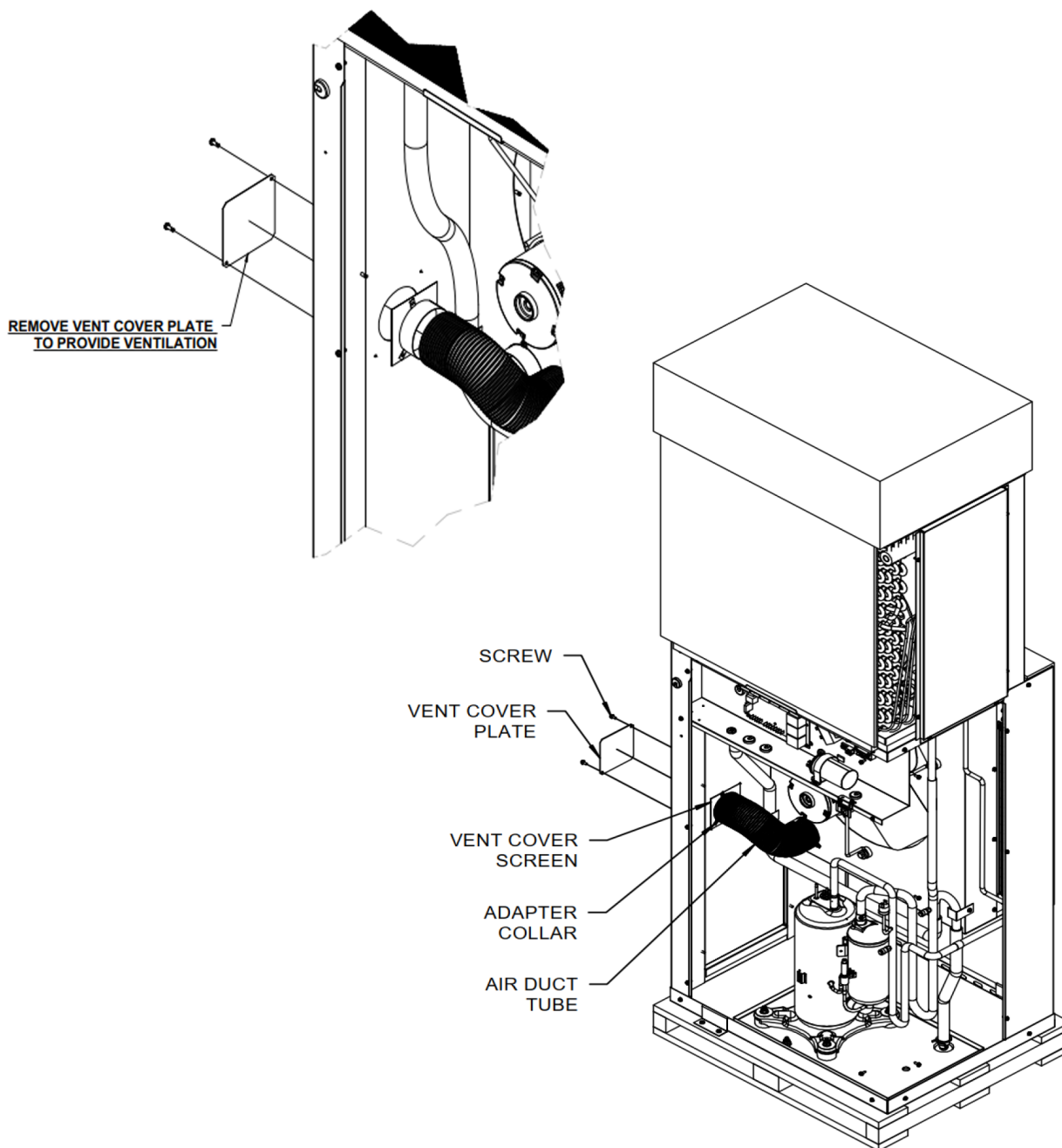
# ECO SERIES COOL-PAK HP

## SPACE CONSTRAINED HEAT PUMP W/ELECTRIC HEATING

### VENTILATION AIR

One end of a 3" aluminum vent pipe is connected to the condenser venturi and the other end is connected to the side of the cabinet. A mesh screen and a metal plate on the side of the cabinet covers the opening of the vent pipe.

Up to 50 CFM of ventilation air is introduced into the equipment closet by removing the metal cover plate. The ventilation air mixes with the return air and is then pulled through the evaporator coil and into the supply duct. The cover plate can be reinstalled to partially close the ventilation air opening if less than 50 CFM is desired. An external source of negative pressure (i.e. a bathroom fan) could be used to introduce more than 50 CFM of ventilation air. Consult with factory for further details.



# ECO SERIES COOL-PAK HP

## SPACE CONSTRAINED HEAT PUMP W/ELECTRIC HEATING

### CONDENSATE SYSTEM

#### Primary Condensate

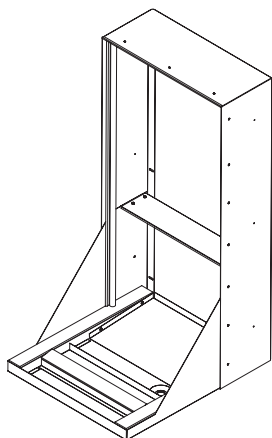
Factory installed drain line connects the evaporator drain pan to a vertical pipe connection in the unit base pan. Evaporator condensate is delivered from the unit to a catch tray in the wall sleeve and exits the sleeve through the 3/4" male NPT fitting. This design allows the plumber to completely pipe the drain to a condensate riser during the rough-in stage, thus eliminating condensate connection problems usually encountered when trying to connect the HVAC drain to the riser after the HVAC unit is installed in the closet. This feature also allows the unit to be removed for service without disconnecting the condensate piping. This configuration does not require any additional closet space to make the drain connection, as do some competitive products.

#### Secondary Condensate Overflow

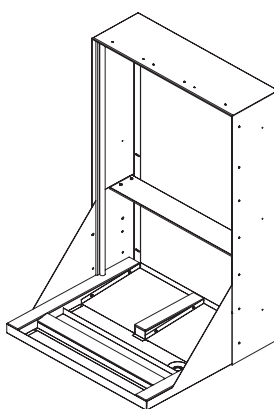
If for any reason the primary condensate riser becomes clogged, water will fill the catch tray and then be diverted through the sleeve to the exterior of the building, rather than be allowed to overflow into the closet or living area. Rain water entering the sleeve is automatically diverted to the 3/4" condensate drain.

### REQUIRED ACCESSORIES: WALL SLEEVES

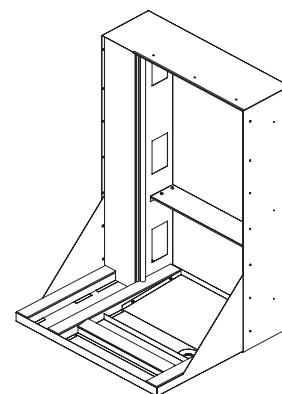
- Provided for installation during rough-in and when ready the unit is simply slid into the wall sleeve and connected to the ductwork and electrical.
- Weight bearing sleeve that supports the entire weight of the unit and provides a weather tight seal against wind and water infiltration.
- Four wall sleeve depths are available to accommodate wall thickness from 5" to 20".
- Includes a weather guard to cover the sleeve opening and a debris guard to cover wall sleeve base and drain during construction.
- Outdoor Louver - Standard colors, custom color, field painted, clear and/or anodized



Standard Sleeve  
for 3/4 - 2 tons



Standard Sleeve  
for 2.0 - 2.5 tons



Oversized Sleeve  
for 3/4 - 2 tons to provide uni-  
form exterior appearance

# ECO SERIES COOL-PAK HP

## SPACE CONSTRAINED HEAT PUMP W/ELECTRIC HEATING

### ACCESSORIES

| SLEEVE AND LOUVER ACCESSORIES                                     |                           |                           |                              |                              |                    |                   |
|-------------------------------------------------------------------|---------------------------|---------------------------|------------------------------|------------------------------|--------------------|-------------------|
| ACCESSORY                                                         | DESCRIPTION               | DIMENSIONS<br>(H x W x D) | STANDARD SLEEVES             |                              | SHIP WT. (EA) Lbs. |                   |
|                                                                   |                           |                           | REAR<br>INSTALL <sup>1</sup> | SIDE<br>INSTALL <sup>2</sup> | REAR <sup>5</sup>  | SIDE <sup>5</sup> |
| <b>SMALL CABINET "A"<br/>WALL SLEEVES</b>                         | For 5" - 8" thick walls   | 43-3/4 x 21-3/8 x 26      | 936-1B                       | 936-11B                      | 59                 | 64                |
|                                                                   | For 8" - 12" thick walls  | 43-3/4 x 21-3/8 x 30      | 936-2B                       | 936-12B                      | 63                 | 73                |
|                                                                   | For 12" - 15" thick walls | 43-3/4 x 21-3/8 x 33      | 936-3B                       | 936-13B                      | 68                 | 73                |
|                                                                   | For 15" - 20" thick walls | 43-3/4 x 21-3/8 x 38      | 936-4B                       | 936-14B                      | 75                 | 80                |
| <b>LARGE CABINET "B"<br/>WALL SLEEVES</b>                         | For 5" - 8" thick walls   | 43-3/4 x 27-3/8 x 26      | 985-1B                       | 985-11B                      | 63                 | 68                |
|                                                                   | For 8" - 12" thick walls  | 43-3/4 x 27-3/8 x 30      | 985-2B                       | 985-12B                      | 68                 | 73                |
|                                                                   | For 12" - 15" thick walls | 43-3/4 x 27-3/8 x 33      | 985-3B                       | 985-13B                      | 75                 | 80                |
|                                                                   | For 15" - 20" thick walls | 43-3/4 x 27-3/8 x 38      | 985-4B                       | 985-14B                      | 79                 | 84                |
| <b>SMALL CABINET "A"<br/>LARGE WALL SLEEVES<br/>WITH BLOCKOFF</b> | For 5" - 8" thick walls   | 43-3/4 x 27-3/8 x 26      | 986-1B                       | 986-11B                      | 63                 | 68                |
|                                                                   | For 8" - 12" thick walls  | 43-3/4 x 27-3/8 x 30      | 986-2B                       | 986-12B                      | 68                 | 73                |
|                                                                   | For 12" - 15" thick walls | 43-3/4 x 27-3/8 x 33      | 986-3B                       | 986-13B                      | 75                 | 80                |
|                                                                   | For 15" - 20" thick walls | 43-3/4 x 27-3/8 x 38      | 986-4B                       | 986-14B                      | 79                 | 84                |
| <b>STANDARD LOUVERS<br/>CABINET "A"<br/>WALL SLEEVES</b>          | Custom Painting           | 44x22                     | G205S                        |                              | 12                 |                   |
|                                                                   | For Field Painting        | 44x22                     | G205PPA                      |                              | 12                 |                   |
|                                                                   | Anodized Aluminum         | 44x22                     | G205A                        |                              | 12                 |                   |
| <b>STANDARD LOUVERS<br/>CABINET "B"<br/>LARGE WALL SLEEVES</b>    | Custom Painting           | 44x28                     | G216S                        |                              | 18                 |                   |
|                                                                   | For Field Painting        | 44x28                     | G216PPA                      |                              | 18                 |                   |
|                                                                   | Anodized Aluminum         | 44x28                     | G216A                        |                              | 18                 |                   |

#### NOTES:

1. Rear install application provides better access to the unit and is recommended over side install wherever possible.
2. Side install application requires different closet size and configuration. Contact factory for further information.
3. Wind resistant sleeves require the usage of a wind resistant louver.
4. S indicates custom color, to be provided by customer. Minimum order quantity is 15 per color, if less than 15 set up fees will be applied.
5. All wall sleeves are shipped two (2) per carton, fully assembled.

