



Product Catalog

Water Source Heat Pump Axiom™ Horizontal/Vertical – GEH/V*

0.5 to 25 Tons – 50/60 Hz

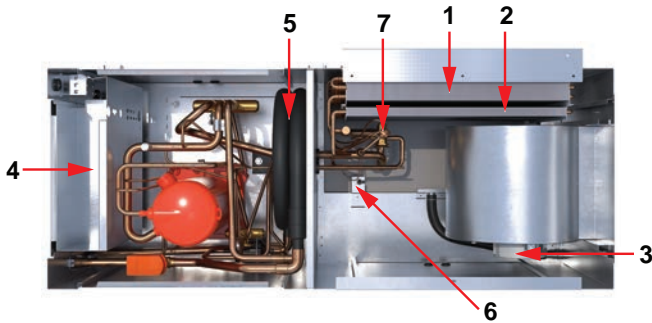




Introduction

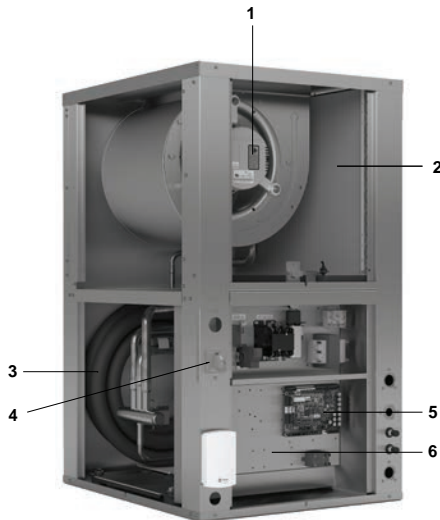
Imagine a full range of comfort utilizing efficiency, sound attenuation, integrated controls, and superior maintenance accessibility. The GEH and GEV models are Trane® water source comfort solutions. The GEH unit is a ceiling hung product that provides serviceability to maintenance components; indoor air quality standards; sound attenuation; and best of all, higher efficiencies rated in accordance to ANSI/AHRI/ASHRAE/ISO13256-1 performance and ASHRAE 90.1 standards. Highlights of these units are included, but not limited to the below items.

Figure 1. GEHK unit (0.5 to 5 tons)



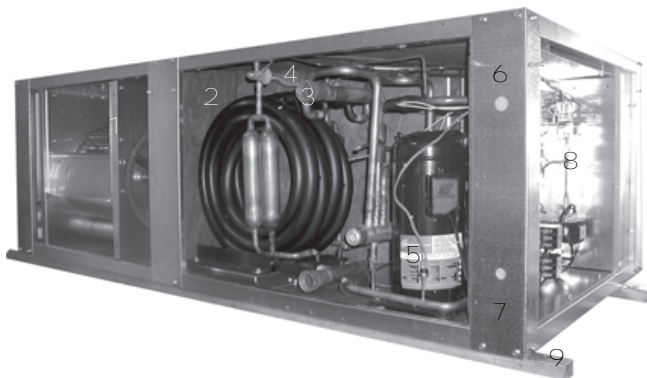
1. Air-to-refrigerant coil (horizontal design)
2. Hot gas reheat coil (optional)
3. ECM variable speed motor with orifice ring motor mounting device (standard for ease of service)
4. Integrated controls with drop down control box for access to internal unit components
5. Coaxial refrigerant-to-water heat exchanger
6. Dual-sloped, non corrosive drain pan with condensate overflow switch
7. TXV

Figure 2. GEVK unit (0.5 to 5 tons)



1. ECM variable speed motor with orifice ring motor mounting device (standard for ease of motor service)
2. Air-to-refrigerant coil (vertical design)
3. Coaxial refrigerant-to-water heat exchanger
4. Unit mounted disconnect switch
5. Trane Symbio™ 400-B controls
6. Drop down control box removable for access to internal unit components

Figure 3. GEH unit (10 tons)



1. Fan blower section
2. Co-axial heat exchanger
3. Water connections
4. Thermal expansion valve
5. Dual compressor
6. Low voltage
7. High voltage
8. Integrated controls
9. Hanging rails

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Revision History

Updated Waterside economizer piping diagram (6 to 25 tons) figure in Unit Dimensions chapter.



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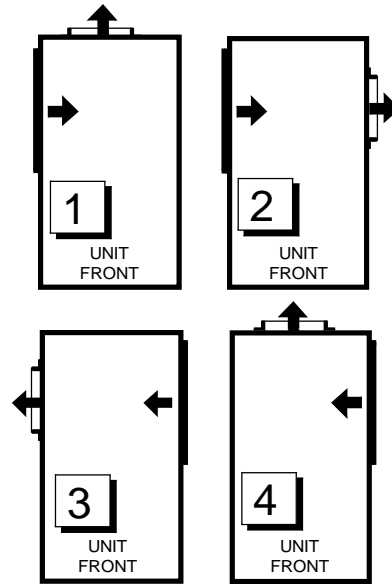
Features and Benefits

Airflow Combinations

GEH (0.5 to 5 Tons)

The GEH model configuration is built to order to meet unique installation requirements. Units must be ordered with the correct return orientation as this cannot be modified in the field.

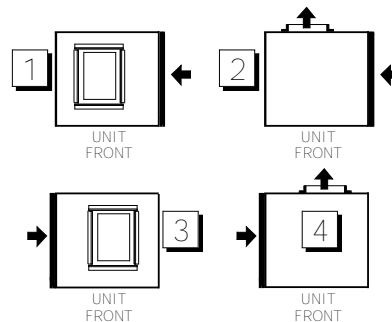
1. Left return-air with back supply-air combination
2. Left return-air with right supply-air combination
3. Right return-air with left supply-air combination
4. Right return-air with back supply-air combination



GEV (0.5 to 5 Tons)

The GEV model is not capable of on-site modifications. Units must be ordered with the correct return and supply orientation as this cannot be modified in the field.

1. Right return-air with top supply-air combination
2. Right return-air with back supply-air combination
3. Left return-air with top supply-air combination
4. Left return-air with back supply-air combination



GEH (6 to 15 Tons)

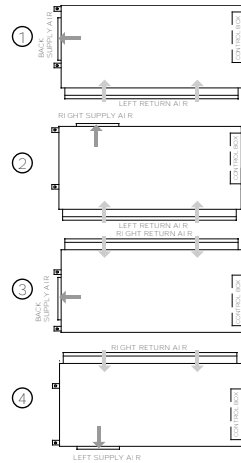
The 6 to 15 ton horizontal cabinet airflow flexibility includes the following combinations to aid in applications where the equipment is required to hug a corridor or wall.



Features and Benefits

The four configurations are:

1. Left return-air with back supply-air combination
2. Left return-air with right supply-air combination
3. Right return-air with back supply-air combination
4. Right return-air with left supply-air combination

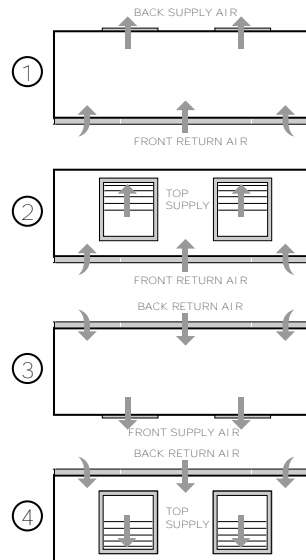


GEV (6 to 25 Tons)

The sleek, narrow cabinet of the 6 to 25 ton vertical cabinet is designed to fit through a standard 36-in. doorway for installation during new or retrofit construction. The equipment is available in four supply-air/return-air combinations. These combinations are order specific via the unit model number.

The four configurations are:

1. Front return-air with back supply-air combination
2. Front return-air with top supply-air combination
3. Back return-air with front supply-air combination
4. Back return-air with top supply-air combination



Access Panels

The upper panels of the GEV 12.5 to 25 ton units feature a key hole hanging design for ease of maintenance of the unit, allowing the panel to be hooked into place when attaching the panel to the unit. The panels are also sealed with a rubber gasket at all four edges to help eliminate air from escaping around the panel edge.



Air-Side Filter (0.5 to 25 Tons)

The air-side filter incorporates a 1-inch thick (nominal) or 2-inch thick (nominal), MERV 8 or MERV 13 disposable filter option. Accessory filters are also available (0.5 to 5 tons) in 4-inch (nominal) thickness for MERV 8 and MERV 13. These filters include an average synthetic dust weight tolerance of approximately 75%. This dust holding capability includes a colorless, odorless adhesive to retain dirt particles within the filter media after fiber contact.



Air to Refrigerant Coil (0.5 to 5 Tons)

The air-to-refrigerant heat exchanger is constructed of staggered copper tubes with die-formed corrugated lanced aluminum fins. The fins are then mechanically bonded to the tubes through expansion.

The maximum working pressure for the coils is 600 psig. It is designed for maximum capacity with an additional benefit of physical unit size reduction. Coil specifications may be found in the General Data section of this catalog.



Blower Housing

The blower housing is constructed of non-corrosive galvanized steel. For 0.5 to 5 ton direct drive units, a factory-mounted orifice ring is provided for ease of motor serviceability.

For 6 to 25 ton units, the housing is a double wide/double inlet, forward curved wheel moved by an integral horsepower motor with sealed bearings.

Blower Motor (0.5 to 5 Tons)

The motor is an ECM variable speed motor with electronic protection. The ECM motor is programmed to provide soft starting and a constant torque over a range of static pressure. A means to adjust the air flow is provided with a control board. The motor contains a quick disconnect plug and permanently lubricated bearing. The fans are placed in a drawthrough configuration. They are constructed of corrosion resistant galvanized material. Removal of the motor and fan wheel can be made with the assistance of a factory provided orifice ring device. This device attaches the wheel and motor to the fan housing in a single assembly eliminating the need for access to the set screw on the backside of the fan hub.



Boilerless Control, Electric Heat (Option)

In cooling dominant regions where heat may be used 15 to 30 days out of the winter season, eliminating the boiler may be an economical advantage to the building owner. Eliminating a boiler from the system reduces costs associated with the mechanical system installation, as well as the maintenance and service of the boiler.

How can heat be provided for the few days of the year when heat is necessary? Through the water-source heat pump of course. The advantage of the water-source heat pump is its ability to provide heat recovery within the closed water-loop. While some WSHPs may be extracting heat from the closed water loop, other WSHPs may be adding heat to the closed water loop. This creates a perfect system balance for heat sharing or movement from one space to another.



Features and Benefits

But when water temperatures fall in a boilerless system, and no further heat recovery may be made using the closed loop, heat may be added to the space through a boilerless control electric heat option.

For 0.5 to 25 ton units, what is NOT available with the boilerless electric heat option? Hot gas reheat and supplemental¹ or emergency heat applications and a factory-installed heater².

How it Works

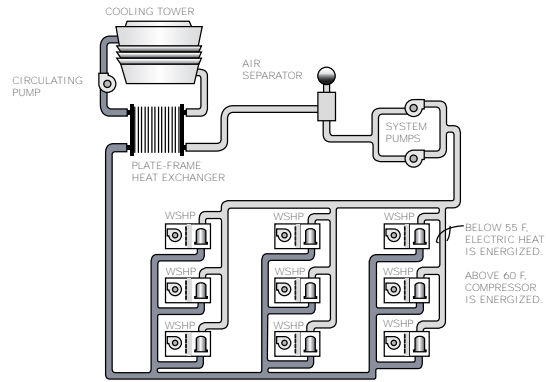
In heating mode, when the water temperature falls below 55°F (factory setting), the electric heater is energized, locking out the compressor. The system's electric heat source will continue to be utilized for primary heating until the loop temperature rises above 60°F. Once the entering water temperature rises above 60°F, the boilerless controller returns the unit to normal compressor heating operation and locks out the electric heater. This maximizes efficiency from the unit during the few days requiring heat from the mechanical system.

Note: For geothermal applications, the boilerless controller has an adjustable setting of 25, 35, 45, 55 and 60°F.

Boilerless Control, Electric Heat System

For 0.5 to 5 ton units, with external Electric Duct Heater (EDH) option, the heater contains a nichrome open wire heating element with corrosion-resistant terminals. Elements are supported every four inches by steatite insulators. Depending on the heating capabilities selected (Low, Medium, High), the heater could contain up to two stages of electric heat designed to operate an electric heater in place of the compressor in the event entering water temperature falls below 55°F or a field adjusted temperature setting between 25°F to 60°F. The EDH can be installed horizontally or vertically in duct spaces, as long as they have a minimum distance of (4) feet downstream from the blower, and minimum of (2) feet either side of an elbow or turn in the duct.

For 6 to 25 tons units, with the boilerless electric heat option, the models will contain boilerless controls ONLY to interface for a field provided supplemental electric heat selection. The heater for this model shall be placed external to the equipment by the contractor for ease of installation. All power connections for the electric heater will be completely separate from the unit.



¹ Only applies to 6 to 25 ton GEH/V units.

² Only applies to 0.5 to 5 ton GEH/V units.

Field Mounted and Wired Boilerless Control, Electric Heat

In this application, the heater shall be placed external to the unit. All power connections for the electric heater will be completely separate from the unit. The unit contains boilerless controls to interface with the field provided electric heat. See *Electric Heat and 575V Water Source Heat Pump 0.5 to 6 Tons Installation Instructions* (WSHP-SVN011*-EN) for more information.



Cabinet Description

The cabinet design contains a platform utilizing similar parts and assemblies throughout the product line. It is constructed of heavy gauge (non-painted), galvanized metal for maximum durability and corrosive resistive exterior.

On the GEH/V 0.5 to 25 tons units, the cabinet front allows service access for the controls. For GEH/V 0.5 to 5 tons models, refrigeration circuitry is accessed through the cabinet front. In addition, water-in/out connection and high/low voltage hook-up is accomplished at the corners on the front-side of the equipment.

For 6 to 15 tons units, hanging the horizontal configuration is accomplished through the robust metal stiffeners located beneath the unit. Optional vibration isolators are available to help decrease sound vibration during equipment operation.

GEH Cabinet (0.5 to 5 Tons)

There are four product variations of return-air and supply-air combinations which are order-specific.

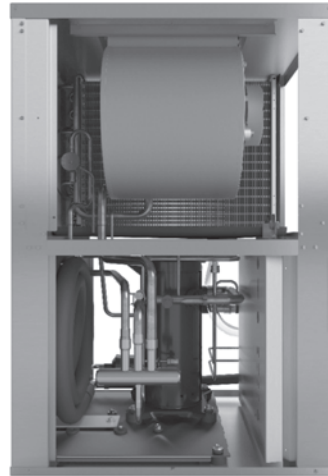




Features and Benefits

GEV Cabinet (0.5 to 5 Tons)

The vertical design offers four product variations of return-air and supply-air combinations. These are factory options for made to order unit construction.



Cabinet Insulation

The cabinet insulation design meets UL 181 requirements. The air-stream surface of the insulation is fabricated of a non-biodegradable source.

Co-axial Water-to-Refrigerant Coil

The unit's internal heat exchanging water coil is engineered for maximum heat transfer.

The copper or cupro-nickel seamless tubing is a tube within a tube design. The inner-water tube contains a deep fluted curve to enhance heat transfer and minimize fouling and scaling. It is available in either copper or cupro-nickel (selectable option) coil. The outer refrigerant gas tube is made from steel material. The coil is leak tested to assure there is no cross leakage between the water tube and the refrigerant gas (steel tube) coil. Co-axial heat exchangers are more tolerant to freeze rupture.



Compressors

The unit's design includes a wide variety of compressor motors to accommodate dedicated voltages and tonnage sizes.

The 0.5 to 1.5 tons products have a rotary compressor design. The scroll compressor design is used in 2 to 5 tons units.

In 6 to 25 ton units, dual circuit designs of the GEH and GEV models feature scroll compressors. The compressors are highly efficient and incorporate external vibration isolators and thermal overload protection.

These different styles allow Trane to provide the voltage variations along with noise reduction required in today's applications.



Compressor and Co-axial Coil Isolation (0.5 to 5 Tons)

Vibration isolation of the compressor and co-axial water coil is accomplished by increasing the rigidity and stiffness at the base. The platform provides double isolation to the compressor and the co-axial water coil for additional attenuation during compressor start and stop.

Drain Pan

The unit drain pan is composed of polymer material. The pan is positively sloped to comply with ASHRAE 62 for (IAQ) indoor air quality conformity. Optional stainless steel drain pans are also available. Access to the drain pan is provided through two access panels for cleaning purposes.



Ducted Filter Rack (0.5 to 5 tons)

When it is necessary to have filter access at the unit in a ducted return, a ducted filter rack is available. This option allows access to the filter at the unit. Vertical unit filter racks are available in right or left access configurations. Horizontal units are available in bottom access configurations.

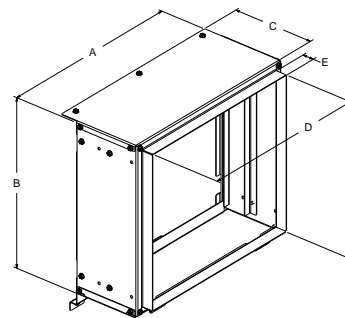


Table 1. Ducted filter opening size - 0.5 to 5 tons

Unit Size	A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	F (in.)
GEHK006-012	16.50	14.25	6.6	14.68	1	12.75
GEHK015-018	19.00	16.25	6.6	17.66	1	14.75
GEHK024-030	20.50	17.25	6.6	18.83	1	15.75
GEHK036-042	23.50	18.50	6.6	21.83	1	16.75
GEHK048-060	30.00	20.25	6.6	28.67	1	18.75
GEVK006-012	16.50	14.25	6.6	14.65	1	12.75
GEVK015-018	19.00	16.25	6.6	17.63	1	14.82
GEVK024-030	20.50	17.25	6.6	19.13	1	15.82
GEVK036-042	23.50	18.50	6.6	22.13	1	16.82
GEVK048-060	30.00	20.25	6.6	28.63	1	18.82

Note: All dimensions in inches. All dimensions are for accessory 2 or 4-inch filter rack.



Features and Benefits

Ducted Panel - Return Air (0.5 to 5 tons)

The return-air arrangement may be easily converted from a free return-air system, to a ducted return-air system with the addition of a return-air side panel. By replacing the filter racks with the return-air panel, a complete seal from the duct to the unit is possible. The 1-inch duct flange facilitates ease of field connection to the duct system. This accessory is typically used when the return-air filter is placed in a built-in ceiling grille, or placed within a field provided filter rack assembly.

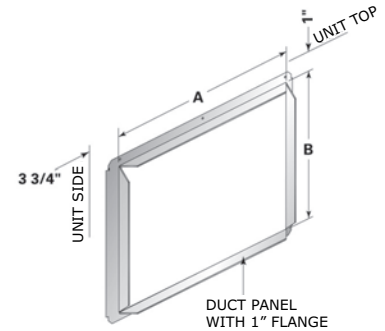


Table 2. Ducted panel - return air

Unit size (60 Hz)	A (in.)	B (in.)	Duct Collar Part Number
GEVK006-012	16.00	14.50	WSHPPND00001
GEVK015-018	18.50	16.50	WSHPPND00002
GEVK024-030	20.00	17.50	WSHPPND00003
GEVK036-042	23.00	18.50	WSHPPND00004
GEVK048-060	29.50	20.50	WSHPPND00005
GEHK006-012	16.00	14.50	WSHPPND00010
GEHK015-018	18.50	16.50	WSHPPND00011
GEHK024-030	20.00	17.50	WSHPPND00012
GEHK036-042	23.00	18.50	WSHPPND00013
GEHK048-060	29.50	20.50	WSHPPND00014

Expansion Valve

The refrigerant flow metering is made through the thermal expansion valve (TXV).

It allows the unit to operate with an entering fluid temperature from between 45°F and 120°F for cooling and between 25°F and 86°F for heating and entering air temperatures from 55°F to 85°F.

The valve is designed to meter refrigerant flow through the circuitry to achieve desired heating or cooling.

Unlike cap-tube assemblies, the expansion valve device allows the exact amount of refrigerant required to meet the coil load demands.

This precise metering by the TXV increases the efficiency of the unit and eliminates the need for a water regulating valve.



Hanging Device

The hanging bracket resides on each side of the three hanging rails of the horizontal 0.5 to 5 ton equipment. The brackets are factory mounted to shorten job installation requirements. The 0.5 to 5 ton unit is shown to the right.

The structural integrity of the design helps assure no bracket deflection or unit bowing from the unit's weight. Isolation for the hanging bracket is provided with a neoprene rubber grommet design. The grommets are a separately ordered accessory on the GEH 6 to 15 tons models. A grommet kit (KIT15407) containing four grommets can be ordered if desired.

This isolation device helps prevent sound vibration from reaching the structural support members of the building during compressor start and stop.

The hanging channel for the horizontal unit (GEH 6 to 15 tons) runs the length of the equipment.



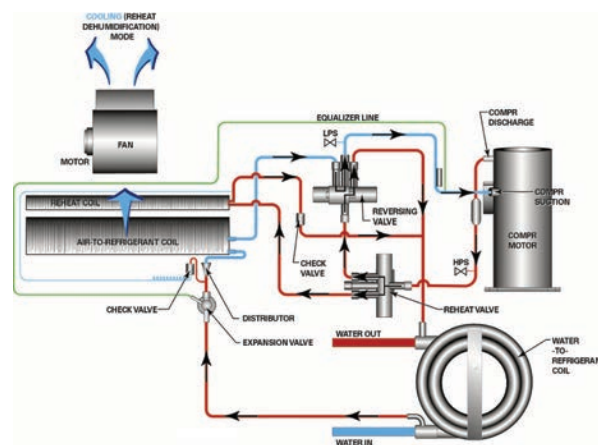
Hot Gas Reheat

For space conditioning and climate control, Trane provides an accurate and cost effective dehumidification control through a hot gas reheat option.

With this reheat option, the return air from the space is conditioned by the air-to-refrigerant coil, then reheated by the reheat coil to control not only the space temperature, but to also reduce the relative humidity of the space. The moisture removal capability of a specific heat pump is determined by the units latent capacity rating.

When operating in the reheat mode (meaning the sensible temperature has been met in the space), the humidistat signals the reheat relay coil to energize, allowing the high pressure refrigerant gas to flow from the compressor, through the reheat valve, into the reversing valve, and through the reheat coil for dehumidification.

Note: GEH/V 0.5 to 5 tons image shown to the right. Trane places an air separation space between the air-to-refrigerant coil, and the reheat coil to allow for maximum moisture removal.



Hot Gas Reheat - Applications

The hot gas reheat option is designed to support building applications requiring fresh-air ventilation units delivering unconditioned-air directly to the space. It also provides dehumidification to large latent load spaces such as auditoriums, theaters and classrooms, or anywhere humidity control is a problem.

Hot Gas Reheat - Design

Water-source heat pumps with hot gas reheat should not be used as a make-up air unit.

Water regulating valves should not be used with the hot gas reheat option. Trane places a thermal expansion valve on all water-source heat pumps, as well as ground-source heat pumps, to regulate refrigerant flow vs. water flow, making the heat pump more efficient to run.



Features and Benefits

Leak Detection System

The Leak Detection System (LDS) consists of one or more refrigerant detection sensors and is required in ducted HVAC systems that have more than 3.91 lbs of A2L refrigerant charge, per safety standard UL 60335-2-40. For any units with more than 3.91 lbs of charge in a circuit, an LDS will be factory-installed. Having the leak detector installed in the factory by the manufacturer on applicable units reduces the risk of improper installation in the field as well as bypassing the added cost in the field for installation, leading to peace of mind that the right solution has been applied to your unit.

Motorized Water Valve

The two-position motorized water valve is installed on the return line of the water loop system between the loop and the loop's pump module.

When the compressor begins running, the two-position valve will open, allowing water to flow through the unit. As the compressor shuts down, the valve slowly closes off. The main purpose of the motorized valve is to shut-off the flow of water through the unit when the unit is off, thus reducing pump energy consumption. The two-position motorized valve is fast opening to prevent compressor trip-out, and slow closing to prevent water hammer.

Refrigerant Piping

The unit's copper tubing is created from a 99% pure copper formation that conforms to the American Society of Testing (ASTM) B743 for seamless, light-annealed processing.

The unit's copper refrigeration system is designed to be free from contaminants and conditions such as drilling fragments, dirt, or oil. This excludes the possibility of these contaminants from damaging the compressor motor.

Reversing Valve

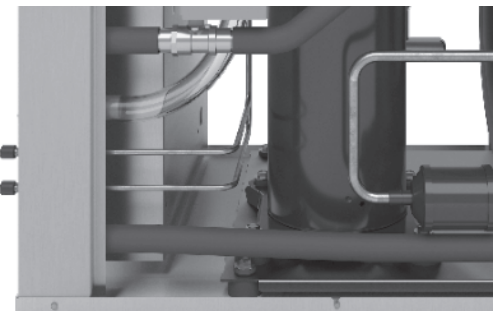
A system reversing valve (4-way valve) is included with all heating/cooling units. This valve is piped to be energized in the cooling mode to allow the system to provide heat if valve failure were to occur. Once the valve is energized for cooling, it will remain energized until the control system is turned to the "OFF" position, or a heating cycle is initiated.



Schrader Connections

For 0.5 to 5 tons vertical and horizontal units, the Schrader/CoreMax® connections are located adjacent to the unit control box.

For 6 to 25 tons, these connections are brazed to the suction and the discharge lines.



Sound Attenuation Package (0.5 to 5 Tons Units)

Testing of conventional units has identified that the sound radiated by the casing of the unit is an important component of the sound that reaches occupants, especially when the unit is located directly over the occupied space.

This sound reduction package reduces radiated noise from the cabinet. Trane® double-isolates the compressor and single-isolates the co-axial coil in the unit. This design absorbs the vibration that contributes to radiated sound. For sound critical spaces, an enhanced sound package as described in the following table provides additional attenuation.

Table 3. Sound package

Standard Sound Attenuation Package	Deluxe Sound Attenuation Package (Option) ^(a)
Lined compressor enclosure with 1/2-inch cabinet insulation	Panel Mass Loading
14-gauge compressor/water-to-refrigerant heat exchanger pan with second stage of vibration isolation	Larger Blowers
Compressor double vibration isolation	Cabinet insulation thickness of 2-inch in certain areas
Water-to-refrigerant heat exchanger vibration isolation	Compressor blanket
Unit base stiffeners	—

^(a) Different combinations of these attenuation treatments maybe be applied for the deluxe sound option depending on unit size and cabinet configuration.

Two-Speed Blower Motor (6 to 25 Tons Option)

The 6 to 25 tons GEH/V models have indoor blowers that are available with 2 speed motors, selectable in the model number (Digit 12, drive packages 1-9). High speed airflow matches the single speed motor airflow, referenced in the fan performance tables. Low fan speed airflow is approximately 50% of high fan speed airflow.

The 6 to 25 tons GEH/V 2 speed blower motors are available with the following options: deluxe 24V or Symbio™ 500 controls, heat pump or heat pump w/ hot gas reheat or heat pump w/ waterside economizer. Not available with boilerless or supplemental electric heat.

Table 4. 6 to 25 tons GEH/V fan speed for 2 speed drive packages 1 to 9

RV State	Fan	Compressor 1	Compressor 2	Fan Speed
Heat	OFF	OFF	OFF	OFF
Heat	ON	OFF	OFF	LOW
Heat	ON	ON	OFF	HIGH
Heat	ON	ON	ON	HIGH
Cool	OFF	OFF	OFF	OFF
Cool	ON	OFF	OFF	LOW
Cool	ON	ON	OFF	LOW
Cool	ON	ON	ON	HIGH

Water Connections

0.5 to 5 Tons

The water-in/water-out connections to the co-axial water coil are located on the right-hand corner of the unit.

The water connection devices are constructed of copper material and include an internal pipe thread (NFPT) junction. The connections are attached to the unit's corner to alleviate the need for a back-up wrench during installation.



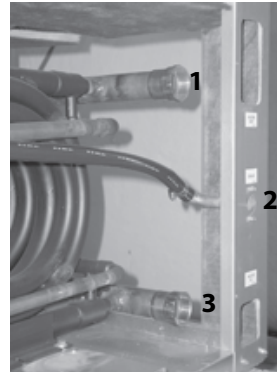


Features and Benefits

6 to 25 Tons

Water hookups for the 6 to 25 tons units are located internal to the equipment to help alleviate damage to the water copper during shipment or job storage of units prior to installation. Each unit (although dual circuit) contains a single supply and return water connection. The figure provides large tonnage water hook-up information for model GEV.

1. Water-out
2. Drain
3. Water-in



Waterside Economizer (Option)

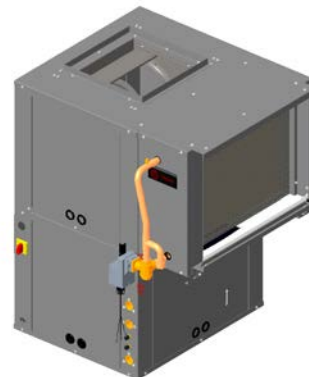
The beauty of the waterside economizer is its ability to take advantage of any loop condition that results in cool water temperatures. A prime example would be during fall, winter and spring when cooling towers have more capacity than required and could be controlled to lower temperatures for economizer support.

Another more common inexpensive means of free comfort cooling includes buildings systems where perimeter heating and core cooling are needed. In this system, the perimeter units extract heat from the building loop while in the heating mode, forcing the building loop temperature to drop. Where as, the core are of a building may require cooling in summer or in winter based upon lighting, people and equipment.

Waterside Economizer Package

The waterside economizer is available on all 0.5 to 15 ton GEH models and 0.5 to 25 GEV models. 0.5 to 5 ton GEH model shown.

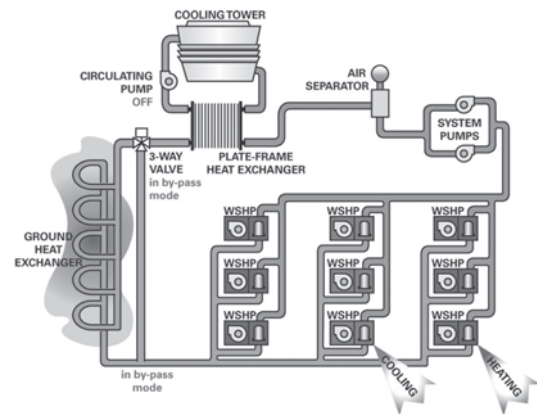
Note: *Condensate overflow protection for the waterside economizer coil is field provided.*



Waterside Economizer System (0.5 to 25 Tons)

If the water-source system design contains an economizing coil option, the moderate temperature loop water circulated through a core water-source system can provide an inexpensive means to satisfy room comfort without operating the water-source heat pump's compressor.

During economizer mode, fluid enters the unit, and passes by a water temperature sensing bulb. This temperature sensing bulb determines whether the two position, three-way valve will direct the water through the waterside economizing coil, and to the heat pump condenser, or through the condenser only. If the water temperature is 55°F or less, fluid will flow into the economizing coil, while simultaneously halting mechanical operation of the compressor. Mechanical cooling will continue on a call for second stage from the thermostat.



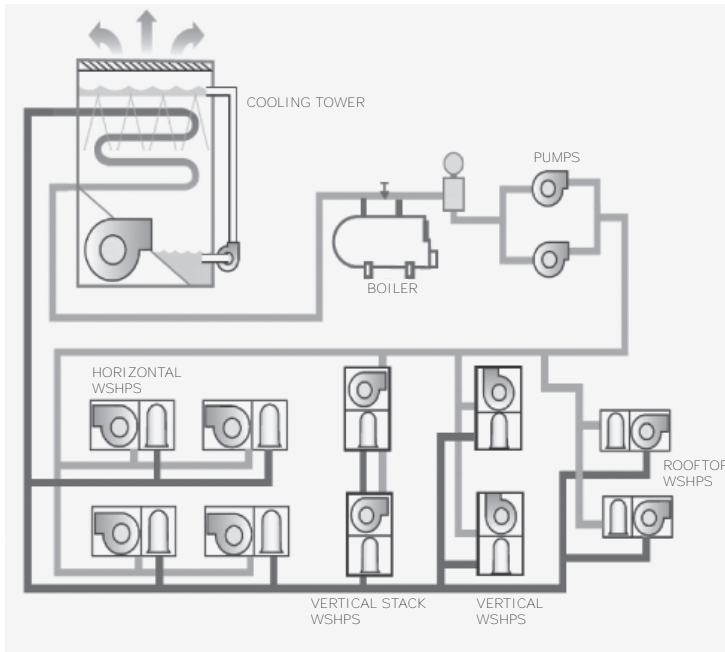
Application Considerations

Systems

Water-source heat pump systems are used to provide comfort in a wide range of building types and climates. The system utilizes energy-conserving, heat-recovery capabilities to transfer heat from one area to another to meet individual zone requirements. When used with system design and control strategies, these high-performance systems reduce operating costs for the building owner and improving occupant comfort.

Heat pump units are available in many different configurations and the design simplicity can be adapted to suit almost any building plan. The vertical and horizontal water-source heat pump system is versatile for installation in a boiler/cooling tower applications, as well as ground source (geothermal) applications.

Figure 4. Conventional water-source heat pump system



Boiler/Cooling Tower

In this type of system, units are distributed throughout the building to provide cooling and heating to the space. Units are connected to a water distribution loop which circulated water throughout the building to transfer heat from one area to another. This common water loop yields what is essentially a heat-recovery system. Units providing heating extract heat from loop water while units providing cooling reject heat to the loop. In effect the system recovers and redistributes heat where needed.

Also connected to this water loop are a heat rejecter such as a cooling tower, a heat adder such as a boiler, circulation pumps, and related accessories. Typically, outdoor air is conditioned and delivered by a separate, dedicated ventilation system.

During warm weather when all or most of the units are cooling, the cooling tower is used to dissipate heat from the condensing process. The condensing water is cooled for recirculation back to the water-to-refrigerant heat exchanger by using a combination of heat and mass transfer by evaporation.

A boiler is also used to add heat to the water loop during winter months when most units are heating. The boiler is typically enabled when the water loop temperature falls to a minimum value.

During moderate weather, such as spring or fall, the heat pumps serving the sunny side and interior of the building often operate in cooling mode and reject heat into the water loop. The heat pumps serving the shady side of the building often operate in heating mode and absorb heat from the water loop.

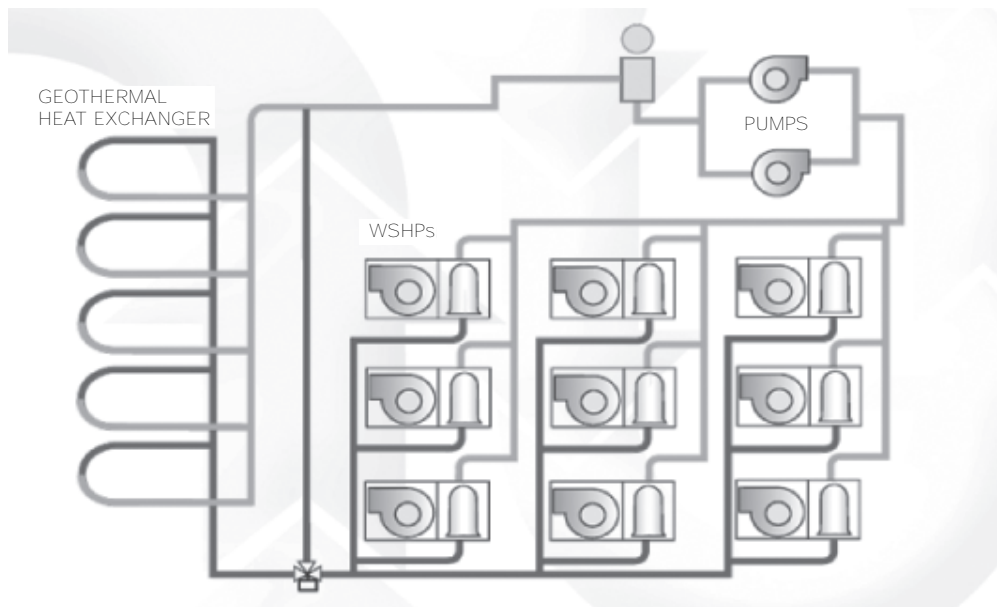
Heat rejected by the units operating in cooling mode is used to offset the heat absorbed by the units in heating mode. In this manner, a WSHP system provides a form of heat recovery and an opportunity to save energy by reducing the need to operate the boiler or cooling tower. For example, if the water temperature stays in the desired range-between 60°F (16°C) and 90°F (32°C)-neither the boiler nor the cooling tower need to operate.

In applications such as office buildings, heat generated by lights, people, and office equipment often results in the need to provide year-round cooling in the interior zones of the building. In these applications, the benefit of this heat recovery further reduces boiler energy use during the winter months.

Ground Source

The advantages of a geothermal heat pump system can potentially minimize heating and cooling cost by 30 to 40 percent. In this application the cooling tower and boiler are replaced with a ground heat exchanger. The ground heat exchanger is a series of pipes buried in the earth. The earth is used as an energy storage tank. Ground-source heat pump systems offer the potential for saving energy because they can reduce (or eliminate) the energy needed to operate a cooling tower and/or boiler. Eliminating the cooling tower has architectural and maintenance advantages, and eliminating the boiler frees up floor space in the building.

Figure 5. Ground source heat pump system



The fluctuating temperatures of fluid from the earth are more stable than air, allowing the equipment to operate at a lower discharge pressure and use fewer kilowatts. The constant earth temperature will heat or cool the fluid running through buried high density polyethylene pipe to provide heating and cooling to a building.

A geothermal loop can be installed either horizontally or vertically. Vertical loops require less overall land area to reject (i.e., sink) the excess heat from the building. Horizontal loops require trenches in the ground spanning a larger overall land area.

Although external piping is the responsibility of the installer and/or piping manufacturer, many electric utilities and rural electric cooperatives are offering monetary incentives to install geothermal systems. Utility companies offer the incentives because of reduced peak loads that flatten out their demand curve over time, and save them money. These savings are ultimately transferred to the consumer.

Hybrid Systems

Hybrid systems involve adding a small cooling tower or dry cooler to a ground source system that is installed in a cooling-dominated climate or adding a small boiler to a system in a heating-dominated climate. In either case, the geothermal heat exchanger is sized based on the smaller of the two loads: for the total heat absorbed in a cooling-dominated climate or the total heat rejected in a heating-dominated climate. Then, a small cooling tower (or boiler) is added to reject (or add) the remaining heat.

A hybrid system may also be used in existing buildings with existing ground loops as additional rooms or buildings are added to the system. A cooling tower may be the solution to off-load the peak demand of the new building addition as an example. Other additions may include a requirement for fresh-air ventilation. A fresh-air, air handler, along with a water to water unit may be introduced to the closed loop system to allow tempered fresh-air into the building.

The buildings heating and cooling needs are not based off of one type of component, but perform harmonious of each other. Heat recovery from the loop itself can be shared with the other major components.

Hybrid systems can often make the system more economical, opening up the possibility to reap the potential energy savings.

Figure 6. Hybrid system

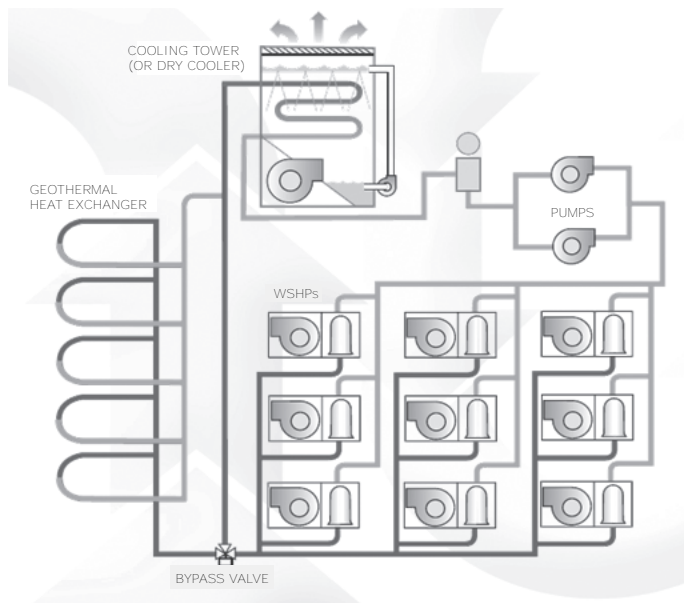
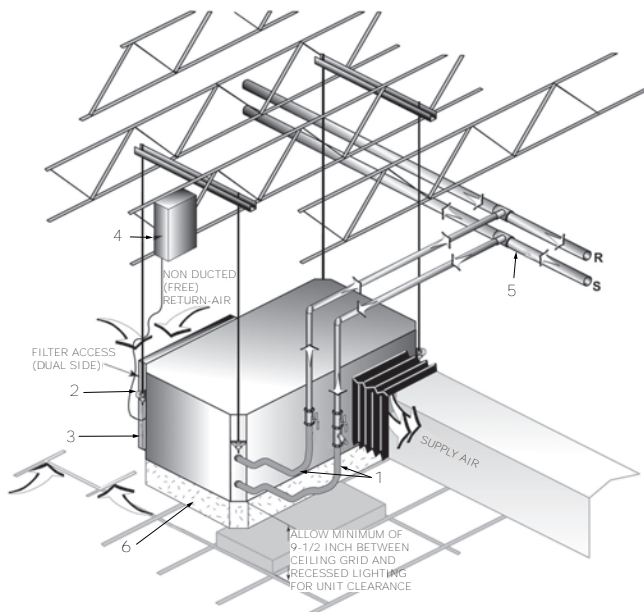


Figure 7. Central pumping system



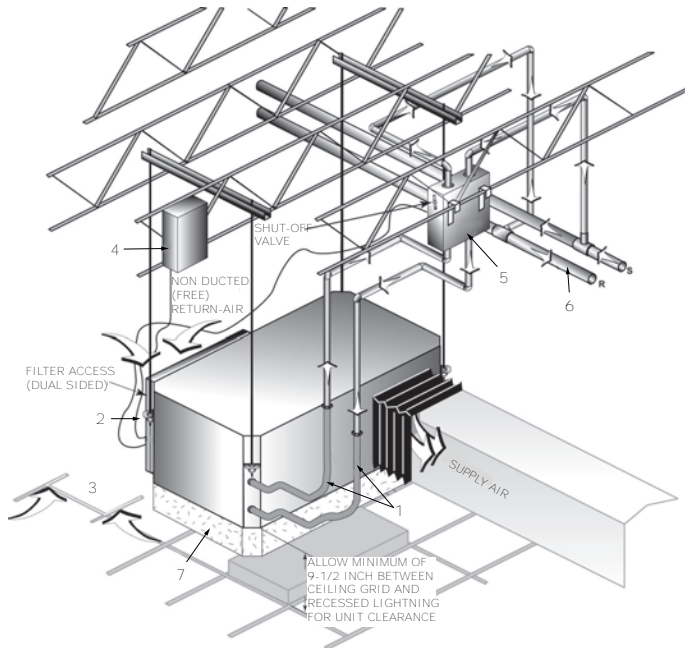
Units that employ a central pumping system contain single or dual pumps to fulfill pumping requirements for the entire building system. The central system's supply and return lines should be sized to handle the required flow with a minimum pressure drop. The water-source heat pump (GEH) may include add-on accessories to help aid in system balancing, acoustics and safety requirements. Some of these items may be ordered from the factory, then field installed. Many are provided by the contractor.

- Hose kits (item 1) are used to connect the water supply and return line to the water inlets and outlets. Trane offers various hose kit combinations to better facilitate system flow balancing. These flexible hoses also aid in the reduction of vibration between the unit and the rigid central piping system.
- A two position isolation valve is often applied to systems which incorporate variable frequency pumping. This valve is capable of stopping/starting water flow to the unit, which in-turn reduces the pumping requirements for the entire system.
- The unit's (item 2) 3/4-inch high voltage and (item 3) 0.5-inch low voltage connections are located on the left corner of the unit. They are designed to accept conduit.
- A field supplied line voltage disconnect (item 4) should be installed for branch circuit protection. Check local codes for requirements.
- The central system supply and return lines (item 5) should be sized to handle the required flow with a minimum pressure drop.

