

TECHNICAL GUIDE

Single Package Heat Pump/Electric Heat 13.4 SEER2 - R-410A - Single-Phase 2 nominal ton to 5 nominal ton - 208/230 V Models: PHE4*24 to 60



Due to continuous product improvement, specifications are subject to change without notice.

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Warranty summary*

Extended 10-year limited parts and compressor warranty

*Extended warranty requires online registration within 90 days of purchase for replacement or closing for new home purchase. See the limited warranty certificate in the *User's Information Manual* for details.

Description

These packaged cooling/heating heat pumps are designed for outdoor installation. Only utility and duct connections are required at the point of installation.

Features

- **Operating efficiency** - All PHE4 heat pump models are rated at 13.4 SEER2 and 6.7 HSPF2 for cooling and heating operation.
- **On-site flexibility** - All model sizes use a compact design cabinet in one of two footprints. This provides installer flexibility for placing the correct capacity unit on curbs or pads with the smallest footprint after the internal load has been determined. Field convertible duct connections from side shot to down shot allow the installer to have greater flexibility with less inventory.
- **Lower installation cost** - Installation time and costs are reduced by easy power and control wiring connections. The small base dimension means less space is required on the ground or roof. All units are completely wired, charged with R-410A refrigerant, and tested before shipment. Test stations using a state-of-the-art computerized process system are used to ensure product quality. Refrigerant charge and component part numbers are verified using computers during assembly. Vital run test statistics such as system pressure, motor currents, air velocity and temperature, unit vibration, and gas system safeties are monitored and recorded by the system to ensure unit performance. Equal size side supply and return duct connections allow easy connection of ducts to match low crawl spaces without transition pieces.
- **Utility connections made easy** - Electric utility access is provided through the bottom or the side of the unit. Utility connections can be made quickly and with a minimum amount of field labor. A field supplied and field installed electrical disconnect switch must be installed.
- **Convertible airflow design** - The bottom duct openings are covered when they leave the factory, ready to be used for a side supply/side return application. If a bottom supply/bottom return application is required, remove the two panels from the bottom of the unit and place them in the side supply/side return duct openings. No panel cutting is required and no accessory panel is necessary. The convertible airflow design allows maximum field flexibility and minimum inventory.
- **Condensate pan** - A corrosion-resistant, long-lasting, water-tight pan is positioned below the indoor coil to collect and drain all condensate, preventing build-up of stagnant condensate. The condensate pan conforms to ASHRAE 62-19 standards (Ventilation for Acceptable Indoor Air Quality).
- **Condensate drain** - The 3/4 in. NPT female connection is rigidly mounted to ensure correct fit and leak tight seal.
- **Durable finish** - The cabinet is made of G90 galvanized steel with a powder paint coating for appearance and protection. The pretreated galvanized steel provides a better paint-to-steel bond, which resists corrosion and rust creep. The powder paint finish ensures less fading when exposed to sunlight, and provides superior corrosion resistance (1,000 h salt spray tested).

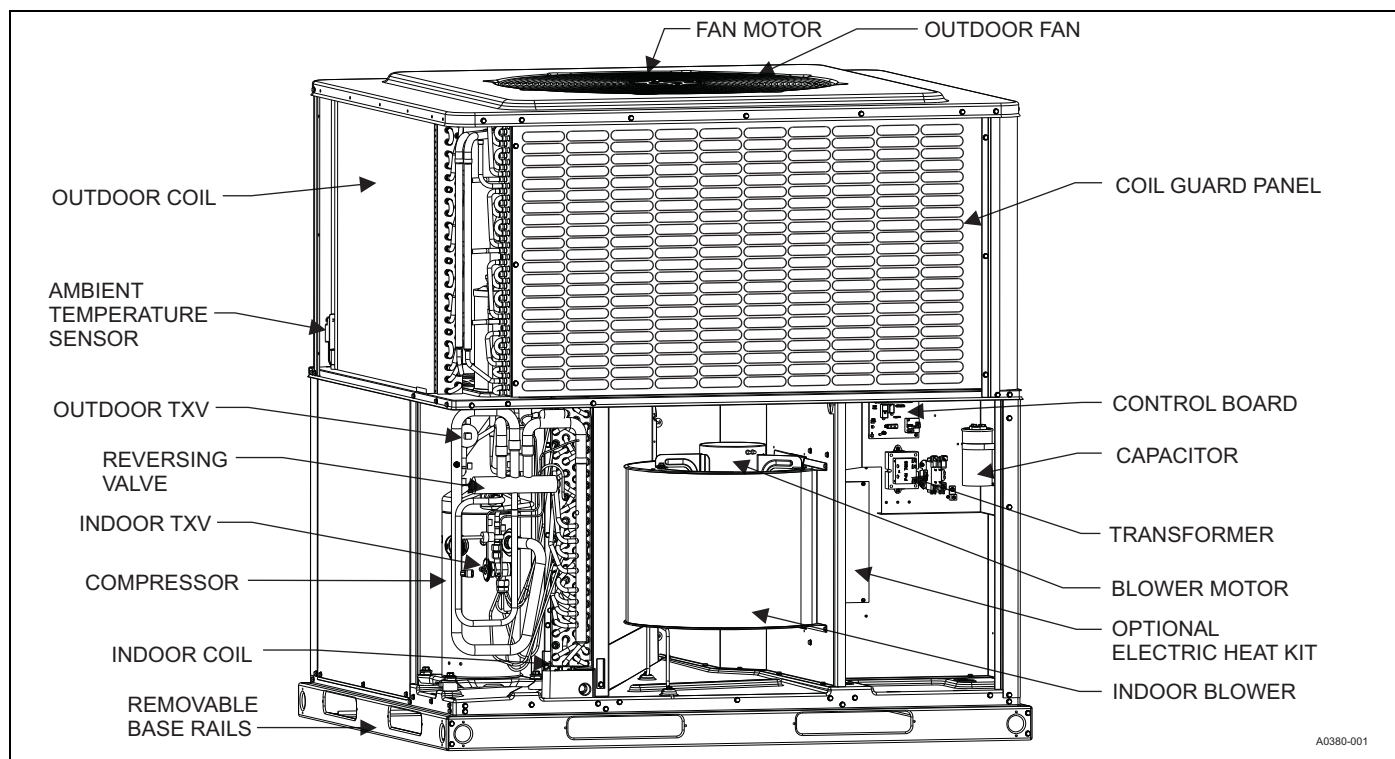
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- **Full perimeter base rails** - The easily removable base rails provide a solid foundation for the entire unit and protect the unit during shipment. The rails provide forklift access from all sides, and rigging holes are also provided so an overhead crane can be used to place the units on a roof. On applications where the unit is placed on a pad, the base keeps the unit off the pad to deter corrosion. On applications where height is limited, the base rails can be removed by removing two screws in each corner.
- **Attractive appearance** - A single-piece top cover containing a top-discharge outdoor fan arrangement requires less square footage on installation and provides a wider variety of installations. The one-piece design adds greater water integrity. Rounded corners with water drip edges add to the attractive appearance and provide cut protection to the installer.
- **Top discharge** - The top-discharge outdoor fan does not disrupt neighboring areas or dry out vegetation surrounding the unit. The warm air from the top mounted fan is blown up and away from the structure and any landscaping.
- **Outdoor coil grille** - All models use a stamped slotted design that provides superior impact protection against small objects during transit and after installation.
- **Low operating sound level** - The upward airflow carries the normal operating noise up and away from the living area. The rigid top panel effectively isolates noise. The isolator mounted compressor and the rippled fins of the outdoor coil muffle the normal fan motor and compressor operating sounds. The unique formed base pan also aids in sound attenuation with its structural design.
- **Low maintenance** - Long-life, permanently lubricated outdoor fan motor bearings and indoor blower motor bearings need no annual maintenance, adding greater reliability to the unit. The slide-out blower assembly and indoor coil assembly can be easily removed for cleaning or service.
- **Fan system** - All models operate over a wide range of design conditions with a standard ECM indoor blower motor. These units easily match all types of applications and provide greater on-site flexibility to match comfort requirements. The cooling speed and heating speeds are factory set at test design conditions but can be field adjusted. This allows for maximum comfort capabilities.
- **Loss of charge switch** - All models include a loss of charge switch to provide safe shutdown of the compressor.
- **Simple control circuit** - A printed circuit board contains a status/diagnostic indicator light. Field thermostat wiring connects to color-coded leads using twist-on wire connections. Cooling controls use contactor and relays for simple application and troubleshooting. MATE-N-LOK plug connectors are used. The electrical control box is not located in the compressor compartment. The controls are mounted to allow the separate access panel to be removed for troubleshooting and maintenance without affecting the normal system operating pressures. All wiring internal to the unit is numbered and color-coded.
- **Protected compressor** - The compressor is internally protected against high pressure and temperature. This is accomplished by the simultaneous operation of scroll bypass and a temperature thermal overload sensor, which protects the compressor if undesirable operating conditions occur.
- **Pressure switches** - A high-pressure switch is standard in all units. When abnormal conditions are sensed through the pressure switch, the unit locks out, preventing any further operation until it is reset or the problem is corrected.
- **Exclusive coil design** - The grooved copper tubes and enhanced aluminum fin construction of the outdoor coils improve heat transfer for maximum efficiency and durability. Indoor tube and fin coils have all aluminum construction for reliability and efficient heat transfer.
- **Electric heat** - All electric heat models use 6HK electric heat, which is available in 208/230-1-60 from 5 kW to 25 kW. Most kits are stageable above 10 kW. Single-phase single-point field wiring kits are available for all applications except 25 kW.
- **Easy service access** - Individual access panels provide access to all major components, for example, compressors, indoor coils, blowers, controls/electric heat kits, and filters, making servicing easy. Removing these panels allows easy removal of components such as the blower assembly for maintenance and troubleshooting.
- **Replacement parts** - The installer requires no special training to replace any of the components of these units. The number of new components has been reduced to minimize the inventory of unique parts.
- **Controls** - Demand defrost curves preloaded into defrost control for optimized performance based on unit capacities.

Nomenclature

PHE	4	A	24		2		4	A		
1	2	3	4	5	6	7	8	9		
1. Model family PHE - packaged heat pump with electric heat PCG - packaged AC with gas heat PHG - packaged heat pump with gas heat PCE - packaged AC with electric heat				5. Gas heating input Btu/h x 1000 050 = 50,000 BTU/h input, blank = electric heat						
2. Nominal cooling efficiency 4 = standard efficiency, 6 = high efficiency				6. Voltage-Phase-Frequency 2 = 208/230-1-60, 3 = 208/230-3-60, 4 = 460-3-60						
3. Cabinet size A = small 35.75 in. x 51.25 in., B = large 45.75 in. x 51.25 in.				7. NOx approval X = Low NOx, blank = not Low NOx						
4. Nominal air conditioning cooling capacity Btu/h x 1000 24 = 24,000 Btu/h, 30 = 30,000 Btu/h				8. Generation level 1 = first generation, 2 = second generation						
Examples: PHE4A2424A is a packaged heat pump, standard efficiency, small cabinet, 2 ton, 208/230 V, single-phase model, fourth generation, original release.				9. Revision level A = original release, B = second release						

Component location



Unit limitations

Model	Unit voltage	Unit limitations		
		Applied voltage		Outdoor DB temperature
		Minimum	Maximum	Maximum (°F)
PHE4A2424	208/230-1-60	187	252	125
PHE4A3024	208/230-1-60	187	252	125
PHE4B3624	208/230-1-60	187	252	125
PHE4B4224	208/230-1-60	187	252	125
PHE4B4824	208/230-1-60	187	252	125
PHE4B6024	208/230-1-60	187	252	125

Applications and accessories

Application limitations								
Packaged equipment series	Air temperature at outdoor coil (°F)				Air temperature at indoor coil (°F)			
	Minimum		Maximum		Minimum		Maximum	
	DB cool	DB heat	DB cool	DB heat	WB cool	WB heat	WB cool	WB heat
PHE4*	55	-10	125	75	57	50	72	80

Note: *PHE4A24 models are restricted to operation of 0°F outdoor air temperature.

- **Anchor bracket kit (S1-1HK0601)** - This kit firmly anchors PCG, PCE, PHE, and PHG packaged units to a pad or support structure. When correctly installed, the kit is approved for ground-mounted or roof-mounted applications, wind load certified, and listed with the State of Florida. See <https://floridabuilding.org> for this listing.
- **Economizer for downflow applications (S1-2EE04710024, S1-2EE04710124)** - The modulating integrated economizer provides simultaneous operation between mechanical cooling and economizer operation. The independent blade design ensures correct control and less than 1% leak rate. Includes hood and mesh bird screen filter integrated into the hood, dry bulb sensor, and barometric relief damper. Separate field accessories of single/dual enthalpy kits are also available.
- **Economizer for horizontal applications (S1-2EE04710224, S1-2EE04710324)** - The modulating integrated economizer provides simultaneous operation between the mechanical cooling and economizer operation. The independent blade design ensures correct control and less than 1% leak rate. Includes hood and mesh bird screen filter integrated into hood and dry bulb sensor. Separate field accessories of single enthalpy and dual enthalpy are available.
- **Barometric relief hood (S1-1RD0501)** - Used in conjunction with a horizontal economizer, the barometric relief hood helps to equalize the building pressure caused by the fresh air introduced through the economizer fresh air hood.
- **Single/dual enthalpy sensor (S1-HE-69630NS-2D)** - The sensor replaces the supply air temperature dry bulb sensor standard in the economizer kit. The sensor enables improved economizer operation by sensing the dry bulb temperature of indoor supply air plus the enthalpy content of the outdoor air.
- **Duct/unit mount CO₂ kit (S1-2AQ04700924)** - The sensor kit detects CO₂ levels automatically and overrides the economizer when CO₂ levels rise above the preset limits.
- **Wall mount CO₂ kit (S1-2AQ04701024)** - The sensor kit detects CO₂ levels automatically and overrides the economizer when CO₂ levels rise above the preset limits.
- **Supply air temperature sensor kit (S1-TE-63616E-2D)** - The outdoor supply air temperature sensor kit is used with economizers.
- **Filter/frame kit (S1-1FF0602, S1-1FF0601)** - The kit contains the necessary hardware to field install return air filters into the base unit. The filter rack is suitable for 1 in. or 2 in. filters.
- **Filter (S1-02647812000)** - Washable 1 in. filter. Two filters are required for A base units. Three filters are required for B base units.
- **Motorized fresh air damper (S1-2MD04705224, S1-2MD04705124)** - Designed for duct mounted side supply/return and unit mounted down supply/return applications. The damper is capable of providing 0% to 50% of outdoor air (field supplied). Closes on power loss, and includes hood and screen assembly.
- **Rectangle to round (horizontal) adapter (S1-1AK0110, S1-1AK0111)** - The kit includes one supply and one return air rectangle to round duct adapter. Adapters are preformed and designed to fit over current horizontal duct openings on the base unit. Transition is from rectangle to 12 in. round for the 1AK0110 kit and from rectangle to 14 in. round for the 1AK0111 kit.
- **Rectangle to round (downflow) adapter (S1-1AK0108, S1-1AK0109)** - The kit includes one supply and one return air rectangle to round duct adapter. Adapters are preformed and designed to fit into current downflow duct openings on the roof curb. Transition is from rectangle to 16 in. round for the 1AK0108 kit and from rectangle to 18 in. round for the 1AK0109 kit.
- **Roof curbs (S1-1RC0503, S1-1RC0501)** - NRCA approved curbs provide correct fit to base unit for rooftop installations. Curbs are designed to be assembled through hinge pins in each corner. The kit also provides seal strip to ensure an airtight seal. These are 8 in. high roof curbs.
- **Roof curbs (S1-1RC0504, S1-1RC0502)** - NRCA approved curbs provide correct fit to base unit for rooftop installations. Curbs are designed for assembly through hinge pins in each corner. The kit also provides seal strip to ensure an airtight seal. These are 14 in. high roof curbs.
- **Transition curb kits (S1-1TC01*)** - These adapter kits allow field use of existing installed roof curbs, matching the PHE4 footprint to Affinity roof curbs or Carrier, Trane, or Goodman roof curbs. Curb adapters are optional for current generation Carrier replacements, but are recommended for previous generation applications. Refer to the PHE4 *Price Pages* for more details.
- **Manual outdoor damper (S1-1FA0502, S1-1FA0501)** - Provides 0% to 50% outdoor air capability (field adjustable). Designed for duct mounted side supply/return applications and unit mounted down supply/return applications. Includes hood and screen assembly.
- **Low ambient kit (S1-2LA04701024)** - The kit provides necessary hardware to convert the unit to operate in cooling cycle down to 0°F. Standard unit operation is 55°F.
- **Transformer kit (S1-2EC06700124)** - The kit provides the necessary hardware to change single-phase models from the factory with 40 VA transformer capability to 75 VA transformer capability. Required on installations with an economizer or motorized damper.
- **Base rail hole cover kit (S1-1HC0101)** - The kit provides necessary hardware to close off openings in base rails to block off openings and prevent animal entrance.
- **Single-point wiring kits for 6HK electric heat applications (S1-SPWK*)** - The kit provides a field option for connecting electrical power supplies to the field installed 6HK kits to allow single-point connections for single-phase electric heat applications, with the exception of 25 kW kits.
- **Thermostat** - Compatible thermostat controls are available through accessory sourcing. For optimum performance, these outdoor units are fully compatible with our residential Hx™ Touch Screen Thermostat available through Source 1. For more information, refer to the *Thermostats & Controllers* section at www.simplygettingthejobdone.com.
- **Wall thermostat** - The units are designed to operate with standard, 24 V electronic non power stealing and electromechanical thermostats. All units can operate with single-stage heat/single-stage cool thermostats - with or without the economizer.