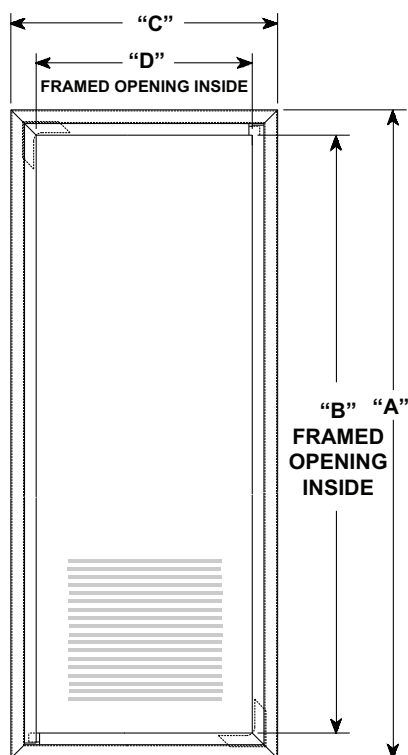
| THERMOSTATS                                                                                                          |                           |         |                                                                                       |
|----------------------------------------------------------------------------------------------------------------------|---------------------------|---------|---------------------------------------------------------------------------------------|
| <b>Heat Pump (24V)<br/>Digital w/emergency heat<br/>cool - off - heat, auto - on<br/>w/limits-(6-wire)</b>           | 4 x 5<br>(Horizontal)     | T1220NC |  |
| <b>Programmable (5-2)<br/>St. Cool/Ht. Pump (24V)<br/>cool-off-heat, auto-on<br/>w/em. Ht. &amp; limits (6-wire)</b> | 4 x 5<br>(Horizontal)     | T2220NC |  |
| <b>Straight Cool or Heat Pump (24V)<br/>Digital Occupancy Sensor</b>                                                 | 4.3 x 5.7<br>(Horizontal) | T8532   |  |

# ECO SERIES COOL-PAK HP

SPACE CONSTRAINED HEAT PUMP W/ELECTRIC HEATING

## ACCESSORIES (CONT'D)

| OPTIONAL ACCESSORIES (FIELD INSTALLED) |                  |                       |         |                |                    |                         |
|----------------------------------------|------------------|-----------------------|---------|----------------|--------------------|-------------------------|
| COMPONENT                              | DESCRIPTION      | DIMENSIONS<br>(H X W) |         | PART<br>NUMBER | SHIPPING<br>WEIGHT | EQUIPPED<br>WITH FILTER |
| ACCESS/RETURN<br>AIR PANEL (3)(4)      | LOUVERED (1)     | FRAME                 | OPENING | 931-11         | 55                 | 20 x 24 x 1             |
|                                        |                  | 87 X 31               | 84 X 28 |                |                    |                         |
|                                        | NON-LOUVERED (2) | 87 X 31               | 84 X 28 | 931-12         |                    | NO                      |
|                                        | LOUVERED (1)     | 82 X 31               | 79 X 28 | 931-13         |                    | 20 x 24 x 1             |
|                                        | NON-LOUVERED (2) | 82 X 31               | 79 X 28 | 931-14         |                    | NO                      |
| ACCESS/RETURN<br>AIR PANEL (3)(4)      | LOUVERED (1)     | FRAME                 | OPENING | 931-15         |                    | 20 x 24 x 1             |
|                                        |                  | 87 X 37               | 84 X 34 |                |                    |                         |
|                                        | NON-LOUVERED (2) | 87 X 37               | 84 X 34 | 931-16         |                    |                         |
|                                        | LOUVERED (1)     | 82 X 37               | 79 X 34 | 931-17         | 20 x 24 x 1        |                         |
|                                        | NON-LOUVERED (2) | 82 X 37               | 79 X 34 | 931-18         | NO                 |                         |
| 9-24A<br>INSULATION KIT                | 5/8" DUCTBOARD   | N/A                   |         | 91K01          | ---                | ---                     |
| 24B-30<br>INSULATION KIT               |                  |                       |         | 91K02          | ---                | ---                     |



\* For rear installation use with size 24 or 30

NOTE: A solid door or panel with a side wall return air louver will result in lower sound levels.

NOTES:

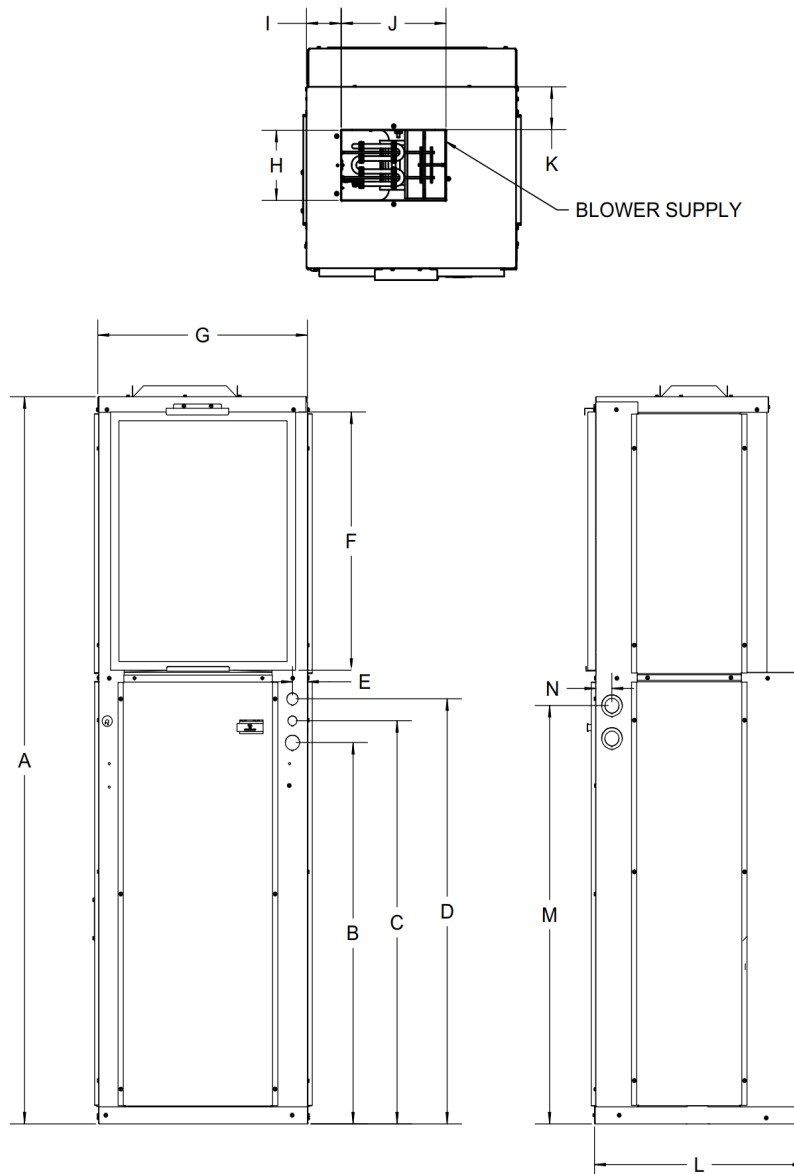
- (1) Includes 18 x 24 x 1 or 20 x 24 x 1 filter.
- (2) Requires external return air louver and unit mount filter.
- (3) Both panels are insulated for sound reduction and have tamperproof screws.
- (4) Panels are shipped ten per carton.

| PART NO.    | "A"   | "B"   | "C"   | "D"   |
|-------------|-------|-------|-------|-------|
| 931-11(12)  | 87.00 | 84.00 | 31.00 | 28.00 |
| 931-13(14)  | 82.00 | 79.00 | 31.00 | 28.00 |
| *931-15(16) | 87.00 | 84.00 | 37.00 | 34.00 |
| *931-17(18) | 82.00 | 79.00 | 37.00 | 34.00 |

# ECO SERIES COOL-PAK HP

SPACE CONSTRAINED HEAT PUMP W/ELECTRIC HEATING

## ACCESSORIES UNIT DIMENSIONS



| COOL -PAK HP    |                    |      |      |      |     |      |      |                    |     |      |     |      |      |     |
|-----------------|--------------------|------|------|------|-----|------|------|--------------------|-----|------|-----|------|------|-----|
| MODEL<br>NUMBER | A                  | B    | C    | D    | E   | F    | G    | H                  | I   | J    | K   | L    | M    | N   |
|                 | CABINET DIMENSIONS |      |      |      |     |      |      | SUPPLY CONNECTIONS |     |      |     |      |      |     |
| EHE09***A       | 66.5               | 34.9 | 36.9 | 38.9 | 1.4 | 23.6 | 20.9 | 6.4                | 3.3 | 10.0 | 3.9 | 20.1 | 38.2 | 1.6 |
| EHE12***A       | 66.5               | 34.9 | 36.9 | 38.9 | 1.4 | 23.6 | 20.9 | 6.4                | 3.3 | 10.0 | 3.9 | 20.1 | 38.2 | 1.6 |
| EHE18***A       | 66.5               | 34.9 | 36.9 | 38.9 | 1.4 | 23.6 | 20.9 | 6.4                | 3.3 | 10.0 | 3.9 | 20.1 | 38.2 | 1.6 |
| EHE24***A       | 66.5               | 34.9 | 36.9 | 38.9 | 1.4 | 23.6 | 20.9 | 6.4                | 3.3 | 10.0 | 3.9 | 20.1 | 38.2 | 1.6 |
| EHE24***B       | 66.5               | 34.9 | 36.9 | 38.9 | 1.4 | 23.7 | 26.9 | 10.0               | 7.9 | 10.0 | 3.9 | 20.1 | 38.2 | 1.6 |
| EHE30***B       | 66.5               | 34.9 | 36.9 | 38.9 | 1.4 | 23.7 | 26.9 | 10.0               | 7.9 | 10.0 | 3.9 | 20.1 | 38.2 | 1.6 |

NOTE:  
24A is for the smaller cabinet.