Note: Pipe will sweat if low temperature water is below the dew point of the surrounding space. Trane recommends that these lines be insulated to prevent damage from condensation when condenser loop is designed to be below 60°F. Equipment installed in attic/crawl space temperatures below 40°F may require antifreeze in the water loop.

- For acoustically sensitive areas, a six-inch deep fiberglass insulation (item 6) is recommended to be field installed below the horizontal unit. This field supplied insulation should be approximately twice the footprint size of the unit. It provides sound damping of the unit while in operation.

Figure 8. Distributed pumping system



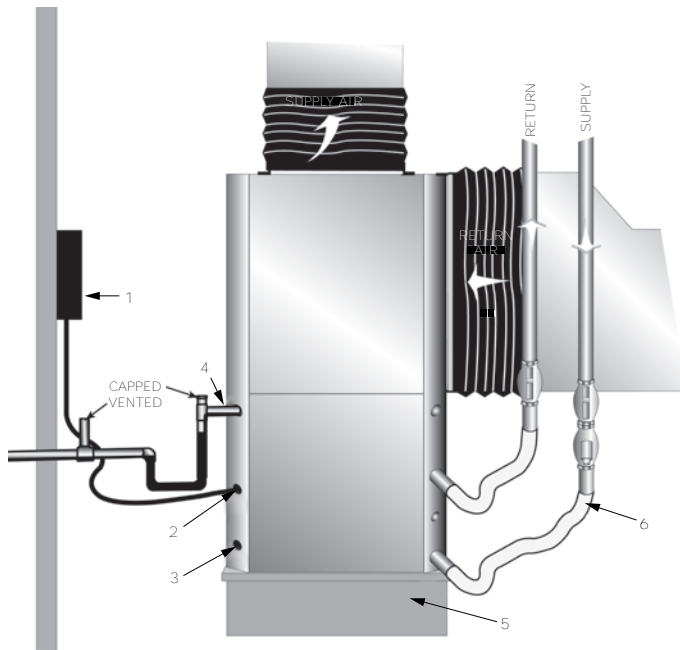
A distributed pumping system contains either a single or dual pump module, specifically sized for each water-source heat pump, then connected directly to the units supply and return lines. The distributed system's supply and return lines should be sized to handle the required flow with a minimum pressure drop.

- Hose kits (item 1) are used to connect the water supply and return line to the water inlets and outlets. Trane offers various hose kit combinations to better facilitate system flow balancing. These flexible hoses also aid in the reduction of vibration between the unit and the rigid central piping system.
- The unit's (item 2) 3/4-inch high voltage and (item 3) 0.5-inch low voltage connections are located on the left corner of the unit. They are designed to accept conduit.
- A field supplied line voltage disconnect (item 4) should be installed for branch circuit protection. Check local codes for requirements.
- A field provided pump module (item 5) and hose kit make a complete pumping package for distributed pumping systems. The module is designed for circulating commercial loops that require a maximum flow rate of 20 gpm.
- The distributed pumping system supply and return lines (item 6) should be sized to handle the required flow with a minimum pressure drop.

Note: Pipe will sweat if low temperature water is below the dew point of the surrounding space. Trane recommends that these lines be insulated to prevent damage from condensation when condenser loop is designed to be below 60°F. Equipment installed in attic/crawl space temperatures below 40°F may require antifreeze in the water loop.

- For acoustically sensitive areas, a six-inch deep fiberglass insulation (item 7) is recommended to be field installed below the horizontal unit. This field supplied insulation should be approximately twice the footprint size of the unit. It provides sound damping of the unit while in operation.

Figure 9. Installation of the 0.5 to 5 tons vertical



Whether securing the 0.5 to 5 tons vertical models to a central pumping system or a distributed pumping system, Trane recommends a few accessory considerations to the system installation.

- The field supplied line voltage disconnect (1) should be installed for branch circuit protection.
- The units (2) 3/4-inch high voltage and (3) 0.5-inch low voltage connections are located on the left corner of the unit. They are designed to accept conduit.
- Trane recommends that the condensate system (4) be set-up per negative pressure trapping in consideration of the unit's draw-through design. With this properly trapped system, when condensate forms during normal operation, the water level in the trap rises until there is a constant outflow. See the Axiom™ Installation and Operations manual for negative pressure trapping guidelines.

Note: Condensate connection for 0.5 to 5T vertical models is on the right-hand side of the unit.

- For acoustically sensitive areas, a 0.5-inch thick field provided vibration pad (5) should be installed below the vertical unit. This field provided piece should be equal to the overall foot-print size of the unit to provide sound damping of the unit while in operation.
- Hose kits (6) are used to connect the water supply and return lines to the water inlet and outlets. Trane includes various hose kit combinations to better facilitate system flow balancing. These flexible hoses, reduce vibration between the unit and the rigid piping system.

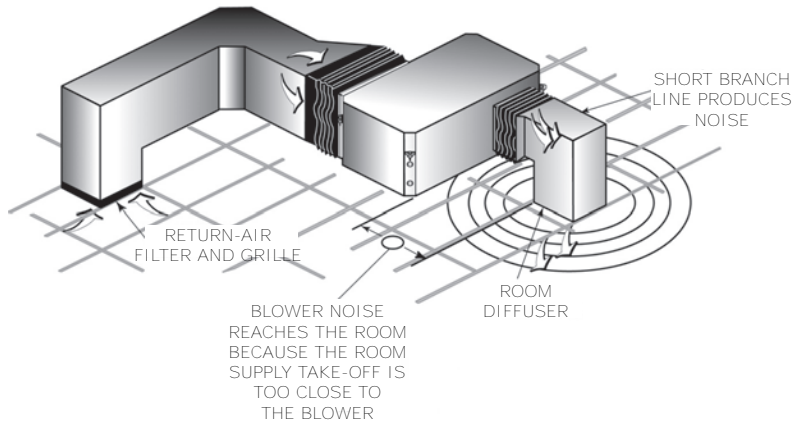
Duct Design for Noise Control

Proper acoustics are often a design requirement. Most of the problems that are associated with HVAC generated sound can be avoided by properly selecting and locating the components of the system. Acoustical modeling should be used to find the lowest cost design to meet a specific sound requirement, however, there are some general do's and don'ts that should be observed.

Improper Supply Air-Ducting (0.5 to 5 Tons)

The figure below shows a supply air duct that is placed too close to the blower to provide substantial noise attenuation. It also, represents the effects on sound that a short supply branch connected to the discharge may produce. Avoid these forms of connections when designing ductwork where noise attenuation is critical.

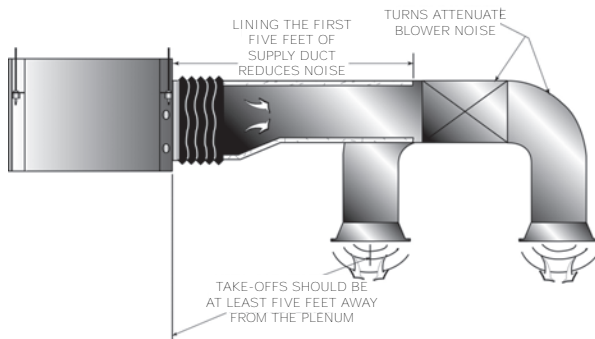
Application Considerations



The following suggestions will reduce the amount of sound that reaches the occupied space:

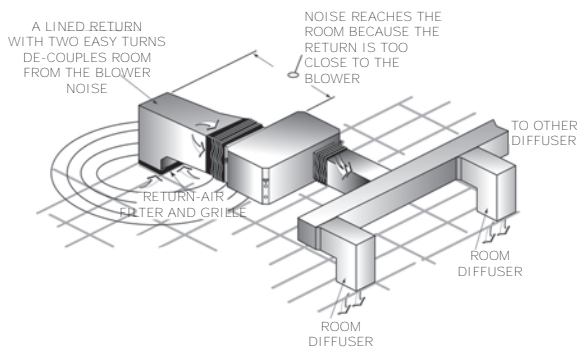
- Design the duct run with two 90° turns
- Line the first 5 feet of the supply trunk
- Line elbows and transition pieces, as well as a short distance upstream and downstream of the fittings
- Use flexible connections to isolate vibrations
- Provide multiple discharges
- Keep duct velocity low

Figure 10. Desired supply air ducting



See [Figure 10, p. 26](#) for a positive representation of supply duct work design for noise attenuation on units over 1.5 tons.

Figure 11. Improper return-air ducting



Sound control applies to the return side of the duct design as well as the supply side. [Figure 11, p. 26](#) demonstrates a poor installation. Note that the return air opening is close to the cabinet of the unit.

Figure 12. Proper return-air ducting

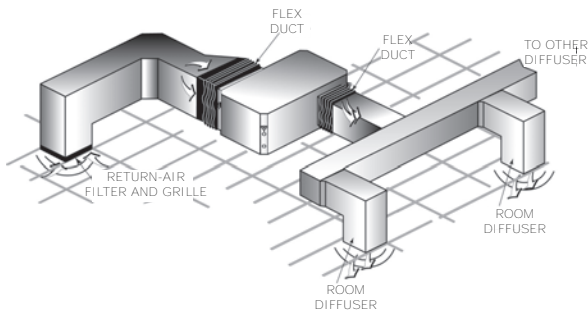


Figure 12, p. 27 graphic represents proper installation of return-air duct. This includes:

- Two 90° bends prior to the intake
- Lining the first 10 feet of the return air duct
- Locating the return-air intake away from the unit blower

A duct system design that takes noise control into account:

- Keeps air flow velocities low
- Uses aerodynamic fittings
- Uses a duct liner if metal duct is applied
- Avoids line-of-sight connections between a noise source and an outlet
- Avoids line-of-sight connection between a noise source and an inlet
- Properly locates balancing dampers
- Seals cracks, seams, and joints in the duct run and equipment panels
- Blocks transmission through walls, ceiling and floors
- Mounts and supports the ductwork with isolation devices that absorb vibration
- Uses flexible duct connections
- Uses flexible braided hoses on the water connections

Water Flow Control

Trane's Axiom product line features thermal expansion valves on every unit. The operating range for the TXV is between 45°F and 120°F for cooling and between 25°F and 86°F for heating. On systems that expect low water temperatures, a waterside economizer can be employed to eliminate the need to operate the compressors and take full advantage of free cooling. Water regulating valves are not recommended.

A two-position isolation valve is recommended for use with the Axiom WSHP unit on systems utilizing variable water flow. The two-position isolation valve allows full water flow through the unit when the compressor is in operation. When the compressor is off, the valve closes and shuts off water flow to the unit allowing the system pumps to unload and operate more efficiently. Isolation valves are typically provided as part of the hose kit and connect to the unit terminal strip. A variety of manual and automatic flow control kits including hoses are available as accessories for balancing a water source heat pump system. For a complete product listing, see *Hose Kit Accessories Automatic and Manual Balancing - Product Catalog (WSHP-PRC025*-EN)*.

A2L Application Considerations

This product is listed to UL standard 60335-2-40, Household and Similar Electrical Appliances – Safety – Part 2-40: Particular Requirements for Electrical Heat Pumps, Air-Conditioners and Dehumidifiers, which defines safe design and use strategies for equipment using A2L refrigerants. This standard limits the refrigerant concentration in a space in the event of a refrigerant leak. To meet the requirements, the UL standard defines minimum room area, refrigerant charge limit, minimum circulation airflow and/or ventilation airflow requirements, and limits the use of ignition sources in spaces. The standard may require a unit refrigerant leak detection system.

For equipment with R-454B and charge amounts less than or equal to 3.91 lbs per circuit, this UL standard does not prescribe a room area limit and does not require a refrigerant leak detection system or any circulation airflow or ventilation airflow mitigation strategies. However, ignition sources in ductwork must be evaluated.

Depending on the application, a specific requirement of ANSI/ASHRAE Standard 15, Safety Standard for Refrigeration Systems, could be more stringent than UL 60335-2-40 requirements. See *Refrigeration Systems and Machinery Rooms Application Considerations for Compliance with ASHRAE® Standard 15-2022 Application Engineering Manual (APP-APM001*-EN)* for more information.



Application Considerations

Minimum Room Area Limits (Refrigerant charge greater than 3.91 lb per circuit)

Equipment with R-454B charge amounts greater than 3.91 lb per circuit may require additional circulation or ventilation airflow mitigation strategies. In this case, two minimum room area (A_{min}) thresholds:

- The first threshold defines when equipment serving a single room is required to provide circulation airflow, either continuous or activated by a leak detection system. A ducted system requires circulation airflow unless the smallest room it serves is larger than the adjusted A_{min} threshold. This product contains a leak detection system if a circuit charge is greater than 3.91 lbs. As a result, no further leak detection system evaluation is required.
- The second threshold defines when additional ventilation airflow is required. If the room area, A or TA, is below the adjusted A_{min} or TA_{min} threshold, additional ventilation is required to remove refrigerant in the event of a leak. Refer to UL 60335-2-40 Clause GG.8 and ANSIASHRAE Standard 15 Section 7 for natural and mechanical ventilation requirements. For minimum room area, see equipment nameplate or unit Installation, Operation, and Maintenance (IOM) manual.

Minimum Room Area (A_{min}) Adjustments

- **Altitude:** The A_{min} threshold changes with altitude. Multiple the altitude adjustment factor in the following table by A_{min} shown on the unit nameplate or in the Installation, Operation, and Maintenance (IOM) manual.

Table 5. Altitude adjustment factor

Altitude (ft)	Sea Level to 2000	2001 to 4000	4001 to 6000	6001 to 8000	8001 to 10000	10001 to 12000	12001 to 14000	14001 to 15000	Over 15000
A_{min} Adjustment	1	1.05	1.11	1.17	1.24	1.32	1.41	1.51	1.57

- **Height :** A_{min} can be adjusted if the unit is installed in a room at a height higher than the minimum height shown on the unit. Multiply A_{min} by the ratio of the unit minimum release height (in meters) / actual release height (in meters).
- **Institutional Occupancies:** For institutional occupancies, ASHRAE Standard 15 applies an additional adjustment factor, FOCC, to the amount of charge allowed in a space. To calculate the adjusted A_{min} for institutional occupancies, divide the A_{min} on the nameplate by 0.5.

Determining Room Area (A or TA)

The room area (A) is the room area enclosed by the projection to the floor of the walls, partitions, and doors of the space that the equipment serves. For ducted systems, total room area (TA) of all rooms connected by ducts, may be used instead of A.

Rooms connected by drop ceilings only are not considered a single room.

Rooms on the same floor of the building, and connected by an open passageway, can be considered part of the same room if the passageway is a permanent opening, extends to the floor and is intended for people to walk through.

Adjacent rooms on the same floor of the building and connected by permanent openings in the walls and/or doors between rooms (including gaps between the wall and the floor), can be considered part of the same room if the openings meet the following criteria.

- The opening is permanent and cannot be closed.
- Openings extending to the floor, such as door gaps, need to be at least 20 mm above the floor covering surface.
- Natural ventilations opening areas must meet the requirements of ANSIASHRAE Standard 15-2022, Section 7.2.3.2.

Rooms that are connected by a mechanical ventilation system can be considered a single room area if the mechanical ventilation system meets the requirements of ANSIASHRAE Standard 15-2022, Section 7.6.4.

Leak Detection System (Refrigerant charge greater than 3.91 lb per circuit)

The leak detection system consists of one or more refrigerant detection sensors. When the system detects a leak, the following mitigation actions will be initiated until refrigerant has not been detected for at least 5 minutes:

- Energize the supply fan(s) to deliver a required minimum amount of circulation airflow.
- Disable compressor operation.
- Provide an output signal that can be used to fully open zone dampers and/or VAV boxes and disable electric heat in VAV boxes.

- Provide an output signal that can be used to energize additional mechanical ventilation (if needed).
- Units without airflow proving will disable electric heat sources.

Building fire and smoke systems may override this function.

If the refrigerant sensor has a fault, is at the end of its life, or is disconnected, the unit will initiate the mitigation actions. Mitigation actions may be verified by disconnecting the sensor.

The refrigerant sensors do not need service. Use only manufacturer-approved sensors when replacement is required.



Model Number Description

GEV/GEH 072–300 Models

Digits 1–3 — Unit Configuration

GEH = Standard Efficiency Horizontal 6 to 15 Tons
GEV = Standard Efficiency Vertical 6 to 25 Tons

Digit 4 — Development Sequence

K = R-454B

Digits 5–7 — Nominal Capacity

072 = 6 Tons
090 = 7.5 Tons
120 = 10 Tons
150 = 12.5 Tons
180 = 15 Tons
240 = 20 Tons
300 = 25 Tons

Digit 8 — Voltage (Volts/Hz/Phase)

1 = 208/60/1
2 = 230/60/1
3 = 208/60/3
4 = 460/60/3
5 = 575/60/3
8 = 230/60/3
9 = 380-415/50/3

Digit 9 — Heat Exchanger

1 = Copper-Water Coil
2 = Cupro-Nickel Water Coil
7 = Insulated Copper-Water Coil
8 = Insulated Cupro-Nickel Water Coil

Digit 10 — Current Design Sequence

Digit 11 — Refrigeration Circuit

0 = Heating and Cooling Circuit
2 = Heating and Cooling Circuit with Hot Gas Reheat
3 = Heating and Cooling Circuit with Waterside Economizer
4 = Heating and Cooling Circuit with HGR and WSE

Digit 12 — Blower Configuration

A = Drive Package A
B = Drive Package B
C = Drive Package C
D = Drive Package D
E = Drive Package E
F = Drive Package F
G = Drive Package G
H = Drive Package H
J = Drive Package J
1 = 2 Speed Drive Package A
2 = 2 Speed Drive Package B
3 = 2 Speed Drive Package C
4 = 2 Speed Drive Package D
5 = 2 Speed Drive Package E
6 = 2 Speed Drive Package F
7 = 2 Speed Drive Package G
8 = 2 Speed Drive Package H
9 = 2 Speed Drive Package J

Digit 13 — Freeze Protection

A = 20°F Freezestat (For Glycol loop)
B = 35°F Freezestat (For Water loop)

Digit 14 — Open Digit = 0

Digit 15 — Supply-Air Arrangement

B = Back Supply-Air Arrangement
F = Front Supply-Air Arrangement
L = Left Supply-Air Arrangement
R = Right Supply-Air Arrangement
T = Top Supply-Air Arrangement

Digit 16 — Return-Air Arrangement

B = Back Return-Air Arrangement
F = Front Return-Air Arrangement
L = Left Return-Air Arrangement
R = Right Return-Air Arrangement

Digit 17 — Control Types

D = Deluxe 24V Controls
F = Symbio™ 500
G = Symbio 500/with Air-Fi® Wireless

Digit 18 — Tstat/Sensor Location

0 = Wall Mounted Location

Digit 19 — Fault Sensors

1 = Condensate Overflow Sensor
3 = Condensate Overflow and Filter Maintenance Timer
6 = Condensate Overflow and Fan Status
J = Fan Status, Filter Maintenance Timer and Condensate Overflow Sensor

Digit 20 — Temperature Sensor

0 = No Temperature Sensor
1 = Entering Water Sensor

Digit 21 — Insulation

1 = Standard Fiberglass Insulation

Digit 22 — Electric Heat

0 = No Electric Heat
4 = External Boilerless Electric Heat
5 = External Supplemental Electric Heat

Digit 23 — ON/OFF Switch

0 = No ON/OFF Switch

Digit 24 — Filter Type

1 = 1-inch Throwaway Filter
2 = 2-inch Throwaway Filter
4 = 2-inch MERV 8
5 = 2-inch MERV 13

Digit 25 — Acoustic Arrangement

0 = Enhanced Sound Attenuation

Digits 26–34 — Does Not Apply to GEH or GEV

0000000000 = Digits 26-36 are not applicable to the GEH or GEV products

Digits 35 — Unit Drain Pan Option

A = Polymer Drain Pan
B = Stainless Steel Drain Pan

Model Number Notes

Note: 20°F Freezestat is typically used in a geothermal application. 35°F Freezestat is typically used in a boiler/tower application.

GEV/GEH 006–060 Models

Digits 1–3 — Unit Configuration

GEH = Standard Efficiency Horizontal
GEV = Standard Efficiency Vertical

Digit 4 — Development Sequence

K = R-454B

Digits 5–7 — Nominal Size (MBh)

006 = 6.0 MBh
009 = 9.0 MBh
012 = 12.0 MBh
015 = 15.0 MBh
018 = 18.0 MBh
024 = 24.0 MBh
030 = 30.0 MBh
036 = 36.0 MBh
042 = 42.0 MBh
048 = 48.0 MBh
060 = 60.0 MBh

Digit 8 — Voltage (Volts/Hz/Phase)

4 = 460/60/3
7 = 265/60/1
A = 208-230/60/1
B = 208-230/60/3

Digit 9 — Heat Exchanger

1 = Copper-Water Coil
2 = Cupro-Nickel Water Coil
7 = Insulated Copper-Water Coil/Suction Line
8 = Insulated Cupro-Nickel Water Coil/Suction Line

Digit 10 — Design Sequence

A First Design Sequence

Digit 11 — Refrigeration Circuit

0 = Heating and Cooling Circuit
2 = Heating and Cooling Circuit with Hot Gas Reheat
3 = Heating and Cooling Circuit with Waterside Economizer
4 = Heating and Cooling Circuit with Waterside Economizer, Hot Gas Reheat

Digit 12 — Blower Configuration

K = Variable ECM Motor, Constant Torque

Digit 13 — Freeze Protection

A = 20°F Freezestat (For Glycol loop)
B = 35°F Freezestat (For Water loop)

Digit 14 — Open Digit = 0

Digit 15 — Supply-Air Arrangement

T = Top Supply-Air Arrangement
B = Back Supply-Air Arrangement
L = Left Supply-Air Arrangement
R = Right Supply-Air Arrangement

Digit 16 — Return-Air Arrangement

L = Left Return-Air Arrangement
R = Right Return-Air Arrangement

Digit 17 — Control Types

D = Deluxe 24V Controls
H = Symbio 400-B
J = Symbio 400-B/with Air-Fi® Wireless Communications

Digit 18 — Tstat/Sensor Location

0 = Wall Mounted Location

Digit 19 — Fault Sensors

1 = Condensate Overflow Sensor
3 = Condensate Overflow and Filter Maintenance Timer
6 = Condensate Overflow and Fan Status
J = Fan Status, Filter Maintenance Timer and Condensate Overflow Sensor

Digit 20 — Temperature Sensor

0 = No Additional Temperature Sensor
1 = Entering Water Sensor

Digit 21 — Insulation

1 = Matte Faced Insulation
2 = Foil Faced Insulation

Digit 22 — Electric Heat Option

0 = No Electric Heat
6 = Field Mounted External Boilerless LOW Electric Heat
7 = Field Mounted External Boilerless MED Electric Heat
8 = Field Mounted External Boilerless HIGH Electric Heat
9 = Boilerless Electric Heat Ready

Digit 23 — Unit Mounted Disconnect

0 = No Unit Mounted Disconnect
2 = Unit Mounted Disconnect

Digit 24 — Filter Type

1 = 1-inch Throwaway Filter
2 = 2-inch Throwaway Filter
4 = 2-inch MERV 8
5 = 2-inch MERV 13

Digit 25 — Acoustic Arrangement

1 = Standard Sound Attenuation
2 = Deluxe Sound Attenuation

Digits 26–36 — Does Not Apply

0000000000 = Digits 26-36 are not applicable to the GEH or GEV products

Digit 37 — Ducted Filter Rack

0 = Non-ducted Filter Rack
A = Ducted Filter Rack (Side Access/LH—RH)
C = Ducted Filter Rack (Bottom Access)

Digit 38 — Isolation Valve

0 = No Isolation Valve
1 = Factory Mounted Isolation Valve

Digit 39 — Power Connection

1 = Single Point
2 = Electric Heat Power Separate from Unit

Digit 40 — Drain Pan

A = Polymer Drain Pan
B = Stainless Steel Drain Pan

Model Number Note:

Note: 20°F Freezestat is typically used in a geothermal application. 35°F Freezestat is typically used in a boiler/tower application.



General Data

Table 6. Models GEHK006-024 (0.5 to 2 tons)

Model GEH	006	009	012	015	018	024
Unit Size Depth x L x H (in.)	23 x 41 x 15.75	23 x 41 x 15.75	23 x 41 x 15.75	25.5 x 46 x 17.75	25.5 x 46 x 17.75	25.5 x 49 x 18.75
Compressor Type	Rotary	Rotary	Rotary	Rotary	Rotary	Scroll
Net Weight (lbs.)	165	165	165	173	173	269
Ship Weight (lbs.)	255	255	255	297	297	393
Filter Size Nominal (in.)	14 X 16	14 X 16	14 X 16	16 X 19	16 X 19	17 X 20
Water in/out size (FPT)	0.5	0.5	0.5	0.5	0.5	0.75
Condensate size (NPTI)	0.75	0.75	0.75	0.75	0.75	0.75
Blower Wheel Size (in.) - Direct Drive	9 x 6	9 x 6	9 x 6	9 x 8	9 x 8	10 x 8

Table 7. Models GEHK030-060 (2.5 to 5 tons)

Model GEH	030	036	042	048	060
Unit Size Depth x L x H (in.)	25.5 x 49 x 18.75	25.5 x 55 x 19.75	25.5 x 55 x 19.75	28 x 68 x 21.75	28 x 68 x 21.75
Compressor Type	Scroll	Scroll	Scroll	Scroll	Scroll
Net Weight (lbs.)	271	340	318	384	394
Ship Weight (lbs.)	395	464	442	529	539
Filter Size Nominal (in.)	17 X 20	18 X 23	18 X 23	20 X 30	20 X 30
Water in/out size (FPT)	0.75	0.75	0.75	1	1
Condensate size (NPTI)	0.75	0.75	0.75	0.75	0.75
Blower Wheel Size (in.) - Direct Drive	10 x 8	10 x 9	10 x 9	11 x 11	11 x 11

Table 8. Models GEHK072-180 (6 to 15 tons)

Model GEH	072	090	120	150	180
Unit Size Depth x L x H (in.)	41 x 79 X 21	41 x 79 x 21	41 x 79 x 21	47 x 85 x 28	47 x 85 x 28
Compressor Type	Scroll (2)	Scroll (2)	Scroll (2)	Scroll (2)	Scroll (2)
Net Weight (lbs.)	671	382	787	859	965
Ship Weight (lbs.)	720	730	829	901	1007
Filter Size Nominal (in.)	20 x 25 (3)	20 x 25 (3)	20 x 25 (3)	20 x 25 (3)	20 x 25 (3)
Water in/out size (FPT)	1.25	1.25	1.50	1.50	1.50
Condensate size (NPTI)	0.50	0.50	0.50	0.50	0.50
Blower Wheel Size (in.) - Direct Drive	13 x 13	13 x 13	13 x 13	15 x 15	15 x 15

Table 9. Models GEVK006-024 (0.5 to 2 tons)

Model GEVK	006	009	012	015	018	024
Unit Size width x depth x height (in.)	19 x 19 x 30	19 x 19 x 30	19 x 19 x 30	21.5 x 21.5 x 34	21.5 x 21.5 x 34	21.5 x 23 x 36
Compressor type	Rotary	Rotary	Rotary	Rotary	Rotary	Scroll
Net weight (lbs.)	149	149	149	155	157	210
Ship weight (lbs.)	201	201	201	210	212	268
Filter size nominal (in.)	14 X 16	14 X 16	14 X 16	16 X 19	16 X 19	17 X 20
Water in/out size (FPT)	0.5	0.5	0.5	0.5	0.5	0.75

Table 9. Models GEVK006–024 (0.5 to 2 tons) (continued)

Model GEVK	006	009	012	015	018	024
Condensate size (NPTI)	0.75	0.75	0.75	0.75	0.75	0.75
Blower wheel Size (in.)	9 x 6	9 x 6	9 x 6	9 x 8	9 x 8	10 x 8

Table 10. Models GEVK030-060 (2.5 to 5 tons)

Model GEVK	030	036	042	048	060
Unit Size width x depth x height (in.)	21.5 x 23 x 36	21.5 x 26 x 38	21.5 x 26 x 38	24 x 32.5 x 42	24 x 32.5 x 42
Compressor type	Scroll	Scroll	Scroll	Scroll	Scroll
Net weight (lbs.)	216	247	257	283	285
Ship weight (lbs.)	274	307	317	346	348
Filter size nominal (in.)	17 X 20	18 X 23	18 X 23	20 X 30	20 X 30
Water in/out size (FPT)	0.75	0.75	0.75	1	1
Condensate size (NPTI)	0.75	0.75	0.75	0.75	0.75
Blower wheel Size (in.)	10 x 8	10 x 9	10 x 9	11 x 11	11 x 11

Table 11. Models GEVK072-180 (6 to 15 tons)

Model GEV	072	090	120	150	180
Unit Size Depth x L x H (in.)	42 x 36 x 63	42 x 36 x 63	42 x 36 x 63	81-5/8 x 36-1/4 x 68	81-5/8 x 36-1/4 x 68
Compressor Type	Scroll (2)	Scroll (2)	Scroll (2)	Scroll (2)	Scroll (2)
Net Weight (lbs.)	596	624	819	1164	1188
Ship Weight (lbs.)	636	664	859	1209	1233
Filter Size Nominal (in.)	20 x 20 (4)	20 x 20 (4)	20 x 20 (4)	20 x 25 (6)	20 x 25 (6)
Water in/out size (FPT)	1.25	1.25	1.50	1.50	1.50
Condensate size (NPTI)	0.75	0.75	0.75	0.75	0.75
Blower Wheel Size (in.)	13 x 13	13 x 13	13 x 13	15 x 15	15 x 15

Table 12. Models GEVK240-300 (20 to 25 tons)

Model GEV	240	300
Unit Size Depth x L x H (in.)	81-5/8 x 36-1/4 x 68	81-5/8 x 36-1/4 x 68
Compressor Type	Scroll (2)	Scroll (2)
Net Weight (lbs.)	1599	1636
Ship Weight (lbs.)	1644	1681
Filter Size Nominal (in.)	20 x 25 (6)	20 x 25 (6)
Water in/out size (FPT)	2.00	2.00
Condensate size (NPTI)	0.75	0.75
Blower Wheel Size (in.)	(2) 13 x 13	(2) 15 x 11 or (2) 13 x 13 ^(a)

^(a) Size is determined by specific drive package ordered.

Table 13. Models GEV/GEH 006-060 (0.5 to 5 tons) air-to-refrigerant coil

Model GEV/GEH	006-012	015-018	024-030	036-042	048-060
Working Pressure (psig)	600	600	600	600	600
Tubes High	14	16	17	20	20
Tubes Deep	3	3	3	3	3
No. of Circuits	1	2	3	4	5
Finned vol. (h,w,d)	14 x 14.75 x 2.6	16 x 17.25 x 2.6	17 x 18.75 x 2.6	18 x 21.75 x 2.6	20 x 28.25 x 2.6
Coil Surface Area (Sq. Ft.)	1.43	1.92	2.21	3.02	3.92



General Data

Table 13. Models GEV/GEH 006-060 (0.5 to 5 tons) air-to-refrigerant coil (continued)

Model GEV/GEH	006-012	015-018	024-030	036-042	048-060
Fins per Inch	14	14	14	14	14
Tube Material	Copper	Copper	Copper	Copper	Copper
Tube OD (in.)	0.375	0.375	0.375	0.375	0.375
Wall Thickness	0.014	0.014	0.014	0.014	0.014
Return Bends	Copper	Copper	Copper	Copper	Copper

Table 14. Models GEHK/GEVK 072-300 (6 to 25 tons) dual compressor circuit, air-to-refrigerant coil

Unit Size	072	090	120	150	180	240	300
Working Pressure	600	600	600	600	600	600	600
Tubes High	(GEH) 18.00 (GEV) 24.00	(GEH) 18.000 (GEV) 28.000	(GEH) 18.00 (GEV) 36.00	(GEH) 24.00 (GEV) 28.00	(GEH) 24.00 (GEV) 32.00	(GEV) 36.00	(GEV) 36.00
Tubes Deep	4.00	4.00	4.00	(GEH) 4.00 (GEV) 2.00	(GEH) 4.00 (GEV) 3.00	(GEV) 4.00	(GEV) 4.00
No. of Circuits	(GEH) 6 refrig. flow paths (2X) (GEV) 6 refrig. flow paths (2X)	(GEH) 6 refrig. flow paths (2X) (GEV) 7 refrig. flow paths (2X)	(GEH) 9 refrig. flow paths (2X) (GEV) 9 refrig. flow paths (2X)	(GEH) 8 refrig. flow paths (2X) (GEV) 7 refrig. flow paths (2X)	(GEH) 6 refrig. flow paths (2X) (GEV) 8 refrig. flow paths (2X)	(GEV) 18 refrig. flow paths (2X)	(GEV) 18 refrig. flow paths (2X)
Finned vol. (h,w,d)	(GEH) 18 x 48 x 3.5 (GEV) 24 x 34 x 3.5	(GEH) 18 x 54 x 3.5 (GEV) 28 x 34 x 3.5	(GEH) 18 x 73 x 3.5 (GEV) 36 x 34 x 3.5	(GEH) 24 x 73 x 3.5 (GEV) 28 x 73 x 1.7	(GEH) 24 x 73 x 3.5 (GEV) 32 x 73 x 2.6	(GEV) 36x 73 x 3.5	(GEV) 36x 73 x 3.5
Coil Surface Area (Ft ²)	(GEH) 6.00 (GEV) 5.67	(GEH) 6.75 (GEV) 6.61	(GEH) 9.125 (GEV) 8.500	(GEH) 12.167 (GEV) 14.190	(GEH) 12.167 (GEV) 16.220	(GEV) 18.250	(GEV) 18.250
Fins Per Inch	14.00	14.000	14.000	14.00	14.00	14.00	14.00
Tube Material	Copper	Copper	Copper	Copper	Copper	Copper	Copper
Tube OD (in.)	0.375	0.375	0.375	0.375	0.375	0.375	0.375
Wall Thickness	0.014	0.014	0.014	0.014	0.014	0.014	0.014
Return Bends	Copper	Copper	Copper	Copper	Copper	Copper	Copper

Table 15. Models GEVK/GEHK 006-060 (0.5 to 5 tons) water-to-refrigerant coil

Model GEVK/GEHK	006	009	012	015	018	024	030	036	042	048	060
Refrigerant Working Pressure (psig)	600	600	600	600	600	600	600	600	600	600	600
Water Working Pressure	400	400	400	400	400	400	400	400	400	400	400

Table 16. Models GEHK072-180 (6 to 15 tons) water-to-refrigerant coil

Model	072	090	120	150	180
Refrigerant Working Pressure (psig)	600	600	600	600	600
Water Working Pressure	400	400	400	400	400

Table 17. Models GEVK072-300 (6 to 25 tons) water-to-refrigerant coil

Model	072	090	120	150	180	240	300
Refrigerant Working Pressure (psig)	600	600	600	600	600	600	600
Water Working Pressure	400	400	400	400	400	400	400



Performance Data

Table 18. ANSI/AHRI/ASHRAE/ISO13256-1 WLHP, GWHP and GLHP performance - (0.5 to 25 tons)

Model	Rated GPM	Rated CFM	Water Loop Heat Pump				Ground Water Heat Pump				Ground Loop Heat Pump			
			Cooling 86°F		Heating 68°F		Cooling 59°F		Heating 50°F		Full Cool 77°F		Full Heat 32°F	
			Capacity Btuh	EER	Capacity Btuh	COP	Capacity Btuh	EER	Capacity Btuh	COP	Capacity Btuh	EER	Capacity Btuh	COP
GEH/V006	1.50	190	7600	14.3	9800	4.60	8500	22.20	7700	4.00	7900	16.80	6000	3.40
GEH/V009	2.25	285	8400	16.8	10500	5.80	9400	25.60	8600	4.90	8800	19.60	6400	4.00
GEH/V012	3.00	380	11000	15.2	14400	5.30	11900	22.30	11500	4.40	11300	17.70	8400	3.50
GEH/V015	3.75	475	15300	15.60	20400	5.40	16800	24.10	16700	4.70	15900	18.20	12500	3.90
GEH/V018	4.50	570	17900	15.10	24200	5.10	19600	23.40	19500	4.50	18500	17.30	15300	3.80
GEH/V024	6.00	760	24300	16	31100	5.10	27000	25.50	26000	4.50	25400	18.90	19700	3.60
GEH/V030	7.50	950	29200	15.8	36800	4.90	31700	23.90	29800	4.30	30000	18.20	23700	3.70
GEH/V036	9.00	1140	39500	15	47400	4.70	42500	22.10	39700	4.20	40600	17.30	30100	3.40
GEH/V042	10.5	1330	44000	16.4	56400	4.70	47100	24.50	46200	4.10	45200	18.90	35800	3.40
GEH/V048	12.0	1520	48900	15.9	62300	4.90	54500	24.00	50800	4.30	50900	18.40	38900	3.60
GEH/V060	15.0	1900	57700	15.7	77100	4.70	64300	23.90	63700	4.20	60100	18.30	50200	3.70
GEHK072	18.0	2100	75000	14.8	82400	4.50	83000	22.00	70700	4.10	77200	16.9	58700	3.40
GEHK090	22.5	2625	88200	13.9	106200	4.60	97600	20.60	90700	4.10	90500	15.7	73000	3.40
GEHK120	30.0	3500	121900	14.3	144800	4.80	134700	20.80	124800	4.20	125000	15.9	98500	3.40
GEHK150	37.5	4375	158600	15.3	191800	4.80	174800	24.10	158500	4.30	164100	17.7	126200	3.50
GEHK180	45.0	5250	188900	13.8	227000	4.50	208600	20.20	190600	4.00	197200	15.8	152900	3.30
GEVK072	18.0	2100	77100	16.5	79900	4.70	84100	25.10	67800	4.20	80000	19.2	56200	3.60
GEVK090	22.5	2625	92000	16.3	108000	4.90	101600	25.30	88600	4.40	95600	18.9	70700	3.70
GEVK120	30.0	3500	125800	16.8	139900	4.90	138500	25.00	118300	4.40	130200	19.1	97100	3.70
GEVK150	37.5	4375	158900	15.9	191400	4.90	176500	25.40	158900	4.30	164400	18.4	124600	3.60
GEVK180	45.0	5250	192600	14.9	228600	4.50	212800	22.80	187400	4.00	198600	16.9	145100	3.20
GEVK240	60.0	7000	258200	16.6	287000	4.90	284700	26.80	235000	4.30	266200	18.8	184300	3.50
GEVK300	75.0	8750	319000	14.5	377100	4.50	353700	21.40	305300	3.90	329500	16.4	243200	3.20

Notes:

1. Rated in accordance with ANSI/AHRI/ASHRAE/ISO13256-1. Certified conditions are 80.6F DB/66.2F WB EAT in cooling and 68F DB/59F WB EAT in heating.
2. Models with capacities greater than 135,000 Btuh are not included in the ANSI/AHRI/ASHRAE/ISO13256-1 water-to-air and brine-to-air heat pump certification program.

Cooling and Heating Capacities 0.5 tons

Table 19. Cooling capacities 0.5 tons (gross) - GEV/H006

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Comp Pwr kW	Reject Mbtuh	LWT	Feet Head
45	1.0	9.2	6.5	0.71	0.29	10.1	65.4	1.3
45	1.2	9.2	6.5	0.71	0.27	10.1	62.0	1.7
45	1.4	9.3	6.5	0.71	0.25	10.1	59.5	2.3
45	1.5	9.3	6.5	0.71	0.24	10.1	58.6	2.5
45	1.6	9.3	6.6	0.71	0.24	10.1	57.7	2.8
45	1.7	9.3	6.6	0.71	0.23	10.1	56.9	3.2
45	1.8	9.3	6.6	0.71	0.23	10.1	56.3	3.5
55	1.0	8.8	6.3	0.72	0.36	10.1	75.1	1.2



Performance Data

Table 19. Cooling capacities 0.5 tons (gross) - GEV/H006 (continued)

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Comp Pwr kW	Reject Mbtuh	LWT	Feet Head
55	1.2	8.9	6.4	0.71	0.34	10.1	71.8	1.7
55	1.4	9.0	6.4	0.71	0.33	10.1	69.4	2.2
55	1.5	9.0	6.4	0.71	0.32	10.1	68.5	2.4
55	1.6	9.0	6.4	0.71	0.32	10.1	67.6	2.7
55	1.7	9.0	6.4	0.71	0.31	10.1	66.9	3.0
55	1.8	9.0	6.4	0.71	0.31	10.1	66.2	3.4
68	1.0	8.3	6.1	0.73	0.43	9.8	87.5	1.1
68	1.2	8.4	6.1	0.73	0.41	9.8	84.3	1.5
68	1.4	8.5	6.1	0.73	0.40	9.9	82.0	2.0
68	1.5	8.5	6.2	0.72	0.40	9.9	81.1	2.2
68	1.6	8.5	6.2	0.72	0.40	9.9	80.3	2.5
68	1.7	8.5	6.2	0.72	0.39	9.9	79.6	2.8
68	1.8	8.5	6.2	0.72	0.39	9.9	79.0	3.1
75	1.0	8.2	6.0	0.73	0.45	9.7	94.2	1.1
75	1.2	8.3	6.0	0.73	0.44	9.8	91.1	1.5
75	1.4	8.4	6.1	0.72	0.43	9.8	88.9	1.9
75	1.5	8.4	6.1	0.72	0.42	9.8	88.0	2.2
75	1.6	8.4	6.1	0.72	0.42	9.9	87.2	2.4
75	1.7	8.5	6.1	0.72	0.41	9.9	86.5	2.7
75	1.8	8.5	6.1	0.72	0.41	9.9	85.9	3.0
86	1.0	7.8	5.8	0.74	0.52	9.6	104.7	1.0
86	1.2	7.9	5.8	0.74	0.50	9.6	101.7	1.4
86	1.4	8.0	5.9	0.73	0.49	9.7	99.5	1.9
86	1.5	8.0	5.9	0.73	0.49	9.7	98.6	2.1
86	1.6	8.0	5.9	0.73	0.48	9.7	97.8	2.4
86	1.7	8.1	5.9	0.73	0.48	9.7	97.2	2.6
86	1.8	8.1	5.9	0.73	0.48	9.7	96.5	2.9
95	1.0	7.4	5.6	0.76	0.57	9.3	113.1	1.0
95	1.2	7.5	5.6	0.75	0.56	9.4	110.2	1.4
95	1.4	7.6	5.7	0.75	0.55	9.4	108.1	1.8
95	1.5	7.6	5.7	0.75	0.54	9.4	107.3	2.1
95	1.6	7.6	5.7	0.75	0.54	9.5	106.5	2.3
95	1.7	7.6	5.7	0.75	0.54	9.5	105.9	2.6
95	1.8	7.7	5.7	0.75	0.53	9.5	105.3	2.8
105	1.0	6.9	5.4	0.78	0.63	9.0	122.5	1.0
105	1.2	7.0	5.4	0.77	0.62	9.1	119.7	1.3
105	1.4	7.1	5.4	0.77	0.61	9.1	117.6	1.8
105	1.5	7.1	5.5	0.77	0.61	9.2	116.8	2.0
105	1.6	7.1	5.5	0.77	0.60	9.2	116.1	2.2
105	1.7	7.1	5.5	0.77	0.60	9.2	115.5	2.5
105	1.8	7.2	5.5	0.77	0.60	9.2	114.9	2.8

Table 19. Cooling capacities 0.5 tons (gross) - GEV/H006 (continued)

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Comp Pwr kW	Reject Mbtuh	LWT	Feet Head
115	1.0	6.3	5.1	0.81	0.70	8.7	131.8	1.0
115	1.2	6.4	5.2	0.80	0.69	8.8	129.1	1.3
115	1.4	6.5	5.2	0.80	0.68	8.8	127.2	1.7
115	1.5	6.6	5.2	0.80	0.67	8.9	126.4	1.9
115	1.6	6.6	5.2	0.80	0.67	8.9	125.7	2.2
115	1.7	6.6	5.2	0.79	0.67	8.9	125.1	2.4
115	1.8	6.6	5.3	0.79	0.67	8.9	124.5	2.7
120	1.0	6.0	5.0	0.83	0.73	8.5	136.3	0.9
120	1.2	6.1	5.0	0.82	0.72	8.6	133.7	1.3
120	1.4	6.2	5.1	0.82	0.71	8.6	131.9	1.7
120	1.5	6.2	5.1	0.81	0.71	8.7	131.1	1.9
120	1.6	6.3	5.1	0.81	0.71	8.7	130.4	2.2
120	1.7	6.3	5.1	0.81	0.70	8.7	129.8	2.4
120	1.8	6.3	5.1	0.81	0.70	8.7	129.3	2.7

Note: Cooling performance data is tabulated at 80.6°F DB/66.2°F WB entering air at ANSI/AHRI/ASHRAE/ISO13256-1 rated cfm. For conditions other than rated and the cooling correction factors for variations in entering air temperature. Rated GPM 1.5; Minimum CFM 152; Rated CFM 190; than rated and the cooling correction factors for variations in entering air temperature. Rated GPM 1.5; Minimum CFM 152; Rated CFM 190; Maximum CFM 228.