* For additional kit numbers, refer to the *Price Pages*.

Guide specifications

General

Units shall be manufactured by Ducted Systems in an ISO 9001 certified facility. These packaged cooling/heating air conditioners are designed for outdoor installation. Only utility and duct connections are required at the point of installation. Heat pumps provide electric cooling and electric heating, with field installed electric heat kits from 5 kW to 25 kW for backup supplemental heating operation.

Description

Units shall be factory-assembled, single packaged, heat pumps with electric cooling/electric heating units, designed for outdoor installation. They shall have built-in, equal size, field convertible duct connections for downflow supply/return or horizontal supply/return. The units shall be factory wired, piped, charged with R-410A refrigerant, and factory tested before shipment. All models shall be rated in accordance with DOE and AHRI test procedures for heating and cooling operation. Units shall be CSA listed to the UL 1995/CAN/CSA No. 236-M90 standards.

- **Operating efficiency** - All heat pump models shall be rated at a minimum of 13.4 SEER2 and 6.7 HSPF2 for cooling and heating operation.
- **Low operating sound level** - The upward airflow carries the normal operating noise up and away from the living area. The rigid top panel effectively isolates noise. The isolator mounted compressor and the rippled fins of the outdoor coil muffle the normal fan motor and compressor operating sounds. The unique formed base pan also aids in sound attenuation with its structural design. Sound ratings as tested under AHRI test procedures shall be less than 77 dB(A) for all models.

Unit cabinet

The unit cabinet shall be a single piece design, with drip edges and no-seam corners to provide optimum water integrity. The unit shall have a rigidly mounted outdoor coil guard to provide protection from objects and personnel after installation. The indoor blower section shall be insulated with foil-faced or foam insulation, fastened to prevent insulation from entering the air stream. Cabinet panels shall be separate and easily removable for servicing and maintenance. The unit shall be built on a formed, design base pan, with embossments at critical points to add strength and rigidity and aid in minimizing sound. Full perimeter base rails shall be provided to ensure reliable transit of equipment and facilitate overhead rigging, allowing truck access and correct sealing on roof curb applications. Base rails shall be easily removable if their removal is required to lower the unit height. Filters shall be field installed, furnished, and accessible through a removable access door, sealed airtight. The unit's vertical discharge and return duct configuration shall be designed to fit between standard 24 in. O.C. beams without modification to building structure, duct work, and base unit.

- **On-site flexibility** - All model sizes shall use a compact design cabinet in one of two footprints. This provides installer flexibility for placing the correct capacity unit on curbs or pads with the smallest footprint after the internal load has been determined. Field convertible duct connections from side shot to down shot allow the installer to have greater flexibility with less inventory.

- **Durable finish** - The cabinet shall be made of G90 galvanized steel with a powder paint coating for appearance and protection. The pretreated galvanized steel shall provide a better paint-to-steel bond, which resists corrosion and rust creep. The powder paint finish ensures less fading when exposed to sunlight, and provides superior corrosion resistance (1,000 h salt spray tested).
- **Attractive appearance** - A single-piece top cover containing a top-discharge outdoor fan arrangement shall be used. This requires less square footage on installation and provides a wider variety of installations. The one-piece design adds greater water integrity. Rounded corners with water drip edges add to the attractive appearance and prevent water penetration.
- **Convertible airflow design** - The bottom duct openings are covered when they leave the factory, ready to be used for a side supply/side return application. If a bottom supply/bottom return application is required, remove the two panels from the bottom of the unit and place them in the side supply/side return duct openings. No panel cutting is required and no accessory panel is necessary. The convertible airflow design allows maximum field flexibility and minimum inventory.
- **Utility connections made easy** - Electric utility access shall be provided through the bottom or the side of the unit. Utility connections should be made quickly and with a minimum amount of field labor. A field supplied and field installed electrical disconnect switch must be installed.
- **Easy service access** - Individual access panels provide access to all major components, for example, compressors, indoor coils, blowers, controls/electric heat kits, and filters, making servicing easy. Removing these panels allows easy removal of components such as the blower assembly for maintenance and troubleshooting.
- **Top discharge** - The top-discharge outdoor fan does not disrupt neighboring areas or dry out vegetation surrounding the unit. The warm air from the top mounted fan is blown up and away from the structure and any landscaping.
- **Outdoor coil grille** - All models use a stamped slotted design that provides superior impact protection against small objects during transit and after installation.

Indoor blower assembly - The blower shall be a direct drive design. The blower wheel shall be a double-inlet type with forward-curved blades, dynamically balanced to operate smoothly throughout the entire range of operation. The design shall use constant torque motors. Bearings shall be sealed and permanently lubricated for longer life and no maintenance. The blower assembly shall be a slide-out design for easy removal and cleaning. Indoor blower motors shall be equipped with a standard high efficiency brushless DC motor (constant torque), also known as a standard ECM motor.

Outdoor fan assembly - The outdoor fan shall be of the direct-driven propeller type, discharge air vertically, have aluminum blades riveted to a corrosion resistant steel spider bracket, and be statically balanced for smooth operation. The outdoor fan motor shall be totally enclosed with permanently lubricated bearings and internally protected against overload conditions.

Refrigerant components

- **Protected compressor** - The compressor shall be a fully hermetic type, direct drive compressor, that is internally protected against high pressure and temperature. This is accomplished by the simultaneous operation of a scroll bypass valve and a temperature thermal overload sensor, which protects the compressor if undesirable operating conditions occur. The hermetic motor shall be suction gas cooled and have a voltage range of $\pm 10\%$ of the unit nameplate voltage. Compressors shall have internal isolation and sound muffling to minimize vibration and noise, and be externally isolated on a dedicated, independent mounting.
- **Indoor coils** - Indoor coils shall be of the direct expansion, draw through design and have aluminum plate fins mechanically bonded to seamless internally enhanced aluminum tubes with all joints brazed.
- **Condensate pan** - A corrosion-resistant, long-lasting, water-tight pan is positioned below the indoor coil to collect and drain all condensate, preventing build-up of stagnant condensate. The condensate pan conforms to ASHRAE 62-19 standards (Ventilation for Acceptable Indoor Air Quality).
- **Condensate drain** - The 3/4 in. NPT female connection is rigidly mounted to ensure correct fit and leak tight seal.
- **Outdoor coils** - Outdoor coils shall have aluminum plate fins mechanically bonded to seamless internally enhanced copper tubes with all joints brazed, and be a draw through design.

Refrigerant circuit and refrigerant safety components shall include the following:

- Thermal expansion valve (TXV) that is factory mounted and provided
- Filter/strainer to eliminate any foreign matter
- Reversing valves to control refrigerant flow

Controls

- **Simple control circuit** - A printed circuit board contains a status/diagnostic indicator light. Field thermostat wiring connects to color-coded leads using twist-on wire connections. Cooling controls use contactor and relays for simple application and troubleshooting. MATE-N-LOK plug connectors are used. The electrical control box is not located in the compressor compartment. The controls are mounted to allow the separate access panel to be removed for troubleshooting and maintenance without affecting the normal system operating pressures. All wiring internal to the unit is numbered and color-coded.
- **Controls** - Demand defrost curves pre-loaded into defrost control for optimized performance based on unit capacities.
- **Pressure switches** - A high-pressure switch is standard in all units. When abnormal conditions are sensed through the pressure switch, the unit locks out, preventing any further operation until it is reset or the problem is corrected.
- **Factory testing** - Installation time and costs are reduced by easy power and control wiring connections. All units are completely wired, charged with R-410A refrigerant, and tested before shipment. Test stations using a state-of-the-art computerized process system shall be used to ensure product quality. Refrigerant charge and component part numbers are verified using computer bar code scans during assembly. Vital run test statistics such as system pressure, motor currents, air velocity and temperature, unit vibration, and gas system safeties are monitored and recorded by the system to ensure unit performance. This data could be provided by serial number tracking if necessary.
- **Electric heat** - All electric heat models use 6HK electric heat, which is available in 208/230-1-60 from 5 kW to 25 kW. Most kits are stageable above 10 kW. Single-point accessory kits are available for single-phase models. Single-phase single-point field wiring kits are available for all applications except 25 kW. Electric heat kits must be certified to UL 1995 standard requirements.

Physical data

Nominal tonnage	Models					
	PHE4A24	PHE4A30	PHE4B36	PHE4B42	PHE4B48	PHE4B60
	2.0	2.5	3.0	3.5	4.0	5.0
AHRI cooling performance						
Gross capacity at AHRI A point (MBH)	24.4	30.1	36.0	42.3	48.9	61.3
AHRI net capacity (MBH)	23.8	29.4	35.2	41.0	47.5	59.0
EER2	11.0	11.0	11.0	11.0	11.0	11.0
SEER2	13.4	13.4	13.4	13.4	13.4	13.4
Nominal CFM	780	960	1150	1430	1490	1890
System power (kW)	2.2	2.7	3.2	3.7	4.3	5.4
Refrigerant type	R-410A	R-410A	R-410A	R-410A	R-410A	R-410A
Refrigerant charge (lb-oz)	4-9	7-4	9-6	9-6	14-4	11-10
AHRI heating performance						
47°F capacity rating (MBH)	23.8	28.4	34.8	39.5	47.0	57.0
System power (kW/COP)	1.9 / 3.6	2.3 / 3.6	2.9 / 3.5	3.3 / 3.5	3.8 / 3.6	4.8 / 3.5
17°F capacity rating (MBH)	14.0	16.2	20.2	22.6	27.1	33.9
HSPF2 (Btu/Wh)	6.7	6.7	6.7	6.7	6.7	6.7
Dimensions (in.)						
Length	51 1/4	51 1/4	51 1/4	51 1/4	51 1/4	51 1/4
Width	35 3/4	35 3/4	45 3/4	45 3/4	45 3/4	45 3/4
Height	44	45	47	47	53	55
Operating weight (lb)	330	355	420	436	479	485
Compressors						
Type	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
Outdoor coil data						
Face area (sq. ft)	12.3	13.8	17.6	17.6	24.2	26.4
Rows	1	2	2	2	2	2
Fins per inch	22	22	22	22	22	22
Tube diameter (mm)	7	7	7	7	7	7
Circuitry type	Interlaced	Interlaced	Interlaced	Interlaced	Interlaced	Interlaced
Refrigerant control	TXV	TXV	TXV	TXV	TXV	TXV
Indoor coil data						
Face area (ft ²)	4.6	4.6	6.3	6.3	6.3	6.3
Rows	3	3	3	3	4	4
Fins per inch	16	16	16	16	16	16
Tube diameter (in.)	3/8	3/8	3/8	3/8	3/8	3/8
Circuitry type	Interlaced	Interlaced	Interlaced	Interlaced	Interlaced	Interlaced
Refrigerant control	TXV	TXV	TXV	TXV	TXV	TXV
Outdoor fan data						
Fan diameter (in.)	24	24	26	26	26	26
Type	Prop	Prop	Prop	Prop	Prop	Prop
Drive type	Direct	Direct	Direct	Direct	Direct	Direct
Number of speeds	1	1	1	1	1	1
Motor HP each	1/4	1/4	1/3	1/3	1/3	1/3
RPM	850	850	850	850	850	850
Nominal total CFM	2800	2850	3450	3450	4000	4000
Direct drive indoor blower data						
Fan size (in.)	11 x 8	11 x 8	11 x 10	11 x 10	11 x 10	11 x 10
Type	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal
Motor HP each	1/2	1/2	1/2	3/4	3/4	1
RPM	1200 maximum	1200 maximum	1200 maximum	1200 maximum	1200 maximum	1200 maximum
Frame size	48	48	48	48	48	48
Filters						
Filter size	A	A	B	B	B	B
Quantity - size	Field-supplied external filters must be sized so as not to exceed 300 fpm air velocity through disposable filters. For internal filter use, a filter rack kit is available. Refer to the instructions supplied with the kit for replacement filter sizes. Filter sizes: A = 20 in. x 20 in., B = 20 in. x 30 in.					