# ECO SERIES COOL-PAK HP

## SPACE CONSTRAINED HEAT PUMP W/ELECTRIC HEATING

| COOL-PAK HP – PHYSICAL DATA           |       |                 |                 |                 |                 |                       |                 |
|---------------------------------------|-------|-----------------|-----------------|-----------------|-----------------|-----------------------|-----------------|
| 454B COOL PAK HP                      |       | EHE09           | EHE12           | EHE18           | EHE24B          | EHE24A                | EHE30           |
| Compressor (Quantity)                 |       | Rotary (1)      |                 |                 |                 | Scroll<br>(two stage) | Scroll (1)      |
| Compressor FLA                        |       | 3.9             | 4.8             | 7.5             | 11.4            | 9.7                   | 11.7            |
| Factory Charge<br>(R454B)             | Lb    | 2.7             | 3.2             | 4               | 5.25            | 4.25                  | 5               |
|                                       | Kg    | 1.22            | 1.45            | 1.81            | 2.38            | 1.92                  | 2.26            |
| Minimum Rm. Area                      | m^2   | 3.68            | 4.38            | 5.47            | 7.19            | 5.80                  | 6.83            |
| Minimum Rm. Area                      | Ft^2  | 40              | 47              | 59              | 77              | 62                    | 73              |
| Minimum Air Flow                      | CFM   | 73              | 86              | 108             | 142             | 115                   | 135             |
|                                       | M³/hr | 124             | 147             | 183             | 241             | 195                   | 229             |
| ID MOTOR                              |       |                 |                 |                 |                 |                       |                 |
| Motor (Quantity)                      |       | 1               | 1               | 1               | 1               | 1                     | 1               |
| Fan Motor Type                        |       | ECM             | ECM             | ECM             | ECM             | ECM                   | ECM             |
| Motor HP                              |       | 1/4             | 1/4             | 1/3             | 1/3             | 1/3                   | 1/2             |
| Motor FLA                             |       | 2.3             | 2.3             | 2.8             | 2.8             | 2.8                   | 4.1             |
| OD MOTOR                              |       |                 |                 |                 |                 |                       |                 |
| Motor (Quantity)                      |       | 1               | 1               | 1               | 1               | 1                     | 1               |
| Fan Motor Type                        |       | ECM             | ECM             | ECM             | ECM             | ECM                   | ECM             |
| Motor HP                              |       | 1/4             | 1/4             | 1/4             | 1/4             | 1/4                   | 1/3             |
| Motor FLA                             |       | 2.3             | 2.3             | 2.3             | 2.3             | 2.3                   | 2.8             |
| ID BLOWER                             |       |                 |                 |                 |                 |                       |                 |
| Blowers (Quantity)                    |       | 1               | 1               | 1               | 1               | 1                     | 1               |
| Blower Wheel Size<br>(D x W) in. [cm] |       | 6 x 7           | 6 x 7           | 9 x 4           | 9 x 4           | 9 x 4                 | 9 x 4           |
|                                       |       | [15.3 x 17.78]  | [15.3 x 17.78]  | [22.9 x 10.16]  | [22.9 x 10.16]  | [22.9 x 10.16]        | [22.9 x 10.16]  |
| EVAPORATOR COIL                       |       |                 |                 |                 |                 |                       |                 |
| Dimensions (H x W) in. [cm]           |       | 24 x 16.25      | 24 x 16.25      | 24 x 16.25      | 24x22           | 24 x 16.25            | 24x22           |
|                                       |       | [61 x 41.275]   | [61 x 41.275]   | [61 x 41.275]   | [61 x 55.88]    | [61 x 41.275]         | [61 x 55.88]    |
| Face Area ft² [m²]                    |       | 3.53 [2.70]     | 3.53 [2.70]     | 3.53 [2.70]     | 3.53 [0.33]     | 3.53 [2.70]           | 3.53 [0.33]     |
| Rows                                  |       | 2               | 3               | 4               | 4               | 4                     | 4               |
| OD COIL                               |       |                 |                 |                 |                 |                       |                 |
| Dimensions (H x W) in. [cm]           |       | 26 x 16.5       | 26 x 16.5       | 26 x 16.5       | 26 x 22.5       | 26 x 16.5             | 26 x 22.5       |
|                                       |       | [66 x 42]       | [66 x 42]       | [66 x 42]       | [66 x 57]       | [66 x 42]             | [66 x 57]       |
| Face Area ft² [m²]                    |       | 3.0 [0.2772]    | 3.0 [0.2772]    | 3.0 [0.2772]    | 4.1 [0.3762]    | 3.0 [0.2772]          | 4.1 [0.3762]    |
| Rows                                  |       | 2               | 3               | 4               | 4               | 4                     | 4               |
| MISCELLANEOUS                         |       |                 |                 |                 |                 |                       |                 |
| Throwaway Filter Dim. in.<br>[cm]     |       | 18 x 24         | 18 x 24         | 18 x 24         | 24 x 24         | 18 x 24               | 24 x 24         |
|                                       |       | [45.72 x 60.96] | [45.72 x 60.96] | [45.72 x 60.96] | [60.96 x 60.96] | [45.72 x 60.96]       | [60.96 x 60.96] |
| Throwaway Filter Quantity             |       | 1               | 1               | 1               | 1               | 1                     | 1               |
| A2L Mitigation                        |       | NO              | NO              | NO              | YES             | YES                   | YES             |
| Operating Weight lb. [oz]             |       | 290 [132]       | 290 [132]       | 295 [134]       | 310 [141]       | 295 [134]             | 320 [145]       |
| Packaged Weight lb. [oz]              |       | 310 [141]       | 310 [141]       | 315 [143]       | 330 [150]       | 315 [143]             | 340 [154]       |

# ECO SERIES COOL-PAK HP

## SPACE CONSTRAINED HEAT PUMP W/ELECTRIC HEATING

### ELECTRICAL DATA

| COOL-PAK HP – (208/240V 1-PH-60HZ) |      |                      |       |       |       |                    |    |                  |     |                |    |                 |      |                           |      |       |      |                            |      |       |      |
|------------------------------------|------|----------------------|-------|-------|-------|--------------------|----|------------------|-----|----------------|----|-----------------|------|---------------------------|------|-------|------|----------------------------|------|-------|------|
| UNIT<br>MODEL                      |      | ELECTRICAL HEAT DATA |       |       |       |                    |    | BLOWER DATA      |     | CONDENSER DATA |    |                 |      | MINIMUM CIRCUIT AMAPACITY |      |       |      | MAXIMUM CIRCUIT PROTECTION |      |       |      |
|                                    |      | KW                   |       | BTUH  |       | TOTAL HEATING AMPS |    | EVAPORATOR MOTOR |     | COMPRESSOR     |    | CONDENSER MOTOR |      | CKT 1                     |      | CKT 2 |      | CKT 1                      |      | CKT 2 |      |
|                                    |      |                      |       |       |       |                    |    |                  |     |                |    |                 |      |                           |      |       |      |                            |      |       |      |
| 240V                               | 208V | 240V                 | 208V  | 240V  | 208V  | AMPS               | HP | RLA              | LRA | AMPS           | HP | 240V            | 208V | 240V                      | 208V | 240V  | 208V | 240V                       | 208V | 240V  | 208V |
| EHE09                              | -03  | 3                    | 2.25  | 10230 | 7670  | 13                 | 11 | 2.3              | 1/4 | 4              | 22 | 2.3             | 1/4  | 25                        | 23   | 0     | 0    | 30                         | 25   | 0     | 0    |
| EHE12                              | -03  | 3                    | 2.25  | 10230 | 7670  | 13                 | 11 | 2.3              | 1/4 | 4.6            | 25 | 2.3             | 1/4  | 26                        | 24   | 0     | 0    | 30                         | 25   | 0     | 0    |
|                                    | -05  | 4.5                  | 3.38  | 15350 | 11530 | 19                 | 16 | 2.3              | 1/4 | 4.6            | 25 | 2.3             | 1/4  | 34                        | 31   | 0     | 0    | 35                         | 35   | 0     | 0    |
| EHE18                              | -03  | 3                    | 2.25  | 10230 | 7670  | 13                 | 11 | 2.8              | 1/3 | 7.6            | 36 | 2.3             | 1/4  | 30                        | 28   | 0     | 0    | 35                         | 30   | 0     | 0    |
|                                    | -05  | 5                    | 3.75  | 17060 | 12790 | 21                 | 18 | 2.8              | 1/3 | 7.6            | 36 | 2.3             | 1/4  | 41                        | 37   | 0     | 0    | 45                         | 40   | 0     | 0    |
|                                    | -07  | 7                    | 5.25  | 23880 | 17910 | 29                 | 25 | 2.8              | 1/3 | 7.6            | 36 | 2.3             | 1/4  | 51                        | 46   | 0     | 0    | 55                         | 50   | 0     | 0    |
|                                    | -10  | 9.5                  | 7.125 | 32410 | 24310 | 40                 | 34 | 2.8              | 1/3 | 7.6            | 36 | 2.3             | 1/4  | 15                        | 15   | 49    | 43   | 15                         | 15   | 50    | 45   |
| EHE24A                             | -05  | 5                    | 3.75  | 17060 | 12790 | 21                 | 18 | 2.8              | 1/3 | 10.2           | 58 | 2.3             | 1/4  | 44                        | 40   | 0     | 0    | 45                         | 45   | 0     | 0    |
|                                    | -07  | 7                    | 5.25  | 23880 | 17910 | 29                 | 25 | 2.8              | 1/3 | 10.2           | 58 | 2.3             | 1/4  | 54                        | 49   | 0     | 0    | 55                         | 50   | 0     | 0    |
|                                    | -10  | 9.5                  | 7.125 | 32410 | 24310 | 40                 | 34 | 2.8              | 1/3 | 10.2           | 58 | 2.3             | 1/4  | 18                        | 18   | 49    | 43   | 25                         | 25   | 50    | 45   |
| EHE24B                             | -05  | 5                    | 3.75  | 17060 | 12790 | 21                 | 18 | 2.8              | 1/3 | 9.6            | 52 | 2.3             | 1/4  | 43                        | 40   | 0     | 0    | 45                         | 40   | 0     | 0    |
|                                    | -07  | 7                    | 5.25  | 23880 | 17910 | 29                 | 25 | 2.8              | 1/3 | 9.6            | 52 | 2.3             | 1/4  | 54                        | 49   | 0     | 0    | 55                         | 50   | 0     | 0    |
|                                    | -10  | 9.5                  | 7.125 | 32410 | 24310 | 40                 | 34 | 2.8              | 1/3 | 9.6            | 52 | 2.3             | 1/4  | 17                        | 17   | 49    | 43   | 20                         | 20   | 50    | 45   |
| EHE30                              | -05  | 5                    | 3.75  | 17060 | 12790 | 21                 | 18 | 4.1              | 1/2 | 10.5           | 71 | 2.8             | 1/3  | 46                        | 43   | 0     | 0    | 50                         | 45   | 0     | 0    |
|                                    | -07  | 7                    | 5.25  | 23880 | 17910 | 29                 | 25 | 4.1              | 1/2 | 10.5           | 71 | 2.8             | 1/3  | 56                        | 52   | 0     | 0    | 60                         | 55   | 0     | 0    |
|                                    | -10  | 9.5                  | 7.125 | 32410 | 24310 | 40                 | 34 | 4.1              | 1/2 | 10.5           | 71 | 2.8             | 1/3  | 20                        | 20   | 49    | 43   | 25                         | 25   | 50    | 45   |

\*Circuits 1 and 2 require separate sets of power wires connected to the unit, each backed by an independent circuit breaker.