Table 20. Heating capacities 0.5 tons (gross) - GEV/H006

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Comp Pwr kW	LWT	Feet Head
25	1.0	4.5	3.0	0.44	17.3	1.7
25	1.2	4.6	3.0	0.45	18.5	2.4
25	1.4	4.6	3.1	0.45	19.3	3.1
25	1.5	4.7	3.1	0.45	19.7	3.5
25	1.6	4.7	3.2	0.45	20.0	3.9
25	1.7	4.7	3.2	0.45	20.2	4.3
25	1.8	4.7	3.2	0.45	20.5	4.8
32	1.0	5.0	3.4	0.46	23.4	1.7
32	1.2	5.1	3.5	0.47	24.6	2.3
32	1.4	5.2	3.6	0.47	25.6	3.0
32	1.5	5.2	3.6	0.47	26.0	3.4
32	1.6	5.3	3.6	0.47	26.3	3.8
32	1.7	5.3	3.7	0.47	26.6	4.2
32	1.8	5.3	3.7	0.48	26.9	4.6
45	1.0	6.6	4.9	0.50	34.4	1.3
45	1.2	6.7	5.0	0.50	35.9	1.7
45	1.4	6.8	5.1	0.51	37.1	2.3
45	1.5	6.9	5.2	0.51	37.5	2.5
45	1.6	6.9	5.2	0.51	37.9	2.8
45	1.7	7.0	5.2	0.51	38.3	3.2
45	1.8	7.0	5.3	0.51	38.6	3.5
55	1.0	7.5	5.7	0.53	42.7	1.2
55	1.2	7.6	5.8	0.53	44.5	1.7



Performance Data

Table 20. Heating capacities 0.5 tons (gross) - GEV/H006 (continued)

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Comp Pwr kW	LWT	Feet Head
55	1.4	7.8	6.0	0.54	45.8	2.2
55	1.5	7.8	6.0	0.54	46.3	2.4
55	1.6	7.9	6.1	0.54	46.8	2.7
55	1.7	7.9	6.1	0.54	47.2	3.0
55	1.8	8.0	6.1	0.54	47.6	3.4
68	1.0	9.2	7.2	0.56	52.8	1.1
68	1.2	9.4	7.5	0.57	54.9	1.5
68	1.4	9.6	7.6	0.58	56.5	2.0
68	1.5	9.7	7.7	0.58	57.2	2.2
68	1.6	9.8	7.8	0.58	57.8	2.5
68	1.7	9.8	7.8	0.58	58.3	2.8
68	1.8	9.9	7.9	0.58	58.8	3.1
75	1.0	10.0	8.0	0.59	58.0	1.1
75	1.2	10.1	8.1	0.59	60.8	1.5
75	1.4	10.3	8.3	0.59	62.5	1.9
75	1.5	10.4	8.3	0.60	63.2	2.2
75	1.6	10.5	8.4	0.60	63.8	2.4
75	1.7	10.5	8.5	0.60	64.4	2.7
75	1.8	10.6	8.5	0.60	64.9	3.0
86	1.0	10.8	8.8	0.61	67.3	1.0
86	1.2	11.1	9.0	0.62	69.9	1.4
86	1.4	11.3	9.2	0.62	71.8	1.9
86	1.5	11.4	9.3	0.62	72.7	2.1
86	1.6	11.5	9.3	0.63	73.4	2.4
86	1.7	11.5	9.4	0.63	74.0	2.6
86	1.8	11.6	9.5	0.63	74.6	2.9

Note: Heating performance data is tabulated at 68.0°F DB at the ANSI/AHRI/ASHRAE/ISO13256-1 rated cfm. For conditions other than what is tabulated, multipliers must be used to correct performance. See performance correction tables for fan correction factors for CFM other than rated and the heating correction factors for variation in entering air temperatures. Rated GPM 1.5; Minimum CFM 152; Rated CFM 190; Maximum CFM 228.

Table 21. Fan correction factors 0.5 tons - GEV/H006

Entering cfm	Cooling Capacity	Sensible Capacity	Cooling Input Watts	Heating Capacity	Heating Input Watts
152	0.950	0.887	1.006	0.962	1.100
162	0.965	0.917	1.004	0.974	1.071
171	0.977	0.944	1.003	0.984	1.046
181	0.990	0.974	1.001	0.993	1.021
190	1.000	1.000	1.000	1.000	1.000
209	1.019	1.055	0.997	1.013	0.961
219	1.028	1.083	0.996	1.018	0.942
228	1.035	1.109	0.995	1.022	0.926

Table 22. Correction factors for variation in entering air temperature 0.5 tons, GEV/H006

Cooling Entering Air WB°F	Cooling Capacity	Cooling Input Watts	Sensible vs. Entering Dry Bulb Multipliers					Heating Entering Air DB°F	Heating Capacity	Heating Input Watts
			65.6	70.6	75.6	80.6	85.6			
49.4	0.928	1.012	0.987	1.052	1.119	1.257	1.259	53.0	1.041	0.850
56.3	0.878	1.012	0.816	0.992	1.121	1.190	1.259	58.0	1.030	0.903
60.3	0.895	1.011	0.678	0.854	1.031	1.207	1.261	63.0	1.017	0.953
63.2	0.944	1.007	0.575	0.753	0.930	1.106	1.282	68.0	1.000	1.000
66.2	1.000	1.000	0.466	0.645	0.823	1.000	1.176	73.0	0.982	1.046
72.1	1.116	0.979	—	—	0.607	0.786	0.964	78.0	0.963	1.092
77.1	1.221	0.955	—	—	—	0.598	0.778	83.0	0.944	1.138

Note: * = Sensible equals total capacity

Cooling and Heating Capacities 0.75 tons

Table 23. Cooling capacities 0.75 tons (gross) - GEV/H009

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Comp Pwr kW	Reject Mbtuh	LWT	Feet Head
45	1.5	10.2	8.2	0.81	0.25	11.1	59.7	2.3
45	1.8	10.3	8.3	0.80	0.23	11.0	57.2	3.1
45	2.0	10.3	8.3	0.80	0.21	11.0	56.0	3.8
45	2.3	10.3	8.3	0.80	0.20	11.0	54.8	4.6
45	2.4	10.3	8.3	0.80	0.20	11.0	54.1	5.2
45	2.5	10.3	8.3	0.80	0.19	11.0	53.8	5.6
45	2.7	10.4	8.3	0.80	0.19	11.0	53.1	6.4
55	1.5	9.8	8.0	0.82	0.33	11.0	69.5	2.2
55	1.8	9.9	8.1	0.82	0.32	11.0	67.1	3.0
55	2.0	9.9	8.1	0.81	0.31	11.0	65.9	3.6
55	2.3	9.9	8.1	0.81	0.30	11.0	64.7	4.4
55	2.4	9.9	8.1	0.81	0.30	10.9	64.0	5.0
55	2.5	9.9	8.1	0.81	0.29	10.9	63.7	5.3
55	2.7	10.0	8.1	0.81	0.29	10.9	63.0	6.1
68	1.5	9.2	7.7	0.83	0.42	10.7	82.0	2.0
68	1.8	9.3	7.7	0.83	0.40	10.7	79.7	2.8
68	2.0	9.3	7.7	0.83	0.40	10.7	78.6	3.4
68	2.3	9.3	7.8	0.83	0.39	10.7	77.4	4.1
68	2.4	9.4	7.8	0.83	0.39	10.7	76.8	4.6
68	2.5	9.4	7.8	0.83	0.39	10.7	76.5	5.0
68	2.7	9.4	7.8	0.83	0.38	10.7	75.8	5.7
75	1.5	9.2	7.7	0.84	0.42	10.7	89.1	2.0
75	1.8	9.3	7.7	0.83	0.41	10.7	86.8	2.7
75	2.0	9.3	7.8	0.83	0.40	10.7	85.6	3.3
75	2.3	9.4	7.8	0.83	0.40	10.7	84.5	4.0
75	2.4	9.4	7.8	0.83	0.39	10.7	83.9	4.5
75	2.5	9.4	7.8	0.83	0.39	10.7	83.5	4.8
75	2.7	9.4	7.8	0.83	0.39	10.7	82.9	5.5



Performance Data

Table 23. Cooling capacities 0.75 tons (gross) - GEV/H009 (continued)

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Comp Pwr kW	Reject Mbtuh	LWT	Feet Head
86	1.5	8.8	7.4	0.85	0.49	10.4	99.7	1.9
86	1.8	8.9	7.5	0.84	0.47	10.5	97.5	2.6
86	2.0	8.9	7.5	0.84	0.47	10.5	96.3	3.2
86	2.3	8.9	7.5	0.84	0.46	10.5	95.2	3.9
86	2.4	8.9	7.5	0.84	0.46	10.5	94.6	4.4
86	2.5	8.9	7.5	0.84	0.46	10.5	94.3	4.7
86	2.7	9.0	7.5	0.84	0.45	10.5	93.7	5.3
95	1.5	8.3	7.2	0.87	0.54	10.1	108.3	1.9
95	1.8	8.4	7.2	0.86	0.53	10.2	106.1	2.6
95	2.0	8.4	7.2	0.86	0.53	10.2	105.0	3.1
95	2.3	8.4	7.3	0.86	0.52	10.2	103.9	3.8
95	2.4	8.5	7.3	0.86	0.52	10.2	103.4	4.2
95	2.5	8.5	7.3	0.86	0.52	10.2	103.0	4.6
95	2.7	8.5	7.3	0.86	0.51	10.2	102.5	5.2
105	1.5	7.7	6.9	0.90	0.61	9.7	117.6	1.8
105	1.8	7.8	6.9	0.89	0.60	9.8	115.6	2.5
105	2.0	7.8	6.9	0.89	0.59	9.8	114.6	3.0
105	2.3	7.8	7.0	0.89	0.59	9.8	113.6	3.7
105	2.4	7.9	7.0	0.89	0.58	9.9	113.0	4.1
105	2.5	7.9	7.0	0.88	0.58	9.9	112.7	4.4
105	2.7	7.9	7.0	0.88	0.58	9.9	112.2	5.1
115	1.5	7.0	6.5	0.93	0.68	9.3	127.1	1.8
115	1.8	7.1	6.6	0.93	0.67	9.4	125.1	2.4
115	2.0	7.2	6.6	0.92	0.66	9.4	124.2	2.9
115	2.3	7.2	6.6	0.92	0.66	9.4	123.2	3.6
115	2.4	7.2	6.6	0.92	0.65	9.5	122.7	4.0
115	2.5	7.2	6.6	0.92	0.65	9.5	122.4	4.3
115	2.7	7.3	6.7	0.92	0.65	9.5	121.8	4.9
120	1.5	6.7	6.4	0.96	0.71	9.1	131.7	1.7
120	1.8	6.8	6.4	0.95	0.70	9.1	129.8	2.4
120	2.0	6.8	6.4	0.95	0.70	9.2	128.9	2.9
120	2.3	6.8	6.5	0.94	0.69	9.2	127.9	3.5
120	2.4	6.9	6.5	0.94	0.69	9.2	127.5	4.0
120	2.5	6.9	6.5	0.94	0.69	9.2	127.2	4.3
120	2.7	6.9	6.5	0.94	0.69	9.3	126.6	4.9

Note: Cooling performance data is tabulated at 80.6°F DB/66.2°F WB entering air at ANSI/AHRI/ASHRAE/ISO13256-1 rated cfm. For conditions other than what is tabulated, multipliers must be used to correct performance. See performance correction tables for fan correction factors for CFM other than rated and the cooling correction factors for variations in entering air temperature. Rated GPM 2.25; Minimum CFM 228; Rated CFM 285; Maximum CFM 342.

Table 24. Heating capacities 0.75 tons (gross) - GEV/H009

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Comp Pwr kW	LWT	Feet Head
25	1.5	5.2	3.7	0.42	19.0	3.0
25	1.8	5.3	3.8	0.42	19.9	4.1
25	2.0	5.3	3.9	0.42	20.4	4.9
25	2.3	5.4	3.9	0.43	20.8	6.0
25	2.4	5.4	3.9	0.43	21.1	6.7
25	2.5	5.4	3.9	0.43	21.2	7.2
25	2.7	5.4	4.0	0.43	21.5	8.2
32	1.5	5.8	4.3	0.43	25.2	2.9
32	1.8	5.9	4.4	0.44	26.2	3.9
32	2.0	6.0	4.5	0.44	26.7	4.7
32	2.3	6.0	4.5	0.44	27.2	5.8
32	2.4	6.0	4.5	0.44	27.5	6.5
32	2.5	6.1	4.6	0.44	27.7	7.0
32	2.7	6.1	4.6	0.44	28.0	8.0
45	1.5	7.6	6.0	0.47	36.6	2.3
45	1.8	7.8	6.1	0.47	37.8	3.1
45	2.0	7.8	6.2	0.47	38.5	3.8
45	2.3	7.9	6.3	0.47	39.1	4.6
45	2.4	8.0	6.3	0.47	39.5	5.2
45	2.5	8.0	6.4	0.47	39.7	5.6
45	2.7	8.0	6.4	0.47	40.0	6.4
55	1.5	8.7	7.1	0.48	45.1	2.2
55	1.8	8.9	7.2	0.48	46.6	3.0
55	2.0	9.0	7.3	0.48	47.3	3.6
55	2.3	9.1	7.4	0.48	48.1	4.4
55	2.4	9.1	7.5	0.48	48.5	5.0
55	2.5	9.2	7.5	0.48	48.7	5.3
55	2.7	9.2	7.6	0.49	49.1	6.1
68	1.5	10.0	8.3	0.49	56.5	2.0
68	1.8	10.2	8.5	0.49	58.2	2.8
68	2.0	10.3	8.7	0.49	59.0	3.4
68	2.3	10.5	8.8	0.49	59.9	4.1
68	2.4	10.5	8.8	0.49	60.4	4.6
68	2.5	10.6	8.9	0.49	60.6	5.0
68	2.7	10.6	9.0	0.49	61.1	5.7
75	1.5	10.8	9.1	0.49	62.3	2.0
75	1.8	11.1	9.4	0.49	64.1	2.7
75	2.0	11.2	9.5	0.50	65.1	3.3
75	2.3	11.3	9.6	0.50	66.0	4.0
75	2.4	11.4	9.7	0.50	66.5	4.5
75	2.5	11.4	9.7	0.50	66.8	4.8



Performance Data

Table 24. Heating capacities 0.75 tons (gross) - GEV/H009 (continued)

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Comp Pwr kW	LWT	Feet Head
75	2.7	11.5	9.8	0.50	67.4	5.5
86	1.5	12.1	10.4	0.50	71.4	1.9
86	1.8	12.3	10.6	0.50	73.5	2.6
86	2.0	12.4	10.8	0.49	74.6	3.2
86	2.3	12.6	10.9	0.49	75.7	3.9
86	2.4	12.6	11.0	0.49	76.3	4.4
86	2.5	12.7	11.0	0.49	76.6	4.7
86	2.7	12.8	11.1	0.49	77.2	5.3

Note: Heating performance data is tabulated at 68.0°F DB at the ANSI/AHRI/ASHRAE/ISO13256-1 rated cfm. For conditions other than what is tabulated, multipliers must be used to correct performance. See performance correction tables for fan correction factors for CFM other than rated and the heating correction factors for variation in entering air temperatures. Rated GPM 2.25; Minimum CFM 228; Rated CFM 285; Maximum CFM 342.

Table 25. Fan correction factors 0.75 tons - GEV/H009

Entering cfm	Cooling Capacity	Sensible Capacity	Cooling Input Watts	Heating Capacity	Heating Input Watts
228	0.958	0.874	1.012	0.973	1.093
242	0.970	0.905	1.008	0.981	1.067
257	0.982	0.938	1.005	0.989	1.041
271	0.991	0.969	1.003	0.995	1.020
285	1.000	1.000	1.000	1.000	1.000
314	1.016	1.063	0.995	1.009	0.963
328	1.024	1.094	0.993	1.013	0.948
342	1.030	1.124	0.991	1.016	0.933

Table 26. Correction factors for variation in entering air temperature 0.75 tons, GEV/H009

Cooling Entering Air WB °F	Cooling Capacity	Cooling Input Watts	Sensible vs. Entering Dry Bulb Multipliers					Heating Entering Air DB °F	Heating Capacity	Heating Input Watts
			65.6	70.6	75.6	80.6	85.6			
49.4	0.928	1.018	0.900	0.967	1.036	1.107	1.181	53.0	1.040	0.799
56.3	0.929	1.018	0.782	0.980	1.038	1.109	1.181	58.0	1.029	0.870
60.3	0.930	1.018	0.620	0.827	1.034	1.110	1.182	63.0	1.017	0.939
63.2	0.947	1.013	0.500	0.709	0.916	1.124	1.183	68.0	1.000	1.000
66.2	1.000	1.000	0.375	0.585	0.793	1.000	1.202	73.0	0.982	1.060
72.1	1.120	0.960	—	—	0.544	0.754	0.963	78.0	0.962	1.118
77.1	1.219	0.905	—	—	—	0.532	0.743	83.0	0.941	1.176

Note: * = Sensible equals total capacity

Cooling and Heating Capacities 1 ton

Table 27. Cooling capacities 1 ton (gross) - GEV/H012

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Comp Pwr kW	Reject Mbtuh	LWT	Feet Head
45	2.0	13.0	10.7	0.82	0.37	14.3	59.1	3.8
45	2.4	13.1	10.7	0.82	0.34	14.3	56.8	5.2
45	2.7	13.1	10.8	0.82	0.33	14.3	55.5	6.4
45	3.0	13.2	10.8	0.82	0.32	14.3	54.4	7.6
45	3.2	13.2	10.8	0.82	0.31	14.3	53.8	8.6

Table 27. Cooling capacities 1 ton (gross) - GEV/H012 (continued)

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Comp Pwr kW	Reject Mbtuh	LWT	Feet Head
45	3.3	13.2	10.8	0.82	0.31	14.3	53.6	9.0
45	3.6	13.2	10.8	0.82	0.30	14.3	52.9	10.5
55	2.0	12.5	10.4	0.84	0.46	14.1	68.9	3.6
55	2.4	12.6	10.5	0.83	0.45	14.1	66.6	5.0
55	2.7	12.6	10.5	0.83	0.44	14.1	65.3	6.1
55	3.0	12.6	10.5	0.83	0.43	14.1	64.3	7.4
55	3.2	12.6	10.5	0.83	0.42	14.1	63.7	8.2
55	3.3	12.7	10.5	0.83	0.42	14.1	63.4	8.7
55	3.6	12.7	10.5	0.83	0.42	14.1	62.7	10.1
68	2.0	11.7	10.0	0.85	0.57	13.6	81.4	3.4
68	2.4	11.8	10.0	0.85	0.55	13.7	79.2	4.6
68	2.7	11.8	10.0	0.85	0.55	13.7	78.0	5.7
68	3.0	11.8	10.1	0.85	0.54	13.7	77.0	6.8
68	3.2	11.9	10.1	0.85	0.54	13.7	76.4	7.6
68	3.3	11.9	10.1	0.85	0.54	13.7	76.2	8.1
68	3.6	11.9	10.1	0.85	0.53	13.7	75.5	9.4
75	2.0	11.8	10.1	0.85	0.58	13.8	88.6	3.3
75	2.4	11.9	10.1	0.85	0.57	13.9	86.4	4.5
75	2.7	12.0	10.2	0.85	0.56	13.9	85.1	5.6
75	3.0	12.0	10.2	0.85	0.55	13.9	84.1	6.7
75	3.2	12.1	10.2	0.85	0.55	13.9	83.6	7.5
75	3.3	12.0	10.2	0.85	0.55	13.9	83.3	7.9
75	3.6	12.1	10.2	0.84	0.54	13.9	82.6	9.2
86	2.0	11.4	9.9	0.87	0.68	13.7	99.5	3.2
86	2.4	11.5	9.9	0.86	0.67	13.8	97.3	4.4
86	2.7	11.5	9.9	0.86	0.66	13.8	96.0	5.4
86	3.0	11.6	9.9	0.86	0.65	13.8	95.0	6.4
86	3.2	11.6	9.9	0.86	0.65	13.8	94.5	7.2
86	3.3	11.6	10.0	0.86	0.65	13.8	94.2	7.6
86	3.6	11.6	10.0	0.86	0.64	13.8	93.5	8.8
95	2.0	10.7	9.5	0.89	0.75	13.3	108.1	3.1
95	2.4	10.9	9.6	0.88	0.74	13.4	105.9	4.3
95	2.7	10.9	9.6	0.88	0.73	13.4	104.7	5.2
95	3.0	11.0	9.6	0.88	0.73	13.4	103.8	6.3
95	3.2	11.0	9.7	0.88	0.72	13.5	103.2	7.0
95	3.3	11.0	9.7	0.88	0.72	13.5	103.0	7.4
95	3.6	11.0	9.7	0.88	0.72	13.5	102.3	8.6
105	2.0	10.0	9.2	0.92	0.84	12.9	117.6	3.0
105	2.4	10.1	9.2	0.92	0.83	12.9	115.5	4.1
105	2.7	10.2	9.3	0.91	0.82	12.9	114.4	5.1
105	3.0	10.2	9.3	0.91	0.81	13.0	113.5	6.1



Performance Data

Table 27. Cooling capacities 1 ton (gross) - GEV/H012 (continued)

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Comp Pwr kW	Reject Mbtuh	LWT	Feet Head
105	3.2	10.2	9.3	0.91	0.81	13.0	112.9	6.8
105	3.3	10.2	9.3	0.91	0.81	13.0	112.7	7.2
105	3.6	10.2	9.3	0.91	0.81	13.0	112.7	8.4
115	2.0	9.2	8.8	0.96	0.93	12.4	127.0	2.9
115	2.4	9.3	8.9	0.95	0.92	12.4	125.1	4.0
115	2.7	9.4	8.9	0.95	0.91	12.5	124.0	4.9
115	3.0	9.4	8.9	0.95	0.91	12.5	123.1	5.9
115	3.2	9.5	8.9	0.95	0.90	12.5	122.6	6.6
115	3.3	9.5	9.0	0.95	0.90	12.5	122.4	7.0
115	3.6	9.5	9.0	0.94	0.90	12.6	121.8	8.2
120	2.0	8.7	8.6	0.99	0.98	12.0	131.7	2.9
120	2.4	8.8	8.7	0.98	0.97	12.1	129.8	4.0
120	2.7	8.9	8.7	0.98	0.96	12.2	128.8	4.9
120	3.0	9.0	8.7	0.97	0.95	12.2	127.9	5.9
120	3.2	9.0	8.7	0.97	0.95	12.2	127.4	6.6
120	3.3	9.0	8.7	0.97	0.95	12.2	127.2	6.9
120	3.6	9.0	8.8	0.97	0.95	12.3	126.6	8.1

Note: Cooling performance data is tabulated at 80.6°F DB/66.2°F WB entering air at ANSI/AHRI/ASHRAE/ISO13256-1 rated cfm. For conditions other than what is tabulated, multipliers must be used to correct performance. See performance correction tables for fan correction factors for CFM other than rated and the cooling correction factors for variations in entering air temperature. Rated GPM 3; Minimum CFM 304; Rated CFM 380; Maximum CFM 456.

Table 28. Heating capacities 1 ton (gross) - GEV/H012

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Comp Pwr kW	LWT	Feet Head
25	2.0	6.7	4.7	0.58	19.4	4.9
25	2.4	6.8	4.8	0.58	20.2	6.7
25	2.7	6.8	4.8	0.59	20.7	8.3
25	3.0	6.9	4.9	0.59	21.1	9.9
25	3.2	6.9	4.9	0.59	21.3	11.1
25	3.3	6.9	4.9	0.59	21.4	11.7
25	3.6	7.0	5.0	0.59	21.7	13.6
32	2.0	7.5	5.4	0.60	25.6	4.8
32	2.4	7.6	5.5	0.61	26.6	6.5
32	2.7	7.7	5.6	0.61	27.1	8.0
32	3.0	7.7	5.7	0.61	27.6	9.6
32	3.2	7.8	5.7	0.61	27.8	10.8
32	3.3	7.8	5.7	0.61	27.9	11.4
32	3.6	7.8	5.8	0.61	28.3	13.2
45	2.0	9.8	7.6	0.64	37.0	3.8
45	2.4	10.0	7.8	0.64	38.2	5.2
45	2.7	10.1	7.9	0.65	38.9	6.4
45	3.0	10.2	8.0	0.65	39.4	7.6
45	3.2	10.3	8.1	0.65	39.8	8.6

Table 28. Heating capacities 1 ton (gross) - GEV/H012 (continued)

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Comp Pwr kW	LWT	Feet Head
45	3.3	10.3	8.1	0.65	39.9	9.0
45	3.6	10.4	8.1	0.65	40.3	10.5
55	2.0	11.3	9.0	0.66	45.6	3.6
55	2.4	11.5	9.2	0.67	47.0	5.0
55	2.7	11.6	9.3	0.67	47.8	6.1
55	3.0	11.7	9.5	0.67	48.4	7.4
55	3.2	11.8	9.5	0.67	48.8	8.2
55	3.3	11.8	9.5	0.67	49.0	8.7
55	3.6	11.9	9.6	0.67	49.4	10.1
68	2.0	13.3	10.9	0.70	56.8	3.4
68	2.4	13.6	11.2	0.70	58.4	4.6
68	2.7	13.8	11.4	0.70	59.3	5.7
68	3.0	13.9	11.5	0.71	60.1	6.8
68	3.2	14.0	11.6	0.71	60.5	7.6
68	3.3	14.0	11.6	0.71	60.7	8.1
68	3.6	14.2	11.7	0.71	61.3	9.4
75	2.0	14.4	12.0	0.71	62.6	3.3
75	2.4	14.7	12.3	0.71	64.4	4.5
75	2.7	14.9	12.5	0.72	65.4	5.6
75	3.0	15.1	12.6	0.72	66.2	6.7
75	3.2	15.2	12.7	0.72	66.7	7.5
75	3.3	15.2	12.8	0.72	67.0	7.9
75	3.6	15.3	12.9	0.72	67.6	9.2
86	2.0	16.1	13.6	0.72	71.7	3.2
86	2.4	16.5	14.0	0.73	73.7	4.4
86	2.7	16.7	14.2	0.73	74.9	5.4
86	3.0	16.9	14.4	0.73	75.9	6.4
86	3.2	17.0	14.5	0.73	76.4	7.2
86	3.3	17.0	14.5	0.73	76.7	7.6
86	3.6	17.1	14.6	0.73	77.4	8.8

Note: Heating performance data is tabulated at 68.0°F DB at the ANSI/AHRI/ASHRAE/ISO13256-1 rated cfm. For conditions other than what is tabulated, multipliers must be used to correct performance. See performance correction tables for fan correction factors for CFM other than rated and the heating correction factors for variation in entering air temperatures. Rated GPM 3; Minimum CFM 304; Rated CFM 380; Maximum CFM 456.

Table 29. Fan correction factors 1 ton - GEV/H012

Entering cfm	Cooling Capacity	Sensible Capacity	Cooling Input Watts	Heating Capacity	Heating Input Watts
304	0.960	0.875	1.009	0.975	1.082
323	0.971	0.907	1.007	0.983	1.058
342	0.982	0.938	1.004	0.989	1.037
361	0.991	0.969	1.002	0.995	1.018
380	1.000	1.000	1.000	1.000	1.000
418	1.016	1.062	0.996	1.008	0.968



Performance Data

Table 29. Fan correction factors 1 ton - GEV/H012 (continued)

Entering cfm	Cooling Capacity	Sensible Capacity	Cooling Input Watts	Heating Capacity	Heating Input Watts
437	1.023	1.093	0.995	1.012	0.954
456	1.030	1.124	0.993	1.015	0.941

Table 30. Correction factors for variation in entering air temperature 1 ton, GEV/H012

Cooling Entering Air WB°F	Cooling Capacity	Cooling Input Watts	Sensible vs. Entering Dry Bulb Multipliers					Heating Entering Air DB°F	Heating Capacity	Heating Input Watts
			65.6	70.6	75.6	80.6	85.6			
49.4	0.941	1.011	0.896	0.961	1.027	1.095	1.165	53.0	1.048	0.833
56.3	0.942	1.011	0.785	0.969	1.029	1.096	1.165	58.0	1.033	0.890
60.3	0.943	1.011	0.620	0.828	1.037	1.097	1.166	63.0	1.017	0.946
63.2	0.955	1.009	0.499	0.709	0.919	1.111	1.167	68.0	1.000	1.000
66.2	1.000	1.000	0.372	0.583	0.793	1.000	1.168	73.0	0.982	1.053
72.1	1.113	0.972	—	—	0.540	0.751	0.962	78.0	0.964	1.105
77.1	1.217	0.937	—	—	—	0.532	0.745	83.0	0.944	1.156

Note: * = Sensible equals total capacity

Cooling and Heating Capacities 1.25 tons

Table 31. Cooling capacities 1.25 tons (gross) - GEV/H015

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Comp Pwr kW	Reject Mbtuh	LWT	Feet Head
45	2.4	17.8	14.0	0.79	0.53	19.6	61.2	5.8
45	3.0	17.9	14.0	0.78	0.50	19.6	57.9	8.5
45	3.4	17.9	14.0	0.78	0.48	19.6	56.4	10.6
45	3.8	18.0	14.1	0.78	0.47	19.5	55.3	12.6
45	3.9	18.0	14.1	0.78	0.46	19.5	54.9	13.5
45	4.1	18.0	14.1	0.78	0.46	19.5	54.5	14.7
45	4.5	18.0	14.1	0.78	0.45	19.5	53.6	17.3
55	2.4	17.3	13.7	0.80	0.65	19.5	71.1	5.6
55	3.0	17.4	13.8	0.79	0.62	19.5	67.8	8.2
55	3.4	17.4	13.8	0.79	0.61	19.5	66.3	10.2
55	3.8	17.4	13.8	0.79	0.60	19.5	65.3	12.1
55	3.9	17.4	13.8	0.79	0.59	19.5	64.9	12.9
55	4.1	17.4	13.8	0.79	0.59	19.4	64.4	14.1
55	4.5	17.5	13.8	0.79	0.58	19.4	63.6	16.6
68	2.4	16.5	13.3	0.81	0.79	19.2	83.7	5.2
68	3.0	16.6	13.4	0.81	0.76	19.2	80.6	7.6
68	3.4	16.6	13.4	0.81	0.75	19.2	79.1	9.4
68	3.8	16.6	13.4	0.81	0.74	19.2	78.1	11.2
68	3.9	16.6	13.4	0.81	0.74	19.2	77.7	12.0
68	4.1	16.7	13.4	0.81	0.74	19.2	77.2	13.0
68	4.5	16.7	13.4	0.81	0.73	19.2	76.4	15.3
75	2.4	16.3	13.2	0.81	0.85	19.2	90.8	5.0
75	3.0	16.4	13.3	0.81	0.82	19.2	87.7	7.4

Table 31. Cooling capacities 1.25 tons (gross) - GEV/H015 (continued)

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Comp Pwr kW	Reject Mbtuh	LWT	Feet Head
75	3.4	16.5	13.3	0.81	0.81	19.2	86.2	9.2
75	3.8	16.5	13.3	0.81	0.80	19.2	85.1	10.9
75	3.9	16.5	13.3	0.81	0.79	19.2	84.7	11.7
75	4.1	16.5	13.3	0.81	0.79	19.2	84.3	12.7
75	4.5	16.6	13.4	0.81	0.78	19.2	83.4	15.0
86	2.4	15.7	12.9	0.82	0.97	19.0	101.6	4.9
86	3.0	15.8	13.0	0.82	0.95	19.0	98.5	7.2
86	3.4	15.9	13.0	0.82	0.94	19.0	97.1	8.9
86	3.8	15.9	13.0	0.82	0.93	19.1	96.0	10.5
86	3.9	15.9	13.0	0.82	0.93	19.1	95.7	11.3
86	4.1	15.9	13.0	0.82	0.92	19.1	95.2	12.3
86	4.5	15.9	13.1	0.82	0.91	19.1	94.4	14.5
95	2.4	14.9	12.5	0.84	1.07	18.5	110.2	4.7
95	3.0	15.0	12.6	0.84	1.04	18.6	107.2	7.0
95	3.4	15.1	12.7	0.84	1.03	18.6	105.8	8.7
95	3.8	15.2	12.7	0.84	1.02	18.7	104.8	10.3
95	3.9	15.2	12.7	0.84	1.02	18.7	104.4	11.0
95	4.1	15.2	12.7	0.84	1.02	18.7	104.0	12.0
95	4.5	15.2	12.7	0.83	1.01	18.7	103.2	14.1
105	2.4	13.8	12.0	0.87	1.17	17.8	119.5	4.6
105	3.0	14.0	12.2	0.87	1.14	17.9	116.7	6.7
105	3.4	14.1	12.2	0.86	1.13	18.0	115.4	8.4
105	3.8	14.2	12.2	0.86	1.13	18.0	114.5	10.0
105	3.9	14.2	12.2	0.86	1.13	18.1	114.1	10.7
105	4.1	14.3	12.3	0.86	1.12	18.1	113.7	11.7
105	4.5	14.3	12.3	0.86	1.12	18.1	112.9	13.8
115	2.4	12.7	11.6	0.91	1.27	17.0	128.9	4.4
115	3.0	12.9	11.7	0.90	1.25	17.2	126.2	6.6
115	3.4	13.0	11.7	0.90	1.24	17.3	124.9	8.2
115	3.8	13.1	11.7	0.90	1.24	17.3	124.0	9.7
115	3.9	13.1	11.8	0.90	1.23	17.3	123.7	10.4
115	4.1	13.2	11.8	0.89	1.23	17.4	123.3	11.4
115	4.5	13.2	11.8	0.89	1.23	17.4	122.6	13.4
120	2.4	12.0	11.3	0.94	1.32	16.5	133.4	4.4
120	3.0	12.3	11.4	0.93	1.30	16.7	130.9	6.5
120	3.4	12.4	11.4	0.92	1.29	16.8	129.7	8.1
120	3.8	12.5	11.5	0.92	1.29	16.9	128.8	9.6
120	3.9	12.5	11.5	0.92	1.29	16.9	128.5	10.3
120	4.1	12.5	11.5	0.92	1.28	16.9	128.1	11.2



Performance Data

Table 31. Cooling capacities 1.25 tons (gross) - GEV/H015 (continued)

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Comp Pwr kW	Reject Mbtuh	LWT	Feet Head
120	4.5	12.6	11.5	0.92	1.28	16.9	127.4	13.2

Note: Cooling performance data is tabulated at 80.6°F DB/66.2°F WB entering air at ANSI/AHRI/ASHRAE/ISO13256-1 rated cfm. For conditions other than what is tabulated, multipliers must be used to correct performance. See performance correction tables for fan correction factors for CFM other than rated and the cooling correction factors for variations in entering air temperature. Rated GPM 3.75; Minimum CFM 380; Rated CFM 475; Maximum CFM 570.

Table 32. Heating capacities 1.25 tons (gross) - GEV/H015

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Comp Pwr kW	LWT	Feet Head
25	2.4	9.9	7.2	0.82	17.9	8.1
25	3.0	10.2	7.4	0.82	19.2	11.9
25	3.4	10.3	7.5	0.83	19.8	14.8
25	3.8	10.4	7.6	0.83	20.2	17.6
25	3.9	10.4	7.6	0.83	20.4	18.8
25	4.1	10.5	7.6	0.83	20.6	20.5
25	4.5	10.5	7.7	0.83	21.0	24.1
32	2.4	11.1	8.2	0.85	24.0	7.9
32	3.0	11.4	8.5	0.86	25.4	11.6
32	3.4	11.5	8.6	0.86	26.1	14.4
32	3.8	11.6	8.7	0.86	26.6	17.0
32	3.9	11.7	8.7	0.86	26.8	18.2
32	4.1	11.7	8.8	0.86	27.0	19.9
32	4.5	11.8	8.9	0.87	27.4	23.4
45	2.4	14.3	11.1	0.93	35.3	5.8
45	3.0	14.6	11.5	0.93	37.0	8.5
45	3.4	14.8	11.6	0.94	37.8	10.6
45	3.8	15.0	11.7	0.94	38.4	12.6
45	3.9	15.0	11.8	0.94	38.7	13.5
45	4.1	15.1	11.8	0.94	38.9	14.7
45	4.5	15.2	11.9	0.94	39.4	17.3
55	2.4	16.3	13.0	0.97	43.7	5.6
55	3.0	16.7	13.4	0.98	45.6	8.2
55	3.4	17.0	13.6	0.98	46.6	10.2
55	3.8	17.1	13.8	0.98	47.3	12.1
55	3.9	17.2	13.8	0.98	47.6	12.9
55	4.1	17.2	13.9	0.98	47.9	14.1
55	4.5	17.3	14.0	0.99	48.5	16.6
68	2.4	18.7	15.2	1.01	54.9	5.2
68	3.0	19.3	15.8	1.02	57.1	7.6
68	3.4	19.5	16.0	1.02	58.2	9.4
68	3.8	19.7	16.2	1.03	59.0	11.2
68	3.9	19.8	16.3	1.03	59.3	12.0
68	4.1	19.9	16.4	1.03	59.7	13.0
68	4.5	20.1	16.5	1.03	60.4	15.3

Table 32. Heating capacities 1.25 tons (gross) - GEV/H015 (continued)

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Comp Pwr kW	LWT	Feet Head
75	2.4	20.2	16.6	1.03	60.6	5.0
75	3.0	20.8	17.2	1.04	63.0	7.4
75	3.4	21.1	17.5	1.05	64.2	9.2
75	3.8	21.3	17.7	1.05	65.1	10.9
75	3.9	21.4	17.8	1.05	65.4	11.7
75	4.1	21.5	17.9	1.05	65.9	12.7
75	4.5	21.6	18.1	1.05	66.6	15.0
86	2.4	22.5	18.8	1.06	69.4	4.9
86	3.0	23.1	19.5	1.07	72.2	7.2
86	3.4	23.4	19.8	1.07	73.6	8.9
86	3.8	23.7	20.0	1.07	74.6	10.5
86	3.9	23.8	20.1	1.08	75.0	11.3
86	4.1	23.9	20.2	1.08	75.5	12.3
86	4.5	24.0	20.4	1.08	76.3	14.5

Note: Heating performance data is tabulated at 68.0°F DB at the ANSI/AHRI/ASHRAE/ISO13256-1 rated cfm. For conditions other than what is tabulated, multipliers must be used to correct performance. See performance correction tables for fan correction factors for CFM other than rated and the heating correction factors for variation in entering air temperatures. Rated GPM 3.75; Minimum CFM 380; Rated CFM 475; Maximum CFM 570.