Cooling performance data - 2 ton																
Packaged unit model number		PHE4A2424														
Condenser entering air temp DB/WB (°F)	ID SCFM	600					800					1000				
	IDDB (°F)	80	80	75	80	80	80	80	75	80	80	80	80	75	80	80
	IDWB (°F)	57	62	62	67	72	57	62	62	67	72	57	62	62	67	72
55 / 45	Total capacity (MBH)	26.4	28.7	29.0	32.4	35.1	29.4	30.9	31.3	34.9	37.0	32.3	33.0	33.6	37.5	39.0
	Sensible capacity (MBH)	26.2	28.7	20.0	20.4	16.8	29.3	30.8	23.2	23.4	18.6	32.3	33.0	26.3	26.5	20.4
	Total power (kW)	1.08	1.25	1.05	1.03	1.00	1.05	1.30	1.03	1.02	0.99	1.03	1.35	1.02	1.00	0.99
65 / 55	Total capacity (MBH)	24.8	26.7	26.7	30.3	32.8	27.6	28.4	28.5	32.5	34.6	30.5	30.2	30.2	34.6	34.2
	Sensible capacity (MBH)	24.7	26.6	18.6	19.3	15.6	27.6	28.4	21.5	22.3	17.3	30.5	30.1	24.3	25.2	19.0
	Total power (kW)	1.23	1.41	1.30	1.19	1.26	1.21	1.46	1.32	1.18	1.29	1.19	1.51	1.35	1.17	1.31
75 / 63	Total capacity (MBH)	23.1	24.6	24.5	28.3	30.5	25.9	26.0	25.7	30.0	32.1	28.7	27.4	26.8	31.7	33.7
	Sensible capacity (MBH)	23.1	24.6	17.2	18.2	14.4	25.9	26.0	19.8	21.1	16.0	28.6	27.3	22.3	24.0	17.6
	Total power (kW)	1.38	1.56	1.56	1.35	1.53	1.37	1.62	1.62	1.34	1.58	1.35	1.67	1.67	1.33	1.64
85 / 69	Total capacity (MBH)	21.7	22.8	22.9	26.2	28.2	24.1	24.1	23.9	27.6	29.6	26.5	25.4	24.9	29.0	31.0
	Sensible capacity (MBH)	21.7	22.8	16.4	17.0	13.6	24.1	24.1	18.9	19.8	15.1	26.4	25.4	21.5	22.5	16.6
	Total power (kW)	1.55	1.74	1.74	1.63	1.67	1.54	1.80	1.80	1.66	1.75	1.54	1.86	1.86	1.69	1.83
95 / 75	Total capacity (MBH)	20.3	21.0	21.3	24.0	26.0	22.3	22.2	22.1	25.1	27.2	24.3	23.5	22.9	26.2	28.4
	Sensible capacity (MBH)	20.3	21.0	15.6	15.8	12.8	22.3	22.2	18.1	18.4	14.2	24.2	23.4	20.6	21.0	15.6
	Total power (kW)	1.73	1.92	1.92	1.91	1.82	1.72	1.99	1.98	1.98	1.93	1.72	2.05	2.04	2.04	2.03
105 / 83	Total capacity (MBH)	18.6	19.0	19.1	21.7	23.6	20.0	20.0	19.6	22.5	24.5	21.5	21.1	20.2	23.3	25.4
	Sensible capacity (MBH)	18.5	19.0	14.6	14.8	11.8	20.0	20.0	16.6	17.3	13.1	21.5	21.0	18.7	19.8	14.5
	Total power (kW)	1.97	2.10	2.10	2.09	2.03	1.97	2.14	2.14	2.13	2.10	1.97	2.19	2.18	2.17	2.17
115 / 89	Total capacity (MBH)	16.9	17.1	17.0	19.5	21.4	17.8	17.9	17.3	20.0	21.9	18.8	18.7	17.6	20.5	22.5
	Sensible capacity (MBH)	16.8	17.0	13.6	13.9	10.8	17.8	17.9	15.2	16.3	12.1	18.8	18.7	16.8	18.7	13.4
	Total power (kW)	2.21	2.28	2.27	2.27	2.23	2.21	2.30	2.29	2.29	2.26	2.21	2.32	2.31	2.30	2.30
125 / 95	Total capacity (MBH)	15.1	15.1	14.8	17.3	19.1	15.6	15.7	14.9	17.4	19.4	16.1	16.4	14.9	17.6	19.6
	Sensible capacity (MBH)	15.1	15.1	12.7	12.9	9.8	15.6	15.7	13.8	15.3	11.0	16.1	16.3	14.9	17.6	12.3
	Total power (kW)	2.45	2.45	2.45	2.45	2.43	2.45	2.45	2.45	2.44	2.43	2.46	2.45	2.45	2.44	2.43

Cooling performance data - 2.5 ton																
Packaged unit model number		PHE4A3024														
Condenser entering air temp DB/WB (°F)	ID SCFM	800					1000					1200				
	IDDB (°F)	80	80	75	80	80	80	80	75	80	80	80	80	75	80	80
	IDWB (°F)	57	62	62	67	72	57	62	62	67	72	57	62	62	67	72
55 / 45	Total capacity (MBH)	31.6	35.2	33.6	38.4	41.5	34.0	37.9	36.1	40.1	42.7	36.5	40.7	38.5	41.9	47.9
	Sensible capacity (MBH)	30.7	28.4	23.1	23.0	19.6	33.1	32.3	26.1	24.0	21.3	35.5	36.2	29.0	28.6	23.0
	Total power (kW)	1.46	1.44	1.44	1.42	1.41	1.51	1.50	1.50	1.48	1.47	1.56	1.56	1.56	1.54	1.54
65 / 55	Total capacity (MBH)	29.6	31.9	32.2	35.4	40.0	32.0	34.3	34.7	37.6	42.6	34.5	36.7	37.1	39.7	47.1
	Sensible capacity (MBH)	28.8	26.8	22.5	22.3	18.8	31.2	30.4	25.5	24.1	20.5	33.5	34.0	28.5	27.9	22.2
	Total power (kW)	1.63	1.61	1.61	1.60	1.58	1.68	1.67	1.67	1.66	1.64	1.73	1.73	1.73	1.72	1.71
75 / 63	Total capacity (MBH)	27.6	28.6	30.9	32.4	38.5	30.0	30.6	33.3	35.0	42.5	32.4	32.7	35.7	37.6	46.6
	Sensible capacity (MBH)	26.9	25.3	21.9	21.3	18.0	29.2	28.6	24.9	24.2	19.7	31.5	31.8	27.9	27.1	21.4
	Total power (kW)	1.80	1.78	1.78	1.77	1.76	1.85	1.84	1.85	1.83	1.82	1.91	1.90	1.91	1.89	1.88
85 / 69	Total capacity (MBH)	26.4	27.2	27.8	29.8	36.1	28.3	29.3	29.9	32.2	39.2	30.3	31.4	31.9	34.6	42.3
	Sensible capacity (MBH)	25.7	24.8	20.5	20.4	17.0	27.6	27.7	23.4	23.3	18.7	29.5	30.6	26.3	26.2	20.4
	Total power (kW)	1.98	1.97	1.97	1.97	1.96	2.04	2.03	2.04	2.03	2.03	2.10	2.10	2.10	2.09	2.09
95 / 75	Total capacity (MBH)	25.2	25.9	24.7	27.2	33.7	26.7	28.0	26.4	29.4	35.9	28.1	30.1	28.1	31.7	38.1
	Sensible capacity (MBH)	24.6	24.3	19.1	19.5	16.0	26.0	26.8	21.9	22.4	17.7	27.4	29.3	24.7	25.2	19.3
	Total power (kW)	2.16	2.16	2.16	2.16	2.17	2.23	2.22	2.22	2.23	2.24	2.30	2.29	2.29	2.29	2.31
105 / 83	Total capacity (MBH)	22.7	23.8	22.5	25.3	30.2	23.9	25.5	23.7	27.2	32.3	25.1	27.2	24.8	29.0	34.4
	Sensible capacity (MBH)	22.1	22.5	17.9	18.3	14.4	23.3	24.5	20.1	21.0	15.8	24.5	26.5	22.4	23.7	17.2
	Total power (kW)	2.40	2.40	2.40	2.40	2.41	2.47	2.47	2.47	2.47	2.48	2.54	2.54	2.53	2.54	2.55
115 / 89	Total capacity (MBH)	20.3	21.7	20.3	23.4	26.8	21.3	23.1	21.0	24.9	28.8	22.2	24.4	21.6	26.4	30.9
	Sensible capacity (MBH)	19.8	20.9	16.8	17.2	12.9	20.7	22.3	18.5	19.7	14.0	21.7	23.7	20.1	22.3	15.2
	Total power (kW)	2.64	2.64	2.63	2.64	2.65	2.71	2.71	2.70	2.71	2.72	2.77	2.78	2.77	2.78	2.79
125 / 95	Total capacity (MBH)	17.9	19.7	18.2	21.5	23.4	18.6	20.6	18.3	22.7	25.3	19.3	21.5	18.4	23.9	27.3
	Sensible capacity (MBH)	17.5	19.2	15.6	16.1	11.3	18.1	20.1	16.8	18.4	12.2	18.8	20.9	17.9	20.8	13.2
	Total power (kW)	2.87	2.88	2.87	2.87	2.89	2.94	2.95	2.94	2.95	2.96	3.01	3.02	3.01	3.02	3.03

Cooling performance data - 3 ton																
Packaged unit model number		PHE4B3624														
Condenser entering air temp DB/WB (°F)	ID SCFM	1000					1200					1400				
	IDDB (°F)	80	80	75	80	80	80	80	75	80	80	80	80	75	80	80
	IDWB (°F)	57	62	62	67	72	57	62	62	67	72	57	62	62	67	72
55 / 45	Total capacity (MBH)	38.8	41.2	39.8	45.3	48.0	42.0	43.4	42.0	47.1	49.8	45.2	45.6	44.2	49.0	51.7
	Sensible capacity (MBH)	37.2	34.3	28.1	28.8	22.5	40.3	38.3	31.3	31.1	24.4	43.4	42.2	34.5	33.4	26.3
	Total power (kW)	1.80	1.80	1.81	1.79	1.78	1.86	1.87	1.87	1.85	1.84	1.92	1.93	1.93	1.91	1.91
65 / 55	Total capacity (MBH)	36.3	38.4	37.8	42.4	45.9	39.4	40.5	40.2	44.1	48.3	42.5	42.7	42.6	45.9	50.7
	Sensible capacity (MBH)	34.9	32.8	27.4	27.7	22.6	37.9	36.4	30.6	30.3	24.4	41.0	40.1	33.7	32.9	26.3
	Total power (kW)	2.00	2.00	2.01	1.99	1.98	2.06	2.06	2.07	2.05	2.04	2.13	2.13	2.13	2.11	2.11
75 / 63	Total capacity (MBH)	33.8	35.6	35.8	39.5	43.8	36.8	37.6	38.5	41.1	46.7	39.7	39.7	41.1	42.8	49.7
	Sensible capacity (MBH)	32.6	31.2	26.7	26.6	22.6	35.5	34.6	29.8	29.5	24.5	38.5	38.0	33.0	32.4	26.3
	Total power (kW)	2.21	2.20	2.21	2.20	2.18	2.27	2.26	2.27	2.26	2.24	2.33	2.32	2.34	2.32	2.31
85 / 69	Total capacity (MBH)	32.7	33.7	33.2	37.3	41.6	35.2	35.5	36.6	38.8	44.0	37.8	37.3	40.0	40.4	46.3
	Sensible capacity (MBH)	31.7	30.5	25.3	25.6	21.2	34.4	33.4	28.3	28.6	23.0	37.0	36.4	31.3	31.5	24.8
	Total power (kW)	2.44	2.44	2.44	2.44	2.43	2.51	2.51	2.51	2.50	2.50	2.57	2.57	2.58	2.56	2.56
95 / 75	Total capacity (MBH)	31.5	31.9	30.6	35.0	39.5	33.7	33.4	34.7	36.5	41.2	35.8	34.9	38.9	38.0	43.0
	Sensible capacity (MBH)	30.9	29.8	23.9	24.7	19.7	33.2	32.3	26.8	27.7	21.5	35.6	34.9	29.6	30.7	23.4
	Total power (kW)	2.68	2.68	2.68	2.68	2.68	2.75	2.75	2.75	2.74	2.75	2.82	2.82	2.82	2.81	2.81
105 / 83	Total capacity (MBH)	28.5	28.6	27.1	31.5	35.6	30.2	29.9	29.8	32.5	36.6	31.8	31.2	32.6	33.4	37.6
	Sensible capacity (MBH)	28.1	27.2	22.3	23.2	18.2	29.9	29.2	24.3	25.9	19.6	31.7	31.2	26.4	28.6	21.1
	Total power (kW)	2.99	2.99	2.99	2.99	3.00	3.06	3.06	3.06	3.06	3.07	3.13	3.13	3.13	3.13	3.14
115 / 89	Total capacity (MBH)	25.6	25.4	23.7	28.1	31.9	26.8	26.5	25.1	28.6	32.2	28.0	27.6	26.5	29.0	32.4
	Sensible capacity (MBH)	25.4	24.7	20.6	21.7	16.7	26.7	26.2	22.0	24.1	17.8	27.9	27.6	23.4	26.6	18.9
	Total power (kW)	3.29	3.29	3.29	3.30	3.31	3.36	3.36	3.36	3.37	3.38	3.43	3.44	3.43	3.44	3.45
125 / 95	Total capacity (MBH)	22.7	22.2	20.3	24.6	28.2	23.4	23.1	20.3	24.6	27.7	24.1	24.0	20.3	24.6	27.3
	Sensible capacity (MBH)	22.7	22.2	19.0	20.2	15.3	23.4	23.1	19.7	22.4	16.0	24.1	24.0	20.3	24.6	16.7
	Total power (kW)	3.59	3.59	3.59	3.61	3.62	3.66	3.67	3.66	3.68	3.69	3.74	3.74	3.73	3.75	3.76