For 3kW, 5kW, and 7kW models, Circuit 1 is used for compressor power, condenser fan power, evaporator motor power and first stage of electric heat

10kW models, Circuit 1 is used for compressor power, condenser fan power and the first stage of electric heat, and the evaporator motor. Circuit 2 is used for the 2nd stage of electric heat.

Refer to wiring diagrams In the EHE Installation and Operation Manual for additional details.

Wire size should be determined in accordance with National Electric Codes.

Units are rated for 208/230V, but MOP, MCA values are calculated at 208/240V.

Data is subject to change. Please verify most current information on [www.firstco.com](http://www.firstco.com).

# ECO SERIES COOL-PAK HP

SPACE CONSTRAINED HEAT PUMP W/ELECTRIC HEATING

## RATED COOLING & HEATING PERFORMANCE

| COOL -PAK HP |                       |                                   |              |       |                                   |                                   |       |
|--------------|-----------------------|-----------------------------------|--------------|-------|-----------------------------------|-----------------------------------|-------|
| Model        | Rated Airflow<br>SCFM | Cooling<br>Capacity 95°F,<br>BTUH | EER2<br>95°F | SEER2 | Heating<br>Capacity<br>47°F, BTUH | Heating<br>Capacity<br>17°F, BTUH | HSPF2 |
| EHE09***D    | 300                   | 9000                              | 10.0         | 11.9  | 8800                              | 5000                              | 6.3   |
| EHE12***D    | 400                   | 11500                             | 10.0         | 11.9  | 11100                             | 5300                              | 6.3   |
| EHE18***D    | 600                   | 17500                             | 10.0         | 11.9  | 16500                             | 10000                             | 6.3   |
| EHE24A***D   | 800/600               | 22400                             | 10.0         | 11.9  | 22400                             | 14500                             | 6.3   |
| EHE24B***D   | 800                   | 24500                             | 10.0         | 11.9  | 23600                             | 14500                             | 6.3   |
| EHE30***D    | 950                   | 26500                             | 10.0         | 11.9  | 25400                             | 16000                             | 6.3   |

**NOTE:**

24A is for the smaller cabinet.

Ratings subject to change

| ELECTRIC HEAT RATINGS |      |       |      |       |      |       |
|-----------------------|------|-------|------|-------|------|-------|
| Model                 | 240V |       | 230V |       | 208V |       |
|                       | kW   | BTU/H | kW   | BTU/H | kW   | BTU/H |
| EHE09203*             | 3    | 10250 | 2.8  | 9450  | 2.3  | 7700  |
| EHE12203*             | 3    | 10250 | 2.8  | 9450  | 2.3  | 7700  |
| EHE12205*             | 4.5  | 15400 | 4.1  | 14150 | 3.4  | 11550 |
| EHE18203*             | 3    | 10250 | 2.8  | 9450  | 2.3  | 7700  |
| EHE18205*             | 5    | 17100 | 4.6  | 15700 | 3.8  | 12800 |
| EHE18207*             | 7    | 23900 | 6.4  | 22000 | 5.3  | 17950 |
| EHE18210*             | 9.5  | 32450 | 8.7  | 29850 | 7.1  | 24350 |
| EHE24205*             | 5    | 17100 | 4.6  | 15700 | 3.8  | 12800 |
| EHE24207*             | 7    | 23900 | 6.4  | 22000 | 5.3  | 17950 |
| EHE24210*             | 9.5  | 32450 | 8.7  | 29850 | 7.1  | 24350 |
| EHE30205*             | 5    | 17100 | 4.6  | 15700 | 3.8  | 12800 |
| EHE30207*             | 7    | 23900 | 6.4  | 22000 | 5.3  | 17950 |
| EHE30210*             | 9.5  | 32450 | 8.7  | 29850 | 7.1  | 24350 |

7kW and 10kW heating value shown are for both stages of electric heat

Data is subject to change. Please verify most current information on [www.firstco.com](http://www.firstco.com).

# ECO SERIES COOL-PAK HP

## SPACE CONSTRAINED HEAT PUMP W/ELECTRIC HEATING

### EXTENDED PERFORMANCE DATA

| EXTENDED HEATING CAPACITY, COMPRESSOR ONLY |                  |              |             |                 |              |             |                 |              |             |                 |              |             |                 |
|--------------------------------------------|------------------|--------------|-------------|-----------------|--------------|-------------|-----------------|--------------|-------------|-----------------|--------------|-------------|-----------------|
| MODEL                                      | Air Flow<br>SCFM | 47/43        |             |                 | 35/33        |             |                 | 17/15        |             |                 | 5/0          |             |                 |
|                                            |                  | Net Capacity | Power Input | Outlet Dry Bulb | Net Capacity | Power Input | Outlet Dry Bulb | Net Capacity | Power Input | Outlet Dry Bulb | Net Capacity | Power Input | Outlet Dry Bulb |
|                                            |                  | BTUH         | kW          | °F              | BTUH         | kW          | °F              | BTUH         | kW          | °F              | BTUH         | kW          | °F              |
| EHE09*A                                    | 300              | 8800         | 0.80        | 93              | 7000         | 0.76        | 90              | 5000         | 0.69        | 84              | 4000         | 0.67        | 81              |
| EHE12*A                                    | 400              | 11100        | 0.90        | 99              | 8700         | 0.87        | 93              | 6800         | 0.83        | 88              | 5300         | 0.76        | 83              |
| EHE18*A                                    | 600              | 16500        | 1.40        | 95              | 12800        | 1.38        | 90              | 10000        | 1.25        | 85              | 8000         | 1.20        | 82              |
| EHE24*A                                    | 800/600          | 22500        | 1.94        | 95              | 17000        | 1.85        | 91              | 14500        | 1.81        | 86              | 12000        | 1.77        | 83              |
| EHE24*B                                    | 800              | 23600        | 1.92        | 98              | 18400        | 1.85        | 92              | 14500        | 1.75        | 87              | 12200        | 1.70        | 81              |
| EHE30*B                                    | 900              | 25400        | 2.19        | 96              | 21000        | 2.15        | 92              | 16000        | 2.07        | 86              | 13000        | 2.03        | 83              |

Capacities based off 70°F EAT at .3 in. H<sub>2</sub>O of external static.

Airflow run at the default cooling blower speed tap

Capacities include both stage of electric heat for 7kW and 10kW models.

| HEAT PUMP EXTENDED DATA W/ELECTRIC HEAT |                         |              |             |              |             |              |             |              |             |
|-----------------------------------------|-------------------------|--------------|-------------|--------------|-------------|--------------|-------------|--------------|-------------|
| Model                                   | Heater Size,<br>240V kW | 47/43        |             |              |             | 35/33        |             |              |             |
|                                         |                         | 240V         |             | 208V         |             | 240V         |             | 208V         |             |
|                                         |                         | Net Capacity | Power Input | Net Capacity | Power Input | Net Capacity | Power Input | Net Capacity | Power Input |
|                                         |                         | BTU/H        | kW          | BTU/H        | kW          | BTU/H        | kW          | BTU/H        | kW          |
| EHE09203*D*A                            | 3                       | 19030        | 3.8         | 16470        | 3.05        | 17230        | 3.76        | 14670        | 3.01        |
| EHE12203*D*A                            | 3                       | 21330        | 3.9         | 18770        | 3.15        | 18930        | 3.87        | 16370        | 3.12        |
| EHE12205*D*A                            | 5                       | 28160        | 5.9         | 23890        | 4.65        | 25760        | 5.87        | 21490        | 4.62        |
| EHE18203*D*A                            | 3                       | 26730        | 4.4         | 24170        | 3.65        | 23030        | 4.38        | 20470        | 3.63        |
| EHE18205*D*A                            | 5                       | 33560        | 6.4         | 29290        | 5.15        | 29860        | 6.38        | 25590        | 5.13        |
| EHE18207*D*A                            | 7                       | 40380        | 8.4         | 34410        | 6.65        | 36680        | 8.38        | 30710        | 6.63        |
| EHE18210*D*A                            | 9.5                     | 48910        | 10.9        | 40810        | 8.52        | 45210        | 10.88       | 37110        | 8.50        |
| EHE24205*D*A                            | 5                       | 39560        | 6.94        | 35290        | 5.69        | 34060        | 6.85        | 29790        | 5.60        |
| EHE24207*D*A                            | 7                       | 46380        | 8.94        | 40410        | 7.19        | 40880        | 8.85        | 34910        | 7.10        |
| EHE24210*D*A                            | 9.5                     | 54910        | 11.44       | 46810        | 9.06        | 49410        | 11.35       | 41310        | 8.97        |
| EHE24205*D*B                            | 5                       | 40660        | 6.92        | 35290        | 5.69        | 35460        | 6.85        | 29790        | 5.60        |
| EHE24205*D*B                            | 7                       | 47480        | 8.92        | 40410        | 7.19        | 42280        | 8.85        | 34910        | 7.10        |
| EHE24205*D*B                            | 9.5                     | 56010        | 11.42       | 46810        | 9.06        | 50810        | 11.35       | 41310        | 8.97        |
| EHE30205*D*B                            | 5                       | 42460        | 7.19        | 38190        | 5.94        | 38060        | 7.15        | 33790        | 5.90        |
| EHE30207*D*B                            | 7                       | 49280        | 9.19        | 43310        | 7.44        | 44880        | 9.15        | 38910        | 7.40        |
| EHE30210*D*B                            | 9.5                     | 57810        | 11.69       | 49710        | 9.31        | 53410        | 11.65       | 45310        | 9.27        |

Capacities based off 70°F EAT at .3 in. H<sub>2</sub>O of external static.

Airflow run at the default heating blower speed tap

Capacities include both stage of electric heat for 7kW and 10kW models.

Data is subject to change. Please verify most current information on [www.firstco.com](http://www.firstco.com).