Table 33. Fan correction factors 1.25 tons - GEV/H015

Entering cfm	Cooling Capacity	Sensible Capacity	Cooling Input Watts	Heating Capacity	Heating Input Watts
380	0.956	0.877	1.005	0.974	1.084
404	0.969	0.908	1.004	0.983	1.060
428	0.980	0.940	1.002	0.989	1.038
451	0.990	0.970	1.001	0.995	1.019
475	1.000	1.000	1.000	1.000	1.000
523	1.017	1.061	0.998	1.008	0.967
546	1.024	1.090	0.997	1.011	0.952
570	1.031	1.120	0.995	1.014	0.939

Table 34. Correction factors for variation in entering air temperature 1.25 tons, GEV/H015

Cooling Entering Air WB°F	Cooling Capacity	Cooling Input Watts	Sensible vs. Entering Dry Bulb Multipliers					Heating Entering Air DB°F	Heating Capacity	Heating Input Watts
			65.6	70.6	75.6	80.6	85.6			
49.4	0.892	1.012	0.893	0.956	1.021	1.088	1.158	53.0	1.037	0.842
56.3	0.893	1.012	0.789	0.986	1.023	1.090	1.158	58.0	1.027	0.897
60.3	0.898	1.011	0.634	0.833	1.031	1.095	1.159	63.0	1.014	0.950
63.2	0.942	1.007	0.519	0.720	0.920	1.117	1.164	68.0	1.000	1.000
66.2	1.000	1.000	0.399	0.600	0.801	1.000	1.198	73.0	0.985	1.049
72.1	1.123	0.980	-	-	0.562	0.764	0.965	78.0	0.968	1.095
77.1	1.231	0.952	-	-	-	0.555	0.758	83.0	0.949	1.141

Note: * = Sensible equals total capacity



Performance Data

Cooling and Heating Capacities 1.5 tons

Table 35. Cooling capacities 1.5 tons (gross) - GEV/H018

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Comp Pwr kW	Reject Mbtuh	LWT	Feet Head
45	2.9	20.9	16.6	0.79	0.59	22.9	60.6	8.1
45	3.6	21.0	16.6	0.79	0.54	22.8	57.6	11.8
45	4.1	21.0	16.7	0.79	0.52	22.8	56.0	14.8
45	4.5	21.1	16.7	0.79	0.51	22.8	55.0	17.3
45	4.7	21.1	16.7	0.79	0.50	22.8	54.6	18.7
45	5.0	21.1	16.7	0.79	0.49	22.8	54.0	20.8
45	5.4	21.1	16.7	0.79	0.48	22.8	53.4	23.8
55	2.9	20.2	16.3	0.81	0.76	22.8	70.5	7.8
55	3.6	20.3	16.3	0.80	0.72	22.8	67.5	11.3
55	4.1	20.4	16.4	0.80	0.69	22.8	65.9	14.2
55	4.5	20.4	16.4	0.80	0.68	22.7	65.0	16.7
55	4.7	20.4	16.4	0.80	0.67	22.7	64.5	18.0
55	5.0	20.4	16.4	0.80	0.67	22.7	64.0	20.0
55	5.4	20.5	16.4	0.80	0.66	22.7	63.3	22.9
68	2.9	19.2	15.9	0.82	0.95	22.5	83.2	7.2
68	3.6	19.4	15.9	0.82	0.92	22.5	80.3	10.4
68	4.1	19.4	15.9	0.82	0.90	22.5	78.8	13.1
68	4.5	19.4	15.9	0.82	0.89	22.5	77.8	15.4
68	4.7	19.5	16.0	0.82	0.88	22.5	77.4	16.6
68	5.0	19.5	15.9	0.82	0.88	22.5	76.8	18.5
68	5.4	19.5	16.0	0.82	0.87	22.5	76.2	21.1
75	2.9	19.1	15.7	0.82	1.02	22.6	90.3	7.0
75	3.6	19.3	15.8	0.82	0.98	22.6	87.4	10.2
75	4.1	19.3	15.8	0.82	0.96	22.6	85.9	12.8
75	4.5	19.3	15.8	0.82	0.95	22.6	84.9	15.0
75	4.7	19.4	15.8	0.82	0.95	22.6	84.5	16.2
75	5.0	19.4	15.8	0.82	0.94	22.6	83.9	18.0
75	5.4	19.4	15.8	0.82	0.93	22.6	83.3	20.6
86	2.9	18.4	15.4	0.83	1.16	22.4	101.2	6.8
86	3.6	18.6	15.5	0.83	1.13	22.4	98.3	9.9
86	4.1	18.6	15.5	0.83	1.12	22.4	96.8	12.3
86	4.5	18.7	15.5	0.83	1.11	22.4	95.8	14.5
86	4.7	18.7	15.5	0.83	1.10	22.4	95.4	15.6
86	5.0	18.7	15.5	0.83	1.10	22.5	94.8	17.4
86	5.4	18.7	15.5	0.83	1.09	22.5	94.2	19.9
95	2.9	17.5	14.9	0.85	1.29	21.9	109.8	6.6
95	3.6	17.7	15.0	0.85	1.26	22.0	107.0	9.6
95	4.1	17.7	15.1	0.85	1.25	22.0	105.5	12.0
95	4.5	17.8	15.1	0.85	1.24	22.0	104.6	14.1
95	4.7	17.8	15.1	0.85	1.23	22.0	104.2	15.2

Table 35. Cooling capacities 1.5 tons (gross) - GEV/H018 (continued)

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Comp Pwr kW	Reject Mbtuh	LWT	Feet Head
95	5.0	17.8	15.1	0.85	1.23	22.0	103.7	16.9
95	5.4	17.9	15.1	0.85	1.22	22.0	103.0	19.4
105	2.9	16.2	14.4	0.89	1.42	21.0	119.2	6.3
105	3.6	16.4	14.5	0.88	1.40	21.2	116.5	9.2
105	4.1	16.6	14.5	0.88	1.38	21.3	115.2	11.6
105	4.5	16.7	14.6	0.87	1.38	21.3	114.3	13.7
105	4.7	16.7	14.6	0.87	1.37	21.4	113.9	14.8
105	5.0	16.7	14.6	0.87	1.37	21.4	113.4	16.5
105	5.4	16.8	14.6	0.87	1.36	21.4	112.8	18.9
115	2.9	14.9	13.8	0.92	1.56	20.3	128.6	6.1
115	3.6	15.2	13.9	0.92	1.54	20.4	126.1	9.0
115	4.1	15.3	14.0	0.91	1.53	20.5	124.8	11.3
115	4.5	15.4	14.0	0.91	1.52	20.5	123.9	13.3
115	4.7	15.4	14.0	0.91	1.52	20.6	123.5	14.4
115	5.0	15.4	14.0	0.91	1.51	20.6	123.0	16.1
115	5.4	15.5	14.0	0.91	1.51	20.6	122.5	18.4
120	2.9	14.2	13.5	0.95	1.63	19.8	133.2	6.1
120	3.6	14.4	13.6	0.94	1.61	19.9	130.8	8.9
120	4.1	14.6	13.6	0.94	1.60	20.0	129.5	11.2
120	4.5	14.6	13.7	0.93	1.59	20.1	128.7	13.2
120	4.7	14.7	13.7	0.93	1.59	20.1	128.3	14.2
120	5.0	14.7	13.7	0.93	1.59	20.1	127.8	15.9
120	5.4	14.8	13.7	0.93	1.58	20.1	127.3	18.2

Note: Cooling performance data is tabulated at 80.6°F DB/66.2°F WB entering air at ANSI/AHRI/ASHRAE/ISO13256-1 rated cfm. For conditions other than what is tabulated, multipliers must be used to correct performance. See performance correction tables for fan correction factors for CFM other than rated and the cooling correction factors for variations in entering air temperature. Rated GPM 4.5; Minimum CFM 456; Rated CFM 570; Maximum CFM 684.

Table 36. Heating capacities 1.5 tons (gross) - GEV/H018

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Comp Pwr kW	LWT	Feet Head
25	2.9	12.2	8.8	0.99	17.8	10.9
25	3.6	12.5	9.1	1.00	19.0	15.9
25	4.1	12.6	9.2	1.00	19.7	19.9
25	4.5	12.7	9.3	1.01	20.1	23.4
25	4.7	12.8	9.3	1.01	20.3	25.2
25	5.0	12.8	9.4	1.01	20.6	28.1
25	5.4	12.9	9.4	1.01	20.9	32.1
32	2.9	13.6	10.1	1.03	23.8	10.6
32	3.6	13.9	10.4	1.04	25.3	15.4
32	4.1	14.1	10.5	1.05	26.0	19.3
32	4.5	14.2	10.6	1.05	26.5	22.7
32	4.7	14.3	10.7	1.05	26.7	24.5
32	5.0	14.3	10.7	1.05	27.0	27.3



Performance Data

Table 36. Heating capacities 1.5 tons (gross) - GEV/H018 (continued)

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Comp Pwr kW	LWT	Feet Head
32	5.4	14.4	10.8	1.06	27.3	31.2
45	2.9	16.7	12.9	1.13	35.7	8.1
45	3.6	17.1	13.3	1.13	37.3	11.8
45	4.1	17.3	13.4	1.14	38.1	14.8
45	4.5	17.5	13.6	1.14	38.7	17.3
45	4.7	17.5	13.6	1.14	38.9	18.7
45	5.0	17.6	13.7	1.15	39.2	20.8
45	5.4	17.7	13.8	1.15	39.6	23.8
55	2.9	19.0	15.0	1.18	44.1	7.8
55	3.6	19.5	15.5	1.19	46.0	11.3
55	4.1	19.8	15.7	1.19	47.0	14.2
55	4.5	19.9	15.8	1.20	47.6	16.7
55	4.7	20.0	15.9	1.20	47.9	18.0
55	5.0	20.1	16.0	1.20	48.3	20.0
55	5.4	20.2	16.1	1.20	48.8	22.9
68	2.9	22.3	18.1	1.25	55.1	7.2
68	3.6	22.9	18.6	1.26	57.3	10.4
68	4.1	23.2	18.9	1.26	58.4	13.1
68	4.5	23.4	19.1	1.27	59.2	15.4
68	4.7	23.4	19.1	1.27	59.5	16.6
68	5.0	23.6	19.2	1.27	60.0	18.5
68	5.4	23.7	19.3	1.27	60.6	21.1
75	2.9	24.0	19.7	1.28	60.9	7.0
75	3.6	24.6	20.2	1.28	63.3	10.2
75	4.1	24.9	20.5	1.29	64.5	12.8
75	4.5	25.1	20.7	1.29	65.4	15.0
75	4.7	25.2	20.8	1.29	65.7	16.2
75	5.0	25.3	20.9	1.29	66.2	18.0
75	5.4	25.4	21.0	1.29	66.8	20.6
86	2.9	26.6	22.1	1.31	69.9	6.8
86	3.6	27.2	22.7	1.32	72.6	9.9
86	4.1	27.5	23.0	1.32	74.1	12.3
86	4.5	27.7	23.2	1.32	75.0	14.5
86	4.7	27.8	23.3	1.32	75.4	15.6
86	5.0	27.9	23.4	1.32	76.0	17.4
86	5.4	28.0	23.5	1.32	76.7	19.9

Note: Heating performance data is tabulated at 68.0°F DB at the ANSI/AHRI/ASHRAE/ISO13256-1 rated cfm. For conditions other than what is tabulated, multipliers must be used to correct performance. See performance correction tables for fan correction factors for CFM other than rated and the heating correction factors for variation in entering air temperatures. Rated GPM 4.5; Minimum CFM 456; Rated CFM 570; Maximum CFM 684.

Table 37. Fan correction factors 1.5 tons - GEV/H018

Entering cfm	Cooling Capacity	Sensible Capacity	Cooling Input Watts	Heating Capacity	Heating Input Watts
456	0.958	0.875	1.005	0.973	1.087
485	0.970	0.907	1.004	0.982	1.062
513	0.981	0.937	1.002	0.989	1.040
542	0.991	0.968	1.001	0.995	1.019
570	1.000	1.000	1.000	1.000	1.000
627	1.017	1.058	0.997	1.008	0.966
656	1.025	1.089	0.996	1.012	0.950
684	1.031	1.118	0.995	1.015	0.936

Table 38. Correction factors for variation in entering air temperature 1.5 tons, GEV/H018

Cooling Entering Air WB°F	Cooling Capacity	Cooling Input Watts	Sensible vs. Entering Dry Bulb Multipliers					Heating Entering Air DB°F	Heating Capacity	Heating Input Watts
			65.6	70.6	75.6	80.6	85.6			
49.4	0.897	1.011	0.888	0.950	1.013	1.078	1.146	53.0	1.038	0.830
56.3	0.898	1.010	0.787	0.985	1.015	1.080	1.146	58.0	1.028	0.891
60.3	0.901	1.010	0.631	0.832	1.029	1.084	1.147	63.0	1.015	0.946
63.2	0.944	1.006	0.515	0.717	0.917	1.115	1.144	68.0	1.000	1.000
66.2	1.000	1.000	0.394	0.597	0.799	1.000	1.197	73.0	0.984	1.051
72.1	1.122	0.980	—	—	0.558	0.761	0.964	78.0	0.965	1.101
77.1	1.222	0.947	—	—	—	0.548	0.752	83.0	0.945	1.148

Note: * = Sensible equals total capacity

Cooling and Heating Capacities 2 tons

Table 39. Cooling capacities 2 tons (gross) - GEV/H024

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Power kW	Reject Mbtuh	LWT	Feet Head
45	3.9	28.7	22.3	0.78	0.83	31.5	60.9	3.3
45	4.8	28.8	22.3	0.77	0.79	31.5	58.0	4.8
45	5.4	28.9	22.4	0.77	0.78	31.5	56.5	5.9
45	6.0	28.9	22.4	0.77	0.77	31.6	55.4	7.0
45	6.3	29.0	22.4	0.77	0.76	31.6	54.9	7.7
45	6.6	29.0	22.4	0.77	0.76	31.6	54.4	8.3
45	7.2	29.0	22.4	0.77	0.75	31.6	53.7	9.7
55	3.9	27.8	21.8	0.78	0.97	31.1	70.7	3.2
55	4.8	27.9	21.8	0.78	0.93	31.1	67.8	4.6
55	5.4	28.0	21.9	0.78	0.91	31.1	66.4	5.6
55	6.0	28.0	21.9	0.78	0.90	31.1	65.2	6.8
55	6.3	28.1	21.9	0.78	0.89	31.1	64.8	7.4
55	6.6	28.1	21.9	0.78	0.89	31.1	64.3	8.0
55	7.2	28.1	21.9	0.78	0.88	31.1	63.5	9.3
68	3.9	26.7	21.2	0.79	1.18	30.7	83.5	3.0
68	4.8	26.8	21.2	0.79	1.14	30.7	80.6	4.3
68	5.4	26.8	21.2	0.79	1.12	30.7	79.2	5.2



Performance Data

Table 39. Cooling capacities 2 tons (gross) - GEV/H024 (continued)

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Power kW	Reject Mbtuh	LWT	Feet Head
68	6.0	26.9	21.3	0.79	1.10	30.7	78.1	6.3
68	6.3	26.9	21.3	0.79	1.10	30.6	77.6	6.9
68	6.6	26.9	21.3	0.79	1.09	30.6	77.2	7.4
68	7.2	26.9	21.3	0.79	1.08	30.6	76.4	8.6
75	3.9	26.3	21.1	0.80	1.29	30.7	90.5	2.9
75	4.8	26.4	21.1	0.80	1.25	30.6	87.6	4.2
75	5.4	26.4	21.2	0.80	1.22	30.6	86.2	5.1
75	6.0	26.5	21.2	0.80	1.21	30.6	85.0	6.1
75	6.3	26.5	21.2	0.80	1.20	30.6	84.6	6.7
75	6.6	26.5	21.2	0.80	1.19	30.6	84.1	7.3
75	7.2	26.5	21.2	0.80	1.18	30.6	83.4	8.4
86	3.9	25.3	20.6	0.82	1.51	30.4	101.3	2.8
86	4.8	25.4	20.7	0.81	1.46	30.4	98.4	4.0
86	5.4	25.4	20.7	0.81	1.44	30.3	97.0	4.9
86	6.0	25.5	20.7	0.81	1.42	30.3	95.9	5.9
86	6.3	25.5	20.7	0.81	1.41	30.3	95.4	6.5
86	6.6	25.5	20.7	0.81	1.40	30.3	95.0	7.0
86	7.2	25.5	20.8	0.81	1.39	30.3	94.2	8.1
95	3.9	24.3	20.2	0.83	1.71	30.2	110.1	2.7
95	4.8	24.4	20.2	0.83	1.66	30.1	107.3	3.9
95	5.4	24.5	20.3	0.83	1.64	30.1	105.9	4.8
95	6.0	24.5	20.3	0.83	1.62	30.1	104.8	5.8
95	6.3	24.6	20.3	0.83	1.61	30.1	104.3	6.3
95	6.6	24.6	20.3	0.83	1.61	30.1	103.9	6.8
95	7.2	24.6	20.3	0.83	1.59	30.0	103.2	7.9
105	3.9	23.2	19.6	0.85	1.97	29.9	120.0	2.7
105	4.8	23.3	19.7	0.84	1.91	29.8	117.1	3.8
105	5.4	23.4	19.7	0.84	1.89	29.8	115.8	4.7
105	6.0	23.4	19.7	0.84	1.87	29.8	114.7	5.6
105	6.3	23.4	19.7	0.84	1.86	29.8	114.2	6.1
105	6.6	23.4	19.8	0.84	1.85	29.8	113.8	6.6
105	7.2	23.5	19.8	0.84	1.84	29.8	113.1	7.7
115	3.9	22.0	19.1	0.87	2.24	29.6	129.8	2.6
115	4.8	22.1	19.1	0.87	2.19	29.5	127.0	3.7
115	5.4	22.1	19.1	0.86	2.16	29.5	125.7	4.5
115	6.0	22.2	19.2	0.86	2.14	29.5	124.6	5.5
115	6.3	22.2	19.2	0.86	2.13	29.5	124.1	5.9
115	6.6	22.2	19.2	0.86	2.12	29.5	123.7	6.4
115	7.2	22.2	19.2	0.86	2.11	29.4	123.0	7.5
120	3.9	21.3	18.8	0.88	2.38	29.4	134.7	2.6
120	4.8	21.4	18.8	0.88	2.33	29.4	131.9	3.7

Table 39. Cooling capacities 2 tons (gross) - GEV/H024 (continued)

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Power kW	Reject Mbtuh	LWT	Feet Head
120	5.4	21.5	18.8	0.88	2.30	29.3	130.6	4.5
120	6.0	21.5	18.8	0.88	2.28	29.3	129.5	5.4
120	6.3	21.5	18.9	0.88	2.28	29.3	129.1	5.8
120	6.6	21.5	18.9	0.88	2.27	29.3	128.6	6.3
120	7.2	21.6	18.9	0.87	2.25	29.3	127.9	7.4

Note: Cooling performance data is tabulated at 80.6°F DB/66.2°F WB entering air at ANSI/AHRI/ASHRAE/ISO13256-1 rated cfm. For ANSI/AHRI/ASHRAE/ISO13256-1 certified ratings, refer to the ANSI/AHRI/ASHRAE/ISO13256-1 WLHP, GWHP and GLHP performance table. See performance correction tables to correct performance at conditions other than those tabulated. Data shown is for unit performance only. Interpolation of data is permissible; extrapolation is not. Rated GPM: 5.6 Minimum cfm 608; Rated cfm 760; Maximum cfm 912.

Table 40. Heating capacities 2 tons (gross) - GEV/H024

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Power kW	LWT	Feet Head
25	3.9	15.9	11.1	1.39	18.3	4.3
25	4.8	16.2	11.4	1.40	19.4	6.2
25	5.4	16.3	11.6	1.40	20.0	7.6
25	6.0	16.5	11.7	1.41	20.4	9.1
25	6.3	16.5	11.7	1.41	20.6	9.9
25	6.6	16.6	11.8	1.41	20.8	10.8
25	7.2	16.7	11.9	1.41	21.1	12.5
32	3.9	17.6	12.7	1.43	24.4	4.2
32	4.8	18.0	13.1	1.44	25.7	6.0
32	5.4	18.2	13.3	1.44	26.3	7.4
32	6.0	18.3	13.4	1.45	26.8	8.9
32	6.3	18.4	13.5	1.45	27.0	9.6
32	6.6	18.5	13.5	1.45	27.2	10.5
32	7.2	18.6	13.6	1.45	27.6	12.2
45	3.9	22.4	17.1	1.53	35.8	3.3
45	4.8	22.9	17.6	1.54	37.3	4.8
45	5.4	23.2	17.9	1.55	38.1	5.9
45	6.0	23.4	18.1	1.55	38.7	7.0
45	6.3	23.5	18.2	1.55	39.0	7.7
45	6.6	23.6	18.2	1.56	39.2	8.3
45	7.2	23.7	18.4	1.56	39.7	9.7
55	3.9	25.3	19.9	1.59	44.3	3.2
55	4.8	25.9	20.5	1.60	46.1	4.6
55	5.4	26.3	20.8	1.60	47.0	5.6
55	6.0	26.5	21.0	1.61	47.7	6.8
55	6.3	26.6	21.1	1.61	48.0	7.4
55	6.6	26.7	21.2	1.61	48.3	8.0
55	7.2	26.9	21.4	1.61	48.8	9.3
68	3.9	28.4	22.8	1.65	55.8	3.0
68	4.8	29.1	23.4	1.67	57.8	4.3
68	5.4	29.5	23.8	1.67	58.8	5.2



Performance Data

Table 40. Heating capacities 2 tons (gross) - GEV/H024 (continued)

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Power kW	LWT	Feet Head
68	6.0	29.8	24.1	1.68	59.6	6.3
68	6.3	29.9	24.2	1.68	59.9	6.9
68	6.6	30.1	24.3	1.68	60.3	7.4
68	7.2	30.3	24.5	1.69	60.9	8.6
75	3.9	30.6	24.8	1.69	61.7	2.9
75	4.8	31.4	25.5	1.70	63.8	4.2
75	5.4	31.8	25.9	1.71	64.9	5.1
75	6.0	32.1	26.2	1.71	65.8	6.1
75	6.3	32.2	26.4	1.72	66.2	6.7
75	6.6	32.4	26.5	1.72	66.5	7.3
75	7.2	32.6	26.7	1.72	67.2	8.4
86	3.9	33.9	27.9	1.74	70.8	2.8
86	4.8	34.7	28.7	1.75	73.3	4.0
86	5.4	35.1	29.1	1.76	74.5	4.9
86	6.0	35.5	29.5	1.76	75.6	5.9
86	6.3	35.6	29.6	1.76	76.0	6.5
86	6.6	35.8	29.7	1.77	76.4	7.0
86	7.2	36.0	30.0	1.77	77.1	8.1

Note: Heating performance data is tabulated at 68°F DB entering air at ANSI/AHRI/ASHRAE/ISO13256-1 rated cfm. For ANSI/AHRI/ASHRAE/ISO13256-1 certified ratings, refer to the ANSI/AHRI/ASHRAE/ISO13256-1 WLHP, GWHP and GLHP performance table. See performance correction tables to correct performance at conditions other than those tabulated. Data shown is for unit performance only. Interpolation of data is permissible; extrapolation is not. Rated GPM: 5.6 Minimum cfm 608; Rated cfm 760; Maximum cfm 912.

Table 41. Fan correction factors 2 tons - GEV/H024

Entering cfm	Cooling Capacity	Sensible Capacity	Cooling Input Watts	Heating Capacity	Heating Input Watts
608	0.960	0.882	1.007	0.989	1.109
646	0.971	0.912	1.005	0.993	1.077
684	0.982	0.942	1.003	0.995	1.048
722	0.991	0.971	1.002	0.998	1.023
760	1.000	1.000	1.000	1.000	1.000
836	1.015	1.058	0.997	1.004	0.961
874	1.022	1.087	0.996	1.005	0.944
912	1.028	1.115	0.995	1.006	0.929

Table 42. Correction factors for variation in entering air temperature 2 tons, GEV/H024

Cooling Entering Air WB°F	Cooling Capacity	Cooling Input Watts	Sensible vs. Entering Dry Bulb Multipliers					Heating Entering Air DB°F	Heating Capacity	Heating Input Watts
			65.6	70.6	75.6	80.6	85.6			
49.4	0.909	1.015	0.931	0.992	1.054	1.118	1.184	53.0	1.026	0.823
56.3	0.910	1.015	0.800	0.996	1.056	1.119	1.184	58.0	1.018	0.879
60.3	0.915	1.014	0.644	0.841	1.036	1.125	1.185	63.0	1.009	0.939
63.2	0.951	1.008	0.526	0.728	0.923	1.119	1.189	68.0	1.000	1.000
66.2	1.000	1.000	0.403	0.605	0.805	1.000	1.197	73.0	0.991	1.064
72.1	1.104	0.983	—	—	0.562	0.764	0.961	78.0	0.981	1.130

Table 42. Correction factors for variation in entering air temperature 2 tons, GEV/H024 (continued)

Cooling Entering Air WB°F	Cooling Capacity	Cooling Input Watts	Sensible vs. Entering Dry Bulb Multipliers					Heating Entering Air DB°F	Heating Capacity	Heating Input Watts
			65.6	70.6	75.6	80.6	85.6			
77.1	1.202	0.965	—	—	—	0.552	0.756	83.0	0.971	1.198

Note: * = Sensible equals total capacity

Cooling and Heating Capacities 2.5 tons

Table 43. Cooling capacities 2.5 tons (gross) - GEV/H030

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Comp Pwr kW	Reject Mbtuh	LWT	Feet Head
45	4.9	33.5	27.3	0.81	1.04	37.1	60.2	5.0
45	6.0	33.6	27.4	0.81	1.01	37.1	57.4	7.1
45	6.8	33.7	27.4	0.81	0.99	37.1	55.9	8.8
45	7.5	33.8	27.4	0.81	0.98	37.1	54.9	10.4
45	7.9	33.8	27.4	0.81	0.97	37.1	54.4	11.4
45	8.3	33.8	27.5	0.81	0.96	37.1	54.0	12.4
45	9.0	33.9	27.5	0.81	0.95	37.1	53.3	14.3
55	4.9	32.5	26.7	0.82	1.21	36.6	70.0	4.8
55	6.0	32.6	26.8	0.82	1.17	36.6	67.2	6.8
55	6.8	32.7	26.8	0.82	1.15	36.6	65.8	8.4
55	7.5	32.7	26.8	0.82	1.13	36.6	64.8	10.0
55	7.9	32.7	26.8	0.82	1.13	36.6	64.3	10.9
55	8.3	32.7	26.9	0.82	1.12	36.6	63.8	11.9
55	9.0	32.8	26.9	0.82	1.11	36.6	63.1	13.7
68	4.9	31.1	25.9	0.83	1.44	36.0	82.7	4.4
68	6.0	31.2	26.0	0.83	1.40	36.0	80.0	6.3
68	6.8	31.2	26.0	0.83	1.38	36.0	78.6	7.8
68	7.5	31.3	26.1	0.83	1.36	35.9	77.6	9.3
68	7.9	31.3	26.1	0.83	1.36	35.9	77.1	10.2
68	8.3	31.3	26.1	0.83	1.35	35.9	76.7	11.1
68	9.0	31.4	26.1	0.83	1.34	35.9	76.0	12.8
75	4.9	30.7	25.8	0.84	1.56	36.0	89.7	4.3
75	6.0	30.8	25.9	0.84	1.51	36.0	87.0	6.2
75	6.8	30.9	25.9	0.84	1.49	36.0	85.6	7.7
75	7.5	30.9	25.9	0.84	1.47	35.9	84.6	9.1
75	7.9	30.9	25.9	0.84	1.46	35.9	84.1	9.9
75	8.3	31.0	25.9	0.84	1.46	35.9	83.7	10.8
75	9.0	31.0	25.9	0.84	1.45	35.9	83.0	12.5
86	4.9	29.8	25.1	0.84	1.81	36.0	100.6	4.2
86	6.0	29.9	25.1	0.84	1.76	35.9	97.9	5.9
86	6.8	30.0	25.1	0.84	1.73	35.9	96.5	7.4
86	7.5	30.0	25.2	0.84	1.71	35.9	95.5	8.8
86	7.9	30.0	25.2	0.84	1.70	35.8	95.0	9.6
86	8.3	30.0	25.2	0.84	1.70	35.8	94.6	10.4



Performance Data

Table 43. Cooling capacities 2.5 tons (gross) - GEV/H030 (continued)

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Comp Pwr kW	Reject Mbtuh	LWT	Feet Head
86	9.0	30.1	25.2	0.84	1.68	35.8	93.9	12.0
95	4.9	28.7	24.5	0.86	2.04	35.6	109.5	4.1
95	6.0	28.8	24.6	0.85	1.99	35.6	106.8	5.8
95	6.8	28.9	24.6	0.85	1.96	35.5	105.4	7.2
95	7.5	28.9	24.6	0.85	1.94	35.5	104.4	8.5
95	7.9	28.9	24.6	0.85	1.93	35.5	103.9	9.3
95	8.3	28.9	24.6	0.85	1.92	35.5	103.5	10.2
95	9.0	29.0	24.7	0.85	1.91	35.5	102.8	11.7
105	4.9	27.3	23.9	0.87	2.33	35.3	119.3	4.0
105	6.0	27.4	23.9	0.87	2.27	35.2	116.7	5.6
105	6.8	27.5	24.0	0.87	2.24	35.2	115.3	7.0
105	7.5	27.6	24.0	0.87	2.22	35.1	114.3	8.3
105	7.9	27.6	24.0	0.87	2.21	35.1	113.8	9.1
105	8.3	27.6	24.0	0.87	2.20	35.1	113.4	9.9
105	9.0	27.6	24.0	0.87	2.19	35.1	112.7	11.4
115	4.9	25.8	23.2	0.90	2.64	34.9	129.1	3.9
115	6.0	26.0	23.2	0.89	2.59	34.8	126.5	5.5
115	6.8	26.0	23.3	0.89	2.56	34.8	125.1	6.8
115	7.5	26.1	23.3	0.89	2.54	34.7	124.2	8.0
115	7.9	26.1	23.3	0.89	2.53	34.7	123.7	8.8
115	8.3	26.1	23.3	0.89	2.52	34.7	123.3	9.6
115	9.0	26.2	23.3	0.89	2.50	34.7	122.7	11.0
120	4.9	25.1	22.8	0.91	2.81	34.6	134.0	3.8
120	6.0	25.2	22.9	0.91	2.75	34.6	131.4	5.4
120	6.8	25.3	22.9	0.91	2.73	34.5	130.1	6.7
120	7.5	25.3	22.9	0.91	2.70	34.5	129.1	7.9
120	7.9	25.3	22.9	0.91	2.69	34.5	128.7	8.7
120	8.3	25.3	22.9	0.91	2.69	34.5	128.2	9.4
120	9.0	25.4	23.0	0.90	2.67	34.5	127.6	10.9

Note: Cooling performance data is tabulated at 80.6°F DB/66.2°F WB entering air at ANSI/AHRI/ASHRAE/ISO13256-1 rated cfm. For conditions other than what is tabulated, multipliers must be used to correct performance. See performance correction tables for fan correction factors for CFM other than rated and the cooling correction factors for variations in entering air temperature. Rated GPM 7.5; Minimum CFM 760; Rated CFM 950; Maximum CFM 1140.

Table 44. Heating capacities 2.5 tons (gross) - GEV/H030

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Comp Pwr kW	LWT	Feet Head
25	4.9	18.8	13.2	1.65	18.6	6.4
25	6.0	19.2	13.5	1.66	19.7	9.1
25	6.8	19.4	13.7	1.66	20.2	11.4
25	7.5	19.5	13.8	1.67	20.7	13.5
25	7.9	19.6	13.9	1.67	20.9	14.8
25	8.3	19.6	13.9	1.67	21.0	16.1
25	9.0	19.7	14.0	1.67	21.3	18.5
32	4.9	21.0	15.2	1.70	24.8	6.2

Table 44. Heating capacities 2.5 tons (gross) - GEV/H030 (continued)

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Comp Pwr kW	LWT	Feet Head
32	6.0	21.4	15.5	1.70	26.0	8.9
32	6.8	21.6	15.8	1.71	26.6	11.0
32	7.5	21.7	15.9	1.71	27.1	13.1
32	7.9	21.8	16.0	1.71	27.3	14.3
32	8.3	21.9	16.0	1.71	27.5	15.6
32	9.0	22.0	16.1	1.72	27.8	18.0
45	4.9	25.5	19.4	1.79	36.6	5.0
45	6.0	26.1	19.9	1.81	38.0	7.1
45	6.8	26.4	20.2	1.81	38.7	8.8
45	7.5	26.6	20.4	1.82	39.3	10.4
45	7.9	26.7	20.5	1.82	39.5	11.4
45	8.3	26.8	20.6	1.82	39.8	12.4
45	9.0	27.0	20.8	1.82	40.1	14.3
55	4.9	29.1	22.7	1.86	45.2	4.8
55	6.0	29.8	23.4	1.87	46.8	6.8
55	6.8	30.1	23.7	1.88	47.7	8.4
55	7.5	30.4	24.0	1.88	48.3	10.0
55	7.9	30.5	24.1	1.88	48.6	10.9
55	8.3	30.6	24.2	1.89	48.9	11.9
55	9.0	30.8	24.4	1.89	49.3	13.7
68	4.9	33.9	27.1	1.99	56.5	4.4
68	6.0	34.7	27.9	2.00	58.3	6.3
68	6.8	35.2	28.3	2.01	59.3	7.8
68	7.5	35.5	28.6	2.01	60.0	9.3
68	7.9	35.7	28.8	2.02	60.4	10.2
68	8.3	35.8	28.9	2.02	60.7	11.1
68	9.0	36.0	29.1	2.02	61.2	12.8
75	4.9	36.5	29.6	2.03	62.4	4.3
75	6.0	37.4	30.4	2.04	64.4	6.2
75	6.8	37.9	30.9	2.05	65.5	7.7
75	7.5	38.2	31.2	2.05	66.3	9.1
75	7.9	38.4	31.4	2.06	66.7	9.9
75	8.3	38.5	31.5	2.06	67.0	10.8
75	9.0	38.8	31.7	2.06	67.6	12.5
86	4.9	40.4	33.3	2.08	71.6	4.2
86	6.0	41.4	34.2	2.10	73.9	5.9
86	6.8	41.9	34.7	2.10	75.2	7.4
86	7.5	42.2	35.0	2.11	76.1	8.8
86	7.9	42.4	35.2	2.11	76.6	9.6
86	8.3	42.5	35.3	2.11	77.0	10.4



Performance Data

Table 44. Heating capacities 2.5 tons (gross) - GEV/H030 (continued)

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Comp Pwr kW	LWT	Feet Head
86	9.0	42.8	35.6	2.11	77.6	12.0

Note: Heating performance data is tabulated at 68.0°F DB at the ANSI/AHRI/ASHRAE/ISO13256-1 rated cfm. For conditions other than what is tabulated, multipliers must be used to correct performance. See performance correction tables for fan correction factors for CFM other than rated and the heating correction factors for variation in entering air temperatures. Rated GPM 7.5; Minimum CFM 760; Rated CFM 950; Maximum CFM 1140.

Table 45. Fan correction factors 2.5 tons - GEV/H030

Entering cfm	Cooling Capacity	Sensible Capacity	Cooling Input Watts	Heating Capacity	Heating Input Watts
760	0.961	0.879	1.005	0.990	1.100
808	0.972	0.910	1.003	0.993	1.070
855	0.982	0.940	1.002	0.996	1.044
903	0.992	0.970	1.001	0.998	1.020
950	1.000	1.000	1.000	1.000	1.000
1045	1.015	1.059	0.998	1.003	0.965
1093	1.021	1.089	0.997	1.005	0.949
1140	1.027	1.119	0.997	1.006	0.936

Table 46. Correction factors for variation in entering air temperature 2.5 tons, GEV/H030

Cooling Entering Air WB°F	Cooling Capacity	Cooling Input Watts	Sensible vs. Entering Dry Bulb Multipliers					Heating Entering Air DB°F	Heating Capacity	Heating Input Watts
			65.6	70.6	75.6	80.6	85.6			
49.4	0.909	1.015	0.931	0.992	1.054	1.118	1.184	53.0	1.026	0.823
56.3	0.910	1.015	0.800	0.996	1.056	1.119	1.184	58.0	1.018	0.879
60.3	0.915	1.014	0.644	0.841	1.036	1.125	1.185	63.0	1.009	0.939
63.2	0.951	1.008	0.526	0.728	0.923	1.119	1.189	68.0	1.000	1.000
66.2	1.000	1.000	0.403	0.605	0.805	1.000	1.197	73.0	0.991	1.064
72.1	1.104	0.983	—	—	0.562	0.764	0.961	78.0	0.981	1.130
77.1	1.202	0.965	—	—	—	0.552	0.756	83.0	0.971	1.198

Note: * = Sensible equals total capacity

Cooling and Heating Capacities 3 tons

Table 47. Cooling capacities 3 tons (gross) - GEV/H036

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Comp Pwr kW	Reject Mbtuh	LWT	Feet Head
45	5.9	45.1	34.3	0.76	1.53	50.3	61.8	6.9
45	7.2	45.3	34.4	0.76	1.47	50.3	58.8	9.7
45	8.1	45.4	34.4	0.76	1.45	50.3	57.3	11.9
45	9.0	45.4	34.5	0.76	1.42	50.3	56.0	14.3
45	9.5	45.5	34.5	0.76	1.41	50.3	55.5	15.7
45	9.9	45.5	34.5	0.76	1.41	50.3	55.0	16.9
45	10.8	45.6	34.5	0.76	1.39	50.3	54.2	19.7
55	5.9	43.8	33.5	0.77	1.75	49.8	71.7	6.6
55	7.2	43.9	33.6	0.77	1.69	49.7	68.7	9.3
55	8.1	44.0	33.7	0.76	1.66	49.7	67.1	11.5
55	9.0	44.1	33.7	0.76	1.64	49.7	65.9	13.8
55	9.5	44.1	33.7	0.76	1.63	49.7	65.3	15.1

Table 47. Cooling capacities 3 tons (gross) - GEV/H036 (continued)

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Comp Pwr kW	Reject Mbtuh	LWT	Feet Head
55	9.9	44.1	33.7	0.76	1.62	49.7	64.9	16.2
55	10.8	44.2	33.7	0.76	1.60	49.7	64.1	18.9
68	5.9	42.0	32.6	0.77	2.11	49.2	84.5	6.2
68	7.2	42.2	32.6	0.77	2.03	49.1	81.5	8.7
68	8.1	42.2	32.7	0.77	2.00	49.1	80.0	10.7
68	9.0	42.3	32.7	0.77	1.97	49.0	78.8	12.8
68	9.5	42.3	32.7	0.77	1.96	49.0	78.2	14.1
68	9.9	42.3	32.7	0.77	1.95	49.0	77.8	15.1
68	10.8	42.4	32.7	0.77	1.93	49.0	77.0	17.6
75	5.9	41.9	32.1	0.77	2.23	49.5	91.6	6.0
75	7.2	42.0	32.2	0.77	2.15	49.4	88.6	8.5
75	8.1	42.1	32.3	0.77	2.12	49.3	87.1	10.4
75	9.0	42.2	32.3	0.77	2.09	49.3	85.8	12.5
75	9.5	42.2	32.3	0.77	2.08	49.3	85.3	13.7
75	9.9	42.2	32.3	0.77	2.07	49.3	84.9	14.7
75	10.8	42.3	32.4	0.77	2.05	49.3	84.0	17.1
86	5.9	40.6	31.2	0.77	2.58	49.4	102.6	5.8
86	7.2	40.8	31.3	0.77	2.50	49.3	99.5	8.2
86	8.1	40.9	31.4	0.77	2.46	49.2	98.0	10.0
86	9.0	40.9	31.4	0.77	2.43	49.2	96.8	12.1
86	9.5	40.9	31.4	0.77	2.41	49.2	96.2	13.2
86	9.9	41.0	31.4	0.77	2.40	49.2	95.8	14.2
86	10.8	41.0	31.5	0.77	2.38	49.1	95.0	16.5
95	5.9	39.0	30.3	0.78	2.90	48.9	111.4	5.6
95	7.2	39.2	30.4	0.77	2.82	48.8	108.4	8.0
95	8.1	39.3	30.4	0.77	2.78	48.8	106.9	9.8
95	9.0	39.3	30.4	0.77	2.75	48.7	105.7	11.7
95	9.5	39.4	30.5	0.77	2.73	48.7	105.1	12.9
95	9.9	39.4	30.5	0.77	2.72	48.7	104.7	13.8
95	10.8	39.4	30.5	0.77	2.70	48.6	103.9	16.1
105	5.9	37.2	29.2	0.78	3.29	48.4	121.2	5.5
105	7.2	37.4	29.3	0.78	3.21	48.3	118.3	7.7
105	8.1	37.4	29.3	0.78	3.17	48.2	116.8	9.5
105	9.0	37.5	29.3	0.78	3.13	48.2	115.6	11.4
105	9.5	37.5	29.3	0.78	3.12	48.2	115.0	12.5
105	9.9	37.6	29.4	0.78	3.11	48.2	114.6	13.4
105	10.8	37.6	29.4	0.78	3.08	48.1	113.8	15.6
115	5.9	35.2	28.0	0.79	3.70	47.9	131.1	5.3
115	7.2	35.4	28.1	0.79	3.62	47.7	128.1	7.5
115	8.1	35.5	28.1	0.79	3.58	47.7	126.7	9.2
115	9.0	35.5	28.2	0.79	3.55	47.6	125.5	11.0



Performance Data

Table 47. Cooling capacities 3 tons (gross) - GEV/H036 (continued)

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Comp Pwr kW	Reject Mbtuh	LWT	Feet Head
115	9.5	35.6	28.2	0.79	3.53	47.6	124.9	12.1
115	9.9	35.6	28.2	0.79	3.52	47.6	124.5	12.9
115	10.8	35.6	28.2	0.79	3.50	47.6	123.7	15.1
120	5.9	34.2	27.4	0.80	3.91	47.5	136.0	5.3
120	7.2	34.4	27.5	0.80	3.83	47.4	133.0	7.4
120	8.1	34.4	27.5	0.80	3.79	47.4	131.6	9.1
120	9.0	34.5	27.5	0.80	3.76	47.3	130.4	10.9
120	9.5	34.5	27.6	0.80	3.75	47.3	129.9	12.0
120	9.9	34.5	27.6	0.80	3.74	47.3	129.5	12.8
120	10.8	34.6	27.6	0.80	3.71	47.3	128.7	14.9

Note: Cooling performance data is tabulated at 80.6°F DB/66.2°F WB entering air at ANSI/AHR/ASHRAE/ISO13256-1 rated cfm. For conditions other than what is tabulated, multipliers must be used to correct performance. See performance correction tables for fan correction factors for CFM other than rated and the cooling correction factors for variations in entering air temperature. Rated GPM 9; Minimum CFM 912; Rated CFM 1140; Maximum CFM 1368.

Table 48. Heating capacities 3 tons (gross) - GEV/H036

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Comp Pwr kW	LWT	Feet Head
25	5.9	24.5	16.9	2.21	18.3	8.9
25	7.2	24.9	17.3	2.22	19.4	12.6
25	8.1	25.2	17.6	2.23	20.0	15.5
25	9.0	25.4	17.8	2.23	20.4	18.6
25	9.5	25.5	17.8	2.24	20.6	20.4
25	9.9	25.6	17.9	2.24	20.8	21.9
25	10.8	25.7	18.1	2.24	21.1	25.5
32	5.9	27.1	19.4	2.27	24.4	8.7
32	7.2	27.7	19.9	2.29	25.7	12.2
32	8.1	28.0	20.1	2.29	26.3	15.0
32	9.0	28.2	20.4	2.30	26.8	18.0
32	9.5	28.3	20.5	2.30	27.1	19.8
32	9.9	28.4	20.5	2.30	27.2	21.3
32	10.8	28.6	20.7	2.31	27.6	24.7
45	5.9	34.4	26.0	2.45	35.8	6.9
45	7.2	35.1	26.7	2.46	37.3	9.7
45	8.1	35.5	27.1	2.47	38.1	11.9
45	9.0	35.9	27.4	2.48	38.7	14.3
45	9.5	36.0	27.5	2.48	39.0	15.7
45	9.9	36.1	27.6	2.48	39.2	16.9
45	10.8	36.4	27.9	2.49	39.7	19.7
55	5.9	38.8	30.1	2.53	44.4	6.6
55	7.2	39.6	30.9	2.55	46.1	9.3
55	8.1	40.1	31.4	2.56	47.0	11.5
55	9.0	40.5	31.7	2.56	47.7	13.8
55	9.5	40.6	31.9	2.57	48.1	15.1
55	9.9	40.8	32.0	2.57	48.3	16.2

Table 48. Heating capacities 3 tons (gross) - GEV/H036 (continued)

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Comp Pwr kW	LWT	Feet Head
55	10.8	41.0	32.2	2.57	48.8	18.9
68	5.9	43.7	34.7	2.66	55.9	6.2
68	7.2	44.8	35.6	2.68	57.8	8.7
68	8.1	45.3	36.1	2.69	58.8	10.7
68	9.0	45.7	36.5	2.70	59.6	12.8
68	9.5	45.9	36.7	2.70	60.0	14.1
68	9.9	46.1	36.9	2.70	60.3	15.1
68	10.8	46.4	37.2	2.71	60.9	17.6
75	5.9	46.9	37.6	2.71	61.8	6.0
75	7.2	47.9	38.6	2.73	63.9	8.5
75	8.1	48.5	39.1	2.74	65.0	10.4
75	9.0	48.9	39.5	2.74	65.9	12.5
75	9.5	49.1	39.7	2.75	66.3	13.7
75	9.9	49.3	39.9	2.75	66.6	14.7
75	10.8	49.6	40.2	2.75	67.3	17.1
86	5.9	51.4	41.9	2.77	71.2	5.8
86	7.2	52.4	42.9	2.78	73.6	8.2
86	8.1	52.8	43.3	2.79	74.8	10.0
86	9.0	53.2	43.7	2.79	75.8	12.1
86	9.5	53.4	43.9	2.79	76.3	13.2
86	9.9	53.5	44.0	2.79	76.7	14.2
86	10.8	53.8	44.3	2.79	77.4	16.5

Note: Heating performance data is tabulated at 68.0°F DB at the ANSI/AHRI/ASHRAE/ISO13256-1 rated cfm. For conditions other than what is tabulated, multipliers must be used to correct performance. See performance correction tables for fan correction factors for CFM other than rated and the heating correction factors for variation in entering air temperatures. Rated GPM 9; Minimum CFM 912; Rated CFM 1140; Maximum CFM 1368.