Cooling performance data - 3.5 ton																
Packaged unit model number		PHE4B4224														
Condenser entering air temp DB/WB (°F)	ID SCFM	1200					1400					1600				
	IDDB (°F)	80	80	75	80	80	80	80	75	80	80	80	80	75	80	80
	IDWB (°F)	57	62	62	67	72	57	62	62	67	72	57	62	62	67	72
55 / 45	Total capacity (MBH)	47.9	50.7	50.8	59.4	62.8	50.5	52.8	52.6	59.8	64.5	53.0	55.0	54.3	60.3	67.4
	Sensible capacity (MBH)	46.4	42.1	36.6	37.7	30.5	48.7	45.9	39.4	40.3	32.3	51.1	49.6	42.1	43.0	34.0
	Total power (kW)	2.11	2.10	2.10	2.07	2.05	2.16	2.16	2.16	2.13	2.11	2.21	2.22	2.22	2.19	2.17
65 / 55	Total capacity (MBH)	45.0	46.8	47.0	54.7	59.5	47.3	48.8	48.7	56.3	63.0	49.6	50.8	50.3	58.0	67.0
	Sensible capacity (MBH)	43.9	39.9	34.4	35.9	29.1	46.1	43.3	37.1	38.7	31.1	48.3	46.7	39.8	41.5	33.1
	Total power (kW)	2.37	2.36	2.36	2.34	2.31	2.42	2.42	2.42	2.40	2.37	2.48	2.48	2.48	2.46	2.44
75 / 63	Total capacity (MBH)	42.1	43.0	43.2	50.0	56.1	44.2	44.8	44.8	52.9	61.4	46.2	46.6	46.4	55.8	66.7
	Sensible capacity (MBH)	41.4	37.7	32.2	34.1	27.8	43.5	40.8	34.9	37.0	29.9	45.5	43.9	37.5	39.9	32.1
	Total power (kW)	2.62	2.61	2.61	2.60	2.57	2.68	2.67	2.68	2.66	2.64	2.74	2.74	2.74	2.73	2.71
85 / 69	Total capacity (MBH)	39.4	39.6	39.9	46.3	51.9	41.4	41.2	41.2	48.4	55.3	43.4	42.7	42.5	50.5	58.7
	Sensible capacity (MBH)	38.8	36.0	30.6	32.2	25.7	40.8	38.6	33.0	35.0	27.7	42.8	41.1	35.5	37.8	29.7
	Total power (kW)	2.89	2.89	2.89	2.89	2.88	2.96	2.96	2.96	2.96	2.95	3.03	3.03	3.03	3.02	3.02
95 / 75	Total capacity (MBH)	36.6	36.3	36.6	42.7	47.7	38.6	37.6	37.6	44.0	49.2	40.5	38.8	38.5	45.3	50.6
	Sensible capacity (MBH)	36.2	34.3	28.9	30.3	23.7	38.1	36.4	31.2	33.0	25.5	40.0	38.4	33.4	35.6	27.3
	Total power (kW)	3.17	3.17	3.17	3.18	3.19	3.24	3.25	3.24	3.25	3.25	3.31	3.32	3.31	3.32	3.32
105 / 83	Total capacity (MBH)	33.2	33.3	32.7	38.4	43.4	34.7	34.3	33.4	39.2	44.5	36.2	35.4	34.2	40.1	45.6
	Sensible capacity (MBH)	32.8	31.9	27.3	28.4	22.1	34.3	33.4	29.0	30.9	23.9	35.8	35.0	30.7	33.3	25.6
	Total power (kW)	3.53	3.53	3.53	3.54	3.55	3.61	3.60	3.60	3.61	3.62	3.68	3.68	3.67	3.68	3.69
115 / 89	Total capacity (MBH)	29.9	30.4	28.9	34.1	39.3	31.0	31.2	29.4	34.6	40.0	32.1	32.0	29.9	35.0	40.7
	Sensible capacity (MBH)	29.5	29.6	25.7	26.6	20.6	30.6	30.6	26.8	28.8	22.3	31.7	31.7	28.0	31.0	24.0
	Total power (kW)	3.88	3.88	3.87	3.89	3.90	3.96	3.95	3.94	3.96	3.97	4.04	4.03	4.02	4.03	4.04
125 / 95	Total capacity (MBH)	26.6	27.5	25.1	29.9	35.2	27.2	28.1	25.4	30.0	35.5	27.9	28.7	25.7	30.0	35.9
	Sensible capacity (MBH)	26.3	27.2	24.0	24.8	19.1	26.9	27.8	24.7	26.8	20.7	27.6	28.3	25.4	28.8	22.3
	Total power (kW)	4.23	4.23	4.21	4.24	4.26	4.31	4.30	4.29	4.31	4.33	4.40	4.38	4.36	4.38	4.40

Cooling performance data - 4 ton																
Packaged unit model number		PHE4B4824														
Condenser entering air temp DB/WB (°F)	ID SCFM	1300					1500					1700				
	IDDB (°F)	80	80	75	80	80	80	80	75	80	80	80	80	75	80	80
	IDWB (°F)	57	62	62	67	72	57	62	62	67	72	57	62	62	67	72
55 / 45	Total capacity (MBH)	49.8	53.9	53.6	58.9	60.3	52.3	55.4	55.0	59.6	60.7	54.9	56.8	56.5	60.3	61.0
	Sensible capacity (MBH)	49.4	45.8	39.1	39.5	36.7	52.3	48.7	41.7	42.1	39.6	54.9	51.7	44.3	44.6	42.5
	Total power (kW)	2.48	2.45	2.45	2.43	2.42	2.53	2.51	2.51	2.49	2.49	2.58	2.57	2.57	2.55	2.55
65 / 55	Total capacity (MBH)	47.8	50.7	50.8	56.4	58.1	50.4	52.2	52.3	57.3	59.0	52.9	53.8	53.7	58.3	59.9
	Sensible capacity (MBH)	47.8	43.7	37.4	38.0	35.0	50.4	46.6	39.9	40.8	37.3	52.9	49.5	42.4	43.6	39.6
	Total power (kW)	2.74	2.73	2.73	2.72	2.72	2.80	2.79	2.80	2.79	2.78	2.86	2.86	2.86	2.85	2.85
75 / 63	Total capacity (MBH)	45.9	47.5	48.1	53.9	56.0	48.4	49.1	49.5	55.1	57.3	51.0	50.8	51.0	56.3	58.7
	Sensible capacity (MBH)	45.9	41.6	35.7	36.6	33.2	48.4	44.5	38.1	39.5	35.0	51.0	47.3	40.6	42.5	36.7
	Total power (kW)	3.00	3.01	3.01	3.01	3.01	3.07	3.08	3.08	3.08	3.08	3.14	3.15	3.15	3.15	3.15
85 / 69	Total capacity (MBH)	43.4	44.6	45.1	50.6	53.5	45.2	45.9	46.4	51.9	54.6	46.9	47.2	47.6	53.1	55.8
	Sensible capacity (MBH)	43.4	40.3	34.0	35.1	32.6	45.2	43.0	36.4	37.7	34.4	46.9	45.6	38.8	40.4	36.1
	Total power (kW)	3.31	3.31	3.32	3.34	3.11	3.23	3.38	3.39	3.41	3.15	3.16	3.46	3.47	3.48	3.19
95 / 75	Total capacity (MBH)	40.9	41.8	42.2	47.3	51.0	41.9	42.7	43.3	48.6	51.9	42.8	43.6	44.3	49.9	52.9
	Sensible capacity (MBH)	40.9	39.0	32.4	33.6	32.0	41.9	41.5	34.7	36.0	33.8	42.8	43.6	37.0	38.3	35.5
	Total power (kW)	3.61	3.62	3.64	3.66	3.21	3.39	3.69	3.71	3.73	3.22	3.18	3.77	3.78	3.81	3.23
105 / 83	Total capacity (MBH)	37.4	38.0	37.4	42.6	46.2	38.0	38.5	38.1	43.6	47.1	38.5	39.0	38.9	44.6	48.1
	Sensible capacity (MBH)	37.4	36.2	30.1	31.2	29.1	38.0	37.8	32.1	33.4	30.8	38.5	39.0	34.1	35.7	32.4
	Total power (kW)	3.87	3.88	4.05	4.07	3.78	3.73	3.93	4.12	4.14	3.81	3.59	3.98	4.20	4.22	3.84
115 / 89	Total capacity (MBH)	34.0	34.3	32.7	38.0	41.5	34.1	34.4	33.1	38.7	42.5	34.3	34.5	33.6	39.4	43.4
	Sensible capacity (MBH)	34.0	33.5	27.9	28.8	26.4	34.1	34.2	29.6	31.0	27.9	34.3	34.5	31.3	33.1	29.4
	Total power (kW)	4.13	4.13	4.44	4.46	4.33	4.06	4.16	4.52	4.54	4.39	3.99	4.19	4.59	4.62	4.44
125 / 95	Total capacity (MBH)	30.6	30.6	28.0	33.5	36.9	30.3	30.3	28.1	33.8	37.8	30.1	30.1	28.3	34.1	38.7
	Sensible capacity (MBH)	30.6	30.6	25.6	26.5	23.6	30.3	30.3	27.1	28.5	25.0	30.1	30.1	28.3	30.5	26.5
	Total power (kW)	4.38	4.38	4.84	4.86	4.88	4.39	4.39	4.92	4.94	4.96	4.39	4.39	4.99	5.01	5.04

Cooling performance data - 5 ton																
Packaged unit model number		PHE4B6024														
Condenser entering air temp DB/WB (°F)	ID SCFM	1600					1800					2000				
	IDDB (°F)	80	80	75	80	80	80	80	75	80	80	80	80	75	80	80
	IDWB (°F)	57	62	62	67	72	57	62	62	67	72	57	62	62	67	72
55 / 45	Total capacity (MBH)	65.6	69.4	68.1	73.1	72.9	69.0	71.4	70.3	74.5	74.5	72.5	73.5	72.5	75.8	76.0
	Sensible capacity (MBH)	64.3	58.0	48.1	47.3	37.1	67.0	62.4	51.6	49.8	41.1	69.7	66.8	55.0	52.3	45.0
	Total power (kW)	3.18	3.16	3.15	3.15	3.13	3.28	3.26	3.24	3.24	3.24	3.37	3.36	3.34	3.34	3.34
65 / 55	Total capacity (MBH)	61.4	64.7	64.3	69.9	72.4	65.0	67.0	66.8	71.5	74.0	68.6	69.2	69.3	73.1	75.6
	Sensible capacity (MBH)	60.1	55.3	46.5	46.0	36.8	63.3	59.9	50.1	49.0	39.5	66.5	64.5	53.7	51.9	42.2
	Total power (kW)	3.51	3.50	3.50	3.51	3.51	3.61	3.60	3.59	3.60	3.61	3.71	3.69	3.69	3.70	3.70
75 / 63	Total capacity (MBH)	57.2	60.1	60.4	66.8	72.0	61.0	62.6	63.3	68.6	73.6	64.7	65.0	66.1	70.4	75.3
	Sensible capacity (MBH)	55.9	52.6	44.8	44.8	36.5	59.6	57.4	48.6	48.2	38.0	63.4	62.2	52.3	51.6	39.5
	Total power (kW)	3.84	3.84	3.85	3.87	3.88	3.95	3.93	3.94	3.97	3.97	4.05	4.03	4.04	4.06	4.07
85 / 69	Total capacity (MBH)	54.8	56.9	56.1	62.3	67.7	58.2	59.1	58.2	64.1	69.1	61.5	61.2	60.4	65.9	70.4
	Sensible capacity (MBH)	54.0	51.4	42.5	42.6	33.5	57.5	55.6	46.1	46.2	35.6	61.0	59.9	49.7	49.7	37.6
	Total power (kW)	4.24	4.24	4.24	4.26	4.29	4.34	4.33	4.33	4.36	4.39	4.45	4.43	4.43	4.46	4.48
95 / 75	Total capacity (MBH)	52.4	53.8	51.7	57.8	63.4	55.4	55.6	53.2	59.6	64.5	58.4	57.4	54.6	61.4	65.6
	Sensible capacity (MBH)	52.2	50.1	40.1	40.4	30.6	55.4	53.9	43.5	44.1	33.2	58.4	57.4	47.0	47.8	35.8
	Total power (kW)	4.63	4.63	4.63	4.66	4.71	4.73	4.73	4.73	4.76	4.80	4.84	4.83	4.83	4.86	4.90
105 / 83	Total capacity (MBH)	48.2	48.8	46.6	52.5	57.4	50.5	50.7	47.8	53.6	58.1	52.9	52.6	49.1	54.8	58.8
	Sensible capacity (MBH)	48.1	46.5	37.6	38.1	28.8	50.5	49.7	40.9	41.6	31.0	52.9	52.6	44.2	45.0	33.3
	Total power (kW)	5.15	5.15	5.14	5.18	5.23	5.26	5.26	5.25	5.28	5.33	5.37	5.36	5.35	5.39	5.42
115 / 89	Total capacity (MBH)	44.1	44.1	41.5	47.3	51.6	45.8	46.0	42.7	47.8	52.0	47.6	47.9	43.8	48.4	52.3
	Sensible capacity (MBH)	44.1	43.0	35.2	35.9	27.0	45.8	45.6	38.3	39.1	28.9	47.6	47.9	41.4	42.3	30.7
	Total power (kW)	5.66	5.65	5.64	5.69	5.74	5.77	5.77	5.75	5.79	5.83	5.88	5.88	5.86	5.89	5.93
125 / 95	Total capacity (MBH)	40.0	39.3	36.5	42.0	45.8	41.2	41.3	37.5	42.0	45.8	42.4	43.3	38.4	42.0	45.7
	Sensible capacity (MBH)	40.0	39.3	32.8	33.7	25.3	41.2	41.3	35.8	36.7	26.8	42.4	43.3	38.4	39.6	28.2
	Total power (kW)	6.17	6.16	6.14	6.20	6.24	6.28	6.28	6.25	6.30	6.34	6.39	6.39	6.37	6.40	6.44

Heating performance data - 2 ton										
Packaged unit model number		PHE4A2424								
Air temperature entering outdoor coil	Air temperature entering indoor coil	ID CFM								
		600			800			1000		
		MBH	COP	kW	MBH	COP	kW	MBH	COP	kW
60	60	29.1	4.08	2.09	29.9	4.50	1.95	30.8	4.80	1.88
	70	27.9	3.56	2.30	28.5	4.40	1.90	28.6	4.07	2.06
	80	26.6	3.11	2.51	27.1	4.27	1.86	26.4	3.44	2.25
47	60	24.3	3.54	2.01	24.6	3.81	1.89	25.1	3.98	1.85
	70	23.3	3.10	2.20	23.6	3.74	1.85	24.0	3.45	2.04
	80	22.3	2.72	2.40	22.5	3.64	1.81	22.8	3.00	2.23
40	60	22.0	3.29	1.96	22.2	3.48	1.87	22.7	3.60	1.85
	70	20.9	2.84	2.16	21.1	3.40	1.82	21.4	3.09	2.03
	80	19.8	2.47	2.35	20.0	3.29	1.78	20.2	2.69	2.20
30	60	18.1	2.81	1.89	18.6	2.98	1.83	18.8	3.03	1.82
	70	15.8	2.28	2.03	16.1	2.65	1.78	17.8	2.62	1.99
	80	13.5	1.81	2.18	13.6	2.29	1.74	16.7	2.26	2.17
17	60	13.7	2.22	1.81	14.4	2.37	1.78	14.3	2.35	1.79
	70	12.7	1.87	1.99	13.4	2.26	1.74	13.2	1.98	1.95
	80	11.7	1.58	2.17	12.3	2.12	1.70	12.1	1.67	2.12
10	60	11.7	1.94	1.77	12.1	2.03	1.75	11.8	1.95	1.77
	70	10.7	1.60	1.96	11.0	1.69	1.91	10.8	1.64	1.93
	80	9.8	1.34	2.14	9.9	1.40	2.07	9.9	1.39	2.08