# ECO SERIES COOL-PAK HP

SPACE CONSTRAINED HEAT PUMP W/ELECTRIC HEATING

## EXTENDED PERFORMANCE DATA (CONT'D)

| HEAT PUMP EXTENDED DATA WITH ELECTRIC HEAT |                      |              |             |              |             |              |             |              |             |
|--------------------------------------------|----------------------|--------------|-------------|--------------|-------------|--------------|-------------|--------------|-------------|
| Model                                      | Heater Size, 240V kW | 17/15        |             |              |             | 5/0          |             |              |             |
|                                            |                      | 240V         |             | 208V         |             | 240V         |             | 208V         |             |
|                                            |                      | Net Capacity | Power Input | Net Capacity | Power Input | Net Capacity | Power Input | Net Capacity | Power Input |
|                                            |                      | BTUH         | kW          | BTUH         | kW          | BTUH         | kW          | BTUH         | kW          |
| EHE09203*D*A                               | 3                    | 15230        | 3.69        | 12670        | 2.94        | 14230        | 3.67        | 11670        | 2.92        |
| EHE12203*D*A                               | 3                    | 17030        | 3.83        | 14470        | 3.08        | 15530        | 3.76        | 12970        | 3.01        |
| EHE12205*D*A                               | 5                    | 23860        | 5.83        | 19590        | 4.58        | 22360        | 5.76        | 18090        | 4.51        |
| EHE18203*D*A                               | 3                    | 20230        | 4.25        | 17670        | 3.50        | 18230        | 4.20        | 15670        | 3.45        |
| EHE18205*D*A                               | 5                    | 27060        | 6.25        | 22790        | 5.00        | 25060        | 6.20        | 20790        | 4.95        |
| EHE18207*D*A                               | 7                    | 33880        | 8.25        | 27910        | 6.50        | 31880        | 8.20        | 25910        | 6.45        |
| EHE18210*D*A                               | 9.5                  | 42410        | 10.75       | 34310        | 8.37        | 40410        | 10.70       | 32310        | 8.32        |
| EHE24205*D*A                               | 5                    | 31560        | 6.81        | 27290        | 5.56        | 29060        | 6.77        | 24790        | 5.52        |
| EHE24207*D*A                               | 7                    | 38380        | 8.81        | 32410        | 7.06        | 35880        | 8.77        | 29910        | 7.02        |
| EHE24210*D*A                               | 9.5                  | 46910        | 11.31       | 38810        | 8.93        | 44410        | 11.27       | 36310        | 8.89        |
| EHE24205*D*B                               | 5                    | 31560        | 6.75        | 27290        | 5.56        | 29260        | 6.77        | 24790        | 5.52        |
| EHE24205*D*B                               | 7                    | 38380        | 8.75        | 32410        | 7.06        | 36080        | 8.77        | 29910        | 7.02        |
| EHE24205*D*B                               | 9.5                  | 46910        | 11.25       | 38810        | 8.93        | 44610        | 11.27       | 36310        | 8.89        |
| EHE30205*D*B                               | 5                    | 33060        | 7.07        | 28790        | 5.82        | 30060        | 7.03        | 25790        | 5.78        |
| EHE30207*D*B                               | 7                    | 39880        | 9.07        | 33910        | 7.32        | 36880        | 9.03        | 30910        | 7.28        |
| EHE30210*D*B                               | 9.5                  | 48410        | 11.57       | 40310        | 9.19        | 45410        | 11.53       | 37310        | 9.15        |

Capacities based off 70°F EAT at .3 in. H<sub>2</sub>O of external static.

Airflow run at the default heating blower speed tap

Capacities include both stage of electric heat for 7kW and 10kW models.

Data is subject to change. Please verify most current information on [www.firstco.com](http://www.firstco.com).

# ECO SERIES COOL-PAK HP

SPACE CONSTRAINED HEAT PUMP W/ELECTRIC HEATING

## EXTENDED PERFORMANCE DATA (CONT'D)

| EXTENDED COOLING PERFORMANCE |                   |                        |      |      |       |      |      |       |      |      |
|------------------------------|-------------------|------------------------|------|------|-------|------|------|-------|------|------|
| Model                        | Indoor Temp DB/WB | Outdoor Temperature °F |      |      |       |      |      |       |      |      |
|                              |                   | 65.0                   |      |      | 75.0  |      |      | 85.0  |      |      |
|                              |                   | BTUH                   | S/T  | kW   | BTUH  | S/T  | kW   | BTUH  | S/T  | kW   |
| EHE09*A                      | 75/57             | 8700                   | 1.00 | 0.50 | 8350  | 1.00 | 0.60 | 7950  | 1.00 | 0.60 |
|                              | 75/63             | 9750                   | 0.76 | 0.50 | 9250  | 0.80 | 0.60 | 8750  | 0.79 | 0.60 |
|                              | 80/67             | 10650                  | 0.73 | 0.50 | 10100 | 0.70 | 0.60 | 9550  | 0.76 | 0.60 |
|                              | 85/72             | 11900                  | 0.65 | 0.50 | 11300 | 0.70 | 0.60 | 10750 | 0.68 | 0.60 |
| EHE12*A                      | 75/57             | 12050                  | 1    | 0.69 | 11250 | 1    | 0.79 | 10700 | 1    | 0.79 |
|                              | 75/63             | 12900                  | 0.75 | 0.69 | 12200 | 0.77 | 0.79 | 11450 | 0.79 | 0.79 |
|                              | 80/67             | 13800                  | 0.72 | 0.69 | 13000 | 0.74 | 0.79 | 12250 | 0.76 | 0.79 |
|                              | 85/72             | 15200                  | 0.62 | 0.69 | 14350 | 0.63 | 0.79 | 13550 | 0.65 | 0.79 |
| EHE18*A                      | 75/57             | 18300                  | 1    | 1.10 | 17450 | 1    | 1.30 | 16650 | 1    | 1.40 |
|                              | 75/63             | 19450                  | 0.79 | 1.20 | 18450 | 0.81 | 1.30 | 17400 | 0.84 | 1.40 |
|                              | 80/67             | 20700                  | 0.77 | 1.20 | 19700 | 0.79 | 1.30 | 18600 | 0.81 | 1.50 |
|                              | 85/72             | 22350                  | 0.7  | 1.10 | 21250 | 0.72 | 1.30 | 20100 | 0.74 | 1.40 |
| EHE24*A                      | 75/57             | 23300                  | 1    | 1.70 | 22250 | 1    | 1.90 | 20650 | 1    | 2.30 |
|                              | 75/63             | 24800                  | 0.75 | 1.80 | 23500 | 0.77 | 1.90 | 22200 | 0.79 | 2.10 |
|                              | 80/67             | 26550                  | 0.73 | 1.80 | 25200 | 0.75 | 1.90 | 23750 | 0.76 | 2.10 |
|                              | 85/72             | 29050                  | 0.66 | 1.80 | 27550 | 0.68 | 2.00 | 26000 | 0.69 | 2.10 |
| EHE24*B                      | 75/57             | 25400                  | 1    | 1.60 | 24350 | 1    | 1.90 | 22750 | 1    | 2.10 |
|                              | 75/63             | 26900                  | 0.72 | 1.60 | 25600 | 0.74 | 1.90 | 24300 | 0.76 | 2.10 |
|                              | 80/67             | 28650                  | 0.71 | 1.60 | 27300 | 0.73 | 1.90 | 25850 | 0.74 | 2.10 |
|                              | 85/72             | 31150                  | 0.64 | 1.60 | 29650 | 0.66 | 1.90 | 28100 | 0.67 | 2.10 |
| EHE30*B                      | 75/57             | 26400                  | 0.99 | 1.80 | 25400 | 1    | 1.90 | 24650 | 1    | 2.20 |
|                              | 75/63             | 29100                  | 0.72 | 1.80 | 27700 | 0.74 | 2.00 | 26250 | 0.75 | 2.20 |
|                              | 80/67             | 31050                  | 0.69 | 1.90 | 29550 | 0.71 | 2.10 | 28000 | 0.72 | 2.30 |
|                              | 85/72             | 33750                  | 0.63 | 1.90 | 32050 | 0.64 | 2.10 | 30500 | 0.65 | 2.30 |

Extended cooling performance data tabulated based off test at rated Airflow at .3 in. H<sub>2</sub>O of external static.

24A is for the smaller cabinet

Data is subject to change. Please verify most current information on [www.firstco.com](http://www.firstco.com).

# ECO SERIES COOL-PAK HP

SPACE CONSTRAINED HEAT PUMP W/ELECTRIC HEATING

## EXTENDED PERFORMANCE DATA (CONT'D)

| EXTENDED COOLING PERFORMANCE |                      |                       |      |      |       |      |      |       |      |      |
|------------------------------|----------------------|-----------------------|------|------|-------|------|------|-------|------|------|
| Model                        | Indoor Temp<br>DB/WB | Outdoor Temperature°F |      |      |       |      |      |       |      |      |
|                              |                      | 95.0                  |      |      | 105.0 |      |      | 115.0 |      |      |
|                              |                      | BTUH                  | S/T  | kW   | BTUH  | S/T  | kW   | BTUH  | S/T  | kW   |
| EHE09*A                      | 75/57                | 7550                  | 1.00 | 0.74 | 7150  | 1.00 | 0.80 | 6750  | 1.00 | 0.80 |
|                              | 75/63                | 8200                  | 0.82 | 0.74 | 7700  | 0.84 | 0.80 | 7150  | 0.87 | 0.80 |
|                              | 80/67                | 9000                  | 0.82 | 0.74 | 8450  | 0.81 | 0.80 | 7900  | 0.83 | 0.90 |
|                              | 85/72                | 10150                 | 0.70 | 0.74 | 9550  | 0.72 | 0.80 | 8950  | 0.74 | 0.90 |
| EHE12*A                      | 75/57                | 10100                 | 1    | 0.99 | 9500  | 1    | 0.89 | 8900  | 1    | 1.09 |
|                              | 75/63                | 10750                 | 0.81 | 0.99 | 10000 | 0.84 | 0.89 | 9250  | 0.88 | 1.09 |
|                              | 80/67                | 11500                 | 0.76 | 0.99 | 10700 | 0.82 | 0.89 | 9950  | 0.85 | 1.09 |
|                              | 85/72                | 12650                 | 0.67 | 0.99 | 11850 | 0.69 | 0.89 | 10950 | 0.72 | 1.09 |
| EHE18*A                      | 75/57                | 15750                 | 1    | 1.50 | 14900 | 1    | 1.70 | 13950 | 1    | 1.80 |
|                              | 75/63                | 16350                 | 0.86 | 1.50 | 15350 | 0.9  | 1.70 | 14250 | 0.93 | 1.80 |
|                              | 80/67                | 17500                 | 0.76 | 1.60 | 16350 | 0.87 | 1.70 | 15300 | 0.91 | 1.90 |
|                              | 85/72                | 18950                 | 0.76 | 1.60 | 17750 | 0.79 | 1.70 | 16600 | 0.83 | 1.90 |
| EHE24*A                      | 75/57                | 19600                 | 1    | 2.40 | 18450 | 1    | 2.60 | 17250 | 1    | 3.00 |
|                              | 75/63                | 20800                 | 0.81 | 2.40 | 19450 | 0.84 | 2.60 | 18000 | 0.87 | 3.00 |
|                              | 80/67                | 22400                 | 0.79 | 2.40 | 20850 | 0.81 | 2.60 | 19400 | 0.84 | 3.00 |
|                              | 85/72                | 24500                 | 0.71 | 2.40 | 22850 | 0.73 | 2.70 | 21000 | 0.75 | 3.00 |
| EHE24*B                      | 75/57                | 21700                 | 1    | 2.40 | 20550 | 1    | 2.50 | 19100 | 1    | 2.80 |
|                              | 75/63                | 22900                 | 0.78 | 2.40 | 21550 | 0.81 | 2.50 | 20000 | 0.84 | 2.80 |
|                              | 80/67                | 24500                 | 0.77 | 2.40 | 22950 | 0.79 | 2.50 | 21300 | 0.82 | 2.80 |
|                              | 85/72                | 26600                 | 0.69 | 2.40 | 24950 | 0.71 | 2.50 | 23200 | 0.73 | 2.80 |
| EHE30*B                      | 75/57                | 22900                 | 1    | 2.40 | 21800 | 1    | 2.60 | 20600 | 1    | 2.90 |
|                              | 75/63                | 24750                 | 0.76 | 2.40 | 23300 | 0.79 | 2.70 | 21900 | 0.81 | 2.90 |
|                              | 80/67                | 26500                 | 0.79 | 2.50 | 24950 | 0.76 | 2.80 | 23400 | 0.79 | 3.10 |
|                              | 85/72                | 28750                 | 0.67 | 2.50 | 27100 | 0.69 | 2.80 | 25400 | 0.71 | 3.10 |

Extended cooling performance data tabulated based off test at rated Airflow at .3 in. H<sub>2</sub>O of external static.