Table 49. Fan correction factors 3 tons - GEV/H036

Entering cfm	Cooling Capacity	Sensible Capacity	Cooling Input Watts	Heating Capacity	Heating Input Watts
912	0.952	0.883	1.010	0.989	1.098
969	0.969	0.912	1.006	0.993	1.069
1026	0.980	0.942	1.004	0.995	1.043
1083	0.991	0.971	1.002	0.998	1.021
1140	1.000	1.000	1.000	1.000	1.000
1254	1.017	1.058	0.997	1.004	0.965
1311	1.024	1.086	0.996	1.005	0.950
1368	1.031	1.115	0.995	1.007	0.936

Table 50. Correction factors for variation in entering air temperature 3 tons, GEV/H036

Cooling Entering Air WB°F	Cooling Capacity	Cooling Input Watts	Sensible vs. Entering Dry Bulb Multipliers					Heating Entering Air DB°F	Heating Capacity	Heating Input Watts
			65.6	70.6	75.6	80.6	85.6			
49.4	0.911	1.015	0.986	1.052	1.119	1.188	1.259	53.0	1.025	0.837
56.3	0.913	1.015	0.805	0.998	1.121	1.190	1.259	58.0	1.017	0.889
60.3	0.918	1.014	0.647	0.843	1.038	1.197	1.261	63.0	1.009	0.943



Performance Data

Table 50. Correction factors for variation in entering air temperature 3 tons, GEV/H036 (continued)

Cooling Entering Air WB°F	Cooling Capacity	Cooling Input Watts	Sensible vs. Entering Dry Bulb Multipliers					Heating Entering Air DB°F	Heating Capacity	Heating Input Watts
			65.6	70.6	75.6	80.6	85.6			
63.2	0.954	1.008	0.530	0.729	0.924	1.120	1.266	68.0	1.000	1.000
66.2	1.000	1.000	0.406	0.607	0.807	1.000	1.196	73.0	0.991	1.059
72.1	1.101	0.985	—	—	0.561	0.762	0.959	78.0	0.982	1.119
77.1	1.193	0.969	—	—	—	0.547	0.750	83.0	0.973	1.181

Note: * = Sensible equals total capacity

Cooling and Heating Capacities 3.5 tons

Table 51. Cooling capacities 3.5 tons (gross) - GEV/H042

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Comp Pwr kW	Reject Mbtuh	LWT	Feet Head
45	6.8	49.4	38.7	0.78	1.44	54.3	60.9	6.1
45	8.4	49.4	38.7	0.78	1.39	54.1	57.8	8.8
45	9.5	49.4	38.7	0.78	1.36	54.1	56.3	10.9
45	10.5	49.4	38.8	0.78	1.34	54.0	55.2	12.9
45	11.0	49.4	38.8	0.78	1.33	54.0	54.8	14.0
45	11.6	49.5	38.8	0.78	1.32	54.0	54.3	15.4
45	12.6	49.5	38.8	0.78	1.31	53.9	53.5	17.8
55	6.8	48.3	38.0	0.79	1.67	54.0	70.8	5.9
55	8.4	48.4	38.1	0.79	1.61	53.9	67.8	8.4
55	9.5	48.4	38.1	0.79	1.58	53.8	66.3	10.4
55	10.5	48.5	38.1	0.79	1.56	53.8	65.2	12.4
55	11.0	48.5	38.1	0.79	1.55	53.8	64.7	13.5
55	11.6	48.5	38.2	0.79	1.54	53.8	64.2	14.8
55	12.6	48.5	38.2	0.79	1.53	53.7	63.5	17.1
68	6.8	46.6	37.0	0.79	1.99	53.4	83.7	5.7
68	8.4	46.7	37.1	0.79	1.93	53.3	80.7	8.2
68	9.5	46.8	37.1	0.79	1.90	53.3	79.2	10.1
68	10.5	46.8	37.2	0.79	1.87	53.2	78.1	12.0
68	11.0	46.8	37.2	0.79	1.86	53.2	77.7	13.0
68	11.6	46.9	37.2	0.79	1.85	53.2	77.1	14.3
68	12.6	46.9	37.2	0.79	1.84	53.2	76.4	16.5
75	6.8	46.3	36.4	0.79	2.19	53.8	90.8	5.5
75	8.4	46.5	36.5	0.79	2.12	53.7	87.8	8.0
75	9.5	46.6	36.6	0.78	2.09	53.7	86.3	9.9
75	10.5	46.6	36.6	0.78	2.06	53.7	85.2	11.7
75	11.0	46.7	36.6	0.78	2.05	53.7	84.7	12.7
75	11.6	46.7	36.6	0.78	2.04	53.7	84.2	14.0
75	12.6	46.7	36.7	0.78	2.03	53.7	83.5	16.1
86	6.8	44.8	35.4	0.79	2.55	53.5	101.8	5.3
86	8.4	45.0	35.5	0.79	2.47	53.4	98.7	7.7
86	9.5	45.1	35.5	0.79	2.43	53.4	97.3	9.5

Table 51. Cooling capacities 3.5 tons (gross) - GEV/H042 (continued)

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Comp Pwr kW	Reject Mbtuh	LWT	Feet Head
86	10.5	45.2	35.6	0.79	2.41	53.4	96.2	11.3
86	11.0	45.2	35.6	0.79	2.40	53.4	95.7	12.3
86	11.6	45.3	35.6	0.79	2.38	53.4	95.2	13.5
86	12.6	45.3	35.7	0.79	2.37	53.4	94.5	15.6
95	6.8	42.9	34.2	0.80	2.86	52.7	110.5	5.2
95	8.4	43.2	34.3	0.79	2.78	52.7	107.6	7.5
95	9.5	43.3	34.4	0.79	2.74	52.6	106.1	9.3
95	10.5	43.4	34.4	0.79	2.71	52.6	105.0	11.0
95	11.0	43.4	34.4	0.79	2.70	52.6	104.6	12.0
95	11.6	43.4	34.5	0.79	2.69	52.6	104.1	13.1
95	12.6	43.5	34.5	0.79	2.67	52.6	103.4	15.1
105	6.8	40.8	32.8	0.80	3.25	51.9	120.3	5.0
105	8.4	41.0	32.9	0.80	3.17	51.8	117.4	7.3
105	9.5	41.1	33.0	0.80	3.13	51.8	115.9	9.0
105	10.5	41.2	33.0	0.80	3.10	51.7	114.9	10.7
105	11.0	41.2	33.1	0.80	3.08	51.7	114.4	11.6
105	11.6	41.3	33.1	0.80	3.07	51.7	113.9	12.7
105	12.6	41.3	33.1	0.80	3.05	51.7	113.2	14.7
115	6.8	38.5	31.3	0.82	3.69	51.0	130.0	4.9
115	8.4	38.7	31.5	0.81	3.60	51.0	127.2	7.0
115	9.5	38.8	31.5	0.81	3.56	50.9	125.7	8.9
115	10.5	38.9	31.6	0.81	3.52	50.9	124.7	10.6
115	11.0	38.9	31.6	0.81	3.51	50.9	124.3	11.5
115	11.6	38.9	31.6	0.81	3.50	50.9	123.8	12.6
115	12.6	39.0	31.7	0.81	3.48	50.9	123.1	14.6
120	6.8	37.2	30.6	0.82	3.92	50.6	134.9	4.9
120	8.4	37.5	30.7	0.82	3.83	50.5	132.1	7.1
120	9.5	37.6	30.8	0.82	3.79	50.5	130.7	8.8
120	10.5	37.7	30.8	0.82	3.76	50.5	129.6	10.5
120	11.0	37.7	30.8	0.82	3.74	50.5	129.2	11.4
120	11.6	37.7	30.9	0.82	3.73	50.5	128.7	12.5
120	12.6	37.8	30.9	0.82	3.71	50.4	128.0	14.4

Note: Cooling performance data is tabulated at 80.6°F DB/66.2°F WB entering air at ANSI/AHR/ASHRAE/ISO13256-1 rated cfm. For conditions other than what is tabulated, multipliers must be used to correct performance. See performance correction tables for fan correction factors for CFM other than rated and the cooling correction factors for variations in entering air temperature. Rated GPM 10.5; Minimum CFM 1064; Rated CFM 1330; Maximum CFM 1596.

Table 52. Heating capacities 3.5 tons (gross) - GEV/H042

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Comp Pwr kW	LWT	Feet Head
25	6.8	21.6	12.9	2.57	18.0	7.8
25	8.4	22.2	13.4	2.58	19.2	11.2
25	9.5	22.5	13.7	2.59	19.8	13.9
25	10.5	22.7	13.9	2.59	20.3	16.5
25	11.0	22.8	14.0	2.60	20.4	17.9



Performance Data

Table 52. Heating capacities 3.5 tons (gross) - GEV/H042 (continued)

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Comp Pwr kW	LWT	Feet Head
25	11.6	22.9	14.1	2.60	20.7	19.6
25	12.6	23.1	14.2	2.60	21.0	22.7
32	6.8	24.6	15.6	2.63	24.1	7.5
32	8.4	25.3	16.3	2.65	25.4	10.9
32	9.5	25.7	16.6	2.65	26.1	13.5
32	10.5	25.9	16.9	2.66	26.6	16.0
32	11.0	26.0	17.0	2.66	26.8	17.4
32	11.6	26.2	17.1	2.66	27.1	19.1
32	12.6	26.4	17.3	2.67	27.4	22.0
45	6.8	31.1	21.4	2.83	35.7	6.1
45	8.4	32.0	22.3	2.84	37.3	8.8
45	9.5	32.5	22.7	2.85	38.1	10.9
45	10.5	32.8	23.1	2.86	38.7	12.9
45	11.0	33.0	23.2	2.86	38.9	14.0
45	11.6	33.1	23.4	2.86	39.2	15.4
45	12.6	33.4	23.6	2.87	39.6	17.8
55	6.8	36.1	26.2	2.91	44.2	5.9
55	8.4	37.2	27.2	2.93	46.0	8.4
55	9.5	37.8	27.7	2.93	46.9	10.4
55	10.5	38.2	28.1	2.94	47.6	12.4
55	11.0	38.4	28.3	2.94	47.9	13.5
55	11.6	38.5	28.5	2.95	48.3	14.8
55	12.6	38.8	28.8	2.95	48.8	17.1
68	6.8	42.3	31.7	3.10	55.3	5.7
68	8.4	43.7	33.0	3.12	57.4	8.2
68	9.5	44.4	33.7	3.12	58.5	10.1
68	10.5	44.9	34.2	3.13	59.3	12.0
68	11.0	45.1	34.4	3.13	59.6	13.0
68	11.6	45.4	34.7	3.14	60.0	14.3
68	12.6	45.8	35.0	3.14	60.6	16.5
75	6.8	46.1	35.4	3.14	61.2	5.5
75	8.4	47.6	36.8	3.16	63.5	8.0
75	9.5	48.3	37.5	3.17	64.6	9.9
75	10.5	48.8	38.0	3.17	65.5	11.7
75	11.0	49.1	38.2	3.17	65.9	12.7
75	11.6	49.3	38.5	3.18	66.3	14.0
75	12.6	49.7	38.9	3.18	67.0	16.1
86	6.8	51.8	40.9	3.20	70.5	5.3
86	8.4	53.2	42.3	3.21	73.1	7.7
86	9.5	54.0	43.0	3.21	74.4	9.5
86	10.5	54.5	43.5	3.21	75.4	11.3

Table 52. Heating capacities 3.5 tons (gross) - GEV/H042 (continued)

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Comp Pwr kW	LWT	Feet Head
86	11.0	54.7	43.7	3.21	75.8	12.3
86	11.6	55.0	44.0	3.22	76.3	13.5
86	12.6	55.3	44.3	3.22	77.0	15.6

Note: Heating performance data is tabulated at 68.0°F DB at the ANSI/AHRI/ASHRAE/ISO13256-1 rated cfm. For conditions other than what is tabulated, multipliers must be used to correct performance. See performance correction tables for fan correction factors for CFM other than rated and the heating correction factors for variation in entering air temperatures. Rated GPM 10.5; Minimum CFM 1064; Rated CFM 1330; Maximum CFM 1596.

Table 53. Fan correction factors 3.5 tons - GEV/H042

Entering cfm	Cooling Capacity	Sensible Capacity	Cooling Input Watts	Heating Capacity	Heating Input Watts
1064	0.958	0.877	1.003	0.965	1.105
1131	0.967	0.910	1.003	0.976	1.073
1197	0.981	0.939	1.001	0.985	1.046
1264	0.991	0.970	1.001	0.993	1.022
1330	1.000	1.000	1.000	1.000	1.000
1463	1.016	1.060	0.999	1.012	0.963
1530	1.023	1.090	0.998	1.017	0.947
1596	1.030	1.120	0.998	1.022	0.933

Table 54. Correction factors for variation in entering air temperature 3.5 tons, GEV/H042

Cooling Entering Air WB°F	Cooling Capacity	Cooling Input Watts	Sensible vs. Entering Dry Bulb Multipliers					Heating Entering Air DB°F	Heating Capacity	Heating Input Watts
			65.6	70.6	75.6	80.6	85.6			
49.4	0.918	1.006	0.970	1.036	1.103	1.172	1.244	53.0	1.067	0.836
56.3	0.920	1.006	0.795	0.998	1.105	1.174	1.244	58.0	1.046	0.888
60.3	0.921	1.006	0.634	0.837	1.039	1.175	1.245	63.0	1.023	0.943
63.2	0.954	1.003	0.513	0.719	0.921	1.124	1.245	68.0	1.000	1.000
66.2	1.000	1.000	0.387	0.593	0.799	1.000	1.204	73.0	0.976	1.059
72.1	1.104	0.993	—	—	0.547	0.754	0.958	78.0	0.952	1.122
77.1	1.198	0.986	—	—	—	0.535	0.743	83.0	0.927	1.187

Note: * = Sensible equals total capacity

Cooling and Heating Capacities 4 tons

Table 55. Cooling capacities 4 tons (gross) - GEV/H048

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Power kW	Reject Mbtuh	LWT	Feet Head
45	7.8	58.1	44.9	0.77	1.79	64.3	61.2	7.7
45	9.6	58.4	45.0	0.77	1.74	64.3	58.2	11.1
45	10.8	58.5	45.1	0.77	1.71	64.3	56.7	13.6
45	12.0	58.6	45.1	0.77	1.69	64.4	55.6	16.3
45	12.6	58.6	45.1	0.77	1.69	64.4	55.1	17.8
45	13.2	58.7	45.2	0.77	1.68	64.4	54.6	19.3
45	14.4	58.7	45.2	0.77	1.66	64.4	53.8	22.4
55	7.8	56.5	44.0	0.78	2.02	63.4	70.9	7.4
55	9.6	56.7	44.1	0.78	1.96	63.4	68.0	10.7
55	10.8	56.8	44.2	0.78	1.93	63.4	66.5	13.1



Performance Data

Table 55. Cooling capacities 4 tons (gross) - GEV/H048 (continued)

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Power kW	Reject Mbtuh	LWT	Feet Head
55	12.0	56.9	44.2	0.78	1.91	63.4	65.4	15.7
55	12.6	56.9	44.2	0.78	1.90	63.4	64.9	17.1
55	13.2	57.0	44.2	0.78	1.89	63.4	64.4	18.5
55	14.4	57.0	44.3	0.78	1.87	63.4	63.7	21.5
68	7.8	54.3	42.8	0.79	2.38	62.4	83.6	7.2
68	9.6	54.5	42.9	0.79	2.30	62.4	80.7	10.3
68	10.8	54.6	42.9	0.79	2.27	62.3	79.3	12.6
68	12.0	54.7	43.0	0.79	2.24	62.3	78.2	15.2
68	12.6	54.7	43.0	0.79	2.23	62.3	77.7	16.5
68	13.2	54.7	43.0	0.79	2.22	62.3	77.2	17.9
68	14.4	54.8	43.0	0.79	2.20	62.3	76.5	20.8
75	7.8	53.4	42.5	0.80	2.58	62.2	90.5	7.0
75	9.6	53.6	42.6	0.80	2.50	62.1	87.6	10.1
75	10.8	53.7	42.7	0.79	2.46	62.1	86.2	12.3
75	12.0	53.8	42.7	0.79	2.43	62.1	85.1	14.8
75	12.6	53.8	42.8	0.79	2.42	62.1	84.6	16.1
75	13.2	53.9	42.8	0.79	2.41	62.1	84.2	17.5
75	14.4	53.9	42.8	0.79	2.39	62.1	83.4	20.3
86	7.8	51.3	41.6	0.81	2.96	61.4	101.2	6.8
86	9.6	51.6	41.7	0.81	2.88	61.4	98.4	9.7
86	10.8	51.7	41.8	0.81	2.83	61.3	97.0	11.9
86	12.0	51.8	41.8	0.81	2.80	61.3	95.9	14.3
86	12.6	51.8	41.8	0.81	2.79	61.3	95.4	15.6
86	13.2	51.8	41.9	0.81	2.78	61.3	95.0	16.9
86	14.4	51.9	41.9	0.81	2.75	61.3	94.3	19.6
95	7.8	49.3	40.6	0.82	3.34	60.7	110.0	6.6
95	9.6	49.6	40.8	0.82	3.24	60.7	107.2	9.5
95	10.8	49.7	40.8	0.82	3.20	60.6	105.8	11.6
95	12.0	49.8	40.9	0.82	3.16	60.6	104.7	13.9
95	12.6	49.9	40.9	0.82	3.15	60.6	104.3	15.1
95	13.2	49.9	40.9	0.82	3.13	60.6	103.9	16.4
95	14.4	50.0	40.9	0.82	3.11	60.6	103.1	19.1
105	7.8	46.9	39.5	0.84	3.80	59.8	119.6	6.4
105	9.6	47.1	39.6	0.84	3.70	59.8	116.9	9.2
105	10.8	47.3	39.7	0.84	3.66	59.8	115.6	11.2
105	12.0	47.4	39.7	0.84	3.62	59.7	114.5	13.5
105	12.6	47.4	39.7	0.84	3.60	59.7	114.1	14.7
105	13.2	47.5	39.8	0.84	3.59	59.7	113.7	15.9
105	14.4	47.6	39.8	0.84	3.56	59.7	112.9	18.5
115	7.8	44.1	38.2	0.87	4.32	58.8	129.3	6.2
115	9.6	44.4	38.3	0.86	4.22	58.8	126.6	8.9

Table 55. Cooling capacities 4 tons (gross) - GEV/H048 (continued)

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Power kW	Reject Mbtuh	LWT	Feet Head
115	10.8	44.6	38.4	0.86	4.17	58.8	125.3	10.9
115	12.0	44.7	38.5	0.86	4.13	58.8	124.3	13.1
115	12.6	44.7	38.5	0.86	4.11	58.8	123.8	14.2
115	13.2	44.8	38.5	0.86	4.10	58.8	123.4	15.4
115	14.4	44.8	38.5	0.86	4.07	58.7	122.7	18.0
120	7.8	42.6	37.5	0.88	4.59	58.3	134.0	6.1
120	9.6	42.9	37.7	0.88	4.49	58.3	131.4	8.8
120	10.8	43.1	37.7	0.88	4.44	58.2	130.2	10.8
120	12.0	43.2	37.8	0.87	4.40	58.2	129.2	13.0
120	12.6	43.3	37.8	0.87	4.39	58.2	128.7	14.1
120	13.2	43.3	37.8	0.87	4.37	58.2	128.3	15.4
120	14.4	43.4	37.9	0.87	4.35	58.2	127.6	17.9

Note: Cooling performance data is tabulated at 80.6°F DB/66.2°F WB entering air at ANSI/AHRI/ASHRAE/ISO13256-1 rated cfm. For ANSI/AHRI/ASHRAE/ISO13256-1 certified ratings, refer to the ANSI/AHRI/ASHRAE/ISO13256-1 WLHP, GWHP and GLHP performance table. See performance correction tables to correct performance at conditions other than those tabulated. Data shown is for unit performance only. Interpolation of data is permissible; extrapolation is not. Rated GPM: 12 Minimum cfm 1216; Rated cfm 1520; Maximum cfm 1824.

Table 56. Heating capacities 4 tons (gross) - GEV/H048

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Power kW	LWT	Feet Head
25	7.8	30.6	21.6	2.66	18.3	9.9
25	9.6	31.3	22.2	2.68	19.5	14.1
25	10.8	31.6	22.5	2.68	20.0	17.4
25	12.0	31.9	22.7	2.69	20.5	20.8
25	12.6	32.0	22.8	2.69	20.7	22.7
25	13.2	32.1	22.9	2.69	20.8	24.6
25	14.4	32.3	23.1	2.70	21.2	28.6
32	7.8	34.2	24.9	2.73	24.4	9.6
32	9.6	34.9	25.6	2.75	25.7	13.7
32	10.8	35.3	25.9	2.75	26.3	16.8
32	12.0	35.6	26.2	2.76	26.9	20.2
32	12.6	35.8	26.3	2.76	27.1	22.0
32	13.2	35.9	26.5	2.77	27.3	23.9
32	14.4	36.1	26.7	2.77	27.6	27.8
45	7.8	43.6	33.2	3.02	36.1	7.7
45	9.6	44.5	34.2	3.04	37.5	11.1
45	10.8	45.0	34.6	3.05	38.3	13.6
45	12.0	45.4	35.0	3.06	38.9	16.3
45	12.6	45.6	35.2	3.06	39.2	17.8
45	13.2	45.8	35.3	3.07	39.4	19.3
45	14.4	46.1	35.6	3.07	39.8	22.4
55	7.8	49.2	38.5	3.14	44.7	7.4
55	9.6	50.4	39.6	3.16	46.4	10.7
55	10.8	50.9	40.1	3.17	47.2	13.1
55	12.0	51.4	40.5	3.18	47.9	15.7



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Table 56. Heating capacities 4 tons (gross) - GEV/H048 (continued)

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Power kW	LWT	Feet Head
55	12.6	51.6	40.7	3.19	48.2	17.1
55	13.2	51.8	40.9	3.19	48.5	18.5
55	14.4	52.1	41.2	3.20	49.0	21.5
68	7.8	57.6	46.1	3.36	55.8	7.2
68	9.6	59.0	47.4	3.39	57.8	10.3
68	10.8	59.7	48.0	3.41	58.8	12.6
68	12.0	60.2	48.6	3.42	59.6	15.2
68	12.6	60.5	48.8	3.42	60.0	16.5
68	13.2	60.7	49.0	3.43	60.3	17.9
68	14.4	61.1	49.4	3.44	60.9	20.8
75	7.8	61.6	49.9	3.45	61.8	7.0
75	9.6	63.1	51.2	3.48	63.9	10.1
75	10.8	63.8	51.9	3.49	65.0	12.3
75	12.0	64.3	52.4	3.50	65.9	14.8
75	12.6	64.6	52.6	3.51	66.3	16.1
75	13.2	64.8	52.8	3.51	66.7	17.5
75	14.4	65.2	53.2	3.52	67.3	20.3
86	7.8	67.6	55.4	3.57	71.2	6.8
86	9.6	69.0	56.7	3.60	73.6	9.7
86	10.8	69.7	57.3	3.62	74.9	11.9
86	12.0	70.2	57.8	3.63	75.9	14.3
86	12.6	70.5	58.1	3.63	76.3	15.6
86	13.2	70.7	58.3	3.64	76.7	16.9
86	14.4	71.1	58.6	3.65	77.5	19.6

Note: Heating performance data is tabulated at 68°F DB entering air at ANSI/AHRI/ASHRAE/ISO13256-1 rated cfm. For ANSI/AHRI/ASHRAE/ISO13256-1 certified ratings, refer to the ANSI/AHRI/ASHRAE/ISO13256-1 WLHP, GWHP and GLHP performance table. See performance correction tables to correct performance at conditions other than those tabulated. Data shown is for unit performance only. Interpolation of data is permissible; extrapolation is not. Rated GPM: 12.0 Minimum cfm 1216; Rated cfm 1520; Maximum cfm 1824.

Table 57. Fan correction factors 4 tons - GEV/H048

Entering cfm	Cooling Capacity	Sensible Capacity	Cooling Input Watts	Heating Capacity	Heating Input Watts
1216	0.960	0.882	1.003	0.982	1.100
1292	0.971	0.912	1.002	0.988	1.071
1368	0.982	0.941	1.001	0.992	1.044
1444	0.991	0.971	1.001	0.996	1.021
1520	1.000	1.000	1.000	1.000	1.000
1672	1.015	1.058	0.999	1.006	0.964
1748	1.022	1.087	0.999	1.009	0.948
1824	1.028	1.115	0.998	1.011	0.934

Table 58. Correction factors for variation in entering air temperature 4 tons, GEV/H048

Cooling Entering Air WB°F	Cooling Capacity	Cooling Input Watts	Sensible vs. Entering Dry Bulb Multipliers					Heating Entering Air DB°F	Heating Capacity	Heating Input Watts
			65.6	70.6	75.6	80.6	85.6			
49.4	0.908	1.006	0.939	0.999	1.061	1.124	1.190	53.0	1.034	0.840
56.3	0.909	1.005	0.802	0.997	1.063	1.126	1.190	58.0	1.023	0.891
60.3	0.910	1.005	0.646	0.842	1.037	1.127	1.191	63.0	1.012	0.944
63.2	0.951	1.003	0.529	0.729	0.923	1.118	1.195	68.0	1.000	1.000
66.2	1.000	1.000	0.406	0.606	0.806	1.000	1.196	73.0	0.988	1.058
72.1	1.104	0.994	—	—	0.562	0.763	0.959	78.0	0.975	1.118
77.1	1.197	0.988	—	—	—	0.55	0.752	83.0	0.963	1.181

Note: * = Sensible equals total capacity

Cooling and Heating Capacities 5 tons

Table 59. Cooling capacity 5 tons (gross) - GEV/H060

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Comp Pwr kW	Reject Mbtuh	LWT	Feet Head
45	9.8	68.3	54.8	0.80	2.08	75.4	60.4	5.9
45	12.0	68.5	54.9	0.80	2.02	75.4	57.6	8.3
45	13.5	68.6	55.0	0.80	1.99	75.4	56.2	10.2
45	15.0	68.6	55.3	0.81	1.97	75.3	55.0	12.3
45	15.8	68.6	55.3	0.81	1.95	75.3	54.5	13.4
45	16.5	68.6	55.3	0.81	1.95	75.3	54.1	14.5
45	18.0	68.7	55.3	0.81	1.93	75.3	53.4	16.9
55	9.8	66.5	53.8	0.81	2.37	74.6	70.2	5.6
55	12.0	66.7	53.9	0.81	2.30	74.6	67.4	8.0
55	13.5	66.8	54.0	0.81	2.26	74.5	66.0	9.8
55	15.0	66.9	54.0	0.81	2.24	74.5	64.9	11.8
55	15.8	66.9	54.1	0.81	2.22	74.5	64.4	12.9
55	16.5	67.0	54.1	0.81	2.21	74.5	64.0	13.9
55	18.0	66.9	54.4	0.81	2.20	74.4	63.2	16.2
68	9.8	63.9	52.5	0.82	2.80	73.5	82.9	5.6
68	12.0	64.2	52.6	0.82	2.72	73.4	80.2	8.0
68	13.5	64.3	52.6	0.82	2.68	73.4	78.8	9.8
68	15.0	64.4	52.7	0.82	2.65	73.4	77.7	11.7
68	15.8	64.4	52.7	0.82	2.64	73.4	77.2	12.8
68	16.5	64.4	52.7	0.82	2.62	73.4	76.8	13.8
68	18.0	64.5	52.7	0.82	2.60	73.4	76.1	16.1
75	9.8	62.7	52.1	0.83	3.03	73.0	89.7	5.5
75	12.0	62.9	52.2	0.83	2.94	73.0	87.0	7.8
75	13.5	63.0	52.3	0.83	2.90	72.9	85.7	9.5
75	15.0	63.1	52.3	0.83	2.86	72.9	84.6	11.5
75	15.8	63.2	52.3	0.83	2.85	72.9	84.2	12.5
75	16.5	63.2	52.3	0.83	2.84	72.9	83.8	13.5
75	18.0	63.3	52.4	0.83	2.82	72.9	83.0	15.7



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Table 59. Cooling capacity 5 tons (gross) - GEV/H060 (continued)

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Comp Pwr kW	Reject Mbtuh	LWT	Feet Head
86	9.8	60.4	51.0	0.84	3.48	72.3	100.5	5.3
86	12.0	60.7	51.1	0.84	3.38	72.2	97.8	7.5
86	13.5	60.8	51.2	0.84	3.34	72.2	96.5	9.2
86	15.0	60.9	51.2	0.84	3.30	72.1	95.5	11.1
86	15.8	60.9	51.2	0.84	3.29	72.1	95.0	12.1
86	16.5	61.0	51.2	0.84	3.27	72.1	94.6	13.0
86	18.0	61.0	51.3	0.84	3.25	72.1	93.9	15.2
95	9.8	58.1	49.9	0.86	3.92	71.5	109.3	5.1
95	12.0	58.4	50.0	0.86	3.82	71.4	106.7	7.3
95	13.5	58.5	50.1	0.86	3.77	71.4	105.4	9.0
95	15.0	58.6	50.1	0.86	3.73	71.3	104.3	10.8
95	15.8	58.7	50.2	0.85	3.71	71.3	103.9	11.8
95	16.5	58.7	50.2	0.85	3.70	71.3	103.5	12.7
95	18.0	58.6	50.5	0.86	3.67	71.1	102.8	14.8
105	9.8	55.4	48.6	0.88	4.46	70.6	119.0	5.0
105	12.0	55.6	48.7	0.88	4.36	70.5	116.4	7.1
105	13.5	55.8	48.8	0.87	4.30	70.5	115.2	8.7
105	15.0	55.9	48.9	0.87	4.26	70.4	114.1	10.4
105	15.8	55.9	48.9	0.87	4.24	70.4	113.7	11.4
105	16.5	56.0	48.9	0.87	4.23	70.4	113.3	12.3
105	18.0	56.1	48.9	0.87	4.20	70.4	112.6	14.3
115	9.8	52.3	47.2	0.90	5.06	69.6	128.7	4.9
115	12.0	52.6	47.4	0.90	4.95	69.5	126.2	6.9
115	13.5	52.8	47.4	0.90	4.90	69.5	125.0	8.5
115	15.0	52.9	47.5	0.90	4.86	69.5	124.0	10.1
115	15.8	53.0	47.5	0.90	4.84	69.5	123.5	11.1
115	16.5	53.0	47.5	0.90	4.82	69.4	123.1	12.0
115	18.0	53.1	47.6	0.90	4.79	69.4	122.5	13.9
120	9.8	50.7	46.5	0.92	5.38	69.1	133.6	4.8
120	12.0	51.0	46.6	0.91	5.27	69.0	131.1	6.8
120	13.5	51.2	46.7	0.91	5.22	69.0	129.8	8.3
120	15.0	51.3	46.7	0.91	5.18	69.0	128.9	10.0
120	15.8	51.4	46.8	0.91	5.16	69.0	128.4	10.9
120	16.5	51.4	46.8	0.91	5.14	68.9	128.1	11.8
120	18.0	51.5	46.8	0.91	5.11	68.9	127.4	13.7

Note: Cooling performance data is tabulated at 80.6°F DB/66.2°F WB entering air at ANSI/AHRI/ASHRAE/ISO13256-1 rated cfm. For conditions other than what is tabulated, multipliers must be used to correct performance. See performance correction tables for fan correction factors for CFM other than rated and the cooling correction factors for variations in entering air temperature. Rated GPM 15; Minimum CFM 1520; Rated CFM 1900; Maximum CFM 2280.

Table 60. Heating capacities 5 tons (gross) - GEV/H060

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Comp Pwr kW	LWT	Feet Head
25	9.8	40.6	29.3	3.31	18.1	7.2
25	12.0	41.4	30.0	3.32	19.3	10.2

Table 60. Heating capacities 5 tons (gross) - GEV/H060 (continued)

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Comp Pwr kW	LWT	Feet Head
25	13.5	41.8	30.4	3.33	19.8	12.5
25	15.0	42.2	30.8	3.34	20.3	15.0
25	15.8	42.3	30.9	3.34	20.5	16.5
25	16.5	42.5	31.0	3.34	20.7	17.7
25	18.0	42.7	31.3	3.35	21.0	20.6
32	9.8	45.1	33.5	3.39	24.2	7.0
32	12.0	46.1	34.4	3.41	25.5	9.9
32	13.5	46.6	34.9	3.42	26.2	12.1
32	15.0	47.0	35.3	3.43	26.7	14.6
32	15.8	47.2	35.5	3.43	26.9	16.0
32	16.5	47.3	35.6	3.43	27.1	17.2
32	18.0	47.6	35.9	3.44	27.5	20.0
45	9.8	53.8	40.9	3.77	36.2	5.9
45	12.0	55.0	42.0	3.79	37.6	8.3
45	13.5	55.6	42.6	3.80	38.4	10.2
45	15.0	56.1	43.1	3.81	39.0	12.3
45	15.8	56.3	43.3	3.82	39.2	13.4
45	16.5	56.5	43.4	3.82	39.5	14.5
45	18.0	56.8	43.8	3.83	39.9	16.9
55	9.8	60.9	47.6	3.91	44.8	5.6
55	12.0	62.3	48.8	3.94	46.5	8.0
55	13.5	62.9	49.5	3.95	47.3	9.8
55	15.0	63.5	50.0	3.96	48.0	11.8
55	15.8	63.8	50.2	3.97	48.3	12.9
55	16.5	64.0	50.4	3.97	48.6	13.9
55	18.0	64.3	50.8	3.98	49.1	16.2
68	9.8	70.1	55.8	4.18	56.1	5.6
68	12.0	71.7	57.3	4.22	58.0	8.0
68	13.5	72.6	58.1	4.24	59.0	9.8
68	15.0	73.3	58.8	4.25	59.8	11.7
68	15.8	73.6	59.1	4.26	60.2	12.8
68	16.5	73.8	59.3	4.27	60.5	13.8
68	18.0	74.3	59.7	4.28	61.1	16.1
75	9.8	75.2	60.5	4.29	62.1	5.5
75	12.0	76.9	62.1	4.33	64.1	7.8
75	13.5	77.8	62.9	4.35	65.2	9.5
75	15.0	78.5	63.6	4.37	66.1	11.5
75	15.8	78.8	63.9	4.38	66.5	12.5
75	16.5	79.1	64.1	4.38	66.8	13.5
75	18.0	79.6	64.6	4.39	67.5	15.7
86	9.8	82.7	67.4	4.47	71.5	5.3



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Table 60. Heating capacities 5 tons (gross) - GEV/H060 (continued)

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Comp Pwr kW	LWT	Feet Head
86	12.0	84.4	69.0	4.51	73.9	7.5
86	13.5	85.3	69.8	4.53	75.1	9.2
86	15.0	86.0	70.4	4.55	76.1	11.1
86	15.8	86.3	70.7	4.56	76.5	12.1
86	16.5	86.5	70.9	4.57	76.9	13.0
86	18.0	87.0	71.4	4.58	77.6	15.2

Note: Heating performance data is tabulated at 68.0°F DB at the ANSI/AHRI/ASHRAE/ISO13256-1 rated cfm. For conditions other than what is tabulated, multipliers must be used to correct performance. See performance correction tables for fan correction factors for CFM other than rated and the heating correction factors for variation in entering air temperatures. Rated GPM 15; Minimum CFM 1520; Rated CFM 1900; Maximum CFM 2280.

Table 61. Fan correction factors 5 tons - GEV/H060

Entering cfm	Cooling Capacity	Sensible Capacity	Cooling Input Watts	Heating Capacity	Heating Input Watts
1520	0.961	0.881	1.001	0.989	1.104
1615	0.971	0.912	1.001	0.992	1.073
1710	0.981	0.943	1.001	0.995	1.045
1805	0.992	0.970	1.000	0.998	1.021
1900	1.000	1.000	1.000	1.000	1.000
2090	1.015	1.059	1.000	1.004	0.963
2185	1.021	1.089	1.000	1.005	0.947
2280	1.027	1.118	1.000	1.007	0.932

Table 62. Correction factors for variation in entering air temperature 5 tons, GEV/H060

Cooling Entering Air WB°F	Cooling Capacity	Cooling Input Watts	Sensible vs. Entering Dry Bulb Multipliers					Heating Entering Air DB°F	Heating Capacity	Heating Input Watts
			65.6	70.6	75.6	80.6	85.6			
49.4	0.917	1.002	0.919	0.979	1.040	1.102	1.165	53.0	1.028	0.835
56.3	0.918	1.002	0.800	0.997	1.041	1.103	1.165	58.0	1.019	0.887
60.3	0.911	1.003	0.638	0.841	1.038	1.095	1.166	63.0	1.010	0.943
63.2	0.951	1.001	0.518	0.722	0.922	1.122	1.157	68.0	1.000	1.000
66.2	1.000	1.000	0.392	0.597	0.801	1.000	1.200	73.0	0.990	1.060
72.1	1.103	0.999	—	—	0.551	0.756	0.961	78.0	0.980	1.122
77.1	1.196	1.000	—	—	—	0.54	0.747	83.0	0.970	1.187

Note: * = Sensible equals total capacity

Cooling and Heating Capacities 6 tons

Table 63. Cooling capacities 6 tons (gross) – GEH072

EWT	GPM	Gross Cap Mbtuh	Sen. Mbtuh	SHR	Power kW	Reject Mbtuh	LWT	Feet Head
45	9.0	87.4	65.4	0.75	2.7	96.6	66.4	4.0
45	12.0	88.1	65.7	0.75	2.6	96.8	61.1	6.6
45	15.0	88.6	65.9	0.74	2.5	97.0	57.9	9.7
45	18.0	88.9	66.1	0.74	2.4	97.1	55.8	13.3
45	21.0	89.2	66.2	0.74	2.4	97.2	54.2	17.3
55	9.0	85.3	64.5	0.76	3.1	95.8	76.3	3.9
55	12.0	85.9	64.8	0.75	2.9	95.8	70.9	6.4

Table 63. Cooling capacities 6 tons (gross) – GEH072 (continued)

EWT	GPM	Gross Cap Mbtuh	Sen. Mbtuh	SHR	Power kW	Reject Mbtuh	LWT	Feet Head
55	15.0	86.2	64.9	0.75	2.8	95.9	67.8	9.5
55	18.0	86.5	65.0	0.75	2.8	95.9	65.6	13.0
55	21.0	86.7	65.1	0.75	2.7	95.9	64.1	17.0
59	9.0	84.4	64.1	0.76	3.3	95.6	80.2	3.8
59	12.0	84.9	64.4	0.76	3.1	95.5	74.9	6.3
59	15.0	85.3	64.5	0.76	3.0	95.5	71.7	9.3
59	18.0	85.5	64.5	0.75	2.9	95.5	69.6	12.7
59	21.0	85.7	64.7	0.75	2.9	95.5	68.1	16.7
68	9.0	82.3	63.0	0.77	3.7	94.9	89.1	3.6
68	12.0	82.8	63.2	0.76	3.5	94.7	83.8	5.9
68	15.0	83.1	63.4	0.76	3.4	94.6	80.6	8.7
68	18.0	83.3	63.5	0.76	3.3	94.6	78.5	11.9
68	21.0	83.4	63.5	0.76	3.3	94.5	77.0	15.6
77	9.0	78.8	61.8	0.78	4.2	93.0	97.6	3.5
77	12.0	79.5	62.1	0.78	3.9	92.9	92.5	5.7
77	15.0	79.9	62.2	0.78	3.8	92.8	89.4	8.5
77	18.0	80.1	62.4	0.78	3.7	92.8	87.3	11.6
77	21.0	80.3	62.4	0.78	3.7	92.8	85.8	15.2
86	9.0	76.9	60.9	0.79	4.7	93.0	106.6	3.4
86	12.0	77.5	61.3	0.79	4.5	92.8	101.4	5.6
86	15.0	77.9	61.4	0.79	4.3	92.6	98.3	8.2
86	18.0	78.1	61.5	0.79	4.2	92.5	96.3	11.2
86	21.0	78.3	61.5	0.79	4.2	92.5	94.8	14.7
95	9.0	74.1	59.7	0.81	5.3	92.3	115.5	3.4
95	12.0	74.8	60.0	0.80	5.1	92.0	110.3	5.7
95	15.0	75.1	60.3	0.80	4.9	91.8	107.2	8.5
95	18.0	75.4	60.4	0.80	4.8	91.7	105.2	11.7
95	21.0	75.5	60.4	0.80	4.7	91.7	103.7	15.3
105	9.0	70.7	58.4	0.83	6.1	91.4	125.3	3.1
105	12.0	71.3	58.7	0.82	5.8	91.1	120.2	5.3
105	15.0	71.7	58.9	0.82	5.6	90.9	117.1	7.9
105	18.0	72.0	58.9	0.82	5.5	90.8	115.1	10.9
105	21.0	72.1	59.0	0.82	5.4	90.7	113.6	14.1
115	9.0	66.8	56.7	0.85	6.9	90.3	135.1	2.8
115	12.0	67.5	57.0	0.84	6.6	90.0	130.0	4.6
115	15.0	67.9	57.2	0.84	6.4	89.8	127.0	6.9
115	18.0	68.2	57.3	0.84	6.3	89.7	125.0	9.7
115	21.0	68.3	57.3	0.84	6.2	89.6	123.5	12.5
120	9.0	64.7	55.9	0.86	7.3	89.7	139.9	2.5
120	12.0	65.4	56.2	0.86	7.0	89.4	134.9	3.9
120	15.0	65.8	56.3	0.86	6.9	89.2	131.9	6.2



Performance Data

Table 63. Cooling capacities 6 tons (gross) – GEH072 (continued)

EWT	GPM	Gross Cap Mbtuh	Sen. Mbtuh	SHR	Power kW	Reject Mbtuh	LWT	Feet Head
120	18.0	66.1	56.4	0.85	6.8	89.1	129.9	8.8
120	21.0	66.3	56.5	0.85	6.7	89.0	128.5	11.5

Note: Performance data is tabulated for cooling at 80.6°F DB/66.2°F WB entering air. For conditions other than what is tabulated, multipliers must be used to correct performance. See the fan correction factors table for CFM other than rated and the cooling correction factors for variations in entering air temperature. WLHP data is performance data at ANSI/AHRI/ASHRAE/ISO13256-1. For ANSI/AHRI/ASHRAE/ISO13256-1 GLHP conditions, apply 15% methanol by volume per the antifreeze correction factors found in the performance correction tables. The minimum gpm/ton is 3.0 when the EWT is greater than 115°F and the EAT is less than 67°F WB. Rated GPM: 18.0 Minimum CFM 1920; Nominal CFM 2400, Maximum CFM 2880.

Table 64. Heating capacities 6 tons (gross) GEH072

EWT	GPM	Gross Cap Mbtuh	Absorb Mbtuh	Power kW	LWT	Feet Head
25	9.0	45.3	31.9	3.9	16.7	5.2
25	12.0	46.7	33.3	3.9	18.5	8.6
25	15.0	47.6	34.2	4.0	19.7	12.7
25	18.0	48.3	34.8	4.0	20.5	17.4
25	21.0	48.7	35.2	4.0	21.1	22.7
32	9.0	50.0	36.3	4.0	22.7	5.1
32	12.0	51.6	37.9	4.0	24.7	8.3
32	15.0	52.7	38.9	4.1	26.0	12.3
32	18.0	53.4	39.6	4.1	27.0	16.9
32	21.0	54.0	40.1	4.1	27.6	22.0
45	9.0	57.2	43.6	4.0	34.7	4.0
45	12.0	59.2	45.4	4.0	37.0	6.6
45	15.0	60.5	46.6	4.1	38.4	9.7
45	18.0	61.4	47.5	4.1	39.4	13.3
45	21.0	62.0	48.1	4.1	40.2	17.3
55	9.0	60.9	47.1	4.1	39.0	3.9
55	12.0	63.1	49.1	4.1	41.4	6.4
55	15.0	64.5	50.4	4.1	42.9	9.5
55	18.0	65.4	51.3	4.2	44.0	13.0
55	21.0	66.2	52.0	4.2	44.8	17.0
59	9.0	64.7	50.6	4.1	43.2	3.8
59	12.0	67.0	52.8	4.2	45.7	6.3
59	15.0	68.5	54.2	4.2	47.4	9.3
59	18.0	69.6	55.2	4.2	48.5	12.7
59	21.0	70.4	55.9	4.2	49.4	16.7
68	9.0	71.3	56.7	4.3	54.8	3.6
68	12.0	74.1	59.3	4.3	57.6	5.9
68	15.0	75.8	60.9	4.4	59.5	8.7
68	18.0	77.1	62.1	4.4	60.8	11.9
68	21.0	78.0	63.0	4.4	61.7	15.6
77	9.0	76.8	61.9	4.4	60.6	3.5
77	12.0	79.8	64.7	4.4	63.7	5.7
77	15.0	81.7	66.5	4.5	65.7	8.5
77	18.0	83.1	67.7	4.5	67.1	11.6

Table 64. Heating capacities 6 tons (gross) GEH072 (continued)

EWT	GPM	Gross Cap Mbtuh	Absorb Mbtuh	Power kW	LWT	Feet Head
77	21.0	84.2	68.7	4.5	68.1	15.2
86	9.0	85.6	70.0	4.6	69.6	3.4
86	12.0	89.0	73.2	4.6	73.1	5.6
86	15.0	91.2	75.3	4.7	75.4	8.2
86	18.0	92.7	76.6	4.7	77.0	11.2
86	21.0	93.8	77.6	4.7	78.1	14.7

Note: Performance data is tabulated for heating at 68°F DB entering air. For conditions other than what is tabulated, multipliers must be used to correct performance. See the fan correction factors table for CFM other than rated and the heating correction factors for variations in entering air temperature. WLHP data is performance data at ANSI/AHRI/ASHRAE/ISO13256-1. For ANSI/AHRI/ASHRAE/ISO13256-1 GLHP conditions, apply 15% methanol by volume per the antifreeze correction factors found in the performance correction tables. Rated GPM: 18.0 Minimum CFM 1920; Nominal CFM 2400, Maximum CFM 2880.