Heating performance data - 2.5 ton										
Packaged unit model number		PHE4A3024								
Air temperature entering outdoor coil	Air temperature entering indoor coil	ID CFM								
		800			1000			1200		
		MBH	COP	kW	MBH	COP	kW	MBH	COP	kW
60	60	34.4	4.63	2.18	36.8	5.04	2.14	39.2	5.47	2.10
	70	32.8	4.04	2.38	34.5	4.34	2.33	36.1	4.64	2.28
	80	31.2	3.53	2.59	32.1	3.73	2.52	33.0	3.93	2.46
47	60	28.1	3.94	2.09	29.6	4.19	2.07	31.0	4.45	2.04
	70	26.9	3.46	2.28	28.1	3.66	2.25	29.3	3.89	2.21
	80	25.6	3.04	2.47	26.6	3.22	2.42	27.5	3.39	2.38
40	60	25.1	3.59	2.05	26.1	3.77	2.03	27.2	3.97	2.01
	70	23.9	3.16	2.22	24.9	3.32	2.20	25.9	3.48	2.18
	80	22.7	2.77	2.40	23.7	2.93	2.37	24.6	3.08	2.34
30	60	21.0	3.11	1.98	21.6	3.20	1.98	22.3	3.31	1.97
	70	19.9	2.71	2.15	20.6	2.82	2.14	21.4	2.94	2.13
	80	18.7	2.37	2.31	19.6	2.50	2.30	20.5	2.62	2.29
17	60	16.3	2.51	1.90	16.7	2.56	1.91	17.0	2.60	1.92
	70	15.1	2.17	2.04	15.6	2.23	2.05	16.1	2.28	2.07
	80	13.9	1.86	2.19	14.5	1.93	2.20	15.2	2.02	2.21
10	60	14.1	2.23	1.85	14.4	2.26	1.87	14.7	2.28	1.89
	70	12.7	1.87	1.99	13.1	1.91	2.01	13.5	1.95	2.03
	80	11.4	1.58	2.12	11.9	1.62	2.15	12.4	1.67	2.17

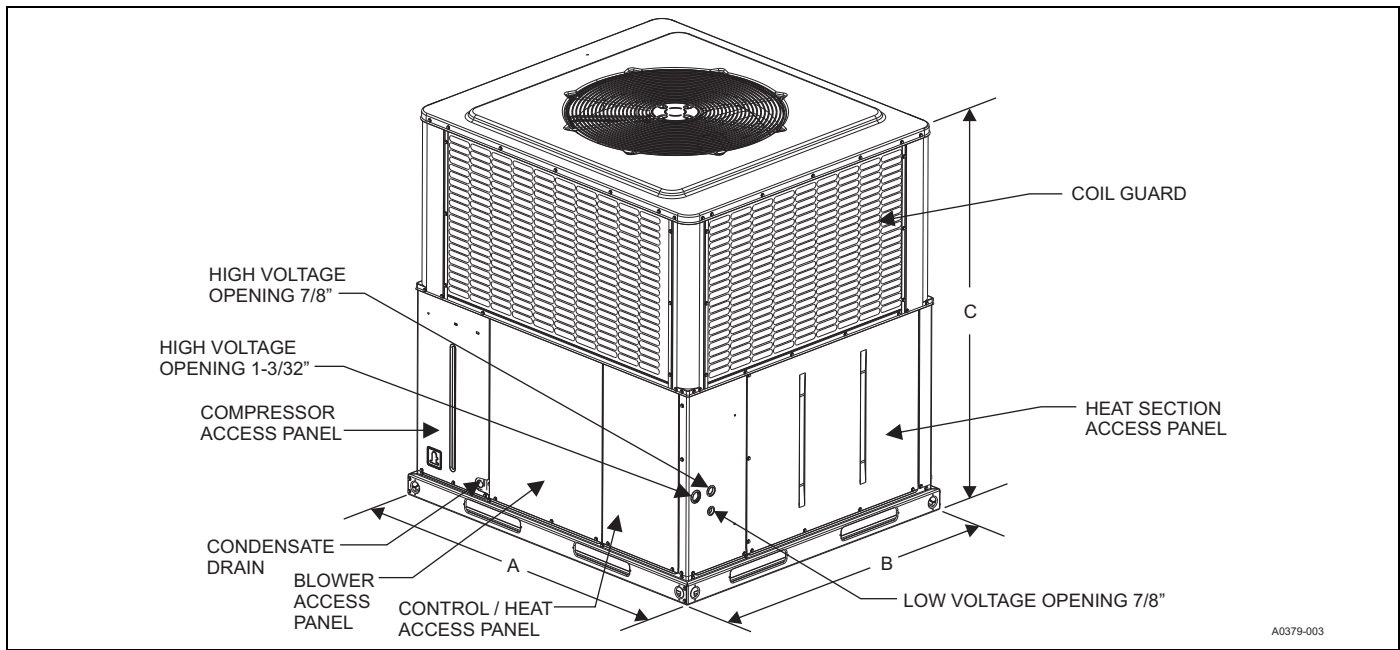
Heating performance data - 3 ton										
Packaged unit model number		PHE4B3624								
Air temperature entering outdoor coil	Air temperature entering indoor coil	ID CFM								
		1000			1200			1400		
		MBH	COP	kW	MBH	COP	kW	MBH	COP	kW
60	60	43.0	4.69	2.69	44.6	4.95	2.64	46.1	5.22	2.59
	70	40.2	3.97	2.97	41.9	4.22	2.91	43.7	4.50	2.85
	80	37.3	3.36	3.25	39.3	3.62	3.18	41.3	3.89	3.11
47	60	34.1	3.87	2.58	35.8	4.11	2.55	37.4	4.33	2.53
	70	33.0	3.42	2.83	34.6	3.62	2.80	36.2	3.84	2.76
	80	31.9	3.03	3.09	33.4	3.22	3.04	34.9	3.41	3.00
40	60	30.0	3.49	2.52	31.6	3.69	2.51	33.2	3.91	2.49
	70	29.5	3.13	2.76	30.9	3.31	2.74	32.4	3.49	2.72
	80	29.0	2.83	3.00	30.2	2.98	2.97	31.5	3.14	2.94
30	60	25.0	3.00	2.44	26.4	3.17	2.44	27.8	3.34	2.44
	70	24.8	2.74	2.65	26.0	2.88	2.65	28.0	3.10	2.65
	80	24.7	2.52	2.87	25.6	2.62	2.86	26.0	2.66	2.86
17	60	19.9	2.50	2.33	20.9	2.61	2.35	21.9	2.69	2.38
	70	19.4	2.26	2.52	20.2	2.33	2.54	21.0	2.39	2.57
	80	18.9	2.05	2.70	19.6	2.10	2.73	20.2	2.15	2.75
10	60	17.9	2.31	2.27	18.5	2.35	2.31	19.1	2.39	2.34
	70	16.9	2.03	2.44	17.4	2.06	2.48	18.0	2.09	2.52
	80	15.8	1.77	2.61	16.3	1.80	2.65	16.8	1.83	2.69

Heating performance data - 3.5 ton										
Packaged unit model number		PHE4B4224								
Air temperature entering outdoor coil	Air temperature entering indoor coil	ID CFM								
		1200			1400			1600		
		MBH	COP	kW	MBH	COP	kW	MBH	COP	kW
60	60	51.1	4.88	3.07	52.7	5.08	3.04	54.3	5.29	3.01
	70	48.9	4.32	3.32	50.2	4.46	3.30	51.6	4.60	3.29
	80	46.7	3.84	3.56	47.8	3.94	3.56	48.9	4.01	3.57
47	60	39.2	3.91	2.94	40.5	4.07	2.92	41.8	4.21	2.91
	70	37.6	3.47	3.18	39.2	3.61	3.18	40.8	3.76	3.18
	80	36.0	3.09	3.42	37.9	3.23	3.44	39.8	3.38	3.45
40	60	33.9	3.46	2.87	34.9	3.58	2.86	36.0	3.70	2.85
	70	32.6	3.07	3.11	34.0	3.20	3.11	35.5	3.33	3.12
	80	31.2	2.73	3.35	33.2	2.89	3.37	35.1	3.04	3.38
30	60	27.5	2.92	2.76	28.1	2.97	2.77	28.7	3.03	2.78
	70	26.4	2.58	3.00	27.6	2.68	3.02	28.0	2.71	3.03
	80	25.4	2.30	3.24	27.1	2.43	3.27	26.0	2.32	3.29
17	60	21.4	2.38	2.63	21.3	2.36	2.65	21.2	2.32	2.68
	70	20.6	2.11	2.86	20.8	2.11	2.89	21.1	2.11	2.93
	80	19.8	1.87	3.10	20.4	1.90	3.14	20.9	1.93	3.17
10	60	19.1	2.19	2.56	18.6	2.10	2.59	18.1	2.02	2.62
	70	18.4	1.93	2.79	18.0	1.86	2.83	17.5	1.79	2.87
	80	17.7	1.72	3.02	17.3	1.65	3.07	17.0	1.60	3.11

Heating performance data - 4 ton										
Packaged unit model number		PHE4B4824								
Air temperature entering outdoor coil	Air temperature entering indoor coil	ID CFM								
		1300			1500			1700		
		MBH	COP	kW	MBH	COP	kW	MBH	COP	kW
60	60	59.8	4.77	3.68	60.1	5.02	3.51	60.4	5.30	3.34
	70	57.2	4.07	4.12	57.8	4.30	3.94	58.4	4.55	3.76
	80	54.6	3.50	4.57	55.5	3.72	4.37	56.5	3.96	4.18
47	60	48.6	4.05	3.52	49.2	4.27	3.38	49.8	4.52	3.23
	70	46.4	3.45	3.94	47.0	3.64	3.78	47.6	3.84	3.63
	80	44.2	2.98	4.35	44.8	3.13	4.19	45.4	3.31	4.02
40	60	43.1	3.67	3.44	43.8	3.88	3.31	44.5	4.10	3.18
	70	41.0	3.14	3.83	41.6	3.30	3.70	42.1	3.47	3.56
	80	39.0	2.70	4.23	39.4	2.82	4.09	39.8	2.96	3.94
30	60	35.7	3.16	3.31	36.5	3.34	3.20	37.3	3.54	3.09
	70	33.9	2.69	3.69	34.4	2.82	3.57	34.9	2.96	3.46
	80	32.1	2.32	4.06	32.3	2.40	3.94	32.5	2.49	3.82
17	60	27.2	2.53	3.15	27.9	2.66	3.07	28.6	2.80	2.99
	70	26.8	2.24	3.50	27.4	2.35	3.41	27.8	2.45	3.33
	80	23.8	1.82	3.84	23.9	1.86	3.76	24.0	1.92	3.67
10	60	23.1	2.21	3.07	23.7	2.32	3.00	24.4	2.44	2.93
	70	21.4	1.84	3.40	21.8	1.92	3.33	22.1	1.99	3.26
	80	19.8	1.56	3.72	19.8	1.59	3.66	19.9	1.62	3.59

Heating performance data - 5 ton										
Packaged unit model number		PHE4B6024								
Air temperature entering outdoor coil	Air temperature entering indoor coil	ID CFM								
		1600			1800			2000		
		MBH	COP	kW	MBH	COP	kW	MBH	COP	kW
60	60	71.8	4.84	4.35	72.1	4.96	4.26	72.3	5.10	4.16
	70	67.7	4.14	4.79	69.2	4.33	4.69	70.8	4.53	4.58
	80	63.5	3.56	5.23	67.0	3.84	5.12	70.4	4.13	5.00
47	60	56.4	3.96	4.17	57.4	4.09	4.11	58.3	4.22	4.05
	70	55.5	3.54	4.59	56.8	3.68	4.52	58.1	3.83	4.45
	80	54.5	3.19	5.01	56.2	3.34	4.93	57.9	3.50	4.85
40	60	49.8	3.59	4.07	51.0	3.71	4.03	52.2	3.84	3.98
	70	49.6	3.24	4.48	50.9	3.38	4.42	52.2	3.50	4.37
	80	49.3	2.95	4.89	50.7	3.08	4.82	52.1	3.21	4.76
30	60	42.2	3.15	3.93	43.4	3.25	3.91	44.5	3.35	3.89
	70	41.8	2.84	4.32	42.0	2.87	4.29	44.8	3.07	4.27
	80	41.5	2.58	4.71	41.0	2.57	4.68	45.1	2.85	4.64
17	60	35.8	2.80	3.75	36.0	2.81	3.76	36.3	2.82	3.77
	70	33.2	2.36	4.12	34.5	2.45	4.12	37.1	2.63	4.13
	80	30.6	2.00	4.48	34.3	2.24	4.49	37.9	2.47	4.49
10	60	32.3	2.59	3.65	32.4	2.58	3.68	32.6	2.58	3.71
	70	28.5	2.08	4.01	30.9	2.25	4.03	33.4	2.42	4.05
	80	24.7	1.66	4.36	29.4	1.97	4.38	34.1	2.27	4.40

Note: The performance values in the cooling and heating performance data tables are based on the following: 0.18 in. W.C static for 2 ton units; 0.23 in. W.C static for 2.5 ton, 3 ton, and 3.5 ton units; and 0.28 in. W.C. static for 4 ton and 5 ton units.



A0379-003

Unit dimensions

Model	Dimensions (in.)		
	A	B	C
PHE4A2424	51 1/4	35 3/4	44
PHE4A3024	51 1/4	35 3/4	45
PHE4B3624	51 1/4	45 3/4	47
PHE4B4224	51 1/4	45 3/4	47
PHE4B4824	51 1/4	45 3/4	53
PHE4B6024	51 1/4	45 3/4	55

Unit clearances

Direction	Distance (in.)	Direction	Distance (in.)
Top ¹	36	Right side	36
Side opposite ducts	36	Left side	24
Duct panel	0	Bottom ^{2,3}	1

1. Provide a minimum clearance of 1 in. on all sides of the supply air duct for the first 3 ft of the duct for 20 kW and 25 kW heaters (0 in. thereafter). For all other heaters, make sure that there is 0 in. clearance on all sides for the entire length of the supply air duct.

2. Install units outdoors. Make sure that overhanging structures or shrubs do not obstruct the outdoor air discharge outlet.

3. You can install units on combustible materials made from wood or class A, B, or C roof covering materials if the factory base rails are left in place as shipped.

Note: For units installed on a roof curb, you can reduce the minimum clearance between combustible roof curb material and the supply air duct from 1 in. to 1/2 in.