24A is for the smaller cabinet

Data is subject to change. Please verify most current information on [www.firstco.com](http://www.firstco.com).

# ECO SERIES COOL-PAK HP

SPACE CONSTRAINED HEAT PUMP W/ELECTRIC HEATING

## BLOWER PERFORMANCE

| COOL -PAK HP |           |                    |                     |     |      |     |      |     |      |     |      |     |
|--------------|-----------|--------------------|---------------------|-----|------|-----|------|-----|------|-----|------|-----|
| MODEL        | Motor Tap | Motor Speed        | IWC STATIC PRESSURE |     |      |     |      |     |      |     |      |     |
|              |           |                    | 0.10                |     | 0.20 |     | 0.30 |     | 0.40 |     | 0.50 |     |
|              |           |                    | SCFM                | W   | SCFM | W   | SCFM | W   | SCFM | W   | SCFM | W   |
| EHE09203*A   | 1         | T1                 | 317                 | 51  | 300  | 49  | 281  | 49  | 263  | 49  | 244  | 48  |
|              | 2         | T2 <sup>C</sup>    | 358                 | 64  | 341  | 63  | 322  | 62  | 303  | 62  | 285  | 61  |
|              | 3         | T3                 | 459                 | 103 | 441  | 102 | 423  | 101 | 404  | 101 | 385  | 100 |
|              | 4         | T4 <sup>H</sup>    | 395                 | 77  | 378  | 76  | 359  | 75  | 340  | 75  | 322  | 74  |
| EHE12203*A   | 1         | T1                 | 358                 | 64  | 341  | 63  | 322  | 62  | 303  | 62  | 285  | 61  |
|              | 2         | T2 <sup>C</sup>    | 459                 | 103 | 441  | 102 | 423  | 101 | 404  | 101 | 385  | 100 |
|              | 3         | T3                 | 552                 | 152 | 535  | 151 | 516  | 151 | 498  | 150 | 479  | 149 |
|              | 4         | T4 <sup>H</sup>    | 510                 | 128 | 493  | 127 | 474  | 127 | 456  | 126 | 437  | 125 |
| EHE12205*A   | 1         | T1                 | 358                 | 64  | 341  | 63  | 322  | 62  | 303  | 62  | 285  | 61  |
|              | 2         | T2 <sup>C</sup>    | 459                 | 103 | 441  | 102 | 423  | 101 | 404  | 101 | 385  | 100 |
|              | 3         | T3                 | 552                 | 152 | 535  | 151 | 516  | 151 | 498  | 150 | 479  | 149 |
|              | 4         | T4 <sup>H</sup>    | 510                 | 128 | 493  | 127 | 474  | 127 | 456  | 126 | 437  | 125 |
| EHE182203*A  | 1         | T1                 | 392                 | 47  | 366  | 47  | 343  | 47  | 311  | 43  | 267  | 35  |
|              | 2         | T2 <sup>H</sup>    | 629                 | 111 | 603  | 111 | 579  | 111 | 548  | 107 | 504  | 99  |
|              | 3         | T3                 | 820                 | 206 | 793  | 206 | 770  | 206 | 738  | 202 | 695  | 194 |
|              | 4         | T4 <sup>C</sup>    | 723                 | 155 | 696  | 155 | 673  | 155 | 641  | 151 | 598  | 143 |
|              | 5         | T5                 | 820                 | 206 | 793  | 206 | 770  | 206 | 738  | 202 | 695  | 194 |
| EHE182205*A  | 1         | T1                 | 392                 | 47  | 366  | 47  | 343  | 47  | 311  | 43  | 267  | 35  |
|              | 2         | T2 <sup>H</sup>    | 629                 | 111 | 603  | 111 | 579  | 111 | 548  | 107 | 504  | 99  |
|              | 3         | T3                 | 820                 | 206 | 793  | 206 | 770  | 206 | 738  | 202 | 695  | 194 |
|              | 4         | T4 <sup>C</sup>    | 723                 | 155 | 696  | 155 | 673  | 155 | 641  | 151 | 598  | 143 |
|              | 5         | T5                 | 820                 | 206 | 793  | 206 | 770  | 206 | 738  | 202 | 695  | 194 |
| EHE182207*A  | 1         | T1                 | 371                 | 36  | 351  | 43  | 330  | 50  | 310  | 57  | 292  | 64  |
|              | 2         | T2 <sup>H</sup>    | 623                 | 101 | 603  | 107 | 582  | 114 | 562  | 122 | 543  | 129 |
|              | 3         | T3                 | 802                 | 179 | 782  | 186 | 762  | 193 | 742  | 200 | 723  | 207 |
|              | 4         | T4 <sup>C</sup>    | 709                 | 134 | 689  | 141 | 669  | 148 | 649  | 155 | 630  | 162 |
|              | 5         | T5                 | 802                 | 179 | 782  | 186 | 762  | 193 | 742  | 200 | 723  | 207 |
| EHE182210*A  | 1         | T1                 | 371                 | 36  | 351  | 43  | 330  | 50  | 310  | 57  | 292  | 64  |
|              | 2         | T2 <sup>H</sup>    | 623                 | 101 | 603  | 107 | 582  | 114 | 562  | 122 | 543  | 129 |
|              | 3         | T3                 | 802                 | 179 | 782  | 186 | 762  | 193 | 742  | 200 | 723  | 207 |
|              | 4         | T4 <sup>C</sup>    | 709                 | 134 | 689  | 141 | 669  | 148 | 649  | 155 | 630  | 162 |
|              | 5         | T5                 | 945                 | 269 | 925  | 276 | 904  | 283 | 884  | 290 | 865  | 297 |
| EHE24205*A   | 1         | T1                 | 573                 | 89  | 546  | 88  | 523  | 89  | 491  | 85  | 448  | 77  |
|              | 2         | T2 <sup>H</sup>    | 820                 | 206 | 793  | 206 | 770  | 206 | 738  | 202 | 695  | 194 |
|              | 3         | T3 <sup>Low</sup>  | 703                 | 145 | 676  | 145 | 653  | 145 | 621  | 141 | 578  | 133 |
|              | 4         | T4 <sup>High</sup> | 904                 | 253 | 878  | 253 | 854  | 253 | 823  | 249 | 779  | 241 |
|              | 5         | T5                 | 945                 | 277 | 918  | 277 | 895  | 278 | 863  | 274 | 820  | 265 |

<sup>C</sup> Factory Default Cooling and Heat Pump Airflow.

<sup>H</sup> Factory Default Electric Heat Airflow.

T1 is reserved for Fan Only Operation (All models.)

24A is for the smaller cabinet.

Blower performance data based on a dry coil at 70°F DB EAT with a standard 1" clean air filter.

Data is subject to change.

Please verify most current information on [www.firstco.com](http://www.firstco.com).

# ECO SERIES COOL-PAK HP

## SPACE CONSTRAINED HEAT PUMP W/ELECTRIC HEATING

| COOL-PAK HP BLOWER PERFORMANCE (CONT'D) |           |                    |                     |     |      |     |      |     |      |     |      |     |
|-----------------------------------------|-----------|--------------------|---------------------|-----|------|-----|------|-----|------|-----|------|-----|
| MODEL                                   | Motor Tap | Motor Speed        | IWC STATIC PRESSURE |     |      |     |      |     |      |     |      |     |
|                                         |           |                    | 0.10                |     | 0.20 |     | 0.30 |     | 0.40 |     | 0.50 |     |
|                                         |           |                    | SCFM                | W   | SCFM | W   | SCFM | W   | SCFM | W   | SCFM | W   |
| EHE24207*A                              | 1         | T1                 | 569                 | 84  | 549  | 90  | 528  | 97  | 508  | 105 | 489  | 111 |
|                                         | 2         | T2 <sup>H</sup>    | 802                 | 179 | 782  | 186 | 762  | 193 | 742  | 200 | 723  | 207 |
|                                         | 3         | T3 <sup>Low</sup>  | 691                 | 126 | 671  | 133 | 650  | 140 | 630  | 147 | 612  | 154 |
|                                         | 4         | T4 <sup>High</sup> | 899                 | 237 | 879  | 244 | 858  | 251 | 838  | 258 | 819  | 265 |
|                                         | 5         | T5                 | 963                 | 283 | 943  | 290 | 922  | 297 | 902  | 304 | 883  | 311 |
| EHE24210*A                              | 1         | T1                 | 569                 | 84  | 549  | 90  | 528  | 97  | 508  | 105 | 489  | 111 |
|                                         | 2         | T2 <sup>H</sup>    | 878                 | 224 | 858  | 230 | 837  | 237 | 817  | 245 | 798  | 251 |
|                                         | 3         | T3 <sup>Low</sup>  | 691                 | 126 | 671  | 133 | 650  | 140 | 630  | 147 | 612  | 154 |
|                                         | 4         | T4 <sup>High</sup> | 899                 | 237 | 879  | 244 | 858  | 251 | 838  | 258 | 819  | 265 |
|                                         | 5         | T5                 | 963                 | 283 | 943  | 290 | 922  | 297 | 902  | 304 | 883  | 311 |
| EHE24205*B                              | 1         | T1                 | 523                 | 70  | 493  | 70  | 462  | 69  | 429  | 66  | 391  | 62  |
|                                         | 2         | T2 <sup>H</sup>    | 864                 | 209 | 834  | 210 | 803  | 208 | 770  | 206 | 732  | 201 |
|                                         | 3         | T3                 | 940                 | 265 | 909  | 265 | 878  | 264 | 846  | 261 | 807  | 257 |
|                                         | 4         | T4 <sup>C</sup>    | 864                 | 209 | 834  | 210 | 803  | 208 | 770  | 206 | 732  | 201 |
|                                         | 5         | T5                 | 966                 | 291 | 936  | 291 | 905  | 289 | 872  | 287 | 834  | 282 |
| EHE24207*B                              | 1         | T1                 | 523                 | 70  | 493  | 70  | 462  | 69  | 429  | 66  | 391  | 62  |
|                                         | 2         | T2 <sup>H</sup>    | 864                 | 209 | 834  | 210 | 803  | 208 | 770  | 206 | 732  | 201 |
|                                         | 3         | T3                 | 940                 | 265 | 909  | 265 | 878  | 264 | 846  | 261 | 807  | 257 |
|                                         | 4         | T4 <sup>C</sup>    | 864                 | 209 | 834  | 210 | 803  | 208 | 770  | 206 | 732  | 201 |
|                                         | 5         | T5                 | 966                 | 291 | 936  | 291 | 905  | 289 | 872  | 287 | 834  | 282 |
| EHE24210*B                              | 1         | T1                 | 523                 | 70  | 493  | 70  | 462  | 69  | 429  | 66  | 391  | 62  |
|                                         | 2         | T2 <sup>H</sup>    | 864                 | 209 | 834  | 210 | 803  | 208 | 770  | 206 | 732  | 201 |
|                                         | 3         | T3                 | 940                 | 265 | 909  | 265 | 878  | 264 | 846  | 261 | 807  | 257 |
|                                         | 4         | T4 <sup>C</sup>    | 864                 | 209 | 834  | 210 | 803  | 208 | 770  | 206 | 732  | 201 |
|                                         | 5         | T5                 | 966                 | 291 | 936  | 291 | 905  | 289 | 872  | 287 | 834  | 282 |
| EHE30205*B                              | 1         | T1                 | 525                 | 68  | 502  | 75  | 479  | 81  | 456  | 87  | 436  | 94  |
|                                         | 2         | T2 <sup>H</sup>    | 864                 | 205 | 842  | 211 | 818  | 217 | 796  | 224 | 775  | 231 |
|                                         | 3         | T3                 | 943                 | 256 | 921  | 262 | 897  | 268 | 875  | 274 | 854  | 281 |
|                                         | 4         | T4 <sup>C</sup>    | 864                 | 205 | 842  | 211 | 818  | 217 | 796  | 224 | 775  | 231 |
|                                         | 5         | T5                 | 969                 | 274 | 946  | 280 | 923  | 286 | 901  | 293 | 880  | 299 |
| EHE30207*B                              | 1         | T1                 | 637                 | 136 | 614  | 137 | 586  | 134 | 557  | 128 | 527  | 122 |
|                                         | 2         | T2 <sup>H</sup>    | 1032                | 338 | 1009 | 339 | 981  | 336 | 952  | 330 | 922  | 324 |
|                                         | 3         | T3                 | 1098                | 395 | 1074 | 396 | 1047 | 393 | 1017 | 387 | 987  | 381 |
|                                         | 4         | T4 <sup>C</sup>    | 1032                | 338 | 1009 | 339 | 981  | 336 | 952  | 330 | 922  | 324 |
|                                         | 5         | T5                 | 1165                | 465 | 1142 | 466 | 1114 | 462 | 1085 | 457 | 1055 | 450 |
| EHE30210*B                              | 1         | T1                 | 637                 | 136 | 614  | 137 | 586  | 134 | 557  | 128 | 527  | 122 |
|                                         | 2         | T2 <sup>H</sup>    | 1032                | 338 | 1009 | 339 | 981  | 336 | 952  | 330 | 922  | 324 |
|                                         | 3         | T3                 | 1098                | 395 | 1074 | 396 | 1047 | 393 | 1017 | 387 | 987  | 381 |
|                                         | 4         | T4 <sup>C</sup>    | 1032                | 338 | 1009 | 339 | 981  | 336 | 952  | 330 | 922  | 324 |
|                                         | 5         | T5                 | 1165                | 465 | 1142 | 466 | 1114 | 462 | 1085 | 457 | 1055 | 450 |