Table 65. Fan correction factors 6 tons - GEH072

Entering CFM	Cooling Capacity	Sensible Capacity	Cooling Input Watts	Heating Capacity	Heating Input Watts
1680	0.957	0.885	1.000	0.987	1.094
1890	0.981	0.943	1.000	0.994	1.041
2100	1.000	1.000	1.000	1.000	1.000
2310	1.016	1.054	1.000	1.005	0.967
2520	1.030	1.109	1.000	1.009	0.940

Table 66. Correction factors for variation in entering air temperature 6 tons, GEH072

Cooling Entering Air WB°F	Cooling Capacity	Cooling Input Watts	Sensible vs. Entering Dry Bulb Multipliers					Heating Entering Air DB°F	Heating Capacity	Heating Input Watts
			65.6	70.6	75.6	80.6	85.6			
44.5	0.734	1.052	0.847	0.933	0.933	0.933	0.958	43	0.743	0.743
49.4	0.734	1.041	0.734	0.933	0.933	0.933	0.958	48	0.788	0.788
56.3	0.838	1.031	0.640	0.995	1.063	1.064	1.064	53	0.837	0.836
60.3	0.901	1.020	0.522	0.850	1.033	1.145	1.145	58	0.888	0.888
63.2	0.949	1.010	0.435	0.740	0.927	1.110	1.206	63	0.942	0.942
66.2	1.000	1.000	—	0.625	0.813	1.000	1.182	68	1.000	1.000
72.1	1.104	0.990	—	—	0.580	0.769	0.958	73	1.061	1.061
77.1	1.194	0.979	—	—	—	0.567	0.757	78	1.125	1.125

Note: * = Sensible equals total capacity

Table 67. Cooling capacities 6 tons (gross) – GEV072

EWT	GPM	Total Cap Mbtuh	Sen Mbtuh	SHR	Comp Power kW	Reject Mbtuh	LWT	Feet Head
45	9.0	86.8	65.4	0.75	2.7	96.0	66.6	4.0
45	12.0	88.0	66.1	0.75	2.6	96.8	61.3	6.5
45	15.0	88.8	66.5	0.75	2.5	97.2	58.1	9.6
45	18.0	89.2	66.7	0.75	2.4	97.5	56.0	13.2
45	21.0	89.6	66.9	0.75	2.4	97.7	54.4	17.3
55	9.0	84.1	64.3	0.77	3.1	94.5	76.3	3.9
55	12.0	85.2	64.7	0.76	2.9	95.1	71.1	6.4
55	15.0	85.9	65.1	0.76	2.8	95.5	67.9	9.5
55	18.0	86.3	65.3	0.76	2.8	95.7	65.8	13.0
55	21.0	86.6	65.6	0.76	2.7	95.9	64.2	17.0



Performance Data

Table 67. Cooling capacities 6 tons (gross) – GEV072 (continued)

EWT	GPM	Total Cap Mbtuh	Sen Mbtuh	SHR	Comp Power kW	Reject Mbtuh	LWT	Feet Head
59	9.0	83.0	63.7	0.77	3.2	94.0	80.2	3.8
59	12.0	84.1	64.2	0.76	3.1	94.6	75.0	6.3
59	15.0	84.8	64.6	0.76	3.0	94.9	71.8	9.3
59	18.0	85.2	64.8	0.76	2.9	95.1	69.7	12.7
59	21.0	85.5	64.9	0.76	2.9	95.3	68.2	16.7
68	9.0	80.5	62.6	0.78	3.6	92.9	88.9	3.6
68	12.0	81.6	63.1	0.77	3.4	93.4	83.8	5.9
68	15.0	82.2	63.4	0.77	3.3	93.6	80.7	8.7
68	18.0	82.7	63.6	0.77	3.3	93.8	78.6	11.9
68	21.0	82.9	63.7	0.77	3.2	94.0	77.1	15.6
77	9.0	79.2	62.0	0.78	4.1	93.2	97.8	3.5
77	12.0	80.4	62.5	0.78	3.9	93.7	92.7	5.7
77	15.0	81.1	62.8	0.77	3.8	94.0	89.6	8.5
77	18.0	81.5	63.0	0.77	3.7	94.2	87.5	11.6
77	21.0	81.8	63.2	0.77	3.7	94.3	86.0	15.2
86	9.0	76.6	60.9	0.80	4.6	92.4	106.6	3.4
86	12.0	77.7	61.4	0.79	4.4	92.8	101.6	5.6
86	15.0	78.4	61.6	0.79	4.3	93.0	98.5	8.2
86	18.0	78.8	61.8	0.78	4.2	93.2	96.4	11.2
86	21.0	79.0	61.9	0.78	4.2	93.3	94.9	14.7
95	9.0	73.6	59.6	0.81	5.2	91.3	115.4	3.4
95	12.0	74.7	60.1	0.80	5.0	91.7	110.4	5.7
95	15.0	75.4	60.4	0.80	4.9	92.0	107.3	8.5
95	18.0	75.8	60.6	0.80	4.8	92.1	105.3	11.7
95	21.0	76.1	60.7	0.80	4.7	92.2	103.8	15.3
105	9.0	70.1	58.1	0.83	5.9	90.2	125.2	3.3
105	12.0	71.2	58.6	0.82	5.7	90.6	120.2	5.5
105	15.0	71.9	58.9	0.82	5.5	90.8	117.2	8.2
105	18.0	72.3	59.1	0.82	5.5	90.9	115.2	11.4
105	21.0	72.6	59.2	0.82	5.4	91.0	113.7	14.9
115	9.0	66.3	56.5	0.85	6.7	89.1	134.9	3.2
115	12.0	67.4	57.0	0.85	6.5	89.4	130.0	5.4
115	15.0	68.0	57.3	0.84	6.3	89.6	127.0	8.0
115	18.0	68.5	57.5	0.84	6.2	89.7	125.0	11.1
115	21.0	68.7	57.6	0.84	6.2	89.8	123.6	14.5
120	9.0	64.3	55.7	0.87	7.1	88.5	139.8	3.2
120	12.0	65.4	56.2	0.86	6.9	88.8	134.9	5.3
120	15.0	66.0	56.4	0.86	6.7	89.0	131.9	7.9
120	18.0	66.4	56.6	0.85	6.7	89.1	130.0	10.9

Table 67. Cooling capacities 6 tons (gross) – GEV072 (continued)

EWT	GPM	Total Cap Mbtuh	Sen Mbtuh	SHR	Comp Power kW	Reject Mbtuh	LWT	Feet Head
120	21.0	66.7	56.7	0.85	6.6	89.2	128.5	14.3

Note: Performance data is tabulated for cooling at 80.6°F DB/66.2°F WB entering air. For conditions other than what is tabulated, multipliers must be used to correct performance. See the fan correction factors table for CFM other than rated and the cooling correction factors for variations in entering air temperature. WLHP data is performance data at ANSI/AHRI/ASHRAE/ISO13256-1. For ANSI/AHRI/ASHRAE/ISO13256-1 GLHP conditions, apply 15% methanol by volume per the antifreeze correction factors found in the performance correction tables. The minimum gpm/ton is 3.0 when the EWT is greater than 115°F and the EAT is less than 67°F WB. Rated GPM: 18.0 Minimum CFM 1920; Nominal CFM 2400, Maximum CFM 2880

Table 68. Heating capacities 6 tons (gross) - GEV072

EWT	GPM	Gross Cap Mbtuh	Absorb Mbtuh	Comp Power kW	LWT	Feet Head
25	9.0	45.1	31.9	3.9	16.8	5.2
25	12.0	46.6	33.2	3.9	18.6	8.6
25	15.0	47.5	34.1	3.9	19.7	12.7
25	18.0	48.2	34.7	3.9	20.5	17.4
25	21.0	48.6	35.2	3.9	21.1	22.7
32	9.0	49.9	36.4	4.0	22.7	5.1
32	12.0	51.6	38.0	4.0	24.7	8.3
32	15.0	52.8	39.0	4.0	26.0	12.3
32	18.0	53.5	39.7	4.1	27.0	16.9
32	21.0	54.1	40.3	4.1	27.6	22.0
45	9.0	56.8	43.1	4.0	34.9	4.0
45	12.0	58.8	44.9	4.1	37.1	6.5
45	15.0	60.1	46.1	4.1	38.5	9.6
45	18.0	61.1	47.0	4.1	39.5	13.2
45	21.0	61.8	47.6	4.2	40.2	17.3
55	9.0	60.7	46.6	4.1	39.1	3.9
55	12.0	62.9	48.7	4.2	41.5	6.4
55	15.0	64.4	50.0	4.2	43.0	9.5
55	18.0	65.4	51.0	4.2	44.0	13.0
55	21.0	66.2	51.7	4.2	44.8	17.0
59	9.0	64.6	50.3	4.2	43.2	3.8
59	12.0	67.1	52.6	4.3	45.8	6.3
59	15.0	68.8	54.1	4.3	47.4	9.3
59	18.0	69.9	55.2	4.3	48.6	12.7
59	21.0	70.8	56.0	4.4	49.4	16.7
68	9.0	70.5	55.7	4.3	54.9	3.6
68	12.0	73.4	58.4	4.4	57.7	5.9
68	15.0	75.3	60.1	4.5	59.5	8.7
68	18.0	76.7	61.4	4.5	60.8	11.9
68	21.0	77.7	62.3	4.5	61.7	15.6
77	9.0	76.5	61.2	4.5	60.6	3.5
77	12.0	79.8	64.2	4.6	63.7	5.7
77	15.0	82.0	66.2	4.6	65.6	8.5
77	18.0	83.5	67.7	4.7	67.0	11.6
77	21.0	84.7	68.7	4.7	68.0	15.2



Performance Data

Table 68. Heating capacities 6 tons (gross) - GEV072 (continued)

EWT	GPM	Gross Cap Mbtuh	Absorb Mbtuh	Comp Power kW	LWT	Feet Head
86	9.0	86.2	70.1	4.7	69.4	3.4
86	12.0	90.3	73.8	4.8	72.9	5.6
86	15.0	92.9	76.3	4.9	75.1	8.2
86	18.0	94.8	78.0	4.9	76.7	11.2
86	21.0	96.3	79.3	5.0	77.9	14.7

Note: Performance data is tabulated for heating at 68°F DB entering air. For conditions other than what is tabulated, multipliers must be used to correct performance. See the fan correction factors table for CFM other than rated and the heating correction factors for variations in entering air temperature. WLHP data is performance data at ANSI/AHRI/ASHRAE/ISO13256-1. For ANSI/AHRI/ASHRAE/ISO13256-1 GLHP conditions, apply 15% methanol by volume per the antifreeze correction factors found in the performance correction tables. Rated GPM: 18.0 Minimum CFM 1920; Nominal CFM 2400, Maximum CFM 2800.

Table 69. Fan correction factors 6 tons - GEV072

Entering CFM	Cooling Capacity	Sensible Capacity	Cooling Input Watts	Heating Capacity	Heating Input Watts
1680	0.955	0.885	1.000	0.987	1.097
1890	0.979	0.944	1.000	0.994	1.042
2100	1.000	1.000	1.000	1.000	1.000
2310	1.018	1.056	1.000	1.005	0.966
2520	1.034	1.111	1.000	1.009	0.939

Table 70. Correction factors for variation in entering air temperature 6 tons, GEV072

Cooling Entering Air WB°F	Cooling Capacity	Cooling Input Watts	Sensible vs. Entering Dry Bulb Multipliers					Heating Entering Air DB°F	Heating Capacity	Heating Input Watts
			65.6	70.6	75.6	80.6	85.6			
44.5	0.922	1.046	0.804	1.049	1.115	1.183	1.255	43	0.738	0.737
49.4	0.922	1.036	0.773	1.049	1.115	1.183	1.255	48	0.784	0.783
56.3	0.924	1.027	0.636	0.997	1.117	1.185	1.255	53	0.833	0.832
60.3	0.925	1.018	0.519	0.849	1.035	1.187	1.257	58	0.885	0.885
63.2	0.953	1.009	0.434	0.739	0.928	1.113	1.258	63	0.941	0.941
66.2	1.000	1.000	—	0.626	0.813	1.000	1.187	68	1.000	1.000
72.1	1.109	0.991	—	—	0.586	0.775	0.963	73	1.063	1.063
77.1	1.214	0.983	—	—	—	0.579	0.769	78	1.130	1.130

Note: * = Sensible equals total capacity

Cooling and Heating Capacities 7.5 tons

Table 71. Cooling capacities 7.5 tons (gross) - GEH090

EWT	GPM	Gross Cap Mbtuh	Sen Mbtuh	SHR	Power kW	Reject Mbtuh	LWT	Feet Head
45	11.3	103.2	79.1	0.77	3.3	114.3	65.3	3.9
45	15.0	104.4	79.8	0.76	3.1	115.0	60.3	6.4
45	18.8	105.2	80.1	0.76	3.0	115.4	57.3	9.5
45	22.5	105.6	80.3	0.76	2.9	115.7	55.3	13.0
45	26.3	106.0	80.4	0.76	2.9	115.8	53.8	17.0
55	11.3	100.0	77.7	0.78	3.7	112.7	75.0	3.8
55	15.0	101.3	78.3	0.77	3.5	113.3	70.1	6.3
55	18.8	102.0	78.6	0.77	3.4	113.7	67.1	9.3
55	22.5	102.4	79.0	0.77	3.4	113.9	65.1	12.7

Table 71. Cooling capacities 7.5 tons (gross) - GEH090 (continued)

EWT	GPM	Gross Cap Mbtuh	Sen Mbtuh	SHR	Power kW	Reject Mbtuh	LWT	Feet Head
55	26.3	102.7	79.1	0.77	3.3	114.0	63.7	16.7
59	11.3	98.7	77.2	0.78	3.9	112.1	78.9	3.8
59	15.0	100.0	77.7	0.78	3.7	112.7	74.0	6.2
59	18.8	100.7	78.0	0.77	3.6	113.0	71.1	9.1
59	22.5	101.1	78.2	0.77	3.5	113.2	69.1	12.5
59	26.3	101.5	78.4	0.77	3.5	113.4	67.6	16.3
68	11.3	95.8	76.0	0.79	4.4	110.8	87.7	3.5
68	15.0	97.0	76.5	0.79	4.2	111.3	82.9	5.8
68	18.8	97.7	76.8	0.79	4.1	111.6	79.9	8.5
68	22.5	98.2	77.0	0.78	4.0	111.8	78.0	11.7
68	26.3	98.5	77.1	0.78	3.9	112.0	76.5	15.3
77	11.3	92.0	74.5	0.81	5.0	109.0	96.4	3.4
77	15.0	93.3	75.2	0.81	4.8	109.5	91.6	5.6
77	18.8	93.9	75.4	0.80	4.6	109.7	88.7	8.3
77	22.5	94.4	75.6	0.80	4.5	109.9	86.8	11.4
77	26.3	94.7	75.7	0.80	4.5	110.0	85.4	14.9
86	11.3	89.9	73.6	0.82	5.6	108.9	105.4	3.3
86	15.0	91.1	74.1	0.81	5.4	109.3	100.6	5.4
86	18.8	91.8	74.4	0.81	5.2	109.6	97.7	8.0
86	22.5	92.2	74.6	0.81	5.1	109.7	95.8	11.0
86	26.3	92.5	74.7	0.81	5.1	109.8	94.4	14.4
95	11.3	86.4	72.2	0.84	6.3	107.8	114.2	4.0
95	15.0	87.7	72.7	0.83	6.0	108.2	109.5	6.6
95	18.8	88.4	73.0	0.83	5.9	108.4	106.6	9.8
95	22.5	88.8	73.2	0.82	5.8	108.5	104.7	13.4
95	26.3	89.1	73.3	0.82	5.7	108.6	103.3	17.7
105	11.3	82.3	70.4	0.86	7.1	106.7	124.0	3.9
105	15.0	83.6	71.0	0.85	6.9	107.0	119.3	6.4
105	18.8	84.3	71.3	0.85	6.7	107.2	116.5	9.5
105	22.5	84.7	71.5	0.84	6.6	107.3	114.6	13.0
105	26.3	85.0	71.6	0.84	6.6	107.4	113.2	17.2
115	11.3	78.0	68.8	0.88	8.1	105.6	133.8	3.8
115	15.0	79.2	69.1	0.87	7.8	105.8	129.2	6.2
115	18.8	79.9	69.5	0.87	7.7	106.0	126.3	9.3
115	22.5	80.3	69.7	0.87	7.6	106.1	124.5	12.7
115	26.3	80.6	69.8	0.87	7.5	106.2	123.1	16.7
120	11.3	75.8	67.9	0.90	8.6	105.0	138.7	3.7
120	15.0	76.9	68.4	0.89	8.3	105.3	134.1	6.1
120	18.8	77.5	68.4	0.88	8.2	105.4	131.3	9.1
120	22.5	77.9	68.8	0.88	8.1	105.5	129.4	12.6



Performance Data

Table 71. Cooling capacities 7.5 tons (gross) - GEH090 (continued)

EWT	GPM	Gross Cap Mbtuh	Sen Mbtuh	SHR	Power kW	Reject Mbtuh	LWT	Feet Head
120	26.3	78.2	68.9	0.88	8.0	105.6	128.1	16.5

Note: Performance data is tabulated for cooling at 80.6°F DB/66.2°F WB entering air. For conditions other than what is tabulated, multipliers must be used to correct performance. See the fan correction factors table for CFM other than rated and the cooling correction factors for variations in entering air temperature. WLHP data is performance data at ANSI/AHRI/ASHRAE/ISO13256-1. For ANSI/AHRI/ASHRAE/ISO13256-1 GLHP conditions, apply 15% methanol by volume per the antifreeze correction factors found in the performance correction tables. The minimum gpm/ton is 3.0 when the EWT is greater than 115°F and the EAT is less than 67°F WB. Rated GPM: 22.5 Minimum CFM 2400; Nominal CFM 3000, Maximum CFM 3600.

Table 72. Heating capacities 7.5 tons (gross) - GEH090

EWT	GPM	Gross Cap Mbtuh	Absorb Mbtuh	Power kW	LWT	Feet Head
25	11.3	55.8	39.9	4.6	16.8	5.1
25	15.0	57.6	41.6	4.7	18.6	8.4
25	18.8	58.7	42.7	4.7	19.8	12.4
25	22.5	59.6	43.5	4.7	20.6	17.0
25	26.3	60.1	44.0	4.7	21.2	22.3
32	11.3	61.8	45.5	4.8	22.8	5.0
32	15.0	63.9	47.5	4.8	24.8	8.2
32	18.8	65.3	48.8	4.8	26.1	12.0
32	22.5	66.3	49.7	4.9	27.0	16.5
32	26.3	67.0	50.4	4.9	27.7	21.6
45	11.3	72.6	55.9	4.9	34.6	3.9
45	15.0	75.3	58.4	5.0	36.9	6.4
45	18.8	77.1	60.0	5.0	38.3	9.5
45	22.5	78.3	61.2	5.0	39.3	13.0
45	26.3	79.3	62.0	5.1	40.1	17.0
55	11.3	77.5	60.4	5.0	38.8	3.8
55	15.0	80.5	63.2	5.1	41.2	6.3
55	18.8	82.5	65.0	5.1	42.8	9.3
55	22.5	83.9	66.3	5.2	43.9	12.7
55	26.3	84.9	67.3	5.2	44.7	16.7
59	11.3	82.6	65.1	5.1	42.9	3.8
59	15.0	85.9	68.2	5.2	45.5	6.2
59	18.8	88.1	70.2	5.3	47.2	9.1
59	22.5	89.7	71.6	5.3	48.4	12.5
59	26.3	90.8	72.7	5.3	49.2	16.3
68	11.3	90.5	72.6	5.3	54.5	3.5
68	15.0	94.3	76.1	5.4	57.4	5.8
68	18.8	96.9	78.4	5.4	59.3	8.5
68	22.5	98.7	80.0	5.5	60.6	11.7
68	26.3	100.0	81.2	5.5	61.5	15.3
77	11.3	98.0	79.4	5.4	60.2	3.4
77	15.0	102.3	83.4	5.6	63.3	5.6
77	18.8	105.2	85.9	5.6	65.4	8.3
77	22.5	107.2	87.8	5.7	66.8	11.4
77	26.3	108.7	89.2	5.7	67.9	14.9

Table 72. Heating capacities 7.5 tons (gross) - GEH090 (continued)

EWT	GPM	Gross Cap Mbtuh	Absorb Mbtuh	Power kW	LWT	Feet Head
86	11.3	110.1	90.5	5.8	69.0	3.3
86	15.0	115.3	95.1	5.9	72.6	5.4
86	18.8	118.7	98.2	6.0	74.9	8.0
86	22.5	121.2	100.4	6.1	76.5	11.0
86	26.3	123.0	102.0	6.2	77.8	14.4

Note: Performance data is tabulated for heating at 68°F DB entering air. For conditions other than what is tabulated, multipliers must be used to correct performance. See the fan correction factors table for CFM other than rated and the heating correction factors for variations in entering air temperature. WLHP data is performance data at ANSI/AHRI/ASHRAE/ISO13256-1. For ANSI/AHRI/ASHRAE/ISO13256-1 GLHP conditions, apply 15% methanol by volume per the antifreeze correction factors found in the performance correction tables. Rated GPM: 22.5 Minimum CFM 2400; Rated CFM 3000, Maximum CFM 3600.

Table 73. Fan correction factors 7.5 tons - GEH090

Entering cfm	Cooling Capacity	Sensible Capacity	Cooling Input Watts	Heating Capacity	Heating Input Watts
2100	0.959	0.884	1.000	0.986	1.100
2363	0.981	0.943	1.000	0.994	1.044
2625	1.000	1.000	1.000	1.000	1.000
2888	1.016	1.058	1.000	1.005	0.965
3150	1.031	1.115	1.000	1.010	0.937

Table 74. Correction factors for variation in entering air temperature 7.5 tons, GEH090

Cooling Entering Air WB°F	Cooling Capacity	Cooling Input Watts	Sensible vs. Entering Dry Bulb Multipliers					Heating Entering Air DB°F	Heating Capacity	Heating Input Watts
			65.6	70.6	75.6	80.6	85.6			
44.5	0.924	1.048	0.971	1.013	1.077	1.143	1.212	43	0.742	0.735
49.4	0.924	1.038	0.951	1.013	1.077	1.143	1.212	48	0.788	0.782
56.3	0.926	1.028	0.805	0.975	1.079	1.145	1.212	53	0.837	0.831
60.3	0.928	1.019	0.652	0.845	1.036	1.148	1.213	58	0.888	0.884
63.2	0.953	1.009	0.539	0.732	0.926	1.100	1.216	63	0.943	0.940
66.2	1.000	1.000	—	0.614	0.808	1.000	1.166	68	1.000	1.000
72.1	1.110	0.991	—	—	0.573	0.768	0.962	73	1.060	1.064
77.1	1.212	0.982	—	—	—	0.564	0.760	78	1.123	1.131

Note: * = Sensible equals total capacity

Table 75. Cooling capacities 7.5 tons (gross) - GEV090

EWT	GPM	Gross Cap Mbtuh	Gross Sen Mbtuh	SHR	Comp Power kW	Reject Mbtuh	LWT	Feet Head
45	11.3	104.9	79.9	0.76	3.3	116.0	65.6	3.9
45	15.0	106.3	80.5	0.76	3.1	116.8	60.6	6.5
45	18.8	107.2	80.9	0.75	3.0	117.3	57.5	9.5
45	22.5	107.7	81.1	0.75	2.9	117.6	55.4	13.1
45	26.3	108.1	81.3	0.75	2.9	117.9	54.0	16.6
55	11.3	101.5	78.5	0.77	3.7	114.1	75.3	3.8
55	15.0	102.9	79.1	0.77	3.5	114.9	70.3	6.3
55	18.8	103.7	79.4	0.77	3.4	115.3	67.3	9.3
55	22.5	104.3	79.6	0.76	3.3	115.6	65.3	12.8
55	26.3	104.6	79.8	0.76	3.3	115.8	63.8	16.3
59	11.3	100.1	77.9	0.78	3.9	113.4	79.2	3.8



Performance Data

Table 75. Cooling capacities 7.5 tons (gross) - GEV090 (continued)

EWT	GPM	Gross Cap Mbtuh	Gross Sen Mbtuh	SHR	Comp Power kW	Reject Mbtuh	LWT	Feet Head
59	15.0	101.5	78.5	0.77	3.7	114.1	74.2	6.2
59	18.8	102.3	78.8	0.77	3.6	114.6	71.2	9.1
59	22.5	102.9	79.1	0.77	3.5	114.8	69.2	12.6
59	26.3	103.2	79.2	0.77	3.5	115.0	67.8	16.0
68	11.3	97.0	76.6	0.79	4.4	112.0	87.9	8.1
68	15.0	98.4	77.2	0.78	4.2	112.6	83.0	13.4
68	18.8	99.2	77.5	0.78	4.0	113.0	80.1	19.7
68	22.5	99.7	77.7	0.78	4.0	113.2	78.1	27.1
68	26.3	100.1	77.9	0.78	3.9	113.4	76.7	34.4
77	11.3	94.7	75.7	0.80	5.0	111.8	96.9	8.0
77	15.0	96.1	76.3	0.79	4.8	112.3	92.0	13.1
77	18.8	96.9	76.6	0.79	4.6	112.7	89.0	19.3
77	22.5	97.4	76.8	0.79	4.5	112.9	87.0	26.4
77	26.3	97.7	77.0	0.79	4.5	113.0	85.6	33.6
86	11.3	91.4	74.3	0.81	5.6	110.6	105.7	7.7
86	15.0	92.7	74.9	0.81	5.4	111.1	100.8	12.6
86	18.8	93.5	75.2	0.80	5.2	111.3	97.9	18.6
86	22.5	93.9	75.4	0.80	5.2	111.5	95.9	25.5
86	26.3	94.3	75.5	0.80	5.1	111.6	94.5	32.4
95	11.3	87.8	72.8	0.83	6.3	109.3	114.5	3.9
95	15.0	89.1	73.4	0.82	6.1	109.8	109.7	6.4
95	18.8	89.8	73.7	0.82	5.9	110.0	106.8	9.5
95	22.5	90.3	73.9	0.82	5.8	110.2	104.8	13.1
95	26.3	90.6	74.0	0.82	5.8	110.3	103.4	17.2
105	11.3	83.5	71.1	0.85	7.2	108.0	124.3	3.8
105	15.0	84.8	71.7	0.85	6.9	108.4	119.5	6.2
105	18.8	85.5	72.0	0.84	6.8	108.6	116.6	9.3
105	22.5	86.0	72.1	0.84	6.7	108.7	114.7	12.7
105	26.3	86.3	72.3	0.84	6.6	108.8	113.3	16.7
115	11.3	78.9	69.3	0.88	8.1	106.6	134.0	3.7
115	15.0	80.2	69.8	0.87	7.9	107.0	129.3	6.1
115	18.8	80.9	70.1	0.87	7.7	107.2	126.5	9.0
115	22.5	81.3	70.3	0.86	7.6	107.3	124.6	12.4
115	26.3	81.6	70.4	0.86	7.6	107.4	123.2	16.3
120	11.3	76.5	68.3	0.89	8.6	106.0	138.9	3.6
120	15.0	77.8	68.8	0.88	8.4	106.3	134.2	6.0
120	18.8	78.4	69.1	0.88	8.2	106.5	131.4	8.9
120	22.5	78.9	69.2	0.88	8.1	106.6	129.5	12.2

Table 75. Cooling capacities 7.5 tons (gross) - GEV090 (continued)

EWT	GPM	Gross Cap Mbtuh	Gross Sen Mbtuh	SHR	Comp Power kW	Reject Mbtuh	LWT	Feet Head
120	26.3	79.2	69.4	0.88	8.1	106.7	128.2	16.1

Note: Performance data is tabulated for cooling at 80.6°F DB/66.2°F WB entering air. For conditions other than what is tabulated, multipliers must be used to correct performance. See the fan correction factors table for CFM other than rated and the cooling correction factors for variations in entering air temperature. WLHP data is performance data at ANSI/AHRI/ASHRAE/ISO13256-1. For ANSI/AHRI/ASHRAE/ISO13256-1 GLHP conditions, apply 15% methanol by volume per the antifreeze correction factors found in the performance correction tables. The minimum gpm/ton is 3.0 when the EWT is greater than 115°F and the EAT is less than 67°F WB. Rated GPM: 22.5 Minimum CFM 2400; Nominal CFM 3000, Maximum CFM 3600.

Table 76. Heating capacities 7.5 tons (gross) - GEV090

EWT	GPM	Gross Cap Mbtuh	Absorb Mbtuh	Comp Power kW	LWT	Feet Head
25	11.3	56.5	40.4	4.7	16.8	5.1
25	15.0	58.2	42.0	4.7	18.6	8.5
25	18.8	59.3	43.0	4.8	19.8	12.5
25	22.5	60.0	43.7	4.8	20.6	17.1
25	26.3	60.6	44.2	4.8	21.2	22.4
32	11.3	62.5	46.0	4.8	22.8	5.0
32	15.0	64.5	47.9	4.9	24.8	8.2
32	18.8	65.8	49.1	4.9	26.1	12.1
32	22.5	66.7	49.9	4.9	27.0	16.6
32	26.3	67.3	50.5	4.9	27.7	21.7
45	11.3	74.1	57.1	5.0	34.5	3.9
45	15.0	76.5	59.4	5.0	36.8	6.5
45	18.8	78.0	60.7	5.1	38.3	9.5
45	22.5	79.0	61.7	5.1	39.3	13.1
45	26.3	79.8	62.4	5.1	40.4	16.6
55	11.3	79.0	61.7	5.1	38.6	3.8
55	15.0	81.7	64.1	5.2	41.1	6.3
55	18.8	83.4	65.7	5.2	42.7	9.3
55	22.5	84.5	66.7	5.2	43.9	12.8
55	26.3	85.3	67.6	5.2	45.0	16.3
59	11.3	84.1	66.3	5.2	42.8	3.8
59	15.0	87.1	69.1	5.3	45.5	6.2
59	18.8	88.9	70.7	5.3	47.2	9.1
59	22.5	90.1	71.9	5.4	48.4	12.6
59	26.3	91.0	72.9	5.3	49.6	16.0
68	11.3	95.6	76.8	5.5	53.9	8.1
68	15.0	99.5	80.3	5.6	56.9	13.4
68	18.8	101.8	82.4	5.7	58.9	19.7
68	22.5	103.4	83.8	5.7	60.3	27.1
68	26.3	104.5	85.1	5.7	61.7	34.4
77	11.3	103.3	83.8	5.7	59.6	8.0
77	15.0	107.6	87.7	5.9	62.9	13.1
77	18.8	110.3	90.0	5.9	65.0	19.3
77	22.5	112.0	91.6	6.0	66.5	26.4
77	26.3	113.0	92.5	6.0	68.0	33.6



Performance Data

Table 76. Heating capacities 7.5 tons (gross) - GEV090 (continued)

EWT	GPM	Gross Cap Mbtuh	Absorb Mbtuh	Comp Power kW	LWT	Feet Head
86	11.3	115.8	95.0	6.1	68.4	7.7
86	15.0	120.9	99.6	6.3	72.1	12.6
86	18.8	124.1	102.4	6.4	74.5	18.6
86	22.5	126.1	104.2	6.4	76.3	25.5
86	26.3	127.1	105.3	6.4	78.0	32.4

Note: Performance data is tabulated for heating at 68°F DB entering air. For conditions other than what is tabulated, multipliers must be used to correct performance. See the fan correction factors table for CFM other than rated and the heating correction factors for variations in entering air temperature. WLHP data is performance data at ANSI/AHRI/ASHRAE/ISO13256-1. For ANSI/AHRI/ASHRAE/ISO13256-1 GLHP conditions, apply 15% methanol by volume per the antifreeze correction factors found in the performance correction tables. Rated GPM: 22.5 Minimum CFM 2400; Nominal CFM 3000, Maximum CFM 3600.

Table 77. Fan correction factors 7.5 tons - GEV090

Entering CFM	Cooling Capacity	Sensible Capacity	Cooling Input Watts	Heating Capacity	Heating Input Watts
2100	0.960	0.884	1.000	0.985	1.108
2363	0.982	0.942	1.000	0.993	1.047
2625	1.000	1.000	1.000	1.000	1.000
2888	1.015	1.057	1.000	1.006	0.963
3150	1.028	1.112	1.001	1.011	0.932

Table 78. Correction factors for variation in entering air temperature 7.5 tons, GEV090

Cooling Entering Air WB°F	Cooling Capacity	Cooling Input Watts	Sensible vs. Entering Dry Bulb Multipliers					Heating Entering Air DB°F	Heating Capacity	Heating Input Watts
			65.6	70.6	75.6	80.6	85.6			
44.5	0.730	1.048	0.827	0.827	0.910	0.909	1.037	43	0.739	0.733
49.4	0.730	1.038	0.910	0.910	0.910	0.909	1.037	48	0.785	0.780
56.3	0.833	1.029	0.807	0.986	1.038	1.038	1.037	53	0.835	0.830
60.3	0.898	1.019	0.656	0.846	1.034	1.118	1.118	58	0.887	0.884
63.2	0.947	1.009	0.544	0.735	0.925	1.108	1.180	63	0.942	0.940
66.2	1.000	1.000	—	0.618	0.810	1.000	1.175	68	1.000	1.000
72.1	1.111	0.991	—	—	0.577	0.769	0.961	73	1.061	1.064
77.1	1.213	0.982	—	—	—	0.568	0.762	78	1.125	1.131

Note: * = Sensible equals total capacity

Cooling and Heating Capacities 10 tons

Table 79. Cooling capacities 10 tons (gross) - GEH120

EWT	GPM	Gross Cap Mbtuh	Sen Mbtuh	SHR	Power kW	Reject Mbtuh	LWT	Feet Head
45	15.0	143.1	107.9	0.75	4.2	157.5	65.9	4.9
45	20.0	144.7	108.6	0.75	4.0	158.4	60.8	8.1
45	25.0	145.6	109.0	0.75	3.9	158.8	57.7	11.9
45	30.0	146.1	109.2	0.75	3.8	159.1	55.6	16.3
45	35.0	146.5	109.4	0.75	3.8	159.3	54.1	21.4
55	15.0	139.1	106.2	0.76	4.8	155.6	75.6	4.8
55	20.0	140.7	106.9	0.76	4.6	156.3	70.6	7.9
55	25.0	141.6	107.3	0.76	4.4	156.8	67.5	11.7
55	30.0	142.2	107.5	0.76	4.4	157.0	65.4	16.0

Table 79. Cooling capacities 10 tons (gross) - GEH120 (continued)

EWT	GPM	Gross Cap Mbtuh	Sen Mbtuh	SHR	Power kW	Reject Mbtuh	LWT	Feet Head
55	35.0	142.5	107.7	0.76	4.3	157.2	63.9	20.9
59	15.0	137.5	105.6	0.77	5.1	154.8	79.5	4.7
59	20.0	139.1	106.2	0.76	4.8	155.5	74.5	7.8
59	25.0	140.0	106.6	0.76	4.7	156.0	71.4	11.4
59	30.0	140.5	106.8	0.76	4.6	156.2	69.4	15.7
59	35.0	140.9	107.0	0.76	4.5	156.4	67.9	20.5
68	15.0	133.6	103.9	0.78	5.7	153.1	88.3	4.4
68	20.0	135.3	104.6	0.77	5.4	153.8	83.3	7.3
68	25.0	136.2	105.0	0.77	5.3	154.2	80.3	10.7
68	30.0	136.7	105.2	0.77	5.2	154.4	78.2	14.7
68	35.0	137.1	105.4	0.77	5.1	154.6	76.8	19.2
77	15.0	128.3	101.8	0.79	6.5	150.3	97.0	4.3
77	20.0	129.9	102.5	0.79	6.2	150.9	92.1	7.1
77	25.0	130.7	102.8	0.79	6.0	151.2	89.1	10.5
77	30.0	131.2	103.0	0.79	5.9	151.4	87.1	14.3
77	35.0	131.6	103.2	0.78	5.8	151.5	85.7	18.8
86	15.0	124.9	100.5	0.80	7.2	149.4	105.9	4.2
86	20.0	126.7	101.2	0.80	6.9	150.1	101.0	6.9
86	25.0	127.7	101.6	0.80	6.7	150.5	98.1	10.1
86	30.0	128.3	101.8	0.79	6.6	150.7	96.1	13.9
86	35.0	128.6	102.0	0.79	6.5	150.8	94.6	18.1
95	15.0	120.1	98.4	0.82	8.1	147.6	114.7	4.0
95	20.0	121.9	99.2	0.81	7.7	148.3	109.8	6.7
95	25.0	122.8	99.6	0.81	7.6	148.6	106.9	9.9
95	30.0	123.4	99.8	0.81	7.4	148.8	104.9	13.7
95	35.0	123.8	100.0	0.81	7.4	148.9	103.5	18.0
105	15.0	114.4	96.0	0.84	9.2	145.7	124.4	3.9
105	20.0	116.1	96.7	0.83	8.8	146.3	119.6	6.5
105	25.0	117.1	97.1	0.83	8.6	146.6	116.7	9.6
105	30.0	117.7	97.5	0.83	8.5	146.8	114.8	13.3
105	35.0	118.0	97.6	0.83	8.5	146.9	113.4	17.5
115	15.0	108.3	93.6	0.86	10.4	143.8	134.1	3.8
115	20.0	110.0	94.3	0.86	10.1	144.3	129.4	6.3
115	25.0	110.9	94.6	0.85	9.9	144.6	126.5	9.4
115	30.0	111.4	94.8	0.85	9.8	144.7	124.6	13.0
115	35.0	111.8	95.0	0.85	9.7	144.8	123.2	17.0
120	15.0	105.1	92.3	0.88	11.1	142.9	138.9	3.8
120	20.0	106.8	93.0	0.87	10.7	143.4	134.3	6.3
120	25.0	107.6	93.3	0.87	10.5	143.6	131.4	9.3
120	30.0	108.1	93.5	0.86	10.4	143.7	129.5	12.8



Performance Data

Table 79. Cooling capacities 10 tons (gross) - GEH120 (continued)

EWT	GPM	Gross Cap Mbtuh	Sen Mbtuh	SHR	Power kW	Reject Mbtuh	LWT	Feet Head
120	35.0	108.5	93.7	0.86	10.4	143.8	128.2	16.8

Note: Performance data is tabulated for cooling at 80.6°F DB/66.2°F WB entering air. For conditions other than what is tabulated, multipliers must be used to correct performance. See the fan correction factors table for CFM other than rated and the cooling correction factors for variations in entering air temperature. WLHP data is performance data at ANSI/AHRI/ASHRAE/ISO13256-1. For ANSI/AHRI/ASHRAE/ISO13256-1 GLHP conditions, apply 15% methanol by volume per the antifreeze correction factors found in the performance correction tables. The minimum gpm/ton is 3.0 when the EWT is greater than 115°F and the EAT is less than 67°F WB. Rated GPM: 30.0 Minimum CFM 3200; Nominal CFM 4000, Maximum CFM 4800.

Table 80. Heating capacities 10 tons (gross) - GEH120

EWT	GPM	Gross Cap Mbtuh	Absorb Mbtuh	Power kW	LWT	Feet Head
25	15.0	75.9	55.8	5.9	16.7	6.6
25	20.0	78.3	58.0	5.9	18.5	10.9
25	25.0	79.8	59.5	6.0	19.7	16.1
25	30.0	80.9	60.5	6.0	20.5	22.1
25	35.0	81.7	61.3	6.0	21.1	28.9
32	15.0	83.8	63.2	6.0	22.6	6.4
32	20.0	86.6	65.9	6.1	24.7	10.6
32	25.0	88.5	67.6	6.1	26.0	15.6
32	30.0	89.8	68.9	6.1	26.9	21.4
32	35.0	90.7	69.8	6.1	27.6	28.0
45	15.0	101.5	79.8	6.4	34.0	4.9
45	20.0	105.1	83.2	6.4	36.4	8.1
45	25.0	107.5	85.4	6.5	38.0	11.9
45	30.0	109.2	87.0	6.5	39.0	16.3
45	35.0	110.4	88.2	6.5	39.8	21.4
55	15.0	108.0	85.9	6.5	38.2	4.8
55	20.0	112.0	89.7	6.6	40.8	7.9
55	25.0	114.7	92.1	6.6	42.4	11.7
55	30.0	116.5	93.9	6.7	43.6	16.0
55	35.0	117.9	95.2	6.7	44.4	20.9
59	15.0	114.7	92.1	6.6	42.4	4.7
59	20.0	119.1	96.3	6.7	45.1	7.8
59	25.0	122.1	99.0	6.8	46.9	11.4
59	30.0	124.1	100.9	6.8	48.1	15.7
59	35.0	125.6	102.3	6.8	49.0	20.5
68	15.0	125.4	102.2	6.8	54.0	4.4
68	20.0	130.7	107.2	6.9	57.0	7.3
68	25.0	134.2	110.4	7.0	58.9	10.7
68	30.0	136.7	112.6	7.0	60.3	14.7
68	35.0	138.5	114.3	7.1	61.3	19.2
77	15.0	135.6	111.6	7.0	59.6	4.3
77	20.0	141.6	117.1	7.2	62.9	7.1
77	25.0	145.5	120.7	7.3	65.0	10.5
77	30.0	148.2	123.2	7.3	66.5	14.3
77	35.0	150.3	125.1	7.4	67.6	18.8

Table 80. Heating capacities 10 tons (gross) - GEH120 (continued)

EWT	GPM	Gross Cap Mbtuh	Absorb Mbtuh	Power kW	LWT	Feet Head
86	15.0	152.1	126.7	7.4	68.5	4.2
86	20.0	159.1	133.1	7.6	72.2	6.9
86	25.0	163.8	137.2	7.8	74.6	10.1
86	30.0	167.0	140.2	7.9	76.3	13.9
86	35.0	169.5	142.4	8.0	77.5	18.1

Note: Performance data is tabulated for heating at 68°F DB entering air. For conditions other than what is tabulated, multipliers must be used to correct performance. See the fan correction factors table for CFM other than rated and the heating correction factors for variations in entering air temperature. WLHP data is performance data at ANSI/AHRI/ASHRAE/ISO13256-1. For ANSI/AHRI/ASHRAE/ISO13256-1 GLHP conditions, apply 15% methanol by volume per the antifreeze correction factors found in the performance correction tables. Rated GPM: 30.0 Minimum CFM 3200; Nominal CFM 4000, Maximum CFM 4800.