Electric heat minimum supply air

Model	Voltage	Minimum blower speed for electric heat					
		Heater (kW)					
		5	8	10	15	20	25
PHE4A24	208/230-1-60	Medium (3)	Medium (3)	Medium (3)	--	--	--
PHE4A30	208/230-1-60	Medium Low (2)	Medium High (4)	Medium High (4)	High (5)	--	--
PHE4B36	208/230-1-60	Medium High (4)	Medium High (4)	High (5)	High (5)	--	--
PHE4B42	208/230-1-60	Medium Low (2)	Medium Low (2)	Medium Low (2)	Medium High (4)	Medium High (4)	--
PHE4B48	208/230-1-60	Medium Low (2)	Medium Low (2)	Medium Low (2)	Medium (3)	Medium (3)	--
PHE4B60	208/230-1-60	Medium Low (2)	Medium Low (2)	Medium High (4)	Medium High (4)	Medium High (4)	Medium High (4)

Indoor blower specifications

Model	Motor				
	HP	RPM	Efficiency	SF	Frame
PHE4A2424	1/2	Variable	0.8	1.0	48
PHE4A3024	1/2	Variable	0.8	1.0	48
PHE4B3624	1/2	Variable	0.8	1.0	48
PHE4B4224	3/4	Variable	0.8	1.0	48
PHE4B4824	3/4	Variable	0.8	1.0	48
PHE4B6024	1	Variable	0.8	1.0	48

Cooling sound performance

Model (ton)	Sound rating ¹ dB(A)	Octave band centerline frequency (Hz)						
		125	250	500	1000	2000	4000	8000
PHE4A2424	69.9	73.4	66.7	67.6	66.9	55.2	49.6	44.4
PHE4A3024	67.3	67.9	68.3	61.2	56.7	56.9	49.4	44.4
PHE4B3624	72.6	77.9	66.6	64.7	64.4	58.1	54.8	47.4
PHE4B4224	73.0	78.6	62.2	65.8	64.9	59.4	57.2	51.8
PHE4B4824	72.4	75.2	66.8	62.9	63.5	58.4	57.3	50.3
PHE4B6024	72.7	73.6	66.2	63.3	63.9	59.6	59.6	52.2

1. Rated in accordance with AHRI Standard 270.

Heating sound performance

Model (ton)	Sound rating ¹ dB(A)	Octave band centerline frequency (Hz)						
		125	250	500	1000	2000	4000	8000
PHE4A2424	71.0	73.8	67.0	68.1	67.7	56.7	49.9	45.3
PHE4A3024	68.3	68.3	68.9	62.6	57.6	57.1	49.6	45.1
PHE4B3624	73.7	78.1	67.2	66.1	65.4	58.3	54.8	48.7
PHE4B4224	74.5	80.5	62.7	67.3	66.6	59.2	61.4	50.7
PHE4B4824	73.8	72.4	67.4	63.4	64.8	60.4	59.5	55.2
PHE4B6024	74.1	74.9	66.3	65.1	65.5	59.6	59.5	52.8

1. Rated in accordance with AHRI Standard 270.

Electrical data for 208/230-1-60 single source power

Model	Compressor			OD fan motor FLA	Blower motor FLA	Electric heat option					MCA ¹ (A)		Max fuse ² or breaker size ³		
	RLA	LRA	MCC			Heater kit ⁴	Heater (kW)		Stages	Heater (A)		208	230	208	230
				208	230		208	230							
PHE4A24	10.8	55.0	16.8	1.3	3.8	none	--	--	--	--	--	18.6	18.6	25	25
						6HK16500506	3.6	4.4	1	17.3	19.2	40.3	42.6	45	45
						6HK16500806	5.8	7.1	1	27.7	30.7	53.3	56.0	60	60
						6HK16501006	7.2	8.8	1	34.7	38.3	61.9	66.5	70	70
PHE4A30	12.3	63.0	19.2	1.3	3.8	none	--	--	--	--	--	20.5	20.5	30	30
						6HK16500506	3.6	4.4	1	17.3	19.2	42.1	44.4	50	50
						6HK16500806	5.8	7.1	1	27.7	30.7	55.1	58.8	60	60
						6HK16501006	7.2	8.8	1	34.7	38.3	63.8	68.4	70	70
PHE4B36	14.7	75.0	22.9	1.7	3.8	none	--	--	--	--	--	23.9	23.9	35	35
						6HK16500506	3.6	4.4	1	17.3	19.2	45.5	47.8	50	50
						6HK16500806	5.8	7.1	1	27.7	30.7	58.5	62.2	60	70
						6HK16501006	7.2	8.8	1	34.7	38.3	67.2	71.8	70	80
PHE4B42	15.9	112.3	24.8	1.7	5.4	none	--	--	--	--	--	27.0	27.0	40	40
						6HK16500506	3.6	4.4	1	17.3	19.2	48.6	50.9	60	60
						6HK16500806	5.8	7.1	1	27.7	30.7	61.6	65.3	70	70
						6HK16501006	7.2	8.8	1	34.7	38.3	70.3	74.9	80	80
PHE4B48	18.3	108.0	28.5	1.7	5.4	none	--	--	--	--	--	30.0	30.0	45	45
						6HK16500506	3.6	4.4	1	17.3	19.2	51.6	53.9	60	60
						6HK16500806	5.8	7.1	1	27.7	30.7	64.6	68.3	70	70
						6HK16501006	7.2	8.8	1	34.7	38.3	73.3	77.9	80	80
PHE4B60	22.2	127.9	34.7	1.7	7.0	none	--	--	--	--	--	36.5	36.5	50	50
						6HK16500506	3.6	4.4	1	17.3	19.2	58.1	60.4	70	70
						6HK16500806	5.8	7.1	1	27.7	30.7	71.1	74.8	80	80
						6HK16501006	7.2	8.8	1	34.7	38.3	79.8	84.4	90	90
PHE4B60	22.2	127.9	34.7	1.7	7.0	6HK16501506	10.8	13.2	2	52.0	57.5	101.5	108.3	110	110
						6HK16502006	14.4	17.6	2	69.3	76.7	123.1	132.3	125	150

1. MCA = minimum circuit ampacity.

2. Maximum overcurrent protection per standard UL 1995.

3. Fuse or HACR circuit breaker is field installed.

4. Single-point connection kit is required.

Electrical data for 208-1-60 multi source power

Model	Compressor			OD fan motor	Blower motor	Electric heat option				Multi source									
	RLA	LRA	MCC	FLA	FLA	Heater kit	Heater (kW)		Stages	Heater (A)		208		208		208		208	
							208		208	208	208	208	MCA ¹ (A)	MOP ²	MCA ¹ (A)	MOP ²	MCA ¹ (A)	MOP ²	MCA ¹ (A)
Multi source: compressor circuit and heat circuits						Multi source:	Circuit 1 compressor circuit			MCA ¹ (A)	MOP ²	MCA ¹ (A)	MOP ²	MCA ¹ (A)	MOP ²	MCA ¹ (A)	MOP ²	MCA ¹ (A)	MOP ²
							Circuit 2 heat												
							Circuit 3 heat												
							Circuit 4 heat												
PHE4A24	10.8	55.0	16.8	1.3	3.8	none	--	--	--	18.6	25	--	--	--	--	--	--	--	
						6HK(0,1)6500506	3.6	1	17.3	18.6	25	21.7	25	--	--	--	--		
						6HK(0,1)6500806	5.8	1	27.7	18.6	25	34.7	40	--	--	--	--		
						6HK(0,1)6501006	7.2	1	34.7	18.6	25	43.3	45	--	--	--	--		
PHE4A30	12.3	63.0	19.2	1.3	3.8	none	--	--	--	20.5	30	--	--	--	--	--	--		
						6HK(0,1)6500506	3.6	1	17.3	20.5	30	21.6	25	--	--	--	--		
						6HK(0,1)6500806	5.8	1	27.7	20.5	30	34.6	40	--	--	--	--		
						6HK(0,1)6501006	7.2	1	34.7	20.5	30	43.4	45	--	--	--	--		
						6HK16501506	10.8	2	52.0	20.5	30	21.7	25	43.3	45	--	--		
6HK26501506	10.8	2	52.0	20.5	30	65.0	70	--	--	--	--								
PHE4B36	14.7	75.0	22.9	1.7	3.8	none	--	--	--	23.9	35	--	--	--	--	--	--		
						6HK(0,1)6500506	3.6	1	17.3	23.9	35	21.6	25	--	--	--	--		
						6HK(0,1)6500806	5.8	1	27.7	23.9	35	34.6	40	--	--	--	--		
						6HK(0,1)6501006	7.2	1	34.7	23.9	35	43.4	45	--	--	--	--		
						6HK16501506	10.8	2	52.0	23.9	35	21.7	25	43.3	45	--	--		
6HK26501506	10.8	2	52.0	23.9	35	65.0	70	--	--	--	--								
PHE4B42	15.9	112.3	24.8	1.7	5.4	none	--	-	--	27.0	40	--	--	--	--	--	--		
						6HK(0,1)6500506	3.6	1	17.3	27.0	40	21.6	25	--	--	--	--		
						6HK(0,1)6500806	5.8	1	27.7	27.0	40	34.6	40	--	--	--	--		
						6HK(0,1)6501006	7.2	1	34.7	27.0	40	43.4	45	--	--	--	--		
						6HK16501506	10.8	2	52.0	27.0	40	21.7	25	43.3	45	--	--		
						6HK16502006	14.4	2	69.3	27.0	40	43.3	45	43.3	45	--	--		
						6HK26501506	10.8	2	52.0	27.0	40	65.0	70	--	--	--	--		
6HK26502006	14.4	2	69.3	27.0	40	86.5	90	--	--	--	--								
PHE4B48	18.3	108.0	28.5	1.7	5.4	none	--	--	--	30.0	45	--	--	--	--	--	--		
						6HK(0,1)6500506	3.6	1	17.3	30.0	45	21.6	25	--	--	--	--		
						6HK(0,1)6500806	5.8	1	27.7	30.0	45	34.6	40	--	--	--	--		
						6HK(0,1)6501006	7.2	1	34.7	30.0	45	43.4	45	--	--	--	--		
						6HK16501506	10.8	2	52.0	30.0	45	21.7	25	43.3	45	--	--		
						6HK16502006	14.4	2	69.3	30.0	45	43.3	45	43.3	45	--	--		
						6HK26501506	10.8	2	52.0	30.0	45	65.0	70	--	--	--	--		
6HK26502006	14.4	2	69.3	30.0	45	86.5	90	--	--	--	--								
PHE4B60	22.2	127.9	34.7	1.7	7.0	none	--	--	--	36.5	50	--	--	--	--	--	--		
						6HK(0,1)6500506	3.6	1	17.3	36.5	50	21.6	25	--	--	--	--		
						6HK(0,1)6500806	5.8	1	27.7	36.5	50	34.6	40	--	--	--	--		
						6HK(0,1)6501006	7.2	1	34.7	36.5	50	43.4	45	--	--	--	--		
						6HK16501506	10.8	2	52.0	36.5	50	21.7	25	43.3	45	--	--		
						6HK16502006	14.4	2	69.3	36.5	50	43.3	45	43.3	45	--	--		
						6HK26501506	10.8	2	52.0	36.5	50	65.0	70	--	--	--	--		
						6HK26502006	14.4	2	69.3	36.5	50	86.5	90	--	--	--	--		
6HK56502506	18.0	2	86.7	36.5	50	43.4	45	43.4	45	21.6	25								
6HK66502506	18.0	2	86.7	36.5	50	108.1	110	--	--	--	--								

1. MCA = minimum circuit ampacity.

2. MOP = maximum overcurrent protection device. Must be HACR type circuit breaker or time delay fuse.

Electrical data for 230-1-60 multi source power

Model	Compressor			OD fan motor FLA	Blower motor FLA	Electric heat option				Multi source								
	RLA	LRA	MCC			Heater kit	Heater (kW)		Heater (A)		230	230	230	230	230	230	230	230
				230	Stages		230	230	MCA ¹ (A)	MOP ²								
Multi source: compressor circuit and heat circuits						Multi source:	Circuit 1 compressor circuit				MCA ¹ (A)	MOP ²	MCA ¹ (A)	MOP ²	MCA ¹ (A)	MOP ²	MCA ¹ (A)	MOP ²
							Circuit 2 heat											
							Circuit 3 heat											
							Circuit 4 heat											
PHE4A24	10.8	55.0	16.8	1.3	3.8	none	--	--	--	18.6	25	--	--	--	--	--	--	
						6HK(0,1)6500506	4.4	1	19.1	18.6	25	23.9	25	--	--	--	--	
						6HK(0,1)6500806	7.1	1	30.7	18.6	25	38.6	40	--	--	--	--	
						6HK(0,1)6501006	8.8	1	38.3	18.6	25	47.8	50	--	--	--	--	
PHE4A30	12.3	63.0	19.2	1.3	3.8	none	--	--	--	20.5	30	--	--	--	--	--	--	
						6HK(0,1)6500506	4.4	1	19.1	20.5	30	23.9	25	--	--	--	--	
						6HK(0,1)6500806	7.1	1	30.7	20.5	30	38.6	40	--	--	--	--	
						6HK(0,1)6501006	8.8	1	38.3	20.5	30	47.8	50	--	--	--	--	
						6HK16501506	13.2	2	57.4	20.5	30	23.9	25	47.8	50	--	--	
						6HK26501506	13.2	2	57.4	30.0	30	71.7	80	--	--	--	--	
PHE4B36	14.7	75.0	22.9	1.7	3.8	none	--	--	--	23.9	35	--	--	--	--	--	--	
						6HK(0,1)6500506	4.4	1	19.1	23.9	35	23.9	25	--	--	--	--	
						6HK(0,1)6500806	7.1	1	30.7	23.9	35	38.6	40	--	--	--	--	
						6HK(0,1)6501006	8.8	1	38.3	23.9	35	47.8	50	--	--	--	--	
						6HK16501506	13.2	2	57.4	23.9	35	23.9	25	47.8	50	--	--	
						6HK26501506	13.2	2	57.4	23.9	35	71.7	80	--	--	--	--	
PHE4B42	15.9	112.3	24.8	1.7	5.4	none	--	--	--	27.0	40	--	--	--	--	--	--	
						6HK(0,1)6500506	4.4	1	19.1	27.0	40	23.9	25	--	--	--	--	
						6HK(0,1)6500806	7.1	1	30.7	27.0	40	38.6	40	--	--	--	--	
						6HK(0,1)6501006	8.8	1	38.3	27.0	40	47.8	50	--	--	--	--	
						6HK16501506	13.2	2	57.4	27.0	40	23.9	25	47.8	50	--	--	
						6HK16502006	17.6	2	76.7	27.0	40	47.8	50	47.8	50	--	--	
						6HK26501506	13.2	2	57.4	27.0	40	71.7	80	--	--	--	--	
						6HK26502006	17.6	2	76.7	27.0	40	95.7	100	--	--	--	--	
PHE4B48	18.3	108.0	28.5	1.7	5.4	none	--	--	--	30.0	45	--	--	--	--	--	--	
						6HK(0,1)6500506	4.4	1	19.1	30.0	45	23.9	25	--	--	--	--	
						6HK(0,1)6500806	7.1	1	30.7	30.0	45	38.4	40	--	--	--	--	
						6HK(0,1)6501006	8.8	1	38.3	30.0	45	47.8	50	--	--	--	--	
						6HK16501506	13.2	2	57.4	30.0	45	23.9	25	47.8	50	--	--	
						6HK16502006	17.6	2	76.7	30.0	45	47.9	50	47.8	50	--	--	
						6HK26501506	13.2	2	57.4	30.0	45	71.7	80	--	--	--	--	
						6HK26502006	17.6	2	76.7	30.0	45	95.7	100	--	--	--	--	
PHE4B60	22.2	127.9	34.7	1.7	7.0	none	--	--	--	36.5	50	--	--	--	--	--	--	
						6HK(0,1)6500506	4.4	1	19.1	36.5	50	23.9	25	--	--	--	--	
						6HK(0,1)6500806	7.1	1	30.7	36.5	50	38.4	40	--	--	--	--	
						6HK(0,1)6501006	8.8	1	38.3	36.5	50	47.8	50	--	--	--	--	
						6HK16501506	13.2	2	57.4	36.5	50	23.9	25	47.8	50	--	--	
						6HK16502006	17.6	2	76.7	36.5	50	47.9	50	47.8	50	--	--	
						6HK26501506	13.2	2	57.4	36.5	50	71.7	80	--	--	--	--	
						6HK26502006	17.6	2	76.7	36.5	50	95.7	100	--	--	--	--	
						6HK56502506	22.0	2	95.8	36.5	50	47.9	50	47.9	50	24.0	25	
6HK66502506	22.0	2	95.8	36.5	50	119.8	125	--	--	--	--							

1. MCA = minimum circuit ampacity.
 2. MOP = maximum overcurrent protection device. Must be HACR type circuit breaker or time delay fuse.