C Factory Default Cooling and Heat Pump Airflow.

H Factory Default Electric Heat Airflow.

T1 is reserved for Fan Only Operation (All models.)

Blower performance data based on a dry coil at 70°F DB EAT with a standard 1" clean air filter.

24A is for the smaller cabinet

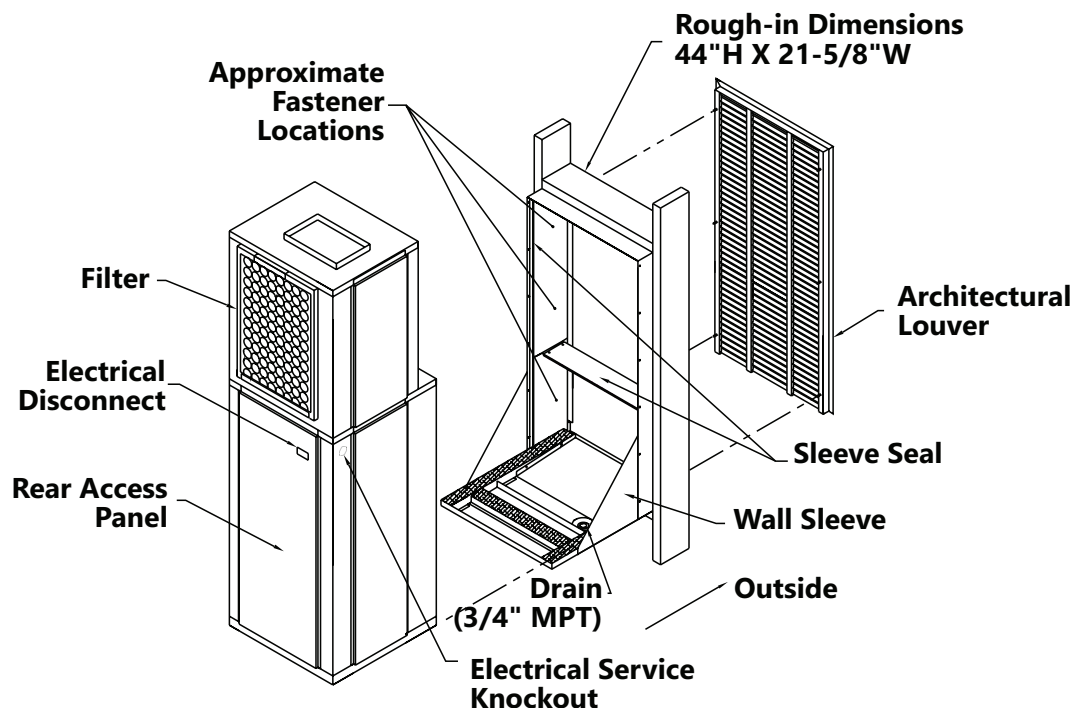
Data is subject to change.

Please verify most current information on [www.firstco.com](http://www.firstco.com).