Table 81. Fan correction factors 10 tons - GEH120

Entering cfm	Cooling Capacity	Sensible Capacity	Cooling Input Watts	Heating Capacity	Heating Input Watts
2800	0.959	0.885	0.999	0.986	1.099
3150	0.982	0.943	1.000	0.994	1.043
3500	1.000	1.000	1.000	1.000	1.000
3850	1.015	1.055	1.000	1.005	0.965
4200	1.028	1.111	1.001	1.010	0.937

Table 82. Correction factors for variation in entering air temperature 10 tons, GEH120

Cooling Entering Air WB°F	Cooling Capacity	Cooling Input Watts	Sensible vs. Entering Dry Bulb Multipliers					Heating Entering Air DB°F	Heating Capacity	Heating Input Watts
			65.6	70.6	75.6	80.6	85.6			
44.5	0.730	1.046	0.836	0.921	0.920	0.920	0.945	43	0.734	0.734
49.4	0.730	1.037	0.921	0.921	0.920	0.920	0.945	48	0.781	0.781
56.3	0.834	1.027	0.810	0.995	1.050	1.050	1.050	53	0.831	0.831
60.3	0.898	1.018	0.659	0.848	1.034	1.132	1.132	58	0.884	0.884
63.2	0.947	1.009	0.549	0.738	0.926	1.112	1.194	63	0.941	0.941
66.2	1.000	1.000	—	0.622	0.811	1.000	1.186	68	1.000	1.000
72.1	1.109	0.991	—	—	0.580	0.771	0.960	73	1.063	1.063
77.1	1.208	0.982	—	—	—	0.571	0.762	78	1.129	1.129

Note: * = Sensible equals total capacity

Table 83. Cooling capacities 10 tons (gross) - GEV120

EWT	GPM	Gross Cap Mbtuh	Gross Sen Mbtuh	SHR	Comp Power kW	Reject Mbtuh	LWT	Feet Head
45	15.0	143.8	108.1	0.75	4.2	158.2	66.1	4.9
45	20.0	145.4	108.8	0.75	4.0	159.1	60.9	8.1
45	25.0	146.3	109.2	0.75	3.9	159.6	57.8	11.9
45	30.0	146.9	109.7	0.75	3.8	159.9	55.7	16.3
45	35.0	147.2	109.8	0.75	3.8	160.1	54.1	21.4
55	15.0	139.7	106.4	0.76	4.8	156.2	75.8	4.8
55	20.0	141.3	107.1	0.76	4.6	157.0	70.7	7.9
55	25.0	142.3	107.5	0.76	4.5	157.4	67.6	11.7
55	30.0	142.8	107.7	0.75	4.4	157.7	65.5	16.0
55	35.0	143.2	107.9	0.75	4.3	157.9	64.0	20.9
59	15.0	138.0	105.5	0.76	5.1	155.4	79.7	4.7



Performance Data

Table 83. Cooling capacities 10 tons (gross) - GEV120 (continued)

EWT	GPM	Gross Cap Mbtuh	Gross Sen Mbtuh	SHR	Comp Power kW	Reject Mbtuh	LWT	Feet Head
59	20.0	139.7	106.3	0.76	4.8	156.2	74.6	7.8
59	25.0	140.6	106.7	0.76	4.7	156.6	71.5	11.4
59	30.0	141.2	107.0	0.76	4.6	156.9	69.4	15.7
59	35.0	141.5	107.2	0.76	4.6	157.1	68.0	20.5
68	15.0	134.1	103.8	0.77	5.7	153.6	88.4	4.4
68	20.0	135.8	104.5	0.77	5.4	154.4	83.4	7.3
68	25.0	136.7	105.1	0.77	5.3	154.8	80.3	10.7
68	30.0	137.3	105.3	0.77	5.2	155.0	78.3	14.7
68	35.0	137.7	105.5	0.77	5.1	155.2	76.8	19.2
77	15.0	129.9	102.3	0.79	6.5	152.0	97.2	4.3
77	20.0	131.5	103.0	0.78	6.2	152.6	92.2	7.1
77	25.0	132.5	103.3	0.78	6.0	152.9	89.2	10.5
77	30.0	133.0	103.6	0.78	5.9	153.1	87.2	14.3
77	35.0	133.4	103.7	0.78	5.8	153.3	85.8	18.8
86	15.0	125.3	100.6	0.80	7.2	149.8	106.0	4.2
86	20.0	127.0	101.3	0.80	6.9	150.4	101.1	6.9
86	25.0	128.0	101.7	0.79	6.7	150.8	98.1	10.1
86	30.0	128.6	102.0	0.79	6.6	151.0	96.1	13.8
86	35.0	129.0	102.1	0.79	6.5	151.2	94.7	18.1
95	15.0	120.5	98.6	0.82	8.1	148.0	114.8	4.0
95	20.0	122.2	99.3	0.81	7.7	148.6	109.9	6.7
95	25.0	123.2	99.7	0.81	7.6	149.0	107.0	9.9
95	30.0	123.8	100.0	0.81	7.5	149.2	105.0	13.7
95	35.0	124.2	100.1	0.81	7.4	149.3	103.6	18.0
105	15.0	114.8	96.2	0.84	9.2	146.1	124.5	3.9
105	20.0	116.5	97.0	0.83	8.8	146.7	119.7	6.5
105	25.0	117.5	97.4	0.83	8.7	147.0	116.8	9.6
105	30.0	118.1	97.6	0.83	8.5	147.2	114.8	13.3
105	35.0	118.4	97.7	0.83	8.5	147.3	113.4	17.5
115	15.0	108.8	93.8	0.86	10.4	144.3	134.2	3.8
115	20.0	110.5	94.5	0.86	10.1	144.8	129.5	6.3
115	25.0	111.4	94.9	0.85	9.9	145.1	126.6	9.4
115	30.0	111.9	95.1	0.85	9.8	145.2	124.7	13.0
115	35.0	112.2	95.2	0.85	9.7	145.3	123.3	17.0
120	15.0	105.7	92.5	0.88	11.1	143.4	139.1	3.8
120	20.0	107.3	93.2	0.87	10.7	143.9	134.3	6.3
120	25.0	108.1	93.5	0.87	10.6	144.1	131.5	9.3
120	30.0	108.6	93.8	0.86	10.4	144.3	129.6	12.8

Table 83. Cooling capacities 10 tons (gross) - GEV120 (continued)

EWT	GPM	Gross Cap Mbtuh	Gross Sen Mbtuh	SHR	Comp Power kW	Reject Mbtuh	LWT	Feet Head
120	35.0	109.0	93.9	0.86	10.4	144.4	128.2	16.8

Note: Performance data is tabulated for cooling at 80.6°F DB/66.2°F WB entering air. For conditions other than what is tabulated, multipliers must be used to correct performance. See the fan correction factors table for CFM other than rated and the cooling correction factors for variations in entering air temperature. WLHP data is performance data at ANSI/AHRI/ASHRAE/ISO13256-1. For ANSI/AHRI/ASHRAE/ISO13256-1 GLHP conditions, apply 15% methanol by volume per the antifreeze correction factors found in the performance correction tables. The minimum gpm/ton is 3.0 when the EWT is greater than 115°F and the EAT is less than 67°F WB. Rated GPM: 30.0 Minimum CFM 3200; Nominal CFM 4000, Maximum CFM 4800.

Table 84. Heating capacities 10 tons (gross) - GEV120

EWT	GPM	Gross Cap Mbtuh	Absorb Mbtuh	Comp Power kW	LWT	EWT
25	15.0	79.1	58.3	6.1	16.4	6.6
25	20.0	81.7	60.7	6.1	18.3	10.9
25	25.0	83.4	62.4	6.2	19.5	16.1
25	30.0	84.6	63.5	6.2	20.3	22.1
25	35.0	85.5	64.3	6.2	20.9	28.9
32	15.0	87.5	66.2	6.3	22.3	6.4
32	20.0	90.7	69.1	6.3	24.4	10.6
32	25.0	92.7	71.0	6.4	25.7	15.6
32	30.0	94.2	72.4	6.4	26.7	21.4
32	35.0	95.2	73.4	6.4	27.4	28.0
45	15.0	99.9	77.8	6.5	34.4	4.9
45	20.0	103.6	81.3	6.5	36.7	8.1
45	25.0	106.0	83.6	6.6	38.2	11.9
45	30.0	107.7	85.2	6.6	39.2	16.3
45	35.0	109.0	86.3	6.7	40.0	21.4
55	15.0	106.6	84.1	6.6	38.5	4.8
55	20.0	110.8	88.0	6.7	41.0	7.9
55	25.0	113.5	90.5	6.7	42.6	11.7
55	30.0	115.4	92.2	6.8	43.7	16.0
55	35.0	116.8	93.5	6.8	44.5	20.9
59	15.0	113.5	90.5	6.7	42.6	4.7
59	20.0	118.1	94.8	6.8	45.3	7.8
59	25.0	121.1	97.5	6.9	47.0	11.4
59	30.0	123.2	99.5	7.0	48.2	15.7
59	35.0	124.7	100.9	7.0	49.1	20.5
68	15.0	125.2	101.5	7.0	54.2	4.4
68	20.0	130.4	106.3	7.1	57.1	7.3
68	25.0	133.8	109.4	7.2	59.0	10.7
68	30.0	136.2	111.6	7.2	60.4	14.7
68	35.0	138.0	113.2	7.3	61.4	19.2
77	15.0	135.3	110.7	7.2	59.8	4.3
77	20.0	141.2	116.1	7.3	63.1	7.1
77	25.0	145.0	119.6	7.4	65.1	10.5
77	30.0	147.7	122.0	7.5	66.6	14.3
77	35.0	149.7	123.8	7.6	67.7	18.8



Performance Data

Table 84. Heating capacities 10 tons (gross) - GEV120 (continued)

EWT	GPM	Gross Cap Mbtuh	Absorb Mbtuh	Comp Power kW	LWT	EWT
86	15.0	151.6	125.6	7.6	68.7	4.2
86	20.0	158.5	131.8	7.8	72.3	6.9
86	25.0	163.0	135.8	8.0	74.7	10.1
86	30.0	166.2	138.7	8.1	76.4	13.8
86	35.0	168.7	140.8	8.2	77.6	18.1

Note: Performance data is tabulated for heating at 68°F DB entering air. For conditions other than what is tabulated, multipliers must be used to correct performance. See the fan correction factors table for CFM other than rated and the heating correction factors for variations in entering air temperature. WLHP data is performance data at ANSI/AHRI/ASHRAE/ISO13256-1. For ANSI/AHRI/ASHRAE/ISO13256-1 GLHP conditions, apply 15% methanol by volume per the antifreeze correction factors found in the performance correction tables. Rated GPM: 30.0 Minimum CFM 3200; Nominal CFM 4000, Maximum CFM 4800.

Table 85. Fan correction factors 10 tons - GEV120

Entering CFM	Cooling Capacity	Sensible Capacity	Cooling Input Watts	Heating Capacity	Heating Input Watts
2800	0.958	0.885	0.999	0.986	1.102
3150	0.981	0.943	1.000	0.994	1.045
3500	1.000	1.000	1.000	1.000	1.000
3850	1.017	1.056	1.000	1.005	0.965
4200	1.031	1.112	1.001	1.010	0.936

Table 86. Correction factors for variation in entering air temperature 10 tons, GEV120

Cooling Entering Air WB°F	Cooling Capacity	Cooling Input Watts	Sensible vs. Entering Dry Bulb Multipliers					Heating Entering Air DB°F	Heating Capacity	Heating Input Watts
			65.6	70.6	75.6	80.6	85.6			
44.5	0.927	1.046	0.808	1.098	1.105	1.172	1.242	43	0.733	0.734
49.4	0.927	1.037	0.774	1.040	1.105	1.172	1.242	48	0.780	0.781
56.3	0.928	1.027	0.642	0.999	1.107	1.174	1.242	53	0.830	0.831
60.3	0.929	1.018	0.523	0.848	1.037	1.176	1.244	58	0.884	0.884
63.2	0.955	1.009	0.435	0.738	0.926	1.116	1.245	63	0.940	0.940
66.2	1.000	1.000	—	0.622	0.811	1.000	1.190	68	1.000	1.000
72.1	1.105	0.991	—	—	0.580	0.770	0.960	73	1.063	1.063
77.1	1.203	0.982	—	—	—	0.570	0.761	78	1.130	1.130

Note: * = Sensible equals total capacity

Cooling and Heating Capacities 12.5 tons

Table 87. Cooling capacities 12.5 tons (gross) - GEH150

EWT	GPM	Gross Cap Mbtuh	Sen Mbtuh	SHR	Power kW	Reject Mbtuh	LWT	Feet Head
45	18.8	181.1	135.9	0.75	5.4	199.5	66.2	6.0
45	25.0	183.6	136.9	0.75	4.9	200.5	61.0	9.9
45	31.3	185.1	137.6	0.74	4.7	201.1	57.9	14.6
45	37.5	186.0	138.0	0.74	4.5	201.5	55.8	20.0
45	43.8	186.7	138.3	0.74	4.4	201.7	54.2	26.2
55	18.8	175.3	133.4	0.76	6.4	197.2	75.9	5.9
55	25.0	177.8	134.5	0.76	6.0	198.2	70.8	9.7
55	31.3	179.2	135.1	0.75	5.7	198.7	67.7	14.3
55	37.5	180.1	135.4	0.75	5.6	199.1	65.6	19.6

Table 87. Cooling capacities 12.5 tons (gross) - GEH150 (continued)

EWT	GPM	Gross Cap Mbtuh	Sen Mbtuh	SHR	Power kW	Reject Mbtuh	LWT	Feet Head
55	43.8	180.7	135.7	0.75	5.4	199.3	64.1	25.7
59	18.8	173.0	132.4	0.77	6.8	196.3	79.8	5.8
59	25.0	175.4	133.5	0.76	6.4	197.2	74.7	9.5
59	31.3	176.8	134.1	0.76	6.1	197.8	71.6	14.0
59	37.5	177.7	134.4	0.76	6.0	198.1	69.5	19.2
59	43.8	178.3	134.7	0.76	5.9	198.4	68.0	25.2
68	18.8	167.6	130.2	0.78	7.8	194.2	88.5	5.4
68	25.0	170.0	131.2	0.77	7.4	195.1	83.5	8.9
68	31.3	171.4	131.8	0.77	7.1	195.7	80.5	13.1
68	37.5	172.3	132.1	0.77	7.0	196.0	78.4	18.0
68	43.8	172.9	132.4	0.77	6.8	196.2	76.9	23.5
77	18.8	163.6	128.5	0.79	8.9	193.9	97.5	5.3
77	25.0	165.8	129.5	0.78	8.4	194.6	92.5	8.7
77	31.3	167.1	130.0	0.78	8.2	195.0	89.4	12.8
77	37.5	167.9	130.3	0.78	8.0	195.3	87.4	17.6
77	43.8	168.4	130.5	0.78	7.9	195.5	85.9	23.0
86	18.8	158.2	126.3	0.80	9.9	192.1	106.4	5.1
86	25.0	160.5	127.2	0.79	9.5	192.9	101.4	8.4
86	31.3	161.7	127.8	0.79	9.3	193.3	98.4	12.4
86	37.5	162.5	128.1	0.79	9.1	193.6	96.3	16.9
86	43.8	163.0	128.3	0.79	9.0	193.7	94.8	22.2
95	18.8	152.2	123.8	0.81	11.1	190.1	115.2	3.8
95	25.0	154.4	124.7	0.81	10.7	190.8	110.2	6.4
95	31.3	155.7	125.3	0.80	10.4	191.2	107.2	9.5
95	37.5	156.4	125.6	0.80	10.3	191.5	105.2	13.0
95	43.8	156.9	125.8	0.80	10.2	191.6	103.7	17.1
105	18.8	145.3	121.0	0.83	12.5	187.9	124.9	3.7
105	25.0	147.4	121.9	0.83	12.1	188.6	120.0	6.2
105	31.3	148.6	122.3	0.82	11.8	189.0	117.0	9.2
105	37.5	149.4	122.6	0.82	11.7	189.2	115.0	12.7
105	43.8	149.9	122.8	0.82	11.6	189.3	113.6	16.7
115	18.8	138.0	118.1	0.86	14.0	185.8	134.6	3.6
115	25.0	140.0	118.9	0.85	13.6	186.4	129.8	6.0
115	31.3	141.2	119.3	0.85	13.3	186.7	126.8	9.0
115	37.5	141.9	119.6	0.84	13.2	186.9	124.9	12.3
115	43.8	142.3	119.8	0.84	13.1	187.0	123.5	16.2
120	18.8	134.2	116.5	0.87	14.8	184.7	139.5	3.6
120	25.0	136.2	117.3	0.86	14.4	185.2	134.7	6.0
120	31.3	137.3	117.8	0.86	14.1	185.5	131.8	8.9
120	37.5	137.9	118.0	0.86	14.0	185.7	129.8	12.2



Performance Data

Table 87. Cooling capacities 12.5 tons (gross) - GEH150 (continued)

EWT	GPM	Gross Cap Mbtuh	Sen Mbtuh	SHR	Power kW	Reject Mbtuh	LWT	Feet Head
120	43.8	138.4	118.2	0.85	13.9	185.8	128.4	16.0

Note: Performance data is tabulated for cooling at 80.6°F DB/66.2°F WB entering air. For conditions other than what is tabulated, multipliers must be used to correct performance. See the fan correction factors table for CFM other than rated and the cooling correction factors for variations in entering air temperature. WLHP data is performance data at ANSI/AHRI/ASHRAE/ISO13256-1. For ANSI/AHRI/ASHRAE/ISO13256-1 GLHP conditions, apply 15% methanol by volume per the antifreeze correction factors found in the performance correction tables. The minimum gpm/ton is 3.0 when the EWT is greater than 115°F and the EAT is less than 67°F WB. Rated GPM: 37.5 Minimum CFM 4000; Nominal CFM 5000, Maximum CFM 6000.

Table 88. Heating capacities 12.5 tons (gross) - GEH150

EWT	GPM	Gross Cap Mbtuh	Absorb Mbtuh	Comp Power kW	LWT	Feet Head
25	18.8	100.4	73.0	8.0	16.3	8.1
25	25.0	103.7	76.0	8.1	18.2	13.3
25	31.3	105.9	77.9	8.2	19.4	19.7
25	37.5	107.4	79.3	8.2	20.3	27.0
25	43.8	108.5	80.3	8.3	20.9	35.4
32	18.8	110.7	82.4	8.3	22.2	7.9
32	25.0	114.6	85.9	8.4	24.3	12.9
32	31.3	117.1	88.2	8.5	25.7	19.1
32	37.5	118.9	89.8	8.5	26.7	26.2
32	43.8	120.2	91.0	8.6	27.4	34.3
45	18.8	131.4	101.8	8.7	33.8	6.0
45	25.0	136.1	106.1	8.8	36.2	9.9
45	31.3	139.3	109.0	8.9	37.8	14.6
45	37.5	141.5	111.0	8.9	38.9	20.0
45	43.8	143.2	112.6	9.0	39.7	26.2
55	18.8	139.7	109.4	8.9	38.0	5.9
55	25.0	144.9	114.2	9.0	40.6	9.7
55	31.3	148.4	117.4	9.1	42.3	14.3
55	37.5	150.9	119.6	9.2	43.4	19.6
55	43.8	152.7	121.3	9.2	44.3	25.7
59	18.8	148.2	117.2	9.1	42.1	5.8
59	25.0	154.0	122.5	9.2	44.9	9.5
59	31.3	157.9	126.0	9.3	46.7	14.0
59	37.5	160.5	128.5	9.4	47.9	19.2
59	43.8	162.6	130.4	9.5	48.9	25.2
68	18.8	169.2	136.7	9.5	53.1	5.4
68	25.0	176.0	142.9	9.7	56.2	8.9
68	31.3	180.6	147.1	9.8	58.3	13.1
68	37.5	183.7	150.0	9.9	59.8	18.0
68	43.8	186.1	152.2	9.9	60.8	23.5
77	18.8	182.1	148.5	9.8	58.7	5.3
77	25.0	189.9	155.6	10.0	62.1	8.7
77	31.3	195.0	160.4	10.2	64.4	12.8
77	37.5	198.6	163.7	10.3	66.0	17.6
77	43.8	201.4	166.2	10.3	67.1	23.0

Table 88. Heating capacities 12.5 tons (gross) - GEH150 (continued)

EWT	GPM	Gross Cap Mbtuh	Absorb Mbtuh	Comp Power kW	LWT	Feet Head
86	18.8	203.2	167.8	10.4	67.5	5.1
86	25.0	212.5	176.4	10.6	71.3	8.4
86	31.3	218.8	182.2	10.7	73.9	12.4
86	37.5	223.2	186.2	10.9	75.7	16.9
86	43.8	226.6	189.3	10.9	77.0	22.2

Note: Performance data is tabulated for heating at 68°F DB entering air. For conditions other than what is tabulated, multipliers must be used to correct performance. See the fan correction factors table for CFM other than rated and the heating correction factors for variations in entering air temperature. WLHP data shown is performance data at ANSI/AHRI/ASHRAE/ISO13256-1. For ANSI/AHRI/ASHRAE/ISO13256-1 GLHP conditions, apply 15% methanol by volume per the antifreeze correction factors found in the performance correction tables. Rated GPM: 37.5 Minimum CFM 4000; Nominal CFM 5000, Maximum CFM 6000.

Table 89. Fan correction factors 12.5 tons - GEH150

Entering CFM	Cooling Capacity	Sensible Capacity	Cooling Input Watts	Heating Capacity	Heating Input Watts
3500	0.958	0.885	1.001	0.983	1.107
3938	0.981	0.943	1.000	0.993	1.047
4375	1.000	1.000	1.000	1.000	1.000
4813	1.016	1.056	1.000	1.006	0.962
5250	1.031	1.112	0.999	1.011	0.931

Table 90. Correction factors for variation in entering air temperature 12.5 tons, GEH150

Cooling Entering Air WB°F	Cooling Capacity	Cooling Input Watts	Sensible vs. Entering Dry Bulb Multipliers					Heating Entering Air DB°F	Heating Capacity	Heating Input Watts
			65.6	70.6	75.6	80.6	85.6			
44.5	0.917	1.047	1.014	1.034	1.098	1.163	1.232	43	0.725	0.725
49.4	0.917	1.037	0.972	1.034	1.098	1.163	1.232	48	0.777	0.777
56.3	0.918	1.028	0.810	0.997	1.099	1.165	1.232	53	0.830	0.831
60.3	0.919	1.019	0.661	0.848	1.035	1.166	1.233	58	0.885	0.886
63.2	0.950	1.009	0.551	0.739	0.926	1.114	1.234	63	0.942	0.942
66.2	1.000	1.000	—	0.625	0.813	1.000	1.188	68	1.000	1.000
72.1	1.114	0.991	—	—	0.585	0.774	0.962	73	1.060	1.059
77.1	1.217	0.981	—	—	—	0.576	0.766	78	1.123	1.120

Note: * = Sensible equals total capacity

Table 91. Cooling capacities 12.5 tons (gross) - GEV150

EWT	GPM	Gross Cap Mbtuh	Gross Sen Mbtuh	SHR	Comp Power kW	Reject Mbtuh	LWT	Feet Head
45	18.8	181.2	135.9	0.75	5.4	199.8	66.3	6.1
45	25.0	183.5	136.9	0.75	5.0	200.6	61.1	9.9
45	31.3	184.8	137.4	0.74	4.8	201.0	57.9	14.6
45	37.5	185.6	137.8	0.74	4.6	201.3	55.8	20.0
45	43.8	186.2	138.0	0.74	4.5	201.5	54.3	26.2
55	18.8	175.8	133.6	0.76	6.5	197.9	76.0	5.9
55	25.0	178.0	134.5	0.76	6.0	198.6	70.9	9.7
55	31.3	179.3	135.1	0.75	5.8	199.0	67.7	14.3
55	37.5	180.1	135.4	0.75	5.6	199.3	65.6	19.6
55	43.8	180.6	135.6	0.75	5.5	199.5	64.1	25.7
59	18.8	173.6	132.7	0.76	6.9	197.1	79.8	5.8



Performance Data

Table 91. Cooling capacities 12.5 tons (gross) - GEV150 (continued)

EWT	GPM	Gross Cap Mbtuh	Gross Sen Mbtuh	SHR	Comp Power kW	Reject Mbtuh	LWT	Feet Head
59	25.0	175.8	133.6	0.76	6.5	197.8	74.8	9.5
59	31.3	177.1	134.1	0.76	6.2	198.3	71.6	14.1
59	37.5	177.8	134.5	0.76	6.1	198.5	69.6	19.3
59	43.8	178.4	134.7	0.76	6.0	198.7	68.1	25.2
68	18.8	168.6	130.6	0.77	7.9	195.4	88.6	5.5
68	25.0	170.8	131.5	0.77	7.4	196.1	83.6	8.9
68	31.3	172.0	132.0	0.77	7.2	196.5	80.5	13.2
68	37.5	172.8	132.3	0.77	7.0	196.8	78.4	18.0
68	43.8	173.3	132.6	0.76	6.9	197.0	76.9	23.6
77	18.8	163.8	128.6	0.79	8.9	194.0	97.4	5.3
77	25.0	165.6	129.3	0.78	8.5	194.4	92.4	8.7
77	31.3	166.6	129.7	0.78	8.2	194.6	89.4	12.9
77	37.5	167.2	130.0	0.78	8.1	194.7	87.3	17.6
77	43.8	167.6	130.1	0.78	8.0	194.8	85.9	23.0
86	18.8	157.7	126.0	0.80	9.9	191.6	106.3	5.1
86	25.0	159.9	126.9	0.79	9.5	192.3	101.3	8.4
86	31.3	161.1	127.5	0.79	9.3	192.7	98.3	12.4
86	37.5	161.8	127.8	0.79	9.1	193.0	96.3	17.0
86	43.8	162.3	128.0	0.79	9.0	193.1	94.8	22.2
95	18.8	151.7	123.6	0.81	11.1	189.6	115.0	3.8
95	25.0	153.8	124.5	0.81	10.7	190.3	110.1	6.4
95	31.3	155.0	125.0	0.81	10.4	190.7	107.1	9.5
95	37.5	155.8	125.3	0.80	10.3	190.9	105.1	13.0
95	43.8	156.3	125.5	0.80	10.2	191.0	103.7	17.1
105	18.8	144.7	120.8	0.83	12.5	187.4	124.7	3.7
105	25.0	146.8	121.7	0.83	12.1	188.0	119.9	6.2
105	31.3	148.0	122.1	0.83	11.8	188.4	116.9	9.2
105	37.5	148.7	122.4	0.82	11.7	188.6	115.0	12.7
105	43.8	149.2	122.6	0.82	11.6	188.7	113.5	16.7
115	18.8	137.5	117.8	0.86	14.0	185.3	134.4	3.6
115	25.0	139.5	118.7	0.85	13.6	185.8	129.6	6.0
115	31.3	140.5	119.1	0.85	13.4	186.1	126.7	9.0
115	37.5	141.2	119.4	0.85	13.2	186.3	124.8	12.4
115	43.8	141.6	119.6	0.84	13.1	186.4	123.4	16.2
120	18.8	133.7	116.4	0.87	14.8	184.2	139.2	3.6
120	25.0	135.6	117.2	0.86	14.4	184.7	134.5	6.0
120	31.3	136.7	117.6	0.86	14.2	185.0	131.6	8.9
120	37.5	137.3	117.8	0.86	14.0	185.2	129.7	12.2

Table 91. Cooling capacities 12.5 tons (gross) - GEV150 (continued)

EWT	GPM	Gross Cap Mbtuh	Gross Sen Mbtuh	SHR	Comp Power kW	Reject Mbtuh	LWT	Feet Head
120	43.8	137.7	118.0	0.86	14.0	185.3	128.3	16.0

Note: Performance data is tabulated for cooling at 80.6°F DB/66.2°F WB entering air. For conditions other than what is tabulated, multipliers must be used to correct performance. See the fan correction factors table for CFM other than rated and the cooling correction factors for variations in entering air temperature. WLHP data is performance data at ANSI/AHRI/ASHRAE/ISO13256-1. For ANSI/AHRI/ASHRAE/ISO13256-1 GLHP conditions, apply 15% methanol by volume per the antifreeze correction factors found in the performance correction tables. The minimum gpm/ton is 3.0 when the EWT is greater than 115°F and the EAT is less than 67°F WB. Rated GPM: 37.5 Minimum CFM 4000; Nominal CFM 5000, Maximum CFM 6000.

Table 92. Heating capacities 12.5 tons (gross) - GEV150

EWT	GPM	Gross Cap Mbtuh	Absorb Mbtuh	Comp Power kW	LWT	Feet Head
25	18.8	100.9	73.4	8.1	16.3	8.2
25	25.0	104.2	76.4	8.2	18.2	13.4
25	31.3	106.4	78.4	8.2	19.4	19.8
25	37.5	107.9	79.8	8.3	20.3	27.1
25	43.8	109.1	80.8	8.3	20.9	35.5
32	18.8	111.3	82.8	8.3	22.2	7.9
32	25.0	115.2	86.3	8.5	24.4	13.0
32	31.3	117.7	88.7	8.5	25.7	19.2
32	37.5	119.5	90.3	8.6	26.7	26.3
32	43.8	120.9	91.5	8.6	27.4	34.4
45	18.8	133.7	103.4	8.9	33.7	6.1
45	25.0	138.5	107.7	9.0	36.2	9.9
45	31.3	141.7	110.7	9.1	37.8	14.6
45	37.5	143.9	112.7	9.2	38.9	20.0
45	43.8	145.7	114.2	9.2	39.7	26.2
55	18.8	142.1	111.0	9.1	37.9	5.9
55	25.0	147.4	115.9	9.3	40.5	9.7
55	31.3	151.0	119.1	9.4	42.2	14.3
55	37.5	153.5	121.3	9.4	43.4	19.6
55	43.8	155.4	123.0	9.5	44.2	25.7
59	18.8	150.8	118.9	9.4	42.1	5.8
59	25.0	156.6	124.2	9.5	44.8	9.5
59	31.3	160.6	127.8	9.6	46.6	14.1
59	37.5	163.3	130.3	9.7	47.9	19.3
59	43.8	165.4	132.1	9.7	48.8	25.2
68	18.8	171.1	137.5	9.9	53.1	5.5
68	25.0	178.0	143.7	10.0	56.2	8.9
68	31.3	182.5	147.8	10.2	58.3	13.2
68	37.5	185.6	150.7	10.3	59.8	18.0
68	43.8	188.0	152.8	10.3	60.8	23.6
77	18.8	184.1	149.3	10.2	58.7	5.3
77	25.0	191.8	156.2	10.4	62.2	8.7
77	31.3	196.9	160.9	10.6	64.4	12.9
77	37.5	200.5	164.1	10.7	66.0	17.6
77	43.8	203.2	166.5	10.7	67.2	23.0



Performance Data

Table 92. Heating capacities 12.5 tons (gross) - GEV150 (continued)

EWT	GPM	Gross Cap Mbtuh	Absorb Mbtuh	Comp Power kW	LWT	Feet Head
86	18.8	205.0	168.2	10.8	67.5	5.1
86	25.0	214.3	176.6	11.1	71.4	8.4
86	31.3	220.5	182.2	11.2	73.9	12.4
86	37.5	224.9	186.1	11.4	75.7	17.0
86	43.8	228.1	189.1	11.4	77.0	22.2

Note: Performance data is tabulated for heating at 68°F DB entering air. For conditions other than what is tabulated, multipliers must be used to correct performance. See the fan correction factors table for CFM other than rated and the heating correction factors for variations in entering air temperature. WLHP data is performance data at ANSI/AHRI/ASHRAE/ISO13256-1. For ANSI/AHRI/ASHRAE/ISO13256-1 GLHP conditions, apply 15% methanol by volume per the antifreeze correction factors found in the performance correction tab. Rated GPM: 37.5 Minimum CFM 4000; Nominal CFM 5000, Maximum CFM 6000.

Table 93. Fan correction factors 12.5 tons - GEV150

Entering CFM	Cooling Capacity	Sensible Capacity	Cooling Input Watts	Heating Capacity	Heating Input Watts
3500	0.958	0.884	1.001	0.984	1.102
3938	0.981	0.943	1.000	0.993	1.045
4375	1.000	1.000	1.000	1.000	1.000
4813	1.016	1.057	1.000	1.006	0.963
5250	1.031	1.114	0.999	1.011	0.933

Table 94. Correction factors for variation in entering air temperature 12.5 tons, GEV150

Cooling Entering Air WB°F	Cooling Capacity	Cooling Input Watts	Sensible vs. Entering Dry Bulb Multipliers					Heating Entering Air DB°F	Heating Capacity	Heating Input Watts
			65.6	70.6	75.6	80.6	85.6			
44.5	0.919	1.045	0.799	0.000	1.097	1.163	1.233	43	0.733	0.733
49.4	0.919	1.036	0.766	1.033	1.097	1.163	1.233	48	0.784	0.784
56.3	0.920	1.027	0.639	0.997	1.099	1.165	1.233	53	0.836	0.836
60.3	0.921	1.018	0.521	0.847	1.036	1.167	1.235	58	0.889	0.889
63.2	0.951	1.009	0.434	0.738	0.926	1.114	1.236	63	0.944	0.944
66.2	1.000	1.000	—	0.623	0.812	1.000	1.189	68	1.000	1.000
72.1	1.112	0.991	—	—	0.583	0.772	0.961	73	1.058	1.058
77.1	1.216	0.982	—	—	—	0.575	0.766	78	1.118	1.117

Note: * = Sensible equals total capacity

Cooling and Heating Capacities 15 tons

Table 95. Cooling capacities 15 tons (gross) - GEH180

EWT	GPM	Gross Cap Mbtuh	Gross Sen Mbtuh	SHR	Comp Power kW	Reject Mbtuh	LWT	Feet Head
45	22.5	219.2	163.8	0.75	7.5	244.8	66.6	8.3
45	30.0	221.8	164.9	0.74	7.0	245.8	61.3	13.6
45	37.5	223.3	165.5	0.74	6.8	246.4	58.0	20.0
45	45.0	224.1	165.9	0.74	6.6	246.7	55.9	27.5
45	52.5	224.7	166.2	0.74	6.5	247.0	54.3	35.9
55	22.5	212.8	161.1	0.76	8.6	242.1	76.3	8.1
55	30.0	215.3	162.1	0.75	8.1	243.1	71.1	13.3
55	37.5	216.7	162.8	0.75	7.9	243.6	67.9	19.6
55	45.0	217.6	163.1	0.75	7.7	244.0	65.8	26.9

Table 95. Cooling capacities 15 tons (gross) - GEH180 (continued)

EWT	GPM	Gross Cap Mbtuh	Gross Sen Mbtuh	SHR	Comp Power kW	Reject Mbtuh	LWT	Feet Head
55	52.5	218.2	163.4	0.75	7.6	244.2	64.2	35.2
59	22.5	210.1	159.9	0.76	9.1	241.0	80.2	7.9
59	30.0	212.6	161.0	0.76	8.6	242.0	75.0	13.1
59	37.5	214.1	161.6	0.75	8.4	242.6	71.8	19.3
59	45.0	215.0	162.0	0.75	8.2	242.9	69.7	26.4
59	52.5	215.6	162.3	0.75	8.1	243.1	68.2	34.5
68	22.5	203.9	157.3	0.77	10.2	238.6	89.0	7.4
68	30.0	206.5	158.4	0.77	9.7	239.6	83.8	12.2
68	37.5	207.9	159.0	0.76	9.4	240.1	80.7	18.0
68	45.0	208.8	159.4	0.76	9.3	240.4	78.6	24.7
68	52.5	209.4	159.6	0.76	9.2	240.7	77.1	32.3
77	22.5	198.0	154.9	0.78	11.3	236.6	98.0	7.3
77	30.0	200.6	156.0	0.78	10.8	237.6	92.8	12.0
77	37.5	202.1	156.6	0.78	10.6	238.1	89.7	17.6
77	45.0	203.0	157.0	0.77	10.4	238.4	87.6	24.1
77	52.5	203.6	157.2	0.77	10.3	238.6	86.1	31.6
86	22.5	189.3	151.4	0.80	12.6	232.2	106.7	7.0
86	30.0	192.0	152.5	0.79	12.1	233.1	101.6	11.5
86	37.5	193.5	153.1	0.79	11.8	233.6	98.5	17.0
86	45.0	194.3	153.5	0.79	11.6	233.9	96.4	23.3
86	52.5	194.9	153.7	0.79	11.5	234.1	94.9	30.5
95	22.5	182.2	148.5	0.82	14.0	229.8	115.4	5.2
95	30.0	184.8	149.6	0.81	13.4	230.6	110.4	8.7
95	37.5	186.2	150.1	0.81	13.1	231.1	107.3	12.9
95	45.0	187.1	150.5	0.80	13.0	231.3	105.3	17.7
95	52.5	187.7	150.7	0.80	12.9	231.5	103.8	23.3
105	22.5	173.9	145.2	0.83	15.6	227.2	125.2	5.1
105	30.0	176.4	146.2	0.83	15.1	227.9	120.2	8.4
105	37.5	177.8	146.7	0.83	14.8	228.3	117.2	12.5
105	45.0	178.6	147.1	0.82	14.6	228.6	115.2	17.2
105	52.5	179.2	147.3	0.82	14.5	228.7	113.7	22.6
115	22.5	165.3	141.7	0.86	17.4	224.7	134.9	4.9
115	30.0	167.7	142.7	0.85	16.9	225.3	130.0	8.2
115	37.5	168.9	143.2	0.85	16.6	225.7	127.0	12.2
115	45.0	169.7	143.5	0.85	16.5	225.9	125.0	16.8
115	52.5	170.2	143.7	0.84	16.4	226.0	123.6	22.0
120	22.5	160.9	140.0	0.87	18.3	223.4	139.8	4.8
120	30.0	163.1	140.9	0.86	17.9	224.0	134.9	8.1
120	37.5	164.4	141.4	0.86	17.6	224.4	131.9	12.0
120	45.0	165.1	141.7	0.86	17.4	224.5	130.0	16.6



Performance Data

Table 95. Cooling capacities 15 tons (gross) - GEH180 (continued)

EWT	GPM	Gross Cap Mbtuh	Gross Sen Mbtuh	SHR	Comp Power kW	Reject Mbtuh	LWT	Feet Head
120	52.5	165.6	141.9	0.86	17.3	224.7	128.5	21.8

Note: Performance data is tabulated for cooling at 80.6°F DB/66.2°F WB entering air. For conditions other than what is tabulated, multipliers must be used to correct performance. See the fan correction factors table for CFM other than rated and the cooling correction factors for variations in entering air temperature. WLHP data is performance data at ANSI/AHRI/ASHRAE/ISO13256-1. For ANSI/AHRI/ASHRAE/ISO13256-1 GLHP conditions, apply 15% methanol by volume per the antifreeze correction factors found in the performance correction tables. The minimum gpm/ton is 3.0 when the EWT is greater than 115°F and the EAT is less than 67°F WB. Rated GPM: 45.0 Minimum CFM 4800; Nominal CFM 6000, Maximum CFM 7200.

Table 96. Heating capacities 15 tons (gross) - GEH180

EWT	GPM	Gross Cap Mbtuh	Absorb Mbtuh	Comp Power kW	LWT	Feet Head
25	22.5	121.9	88.4	9.8	16.3	11.1
25	30.0	125.9	92.0	10.0	18.2	18.3
25	37.5	128.6	94.4	10.0	19.4	27.0
25	45.0	130.5	96.1	10.1	20.3	37.1
25	52.5	131.9	97.4	10.1	20.9	48.6
32	22.5	134.1	99.4	10.2	22.3	10.8
32	30.0	138.8	103.7	10.3	24.4	17.8
32	37.5	141.9	106.5	10.4	25.7	26.2
32	45.0	144.1	108.5	10.4	26.7	36.0
32	52.5	145.8	110.1	10.5	27.4	47.1
45	22.5	158.3	121.7	10.7	33.9	8.3
45	30.0	164.0	127.0	10.9	36.4	13.6
45	37.5	167.8	130.4	11.0	37.9	20.0
45	45.0	170.5	132.8	11.0	39.0	27.5
45	52.5	172.5	134.7	11.1	39.8	35.9
55	22.5	168.1	130.7	11.0	38.1	8.1
55	30.0	174.4	136.5	11.1	40.7	13.3
55	37.5	178.6	140.3	11.2	42.4	19.6
55	45.0	181.6	143.0	11.3	43.5	26.9
55	52.5	183.8	145.0	11.4	44.4	35.2
59	22.5	178.2	139.9	11.2	42.3	7.9
59	30.0	185.2	146.2	11.4	45.0	13.1
59	37.5	189.8	150.4	11.5	46.8	19.3
59	45.0	193.1	153.4	11.6	48.0	26.4
59	52.5	195.5	155.6	11.7	48.9	34.5
68	22.5	200.4	160.4	11.7	53.5	7.4
68	30.0	208.5	167.8	11.9	56.6	12.2
68	37.5	213.8	172.6	12.1	58.6	18.0
68	45.0	217.6	176.1	12.2	60.0	24.7
68	52.5	220.5	178.7	12.3	61.0	32.3
77	22.5	215.5	174.2	12.1	59.2	7.3
77	30.0	224.6	182.4	12.4	62.5	12.0
77	37.5	230.6	187.9	12.5	64.7	17.6
77	45.0	234.9	191.8	12.7	66.3	24.1
77	52.5	238.2	194.7	12.7	67.4	31.6

Table 96. Heating capacities 15 tons (gross) - GEH180 (continued)

EWT	GPM	Gross Cap Mbtuh	Absorb Mbtuh	Comp Power kW	LWT	Feet Head
86	22.5	240.1	196.5	12.8	68.0	7.0
86	30.0	251.1	206.5	13.1	71.8	11.5
86	37.5	258.3	213.0	13.3	74.3	17.0
86	45.0	263.5	217.6	13.4	76.0	23.3
86	52.5	267.3	221.1	13.5	77.3	30.5

Note: Performance data is tabulated for heating at 68°F DB entering air. For conditions other than what is tabulated, multipliers must be used to correct performance. See the fan correction factors table for CFM other than rated and the heating correction factors for variations in entering air temperature. WLHP data is performance data at ANSI/AHRI/ASHRAE/ISO13256-1. For ANSI/AHRI/ASHRAE/ISO13256-1 GLHP conditions, apply 15% methanol by volume per the antifreeze correction factors found in the performance correction tables. Rated GPM: 45.0 Minimum CFM 4800; Nominal CFM 6000, Maximum CFM 7200.