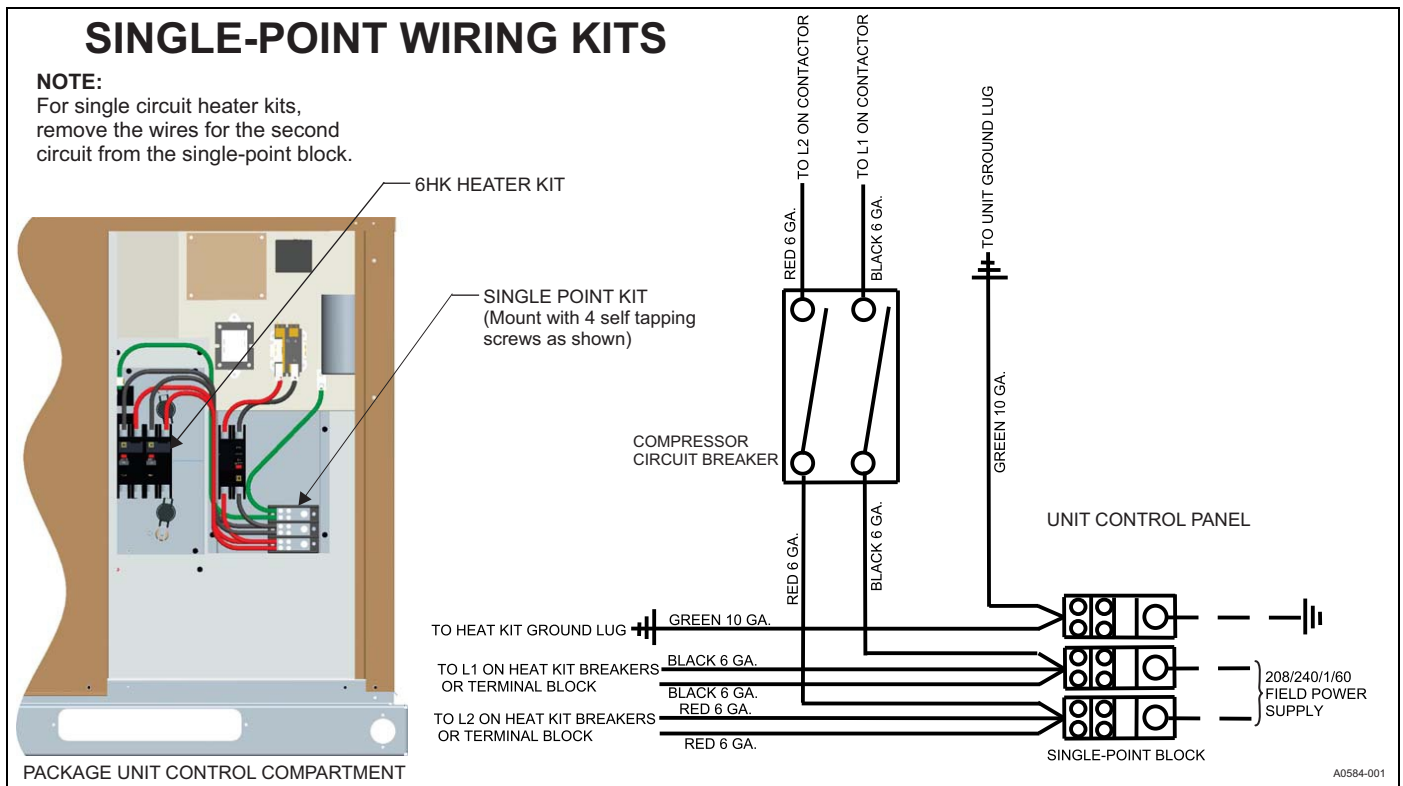
Electric heat performance data: 208/230-1-60

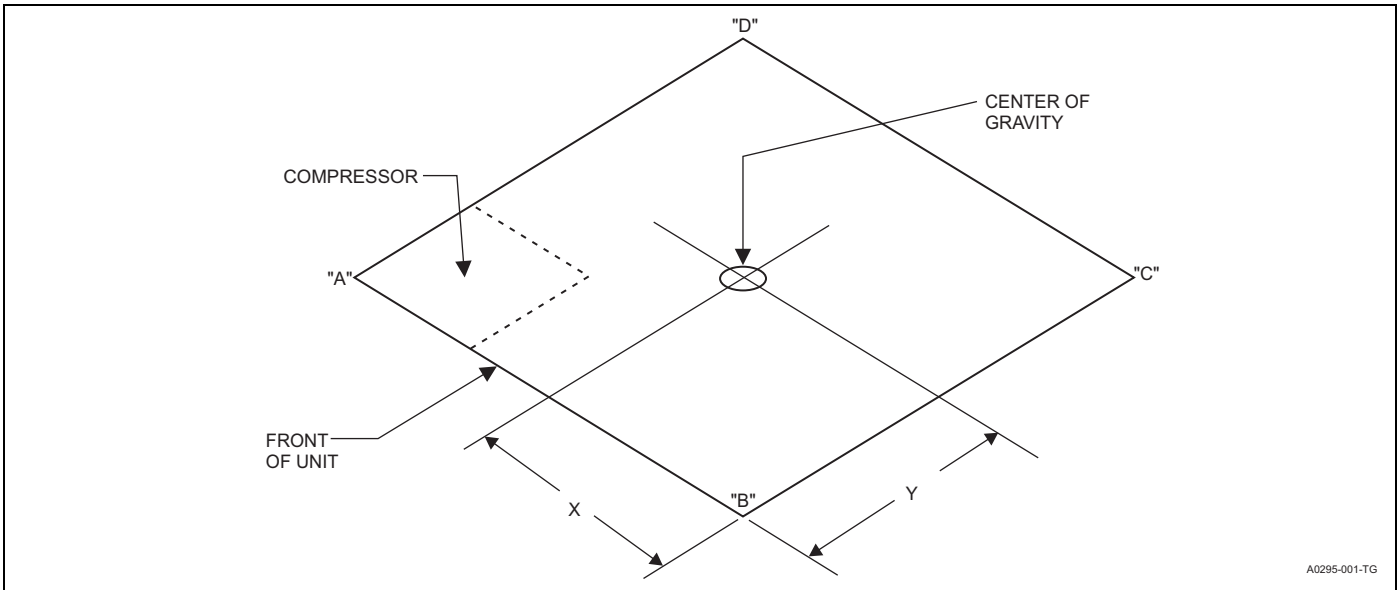
Heater models ^{1,2,3}	Nominal kW at 240 V	Total heat				kW staging				
		kW		MBH		W1 only		W2 only		
		208 V	230 V	208 V	230 V	208 V	230 V	208 V	230 V	
1 PH	6HK(0,1)6500506	4.8	3.6	4.4	12.3	15	3.6	4.4	3.6	4.4
	6HK(0,1)6500806	7.7	5.8	7.1	19.7	24.1	5.8	7.1	5.8	7.1
	6HK(0,1)6501006	9.6	7.2	8.8	24.6	30.1	7.2	8.8	7.2	8.8
	6HK(1,2)6501506	14.4	10.8	13.2	36.9	45.1	3.6	4.4	10.8	13.2
	6HK(1,2)6502006	19.2	14.4	17.6	49.2	60.2	7.2	8.8	14.4	17.6
	6HK(5,6)6502506	24.0	18	22	61.5	75.2	7.2	8.8	18	22

- (0,1): 0 = no service disconnect or 1 = with service disconnect.
- (1,2): 1 = with service disconnect, no breaker jumper bar or 2 = with service disconnect and breaker jumper bar.
- (5,6): 5 = with service disconnect, no breaker jumper bar or 6 = with service disconnect and breaker jumper bar.

Single-point wiring kit

Single-point kit part number	Unit model number	Breaker size	Heat kit
S1-2SPWK006	PHE4A24	25 A	Up to 13 kW
S1-2SPWK001	PHE4A30	30 A	Up to 15 kW
S1-2SPWK002	PHE4B36	35 A	Up to 15 kW
S1-2SPWK007	PHE4B42	40 A	Up to 20 kW
S1-2SPWK003	PHE4B48	45 A	Up to 20 kW
S1-2SPWK004	PHE4B60	50 A	Up to 20 kW





A0295-001-TG

Weights and dimensions

Model	Weight (lb)		Center of gravity		Four-point load location (lb)			
	Shipping	Operating	X	Y	A	B	C	D
PHE4A2424	335	330	29	7	153	101	37	34
PHE4A3024	360	355	29	7	166	116	37	29
PHE4B3624	425	420	29	18	155	90	91	74
PHE4B4224	441	436	30	18	172	90	91	74
PHE4B4824	484	479	29	19	171	100	100	91
PHE4B6024	490	485	29	19	174	106	102	94

Airflow performance - side duct application

Model	Motor speed	External static pressure (in. W.C.)								
		0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	1.0
		SCFM	SCFM	SCFM	SCFM	SCFM	SCFM	SCFM	SCFM	SCFM
PHE4A24	Low (1)	590	550	490	440	390	350	290	230	80
	Medium Low (2)	700	660	610	560	500	460	410	360	250
	Medium (3)	860	830	790	740	690	640	590	550	460
	Medium High (4)	950	910	880	840	800	740	690	650	570
	High (5)	1170	1150	1110	1080	1050	1020	980	950	830
PHE4A30	Low (1)	720	680	630	580	520	470	430	380	270
	Medium Low (2)	930	890	850	820	770	710	650	610	530
	Medium (3)	1030	990	960	920	890	850	810	750	660
	Medium High (4)	1120	1090	1050	1020	990	960	920	870	770
	High (5)	1200	1180	1140	1110	1080	1050	1010	980	880
PHE4B36	Low (1)	880	830	770	690	620	550	500	440	200
	Medium Low (2)	1180	1130	1090	1040	990	930	860	780	670
	Medium (3)	1310	1270	1230	1190	1140	1100	1040	970	840
	Medium High (4)	1440	1400	1360	1320	1280	1240	1190	1150	1010
	High (5)	1600	1560	1530	1490	1450	1410	1360	1320	1230
PHE4B42	Low (1)	990	930	870	800	740	670	600	530	390
	Medium Low (2)	1290	1250	1200	1140	1100	1040	990	930	800
	Medium (3)	1480	1440	1390	1350	1300	1260	1210	1170	1050
	Medium High (4)	1620	1580	1540	1500	1460	1410	1370	1330	1230
	High (5)	1900	1870	1820	1790	1760	1720	1670	1630	1560
PHE4B48	Low (1)	1190	1140	1090	1030	970	910	850	790	680
	Medium Low (2)	1370	1330	1290	1240	1200	1140	1090	1030	920
	Medium (3)	1630	1590	1560	1520	1490	1440	1390	1350	1240
	Medium High (4)	1730	1690	1660	1620	1590	1540	1500	1450	1350
	High (5)	2010	1980	1940	1910	1870	1840	1810	1770	1640
PHE4B60	Low (1)	1340	1290	1240	1190	1140	1110	1050	1000	870
	Medium Low (2)	1520	1480	1450	1400	1360	1320	1280	1240	1150
	Medium (3)	1900	1870	1840	1800	1760	1730	1690	1650	1580
	Medium High (4)	2020	1990	1960	1920	1880	1850	1810	1770	1700
	High (5)	2250	2210	2190	2160	2120	2080	2050	2000	1970

Notes:

Airflow is tested with dry coil conditions, without air filters, at 230 V.

Applications above 0.8 in. W.C. external static pressure are not recommended.

Brushless DC high-efficiency standard ECM blower motor is used for all indoor blower assemblies.

Minimal variations in airflow performance data result from operating at 208 V. The data in the table can be used in those cases.

Heating applications are tested at 0.50 in. W.C. external static pressure. Cooling applications are tested per AHRI Standard 210/240.

The differences between side duct airflows and bottom duct airflows are insignificant.