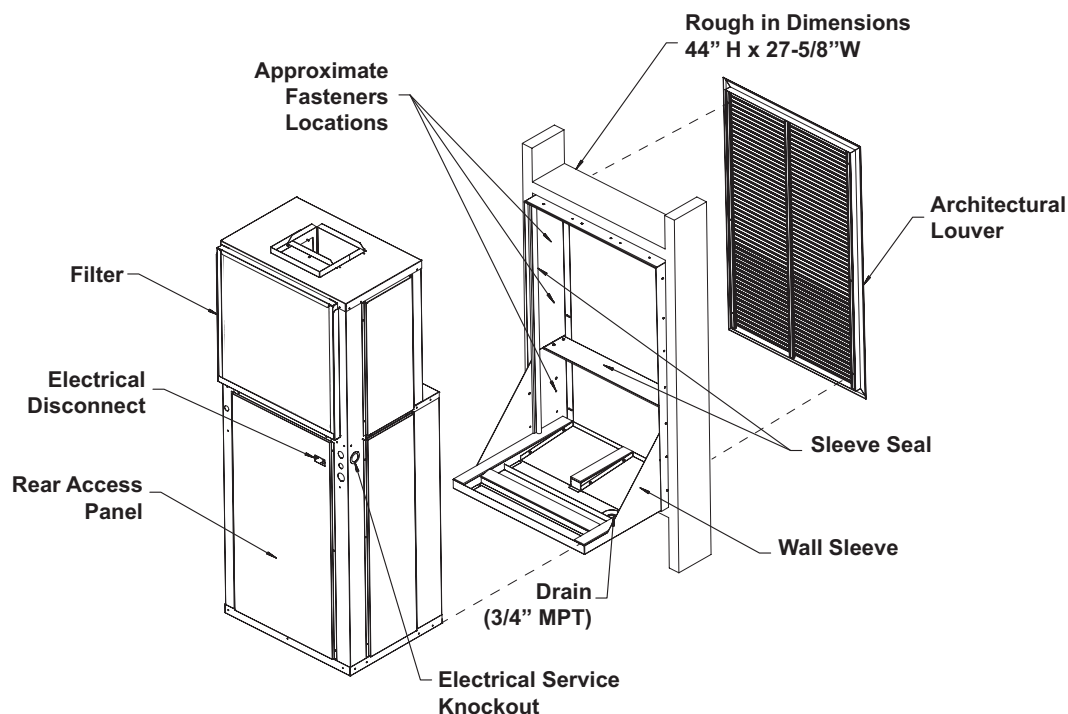
# ECO SERIES COOL-PAK HP

SPACE CONSTRAINED HEAT PUMP W/ELECTRIC HEATING

## GENERAL ASSEMBLY FOR STANDARD SLEEVE AND LOUVER



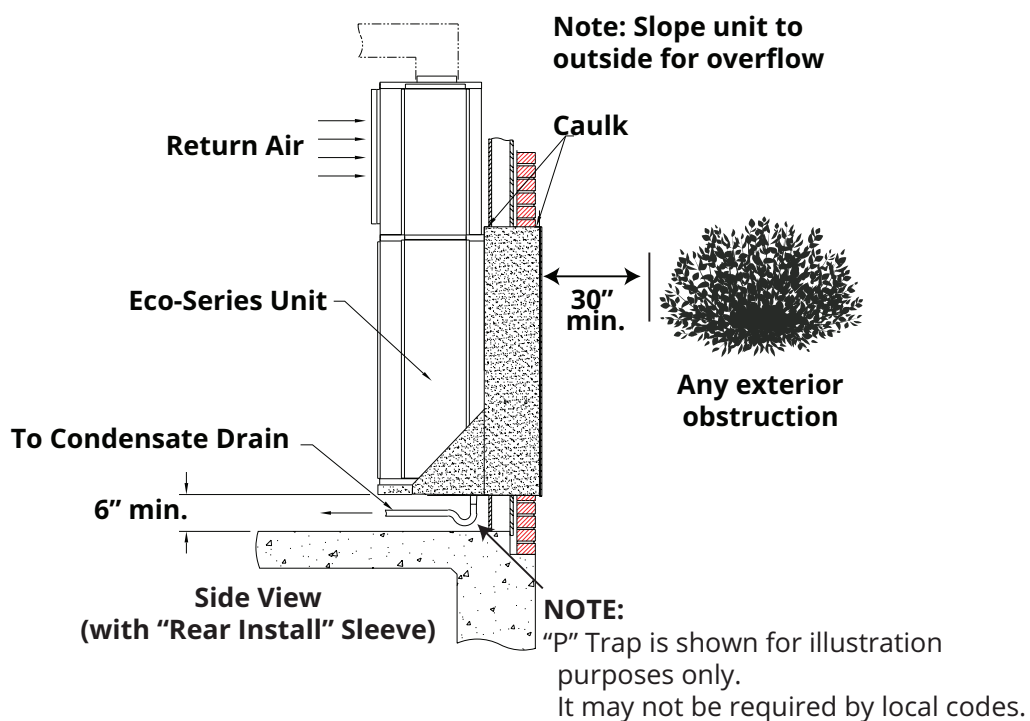
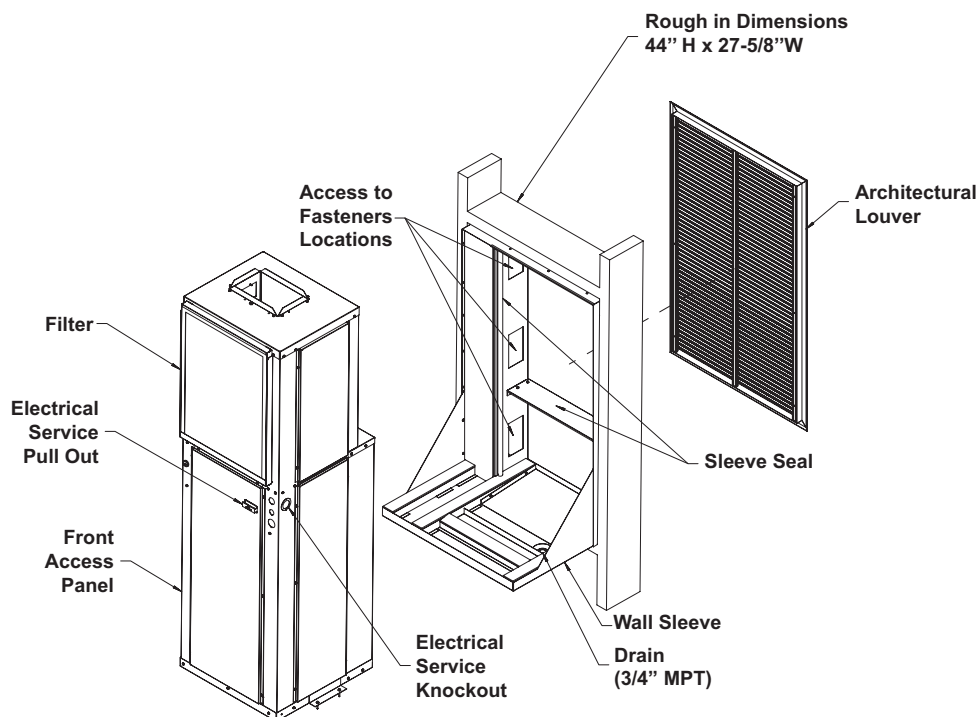
## GENERAL ASSEMBLY FOR LARGE SLEEVE AND LOUVER SIZE 24B - 30



# ECO SERIES COOL-PAK HP

SPACE CONSTRAINED HEAT PUMP W/ELECTRIC HEATING

## GENERAL ASSEMBLY FOR LARGE SLEEVE AND LOUVER FOR 09 - 24A SIZES WITH BLOCK OFF



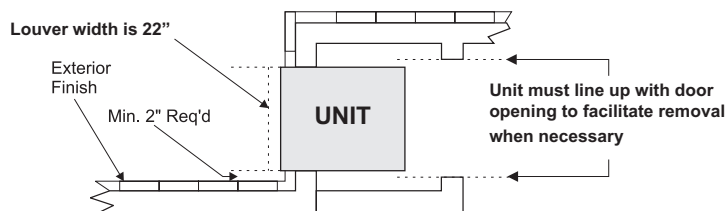
# ECO SERIES COOL-PAK HP

## SPACE CONSTRAINED HEAT PUMP W/ELECTRIC HEATING

### CLOSET DIMENSIONS

#### NOTES:

1. Sleeve rough-in opening is 44"(H) X 21-5/8"(W).
2. Bottom of opening should be approx. 6" above floor level.
3. Minimum 3" of clearance is required on all sides of the unit.
4. Note Wind Resistant Louver is 3/4" larger



### REAR INSTALLATION DETAIL FOR SMALL SLEEVE 21" WIDE (9-24A ONLY)

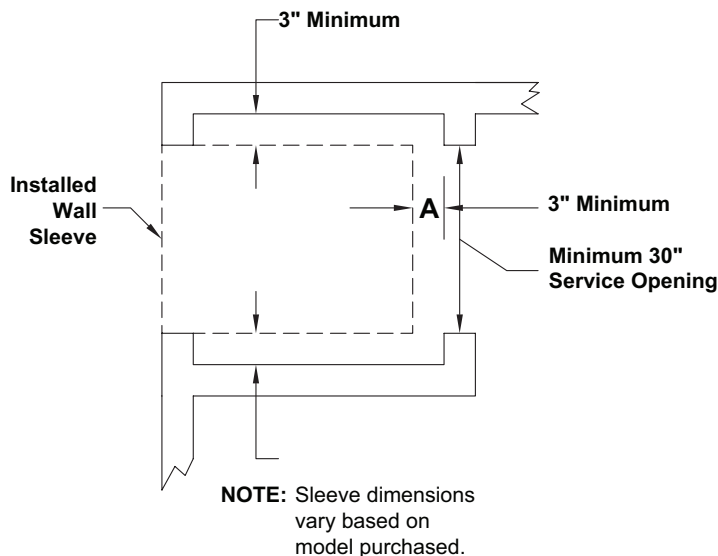
#### INSTRUCTIONS:

To find the minimum closet depth (dimension "C"), use the following method:

Determine dimension "A" which is the total finished wall thickness.

- For 5"-8" outside wall thickness, subtract "A" from 29".  
("C" = 29 - "A")
- For 8"-12" outside wall thickness, subtract "A" from 33".  
("C" = 33 - "A")
- For 12"-15" outside wall thickness, subtract "A" from 36".  
("C" = 36 - "A")

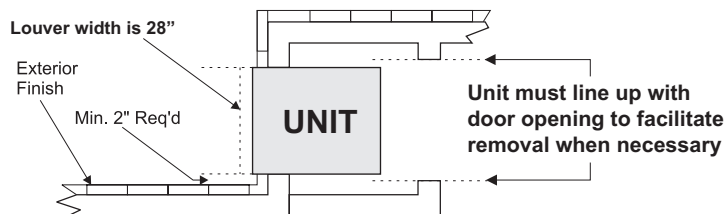
NOTE: Provide minimum clearances as shown for interior closet dimensions.



### REAR INSTALLATION DETAIL FOR LARGE SLEEVE 27" WIDE (24B, 30 SIZE OR 9-24A WITH BLOCKOFF)

#### NOTES:

1. Sleeve rough-in opening is 44"(H) X 27-5/8"(W).
2. Bottom of opening should be approx. 6" above floor level.
3. Minimum 3" of clearance is required on all sides of the unit.
4. Note Wind Resistant Louver is 3/4" larger



# ECO SERIES COOL-PAK HP

## SPACE CONSTRAINED HEAT PUMP W/ELECTRIC HEATING

### CLOSET DIMENSIONS (CONT'D)

#### REAR INSTALLATIONDETAIL FOR LARGE SLEEVE 27" WIDE (24B, 30 SIZE OR 9-24A WITH BLOCKOFF)

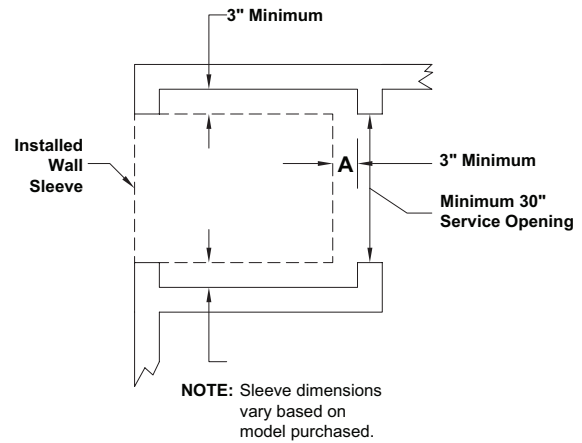
##### INSTRUCTIONS:

To find the minimum closet depth (dimension "C"), use the following method:

Determine dimension "A" which is the total finished wall thickness.

- For 5"-8" outside wall thickness, subtract "A" from 39".  
("C" = 39 - "A")
- For 8"-12" outside wall thickness, subtract "A" from 43".  
("C" = 43 - "A")
- For 12"-15" outside wall thickness, subtract "A" from 46".  
("C" = 46 - "A")

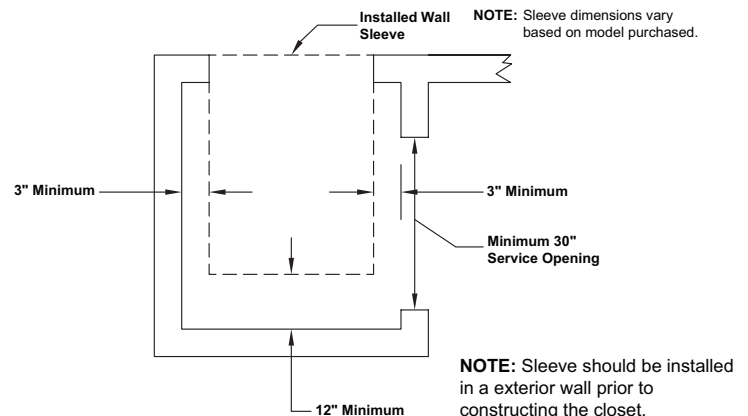
NOTE: Provide minimum clearances as shown for interior closet dimensions.



#### SIDE INSTALLATION DETAIL FOR SMALL SLEEVE 21" WIDE (9-24A SIZE ONLY)

##### NOTES:

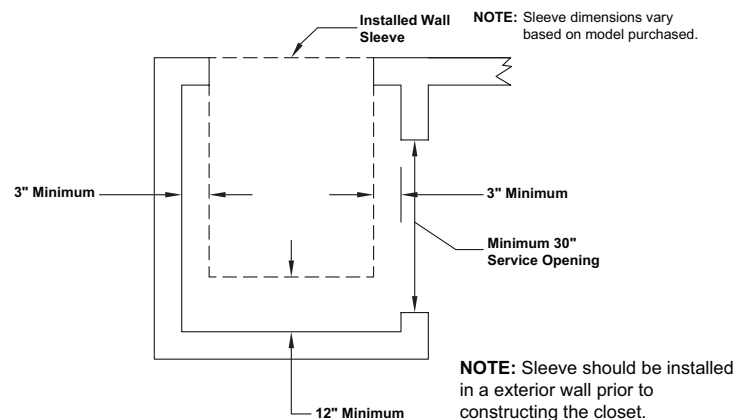
1. Sleeve rough-in opening is 44"(H) X 21-5/8"(W).
2. Bottom of opening should be approx. 6" above floor level.
3. Minimum 3" of clearance is required on all sides of the unit and 12" clearance on the rear.



#### SIDE INSTALLATION DETAIL FOR SMALL SLEEVE 27" WIDE (24B, 30 SIZE OR 9-24A WITH BLOCK OFF)

##### NOTES:

1. Sleeve rough-in opening is 44"(H) X 21-5/8"(W).
2. Bottom of opening should be approx. 6" above floor level.
3. Minimum 3" of clearance is required on all sides of the unit and 12" clearance on the rear.





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**MAY 2025**