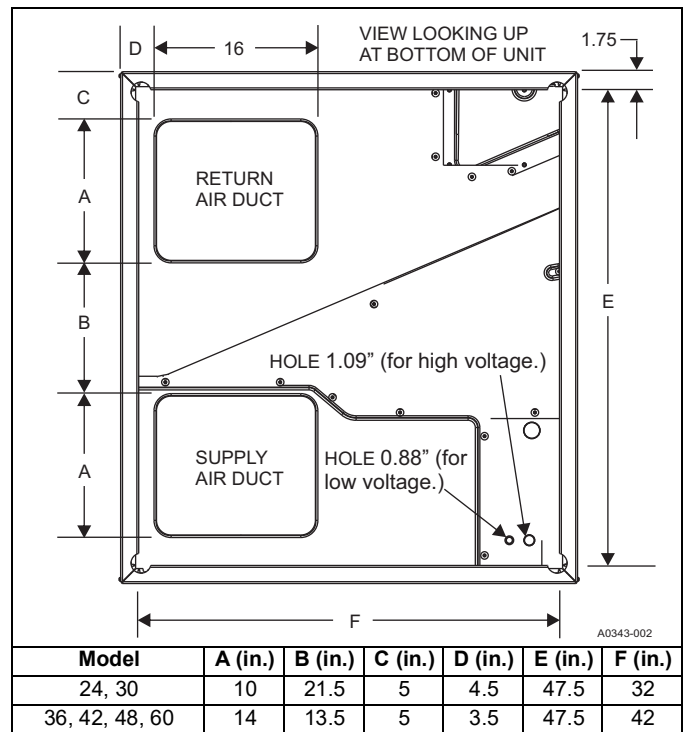
Additional static resistance

Size (ton)	CFM	Wet indoor coil	Economizer ¹	Filter/frame kit	
024 (2.0)	500	0.01	0.00	0.01	
	600	0.01	0.00	0.02	
	700	0.01	0.00	0.04	
	800	0.02	0.01	0.06	
	900	0.03	0.01	0.08	
	1000	0.04	0.01	0.10	
	1100	0.05	0.01	0.13	
	1200	0.06	0.02	0.16	
030 (2.5)	700	0.01	0.00	0.04	
	800	0.02	0.01	0.06	
	900	0.03	0.01	0.08	
	1000	0.04	0.01	0.10	
	1100	0.05	0.01	0.13	
	1200	0.06	0.02	0.16	
	1300	0.07	0.03	0.17	
036 (3.0)	700	0.01	0.00	0.04	
	800	0.02	0.01	0.06	
	900	0.03	0.01	0.08	
	1000	0.04	0.01	0.10	
	1100	0.05	0.01	0.13	
	1200	0.06	0.02	0.16	
	1300	0.07	0.03	0.17	
042 (3.5)	1100	0.02	0.02	0.04	
	1200	0.03	0.02	0.04	
	1300	0.04	0.02	0.05	
	1400	0.05	0.03	0.05	
	1500	0.06	0.04	0.06	
	1600	0.07	0.04	0.07	
	1700	0.07	0.04	0.08	
048 (4.0)	1800	0.08	0.04	0.09	
	1900	0.09	0.05	0.10	
	2000	0.09	0.05	0.11	
	060 (5.0)	1100	0.02	0.02	0.04
		1200	0.03	0.02	0.04
		1300	0.04	0.02	0.05
		1400	0.05	0.03	0.05
		1500	0.06	0.04	0.06
		1600	0.07	0.04	0.07
		1700	0.07	0.04	0.08
1800		0.08	0.04	0.09	
1900		0.09	0.05	0.10	
2000		0.09	0.05	0.11	

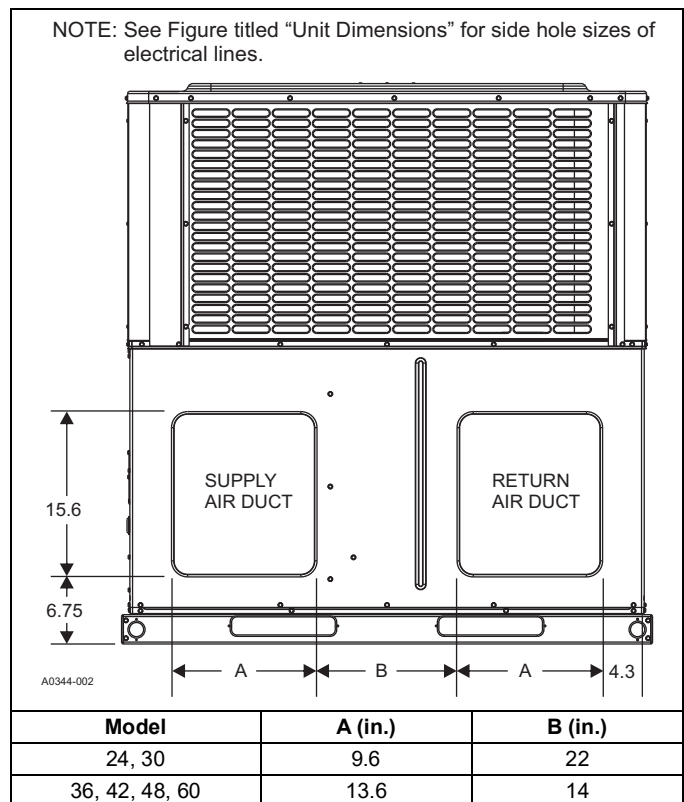
1. The pressure drop through the economizer is greater for 100% outdoor air than for 100% return air. If the resistance of the return air duct is less than 0.25 IWG, the unit delivers less CFM during full economizer operation.

Note: Filter pressure drop is based on standard filter media tested at velocities not to exceed 300 ft/min.

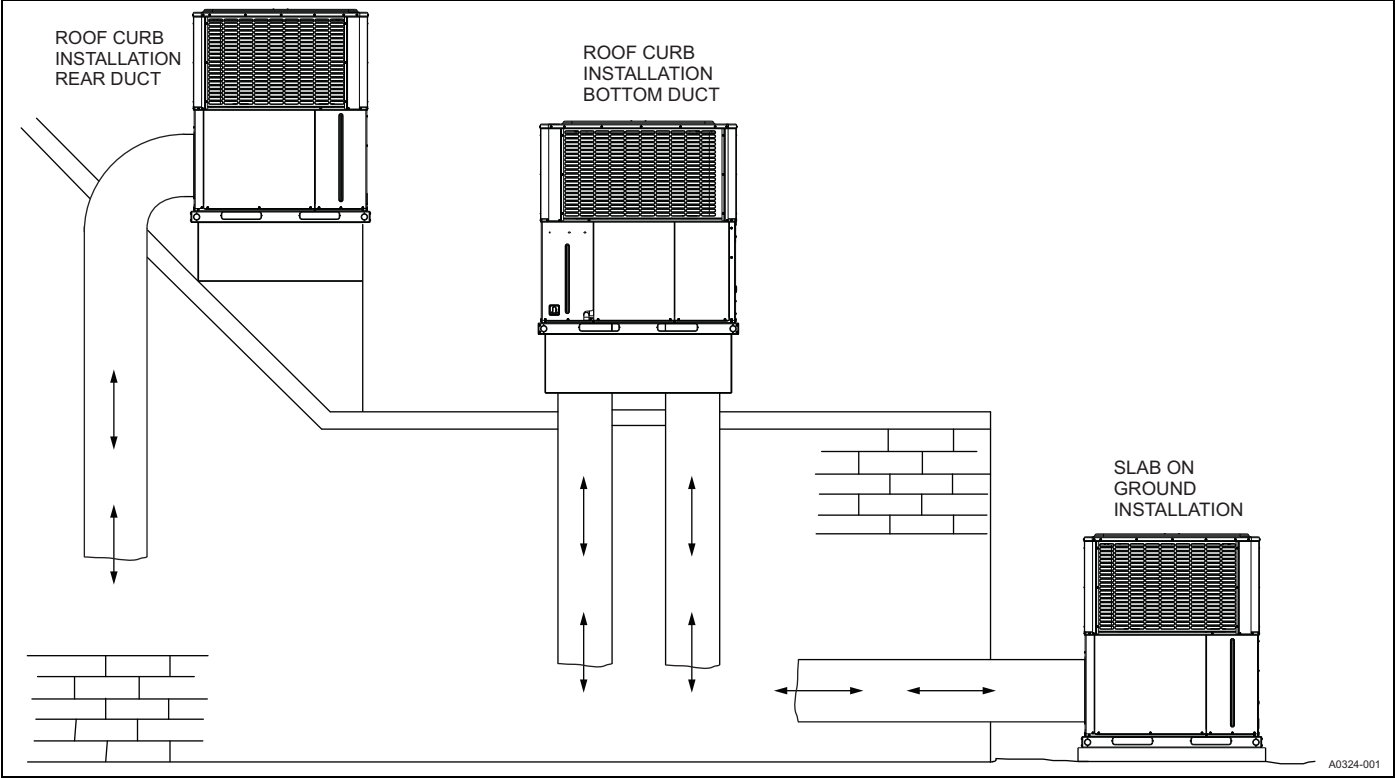
Bottom duct dimensions (in.)



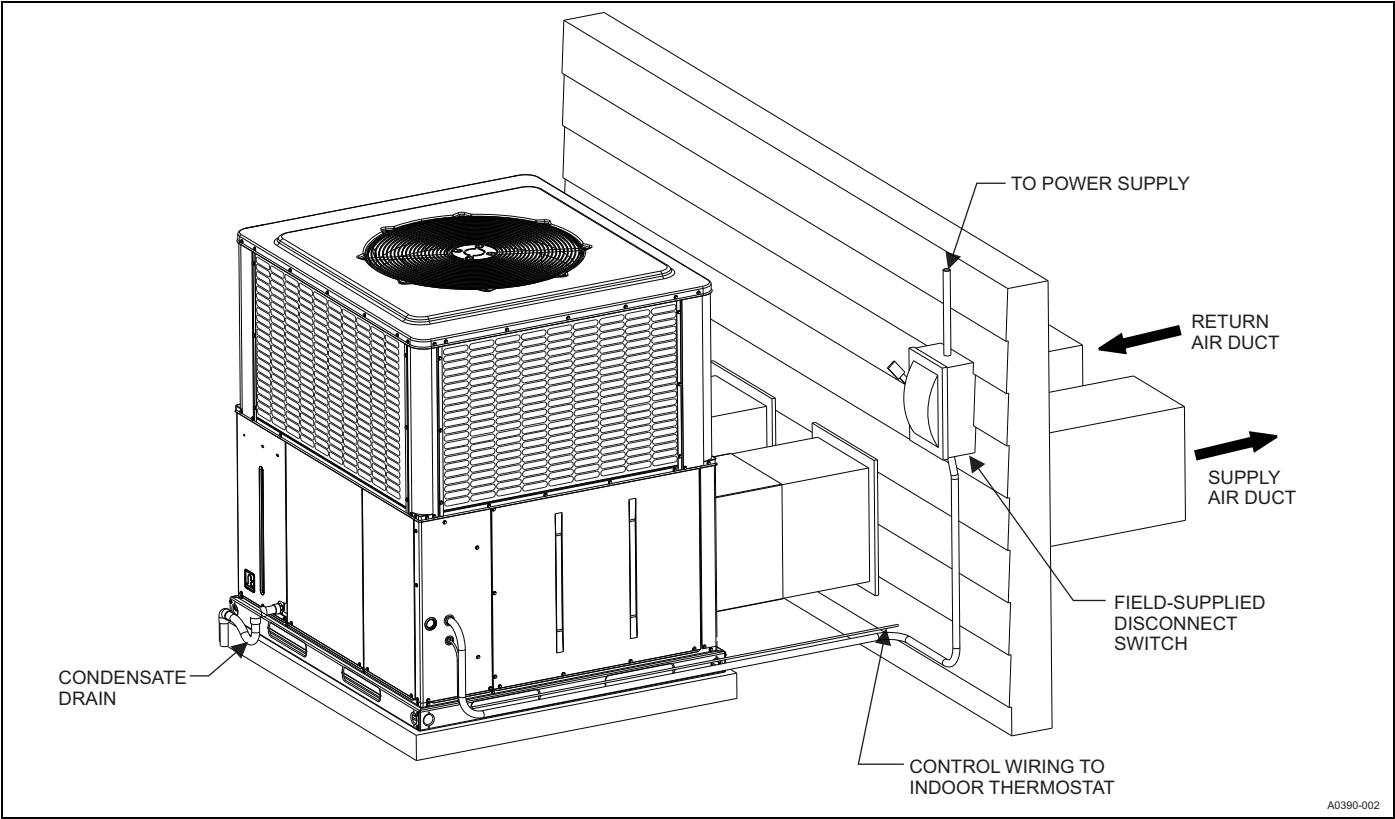
Rear duct dimensions (in.)



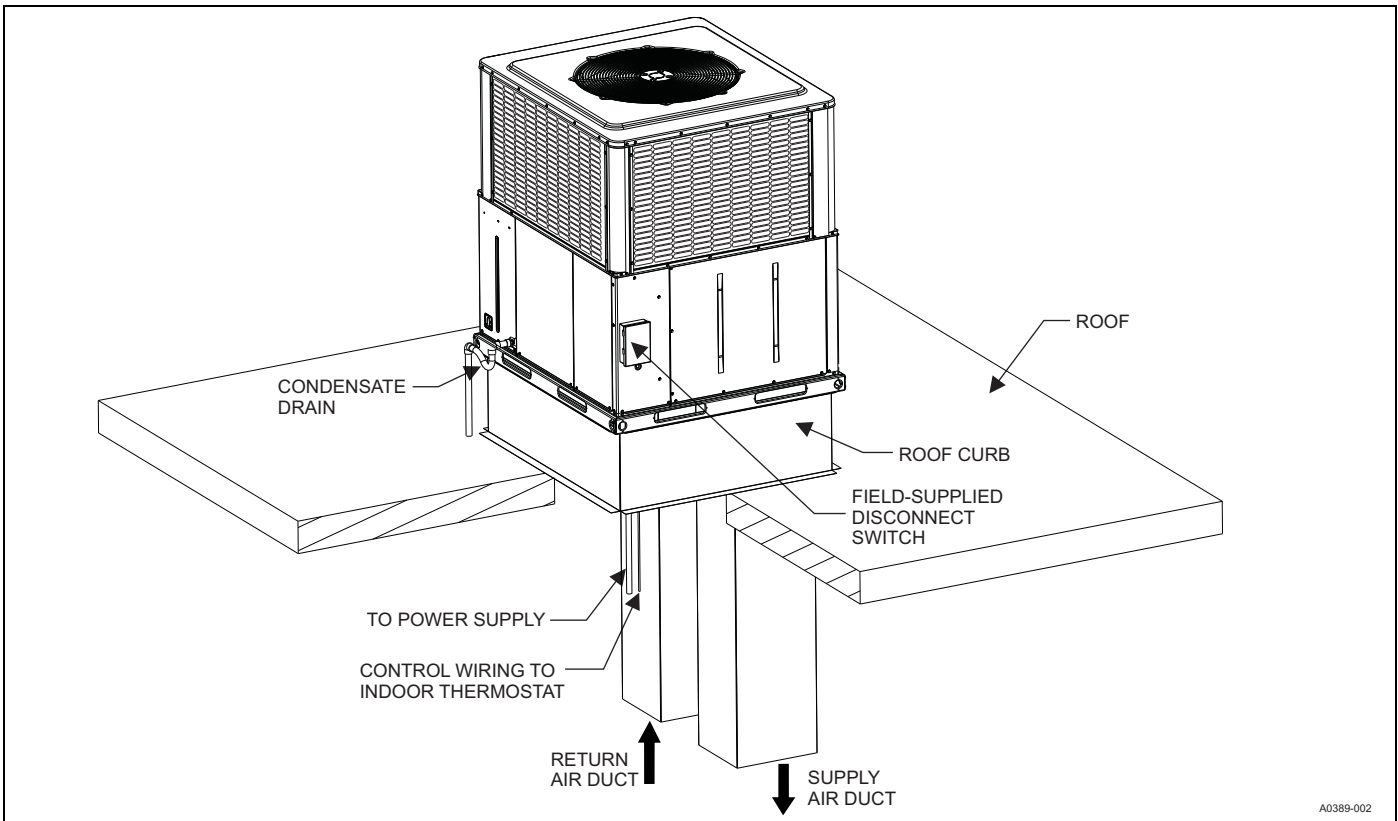
Unit typical duct applications



Unit typical slab on ground installation



Unit typical roof curb installation



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