Table 97. Fan correction factors 15 tons - GEH180

Entering CFM	Cooling Capacity	Sensible Capacity	Cooling Input Watts	Heating Capacity	Heating Input Watts
4200	0.959	0.885	0.998	0.984	1.093
4725	0.981	0.943	0.999	0.993	1.041
5250	1.000	1.000	1.000	1.000	1.000
5775	1.016	1.057	1.001	1.006	0.967
6300	1.030	1.113	1.001	1.011	0.940

Table 98. Correction factors for variation in entering air temperature 15 tons, GEH180

Cooling Entering Air WB°F	Cooling Capacity	Cooling Input Watts	Sensible vs. Entering Dry Bulb Multipliers					Heating Entering Air DB°F	Heating Capacity	Heating Input Watts
			65.6	70.6	75.6	80.6	85.6			
44.5	0.924	1.048	1.021	1.041	1.105	1.170	1.239	43	0.751	0.752
49.4	0.924	1.038	0.979	1.041	1.105	1.170	1.239	48	0.798	0.799
56.3	0.926	1.029	0.811	1.001	1.107	1.172	1.239	53	0.846	0.846
60.3	0.927	1.019	0.661	0.849	1.038	1.173	1.241	58	0.895	0.896
63.2	0.954	1.009	0.550	0.739	0.926	1.117	1.242	63	0.947	0.947
66.2	1.000	1.000	—	0.623	0.811	1.000	1.191	68	1.000	1.000
72.1	1.108	0.991	—	—	0.581	0.771	0.960	73	1.055	1.055
77.1	1.208	0.981	—	—	—	0.572	0.763	78	1.112	1.112

Note: * = Sensible equals total capacity

Table 99. Cooling capacities 15 tons (gross) - GEV180

EWT	GPM	Gross Cap Mbtuh	Gross Sen Mbtuh	SHR	Comp Power kW	Reject Mbtuh	LWT	Feet Head
45	22.5	219.2	163.8	0.75	7.4	244.5	66.7	8.3
45	30.0	221.8	164.9	0.74	7.0	245.6	61.4	13.6
45	37.5	223.3	165.6	0.74	6.7	246.2	58.1	20.1
45	45.0	224.2	166.0	0.74	6.5	246.5	56.0	27.6
45	52.5	224.8	166.2	0.74	6.4	246.7	54.4	36.0
55	22.5	212.8	161.1	0.76	8.5	241.9	76.4	8.1
55	30.0	215.4	162.2	0.75	8.1	242.9	71.1	13.4
55	37.5	216.9	162.8	0.75	7.8	243.5	67.9	19.7
55	45.0	217.8	163.2	0.75	7.6	243.8	65.8	27.0
55	52.5	218.4	163.5	0.75	7.5	244.1	64.3	35.3
59	22.5	210.2	160.0	0.76	9.0	240.9	80.2	8.0



Performance Data

Table 99. Cooling capacities 15 tons (gross) - GEV180 (continued)

EWT	GPM	Gross Cap Mbtuh	Gross Sen Mbtuh	SHR	Comp Power kW	Reject Mbtuh	LWT	Feet Head
59	30.0	212.8	161.1	0.76	8.5	241.9	75.0	13.1
59	37.5	214.2	161.7	0.75	8.3	242.4	71.9	19.3
59	45.0	215.2	162.1	0.75	8.1	242.8	69.7	26.5
59	52.5	215.8	162.4	0.75	8.0	243.0	68.2	34.6
68	22.5	204.1	157.5	0.77	10.1	238.7	88.9	7.5
68	30.0	206.7	158.5	0.77	9.6	239.6	83.8	12.3
68	37.5	208.2	159.2	0.76	9.4	240.1	80.7	18.1
68	45.0	209.1	159.6	0.76	9.2	240.5	78.6	24.8
68	52.5	209.7	159.8	0.76	9.1	240.7	77.1	32.4
77	22.5	198.1	154.9	0.78	11.3	236.7	97.8	7.3
77	30.0	200.3	155.8	0.78	10.8	237.2	92.7	12.0
77	37.5	201.6	156.4	0.78	10.5	237.5	89.6	17.6
77	45.0	202.3	156.7	0.77	10.4	237.7	87.5	24.2
77	52.5	202.8	156.9	0.77	10.3	237.8	86.0	31.6
86	22.5	190.4	151.8	0.80	12.6	233.3	106.7	7.0
86	30.0	193.1	152.9	0.79	12.0	234.2	101.6	11.6
86	37.5	194.6	153.5	0.79	11.8	234.7	98.5	17.0
86	45.0	195.5	153.9	0.79	11.6	235.0	96.5	23.4
86	52.5	196.1	154.1	0.79	11.5	235.2	95.0	30.5
95	22.5	183.2	148.9	0.81	13.9	230.8	115.5	5.2
95	30.0	185.8	149.9	0.81	13.4	231.6	110.4	8.7
95	37.5	187.3	150.5	0.80	13.1	232.1	107.4	12.9
95	45.0	188.2	150.9	0.80	13.0	232.4	105.3	17.7
95	52.5	188.8	151.1	0.80	12.8	232.6	103.9	23.3
105	22.5	174.9	145.5	0.83	15.6	228.1	125.2	5.1
105	30.0	177.4	146.5	0.83	15.1	228.9	120.2	8.4
105	37.5	178.8	147.1	0.82	14.8	229.3	117.2	12.5
105	45.0	179.7	147.4	0.82	14.6	229.6	115.2	17.2
105	52.5	180.2	147.7	0.82	14.5	229.7	113.7	22.6
115	22.5	166.2	142.0	0.85	17.4	225.6	134.9	4.9
115	30.0	168.6	143.0	0.85	16.9	226.2	130.0	8.2
115	37.5	169.9	143.5	0.84	16.6	226.6	127.0	12.2
115	45.0	170.7	143.8	0.84	16.5	226.8	125.0	16.8
115	52.5	171.2	144.0	0.84	16.3	226.9	123.6	22.0
120	22.5	161.8	140.3	0.87	18.3	224.3	139.7	4.9
120	30.0	164.0	141.1	0.86	17.8	224.9	134.8	8.1
120	37.5	165.3	141.7	0.86	17.6	225.3	131.9	12.0
120	45.0	166.0	142.0	0.86	17.4	225.5	129.9	16.6

Table 99. Cooling capacities 15 tons (gross) - GEV180 (continued)

EWT	GPM	Gross Cap Mbtuh	Gross Sen Mbtuh	SHR	Comp Power kW	Reject Mbtuh	LWT	Feet Head
120	52.5	166.5	142.2	0.85	17.3	225.6	128.5	21.8

Note: Performance data is tabulated for cooling at 80.6°F DB/66.2°F WB entering air. For conditions other than what is tabulated, multipliers must be used to correct performance. See the fan correction factors table for CFM other than rated and the cooling correction factors for variations in entering air temperature. WLHP data is performance data at ANSI/AHRI/ASHRAE/ISO13256-1. For ANSI/AHRI/ASHRAE/ISO13256-1 GLHP conditions, apply 15% methanol by volume per the antifreeze correction factors found in the performance correction tables. The minimum gpm/ton is 3.0 when the EWT is greater than 115°F and the EAT is less than 67°F WB. Rated GPM: 45.0 Minimum CFM 4800; Nominal CFM 6000, Maximum CFM 7200.

Table 100. Heating capacities 15 tons (gross) - GEV180

EWT	GPM	Gross Cap Mbtuh	Absorb Mbtuh	Comp Power kW	LWT	Feet Head
25	22.5	116.4	82.4	10.0	16.9	11.2
25	30.0	120.1	85.7	10.1	18.7	18.4
25	37.5	122.5	87.9	10.2	19.8	27.1
25	45.0	124.2	89.4	10.2	20.6	37.2
25	52.5	125.5	90.5	10.2	21.2	48.7
32	22.5	128.9	93.6	10.3	22.8	10.8
32	30.0	133.3	97.6	10.5	24.8	17.8
32	37.5	136.2	100.2	10.6	26.1	26.3
32	45.0	138.2	102.0	10.6	27.0	36.1
32	52.5	139.7	103.3	10.7	27.7	47.2
45	22.5	156.9	119.1	11.1	34.2	8.3
45	30.0	162.7	124.3	11.3	36.5	13.6
45	37.5	166.5	127.7	11.4	38.1	20.1
45	45.0	169.1	130.1	11.4	39.1	27.6
45	52.5	171.2	131.9	11.5	39.9	36.0
55	22.5	167.2	128.4	11.4	38.4	8.1
55	30.0	173.7	134.2	11.6	40.9	13.4
55	37.5	177.9	138.0	11.7	42.5	19.7
55	45.0	180.9	140.7	11.8	43.6	27.0
55	52.5	183.2	142.7	11.9	44.5	35.3
59	22.5	177.9	138.0	11.7	42.5	8.0
59	30.0	185.1	144.4	11.9	45.2	13.1
59	37.5	189.8	148.7	12.1	46.9	19.3
59	45.0	193.1	151.7	12.2	48.1	26.5
59	52.5	195.6	153.9	12.2	49.0	34.6
68	22.5	204.6	162.1	12.5	53.4	7.5
68	30.0	213.0	169.6	12.7	56.5	12.3
68	37.5	218.4	174.5	12.9	58.5	18.1
68	45.0	222.1	177.8	13.0	59.9	24.8
68	52.5	224.8	180.2	13.1	61.0	32.4
77	22.5	220.7	176.6	13.0	59.0	7.3
77	30.0	230.2	185.0	13.2	62.4	12.0
77	37.5	236.3	190.5	13.4	64.6	17.6
77	45.0	240.5	194.2	13.6	66.1	24.2
77	52.5	243.5	196.9	13.7	67.3	31.6



Performance Data

Table 100. Heating capacities 15 tons (gross) - GEV180 (continued)

EWT	GPM	Gross Cap Mbtuh	Absorb Mbtuh	Comp Power kW	LWT	Feet Head
86	22.5	247.1	200.1	13.8	67.7	7.0
86	30.0	258.6	210.3	14.1	71.5	11.6
86	37.5	266.0	217.0	14.4	74.0	17.0
86	45.0	271.1	221.5	14.5	75.8	23.4
86	52.5	274.8	224.8	14.7	77.1	30.5

Note: Performance data is tabulated for heating at 68°F DB entering air. For conditions other than what is tabulated, multipliers must be used to correct performance. See the fan correction factors table for CFM other than rated and the heating correction factors for variations in entering air temperature. WLHP data shown is performance data at ANSI/AHRI/ASHRAE/ISO13256-1. For ANSI/AHRI/ASHRAE/ISO13256-1 GLHP conditions, apply 15% methanol by volume per the antifreeze correction factors found in the performance correction tables. Rated GPM: 45.0 Minimum CFM 4800; Nominal CFM 6000, Maximum CFM 7200.

Table 101. Fan correction factors 15 tons - GEV180

Entering CFM	Cooling Capacity	Sensible Capacity	Cooling Input Watts	Heating Capacity	Heating Input Watts
4200	0.958	0.885	0.998	0.985	1.096
4725	0.981	0.943	0.999	0.993	1.042
5250	1.000	1.000	1.000	1.000	1.000
5775	1.016	1.057	1.001	1.006	0.966
6300	1.031	1.113	1.001	1.010	0.938

Table 102. Correction factors for variation in entering air temperature 15 tons, GEV180

Cooling Entering Air WB°F	Cooling Capacity	Cooling Input Watts	Sensible vs. Entering Dry Bulb Multipliers					Heating Entering Air DB°F	Heating Capacity	Heating Input Watts
			65.6	70.6	75.6	80.6	85.6			
44.5	0.919	1.044	0.800	0.000	1.102	1.168	1.237	48	0.752	0.753
49.4	0.919	1.035	0.767	1.037	1.102	1.168	1.237	53	0.798	0.799
56.3	0.921	1.026	0.638	0.998	1.104	1.170	1.237	58	0.846	0.847
60.3	0.922	1.018	0.521	0.848	1.037	1.171	1.238	63	0.896	0.896
63.2	0.952	1.009	0.434	0.739	0.926	1.115	1.239	68	0.947	0.947
66.2	1.000	1.000	—	0.625	0.812	1.000	1.189	73	1.000	1.000
72.1	1.111	0.991	—	—	0.584	0.773	0.961	78	1.055	1.054
77.1	1.213	0.983	—	—	—	0.575	0.765	83	1.112	1.111

Note: * = Sensible equals total capacity

Cooling and Heating Capacities 20 tons

Table 103. Cooling capacities 20 tons (gross) - GEV240

EWT	GPM	Gross Cap Mbtuh	Gross Sen Mbtuh	SHR	Comp Power kW	Reject Mbtuh	LWT	Feet Head
45	30.0	293.6	217.9	0.74	7.8	320.2	66.4	4.9
45	40.0	297.1	219.4	0.74	7.0	320.8	61.1	8.1
45	50.0	299.0	220.3	0.74	6.5	321.1	57.9	11.9
45	60.0	300.2	220.8	0.74	6.2	321.3	55.8	16.3
45	70.0	301.0	221.2	0.73	6.0	321.3	54.2	21.4
55	30.0	285.3	214.2	0.75	9.6	318.0	76.1	4.8
55	40.0	288.7	215.7	0.75	8.9	318.9	70.9	7.9
55	50.0	290.6	216.6	0.75	8.4	319.4	67.8	11.7
55	60.0	291.8	217.1	0.74	8.1	319.6	65.7	16.0

Table 103. Cooling capacities 20 tons (gross) - GEV240 (continued)

EWT	GPM	Gross Cap Mbtuh	Gross Sen Mbtuh	SHR	Comp Power kW	Reject Mbtuh	LWT	Feet Head
55	70.0	292.6	217.4	0.74	8.0	319.8	64.2	20.9
59	30.0	281.8	212.6	0.75	10.3	316.9	80.0	4.7
59	40.0	285.3	214.2	0.75	9.6	318.0	74.9	7.8
59	50.0	287.2	215.0	0.75	9.2	318.5	71.7	11.4
59	60.0	288.4	215.6	0.75	8.9	318.8	69.6	15.7
59	70.0	289.2	215.9	0.75	8.7	319.0	68.1	20.5
68	30.0	273.9	209.1	0.76	11.8	314.3	88.8	4.4
68	40.0	277.4	210.6	0.76	11.2	315.4	83.7	7.3
68	50.0	279.3	211.5	0.76	10.8	316.1	80.6	10.7
68	60.0	280.5	212.0	0.76	10.5	316.4	78.5	14.7
68	70.0	281.3	212.4	0.76	10.4	316.7	77.0	19.2
77	30.0	266.1	206.7	0.78	13.4	311.8	97.7	4.3
77	40.0	269.1	208.0	0.77	12.8	312.6	92.6	7.1
77	50.0	270.7	208.7	0.77	12.4	313.1	89.5	10.5
77	60.0	271.6	209.1	0.77	12.2	313.3	87.5	14.3
77	70.0	272.2	209.3	0.77	12.1	313.4	86.0	18.8
86	30.0	257.0	203.1	0.79	14.9	307.9	106.5	4.2
86	40.0	260.5	204.6	0.79	14.3	309.3	101.5	6.9
86	50.0	262.3	205.4	0.78	14.0	310.0	98.4	10.1
86	60.0	263.4	205.8	0.78	13.8	310.4	96.4	13.9
86	70.0	264.1	206.1	0.78	13.7	310.7	94.9	18.1
95	30.0	247.4	199.1	0.80	16.6	304.1	115.2	4.0
95	40.0	250.9	200.6	0.80	16.0	305.4	110.3	6.7
95	50.0	252.7	201.3	0.80	15.7	306.1	107.2	9.9
95	60.0	253.8	201.8	0.80	15.5	306.5	105.2	13.7
95	70.0	254.4	202.1	0.79	15.4	306.8	103.8	17.9
105	30.0	236.4	194.5	0.82	18.6	299.8	124.9	3.9
105	40.0	239.7	195.9	0.82	18.0	301.1	120.0	6.5
105	50.0	241.4	196.6	0.81	17.7	301.7	117.0	9.6
105	60.0	242.4	197.1	0.81	17.5	302.1	115.0	13.3
105	70.0	243.0	197.3	0.81	17.4	302.3	113.6	17.4
115	30.0	224.8	189.8	0.84	20.8	295.7	134.5	3.8
115	40.0	227.9	191.1	0.84	20.2	296.7	129.7	6.3
115	50.0	229.5	191.7	0.84	19.9	297.3	126.8	9.4
115	60.0	230.4	192.1	0.83	19.7	297.6	124.9	13.0
115	70.0	231.0	192.3	0.83	19.6	297.8	123.4	17.0
120	30.0	218.8	187.4	0.86	21.9	293.6	139.4	3.8
120	40.0	221.8	188.6	0.85	21.4	294.6	134.6	6.3
120	50.0	223.3	189.2	0.85	21.1	295.1	131.7	9.3
120	60.0	224.1	189.5	0.85	20.9	295.4	129.8	12.8



Performance Data

Table 103. Cooling capacities 20 tons (gross) - GEV240 (continued)

EWT	GPM	Gross Cap Mbtuh	Gross Sen Mbtuh	SHR	Comp Power kW	Reject Mbtuh	LWT	Feet Head
120	70.0	224.6	189.7	0.84	20.8	295.5	128.4	16.8

Note: Performance data is tabulated for cooling at 80.6°F DB/66.2°F WB entering air. For conditions other than what is tabulated, multipliers must be used to correct performance. See the fan correction factors table for CFM other than rated and the cooling correction factors for variations in entering air temperature. WLHP data shown is performance data at ANSI/AHRI/ASHRAE/ISO13256-1. For ANSI/AHRI/ASHRAE/ISO13256-1 GLHP conditions, apply 15% methanol by volume per the antifreeze correction factors found in the performance correction tables. The minimum gpm/ton is 3.0 when the EWT is greater than 115°F and the EAT is less than 67°F WB. Rated GPM: 60.0 Minimum CFM 6400; Nominal CFM 8000, Maximum CFM 9600.

Table 104. Heating capacities 20 tons (gross) - GEV240

EWT	GPM	Gross Cap Mbtuh	Absorb Mbtuh	Comp Power kW	LWT	Feet Head
25	30.0	149.3	109.3	11.7	17.1	6.6
25	40.0	154.1	113.6	11.9	18.9	10.9
25	50.0	157.1	116.4	11.9	20.0	16.1
25	60.0	159.2	118.3	12.0	20.8	22.1
25	70.0	160.8	119.7	12.0	21.3	28.8
32	30.0	165.7	124.1	12.2	23.1	6.4
32	40.0	171.2	129.1	12.3	25.1	10.6
32	50.0	174.7	132.4	12.4	26.3	15.6
32	60.0	177.2	134.6	12.5	27.2	21.4
32	70.0	179.0	136.3	12.5	27.8	28.0
45	30.0	196.2	152.2	12.9	34.6	4.9
45	40.0	203.2	158.7	13.1	36.9	8.1
45	50.0	207.8	162.9	13.2	38.4	11.9
45	60.0	211.0	165.8	13.2	39.4	16.3
45	70.0	213.4	168.0	13.3	40.1	21.4
55	30.0	209.2	164.2	13.2	38.8	4.8
55	40.0	217.0	171.3	13.4	41.3	7.9
55	50.0	222.0	176.0	13.5	42.8	11.7
55	60.0	225.6	179.3	13.6	43.9	16.0
55	70.0	228.3	181.7	13.7	44.7	20.9
59	30.0	222.6	176.4	13.5	43.0	4.7
59	40.0	231.2	184.4	13.7	45.6	7.8
59	50.0	236.7	189.5	13.8	47.3	11.4
59	60.0	240.7	193.2	13.9	48.4	15.7
59	70.0	243.7	195.9	14.0	49.3	20.5
68	30.0	254.8	206.2	14.2	54.0	4.4
68	40.0	265.3	215.8	14.5	57.0	7.3
68	50.0	272.2	222.2	14.7	58.9	10.7
68	60.0	277.1	226.7	14.8	60.3	14.7
68	70.0	280.8	230.1	14.9	61.3	19.2
77	30.0	275.0	224.8	14.7	59.7	4.3
77	40.0	286.9	235.7	15.0	62.9	7.1
77	50.0	294.8	242.9	15.2	65.0	10.5
77	60.0	300.4	248.1	15.4	66.5	14.3
77	70.0	304.7	251.9	15.5	67.6	18.8

Table 104. Heating capacities 20 tons (gross) - GEV240 (continued)

EWT	GPM	Gross Cap Mbtuh	Absorb Mbtuh	Comp Power kW	LWT	Feet Head
86	30.0	308.2	255.2	15.6	68.5	4.2
86	40.0	322.7	268.4	15.9	72.1	6.9
86	50.0	332.3	277.1	16.2	74.5	10.1
86	60.0	339.1	283.3	16.4	76.2	13.9
86	70.0	344.3	288.0	16.5	77.5	18.1

Note: Performance data is tabulated for heating at 68°F DB entering air. For conditions other than what is tabulated, multipliers must be used to correct performance. See the fan correction factors table for CFM other than rated and the heating correction factors for variations in entering air temperature. WLHP data shown is performance data at ANSI/AHRI/ASHRAE/ISO13256-1. For ANSI/AHRI/ASHRAE/ISO13256-1 GLHP conditions, apply 15% methanol by volume per the antifreeze correction factors found in the performance correction tables. Rated GPM: 60.0 Minimum CFM 6400; Nominal CFM 8000, Maximum CFM 9600.

Table 105. Fan correction factors 20 tons - GEV240

Entering CFM	Cooling Capacity	Sensible Capacity	Cooling Input Watts	Heating Capacity	Heating Input Watts
5600	0.957	0.887	1.000	0.982	1.094
6300	0.981	0.944	1.000	0.992	1.042
7000	1.000	1.000	1.000	1.000	1.000
7700	1.017	1.055	1.000	1.007	0.966
8400	1.031	1.111	1.000	1.012	0.938

Table 106. Correction factors for variation in entering air temperature 20 tons, GEV240

Cooling Entering Air WB°F	Cooling Capacity	Cooling Input Watts	Sensible vs. Entering Dry Bulb Multipliers					Heating Entering Air DB°F	Heating Capacity	Heating Input Watts
			65.6	70.6	75.6	80.6	85.6			
44.5	0.919	1.044	0.800	0.000	1.102	1.168	1.237	48	0.752	0.753
49.4	0.919	1.035	0.767	1.037	1.102	1.168	1.237	53	0.798	0.799
56.3	0.921	1.026	0.638	0.998	1.104	1.170	1.237	58	0.846	0.847
60.3	0.922	1.018	0.521	0.848	1.037	1.171	1.238	63	0.896	0.896
63.2	0.952	1.009	0.434	0.739	0.926	1.115	1.239	68	0.947	0.947
66.2	1.000	1.000	—	0.625	0.812	1.000	1.189	73	1.000	1.000
72.1	1.111	0.991	—	—	0.584	0.773	0.961	78	1.055	1.054
77.1	1.213	0.983	—	—	—	0.575	0.765	83	1.112	1.111

Note: * = Sensible equals total capacity

Cooling and Heating Capacities 25 tons

Table 107. Cooling capacities 25 tons (gross) - GEV300

EWT	GPM	Gross Cap Mbtuh	Gross Sen Mbtuh	SHR	Comp Power kW	Reject Mbtuh	LWT	Feet Head
45	37.5	373.9	276.2	0.74	12.1	415.2	67.2	6.0
45	50.0	379.0	278.4	0.73	11.3	417.6	61.7	9.9
45	62.5	382.0	279.8	0.73	10.8	419.0	58.5	14.6
45	75.0	383.9	280.6	0.73	10.5	419.8	56.2	20.0
45	87.5	385.2	281.2	0.73	10.3	420.4	54.7	26.2
55	37.5	362.5	271.3	0.75	13.9	410.1	76.8	5.9
55	50.0	367.5	273.4	0.74	13.1	412.3	71.5	9.7
55	62.5	370.4	274.7	0.74	12.7	413.6	68.2	14.3
55	75.0	372.2	275.5	0.74	12.4	414.4	66.1	19.6



Performance Data

Table 107. Cooling capacities 25 tons (gross) - GEV300 (continued)

EWT	GPM	Gross Cap Mbtuh	Gross Sen Mbtuh	SHR	Comp Power kW	Reject Mbtuh	LWT	Feet Head
55	87.5	373.5	276.0	0.74	12.2	415.0	64.5	25.7
59	37.5	357.9	269.2	0.75	14.7	408.0	80.7	5.8
59	50.0	362.9	271.4	0.75	13.9	410.2	75.4	9.5
59	62.5	365.7	272.6	0.75	13.4	411.5	72.2	14.0
59	75.0	367.6	273.4	0.74	13.1	412.3	70.0	19.2
59	87.5	368.8	274.0	0.74	12.9	412.8	68.4	25.2
68	37.5	347.2	264.6	0.76	16.5	403.4	89.4	5.4
68	50.0	352.2	266.8	0.76	15.6	405.5	84.1	8.9
68	62.5	355.0	268.0	0.75	15.2	406.7	81.0	13.1
68	75.0	356.8	268.8	0.75	14.9	407.5	78.8	18.0
68	87.5	358.1	269.3	0.75	14.6	408.0	77.3	23.5
77	37.5	335.6	260.1	0.77	18.3	398.0	98.1	5.3
77	50.0	339.9	262.0	0.77	17.5	399.5	93.0	8.7
77	62.5	342.4	263.0	0.77	17.0	400.4	89.8	12.8
77	75.0	344.0	263.7	0.77	16.7	400.9	87.7	17.6
77	87.5	345.1	264.2	0.77	16.5	401.3	86.2	23.0
86	37.5	323.5	255.0	0.79	20.3	392.9	107.0	5.1
86	50.0	328.5	257.2	0.78	19.5	394.9	101.9	8.4
86	62.5	331.4	258.4	0.78	19.0	396.1	98.7	12.4
86	75.0	333.2	259.2	0.78	18.7	396.8	96.6	17.0
86	87.5	334.4	259.7	0.78	18.4	397.3	95.1	22.2
95	37.5	310.8	249.7	0.80	22.6	387.8	115.7	3.8
95	50.0	315.8	251.8	0.80	21.7	389.8	110.6	6.3
95	62.5	318.6	253.0	0.79	21.2	390.9	107.5	9.3
95	75.0	320.4	253.8	0.79	20.9	391.6	105.5	12.9
95	87.5	321.6	254.3	0.79	20.6	392.1	104.0	16.9
105	37.5	295.8	243.6	0.82	25.3	382.2	125.3	3.7
105	50.0	300.8	245.6	0.82	24.4	384.0	120.3	6.1
105	62.5	303.6	246.8	0.81	23.9	385.0	117.3	9.1
105	75.0	305.3	247.5	0.81	23.6	385.7	115.3	12.5
105	87.5	306.5	248.0	0.81	23.3	386.1	113.8	16.5
115	37.5	280.1	237.1	0.85	28.3	376.6	135.0	3.6
115	50.0	284.8	239.1	0.84	27.4	378.3	130.1	6.0
115	62.5	287.5	240.2	0.84	26.9	379.2	127.1	8.9
115	75.0	289.2	240.8	0.83	26.6	379.8	125.1	12.2
115	87.5	290.3	241.3	0.83	26.3	380.2	123.7	16.0
120	37.5	271.9	233.8	0.86	29.9	373.8	139.8	3.5
120	50.0	276.5	235.7	0.85	29.0	375.4	134.9	5.9
120	62.5	279.1	236.7	0.85	28.5	376.3	132.0	8.8
120	75.0	280.7	237.4	0.85	28.2	376.8	130.0	12.1

Table 107. Cooling capacities 25 tons (gross) - GEV300 (continued)

EWT	GPM	Gross Cap Mbtuh	Gross Sen Mbtuh	SHR	Comp Power kW	Reject Mbtuh	LWT	Feet Head
120	87.5	281.8	237.8	0.84	28.0	377.2	128.6	15.8

Note: Performance data is tabulated for cooling at 80.6°F DB/66.2°F WB entering air. For conditions other than what is tabulated, multipliers must be used to correct performance. See the fan correction factors table for CFM other than rated and the cooling correction factors for variations in entering air temperature. WLHP data shown is performance data at ANSI/AHRI/ASHRAE/ISO13256-1. For ANSI/AHRI/ASHRAE/ISO13256-1 GLHP conditions, apply 15% methanol by volume per the antifreeze correction factors found in the performance correction tables. The minimum gpm/ton is 3.0 when the EWT is greater than 115°F and the EAT is less than 67°F WB. Rated GPM: 75.0 Minimum CFM 8000; Nominal CFM 10000, Maximum CFM 12000.

Table 108. Heating capacities 25 tons (gross) - GEV300

EWT	GPM	Gross Cap Mbtuh	Absorb Mbtuh	Comp Power kW	LWT	Feet Head
25	37.5	193.8	136.4	16.8	16.9	8.1
25	50.0	199.6	141.7	17.0	18.7	13.4
25	62.5	203.4	145.2	17.1	19.9	19.7
25	75.0	206.0	147.5	17.1	20.7	27.0
25	87.5	208.0	149.3	17.2	21.2	35.4
32	37.5	213.7	154.5	17.3	22.9	7.9
32	50.0	220.6	160.8	17.5	24.9	13.0
32	62.5	225.1	164.9	17.6	26.2	19.1
32	75.0	228.3	167.8	17.7	27.1	26.2
32	87.5	230.6	169.9	17.8	27.7	34.3
45	37.5	254.0	191.7	18.3	34.6	6.0
45	50.0	263.0	199.9	18.5	36.9	9.9
45	62.5	268.9	205.3	18.6	38.3	14.6
45	75.0	273.1	209.1	18.8	39.3	20.0
45	87.5	276.3	212.0	18.8	40.1	26.2
55	37.5	270.7	206.9	18.7	38.8	5.9
55	50.0	280.9	216.2	19.0	41.2	9.7
55	62.5	287.5	222.3	19.1	42.8	14.3
55	75.0	292.3	226.6	19.3	43.8	19.6
55	87.5	295.8	229.8	19.3	44.7	25.7
59	37.5	288.1	222.7	19.1	42.9	5.8
59	50.0	299.4	233.1	19.4	45.5	9.5
59	62.5	306.9	239.9	19.6	47.2	14.0
59	75.0	312.3	244.8	19.8	48.4	19.2
59	87.5	316.2	248.4	19.9	49.2	25.2
68	37.5	333.9	265.2	20.1	53.7	5.4
68	50.0	348.1	278.1	20.5	56.7	8.9
68	62.5	357.6	286.7	20.8	58.7	13.1
68	75.0	364.3	292.8	21.0	60.1	18.0
68	87.5	369.3	297.3	21.1	61.1	23.5
77	37.5	360.9	289.7	20.9	59.3	5.3
77	50.0	377.2	304.5	21.3	62.6	8.7
77	62.5	388.0	314.3	21.6	64.7	12.8
77	75.0	395.7	321.3	21.8	66.2	17.6
77	87.5	401.4	326.4	22.0	67.4	23.0



Performance Data

Table 108. Heating capacities 25 tons (gross) - GEV300 (continued)

EWT	GPM	Gross Cap Mbtuh	Absorb Mbtuh	Comp Power kW	LWT	Feet Head
86	37.5	405.4	330.1	22.1	68.0	5.1
86	50.0	425.3	348.0	22.6	71.7	8.4
86	62.5	438.4	359.9	23.0	74.1	12.4
86	75.0	447.8	368.3	23.3	75.9	17.0
86	87.5	454.8	374.6	23.5	77.2	22.2

Note: Performance data is tabulated for heating at 68°F DB entering air. For conditions other than what is tabulated, multipliers must be used to correct performance. See the fan correction factors table for CFM other than rated and the heating correction factors for variations in entering air temperature. WLHP data shown is performance data at ANSI/AHRI/ASHRAE/ISO13256-1. For ANSI/AHRI/ASHRAE/ISO13256-1 GLHP conditions, apply 15% methanol by volume per the antifreeze correction factors found in the performance correction tables. Rated GPM: 75.0 Minimum CFM 8000; Nominal CFM 10000, Maximum CFM 12000.

Table 109. Fan correction factors 25 tons - GEV300

Entering CFM	Cooling Capacity	Sensible Capacity	Cooling Input Watts	Heating Capacity	Heating Input Watts
7000	0.956	0.886	0.999	0.982	1.096
7875	0.980	0.944	1.000	0.992	1.042
8750	1.000	1.000	1.000	1.000	1.000
9625	1.017	1.055	1.000	1.007	0.966
10500	1.033	1.111	1.000	1.012	0.938

Table 110. Correction factors for variation in entering air temperature 25 tons, GEV300

Cooling Entering Air WB°F	Cooling Capacity	Cooling Input Watts	Sensible vs. Entering Dry Bulb Multipliers					Heating Entering Air DB°F	Heating Capacity	Heating Input Watts
			65.6	70.6	75.6	80.6	85.6			
44.5	0.920	1.053	0.797	0.000	1.114	1.182	1.255	43	0.752	0.756
49.4	0.920	1.042	0.765	1.048	1.114	1.182	1.255	48	0.798	0.802
56.3	0.921	1.032	0.630	0.996	1.116	1.184	1.255	53	0.845	0.849
60.3	0.922	1.021	0.516	0.848	1.034	1.185	1.256	58	0.895	0.897
63.2	0.951	1.011	0.432	0.741	0.926	1.112	1.257	63	0.946	0.948
66.2	1.000	1.000	—	0.629	0.815	1.000	1.187	68	1.000	1.000
72.1	1.115	0.989	—	—	0.591	0.778	0.965	73	1.056	1.054
77.1	1.225	0.979	—	—	—	0.586	0.773	78	1.116	1.111

Note: * = Sensible equals total capacity

Waterside Economizer

Table 111. Waterside economizer performance GEV/H006–060

MODEL	Airside		Waterside			Cooling Capacity	
	CFM	APD (in. w.g.)	GPM	EWT	WPD (ft. hd.)	Total Mbtuh	Sensible Mbtuh
GEV/H006	190	0.04	1.5	45	0.52	6.7	5.0
				50	0.50	5.1	4.4
				55	0.50	4.0	3.8
				60	0.50	3.1	3.0
				65	0.49	2.3	2.3
				70	0.49	1.5	1.5
GEV/H009	285	0.07	2.3	45	1.08	8.9	6.9
				50	1.07	6.8	6.1
				55	1.06	5.4	5.2
				60	1.04	4.3	4.2
				65	1.02	3.2	3.2
				70	1.01	2.1	2.1
GEV/H012	380	0.12	3.0	45	1.80	11.2	8.7
				50	1.78	8.6	7.9
				55	1.75	6.9	6.7
				60	1.72	5.4	5.3
				65	1.70	4.1	4.1
				70	1.69	2.8	2.8
GEV/H015	475	0.10	3.8	45	2.47	14.7	11.5
				50	2.43	11.3	10.1
				55	2.41	9.0	8.7
				60	2.39	7.1	7.0
				65	2.37	5.3	5.2
				70	2.36	3.5	3.5
GEV/H018	570	0.14	4.5	45	3.43	17.2	13.4
				50	3.42	13.1	11.9
				55	3.40	10.4	10.1
				60	3.39	8.2	8.0
				65	3.38	6.2	6.1
				70	3.38	4.1	4.1
GEV/H024	760	0.17	6.0	45	5.93	22.8	17.8
				50	5.91	17.3	15.7
				55	5.89	13.7	13.3
				60	5.88	10.7	10.5
				65	5.86	8.1	8.0
				70	5.85	5.4	5.4



Performance Data

Table 111. Waterside economizer performance GEV/H006-060 (continued)

MODEL	Airside		Waterside			Cooling Capacity	
	CFM	APD (in. w.g.)	GPM	EWT	WPD (ft. hd.)	Total Mbtuh	Sensible Mbtuh
GEV/H030	950	0.25	7.5	45	9.17	27.4	21.4
				50	9.15	20.5	18.9
				55	9.12	16.2	15.7
				60	9.10	12.8	12.5
				65	9.08	9.6	9.5
				70	9.06	6.5	6.5
GEV/H036	1140	0.20	9.0	45	9.62	35.0	27.3
				50	9.60	26.2	23.8
				55	9.58	20.6	20.0
				60	9.56	16.2	15.9
				65	9.54	12.1	12.0
				70	9.52	8.1	8.1
GEV/H042	1330	0.26	10.5	45	13.00	39.5	30.8
				50	12.98	29.5	26.8
				55	12.95	23.2	22.5
				60	12.93	18.3	17.9
				65	12.90	13.8	13.7
				70	12.88	9.2	9.2
GEV/H048	1520	0.21	12.0	45	6.40	44.7	34.9
				50	6.39	33.8	31.1
				55	6.38	26.8	26.0
				60	6.37	21.1	20.7
				65	6.36	15.9	15.7
				70	6.35	10.7	10.7
GEV/H060	1900	0.30	15.0	45	9.93	53.6	41.8
				50	9.92	40.1	36.9
				55	9.91	31.7	30.7
				60	9.89	25.2	24.7
				65	9.88	19.1	18.9
				70	9.86	12.9	12.9

Notes:

1. The waterside pressure drops shown only account for the waterside economizer coil.
2. The airside pressure drop shown only accounts for the waterside economizer coil with a wet coil.
3. Capacity is at rated airflow at 80°F/67°F entering air temperature.

Table 112. Waterside economizer performance (6 to 25 tons)

Unit Model Number	scfm	GPM	Total Capacity (Mbh)	Sensible Capacity (Mbh)	LVG. Air DB (°F)	LVG. Air WB (°F)	Standard APD (in. wg.)	LVG. Fluid Temp (°F)	Fluid PD (FT H2O)	Fluid PD Coil In (FT H2O)	Fluid PD Coil Out (FT H2O)
GEHK072	2400	13.2	65.2	52.3	60.1	58.6	0.26	54.8	—	3.8	1.1
GEHK072	2400	16.8	73.1	55.3	58.9	57.4	0.27	53.7	—	6.1	1.7

Table 112. Waterside economizer performance (6 to 25 tons) (continued)

Unit Model Number	scfm	GPM	Total Capacity (Mbh)	Sensible Capacity (Mbh)	LVG. Air DB (°F)	LVG. Air WB (°F)	Standard APD (in. wg.)	LVG. Fluid Temp (°F)	Fluid PD (FT H2O)	Fluid PD Coil In (FT H2O)	Fluid PD Coil Out (FT H2O)
GEHK072	2400	18.6	76.2	56.5	58.5	57	0.27	53.2	—	7.5	2.1
GEHK090	3000	16.5	83.4	52.5	60	58.3	0.31	55.1	—	6.1	1.7
GEHK090	3000	21	92.2	55.2	59	57.3	0.32	53.8	—	9.8	2.7
GEHK090	3000	23.3	95.6	56.3	58.6	56.9	0.32	53.2	—	12	3.3
GEHK120	4000	22	119.8	54.5	59.2	57.6	0.31	55.9	—	9.3	1.2
GEHK120	4000	28	130.3	57	58.3	56.7	0.32	54.3	—	15.1	1.9
GEHK120	4000	31	134.4	58	57.9	56.3	0.32	53.6	—	18.5	2.3
GEHK150	5000	27.5	153.5	116.2	58.7	57.3	0.28	56.1	—	10.7	1.6
GEHK150	5000	35	167.5	121.8	57.7	56.4	0.28	54.5	—	17.4	2.6
GEHK150	5000	38.8	172.9	123.9	57.3	56	0.29	53.9	—	21.3	3.1
GEHK180	6000	33	176.9	135	59.4	57.8	0.37	55.7	—	15.5	2.3
GEHK180	6000	42	191.8	140.8	58.5	56.9	0.38	54.1	—	25	3.7
GEHK180	6000	46.5	197.8	143.2	58.2	56.6	0.38	53.5	—	30.7	4.5
GEVK072	2400	13.2	72.1	55	59.1	57.6	0.29	55.9	—	8.3	1.1
GEVK072	2400	16.8	78.7	57.6	58.1	56.6	0.3	54.3	—	13.4	1.7
GEVK072	2400	18.6	81.3	58.6	57.7	56.2	0.3	53.7	—	16.4	2.1
GEVK090	3000	16.5	88.8	67.9	59.3	57.7	0.32	55.7	—	10	1.7
GEVK090	3000	21	96.7	71	58.4	56.8	0.33	54.2	—	16.2	2.7
GEVK090	3000	23.3	99.8	72.2	58	56.4	0.34	53.6	—	19.9	3.3
GEVK120	4000	22	117.4	89.9	59.4	57.8	0.34	55.6	—	10.1	1.4
GEVK120	4000	28	127.7	94	58.5	56.9	0.35	54.1	—	16.3	2.2
GEVK120	4000	31	131.8	95.6	58.2	56.6	0.36	53.5	—	20	2.7
GEVK150	5000	27.5	160.4	120.6	58	56.9	0.18	56.6	—	6.9	0.9
GEVK150	5000	35	177.4	127.3	56.7	55.7	0.18	55.1	—	11.2	1.5
GEVK150	5000	38.8	184	130	56.2	55.2	0.19	54.5	—	13.8	1.8
GEVK180	6000	33	187.3	141.4	58.5	57.2	0.23	56.3	—	9.8	1.3
GEVK180	6000	42	205.4	148.5	57.4	56.1	0.24	54.8	—	15.9	2.2
GEVK180	6000	46.5	212.3	151.3	56.9	55.7	0.25	54.1	—	19.5	2.7
GEVK240	8000	44	241.7	183.4	59	57.5	0.3	56	—	8.6	0.7
GEVK240	8000	56	263	191.8	58.1	56.6	0.32	54.4	—	13.9	1.1
GEVK240	8000	62	271.3	195.1	57.7	56.2	0.32	53.7	—	17	1.4
GEVK300	10000	55	280.8	219.5	60.1	58.2	0.52	55.2	—	9.8	1.1
GEVK300	10000	70	299	228.4	59.3	57.5	0.52	53.5	—	15.8	1.8
GEVK300	10000	77.5	306.8	232.1	58.9	57.3	0.53	52.9	—	19.4	2.2

Notes:

1. The waterside pressure drops shown only account for the waterside economizer coil.
2. The airside pressure drop shown only accounts for the waterside economizer coil with a wet coil.
3. Capacity is at rated airflow at 80°F/67°F entering air temperature and 45°F entering water temperature.



Performance Data

Table 113. Antifreeze correction factors

Methanol (concentration by volume)						
Item	0%	10%	20%	30%	40%	50%
Cooling Capacity	1.000	0.998	0.997	0.995	0.993	0.992
Heating Capacity	1.000	0.995	0.990	0.985	0.979	0.974
Pressure Drop	1.000	1.023	1.057	1.091	1.122	1.160
Ethylene Glycol (concentration by volume)						
Item	0%	10%	20%	30%	40%	50%
Cooling Capacity	1.000	0.996	0.991	0.987	0.983	0.979
Heating Capacity	1.000	0.993	0.985	0.977	0.969	0.961
Pressure Drop	1.000	1.024	1.068	1.124	1.188	1.263
Propylene Glycol (concentration by volume)						
Item	0%	10%	20%	30%	40%	50%
Cooling Capacity	1.000	0.993	0.987	0.980	0.974	0.968
Heating Capacity	1.000	0.986	0.973	0.960	0.948	0.935
Pressure Drop	1.000	1.040	1.098	1.174	1.273	1.405
Brine (NaCL) (concentration by volume)						
Item	0%	10%	20%	30%	40%	50%
Cooling Capacity	1.000	0.994	0.987	0.979	0.971	0.963
Heating Capacity	1.000	0.993	0.987	0.982	0.978	0.976
Pressure Drop	1.000	1.154	1.325	1.497	1.669	1.841

Examples

Example 1 (Ethylene Glycol):

The antifreeze solution is 20 percent by volume of Ethylene Glycol. Determine the corrected cooling capacity and waterside pressure drop for a GEH018 when the EWT is 86°F and the GPM is 4.5.

From the catalog data, the cooling capacity at these conditions with 100 percent water is 18.9 Mbtuh, and the waterside pressure drop is 11.8 feet of head. At 20 percent Ethylene Glycol, the correction factor for cool capacity is 0.991 and the pressure drop is 1.068.

The corrected cooling capacity (Mbtuh) = $18.9 \times 0.991 = 18.7$. The corrected water side pressure drop (Ft. head) = $11.8 \times 1.068 = 12.6$.

Example 2 (Propylene Glycol):

The antifreeze solution is 30 percent by volume of Propylene Glycol. Determine the corrected heating capacity and waterside pressure drop for a GEH042 when the EWT is 45°F and the GPM is 9.5.

From the catalog data, the heating capacity at these conditions with 100 percent water is 40.4 Mbtuh, and the waterside pressure drop is 8.6 feet of head. At 30 percent Propylene Glycol, the correction factor for heat capacity is 0.960 and the pressure drop is 1.174.

The corrected heating capacity (Mbtuh) = $40.4 \times 0.960 = 38.8$. The corrected water side pressure drop (Ft. head) = $8.6 \times 1.174 = 10.1$.

Figure 13. Cooling capacity correction factor

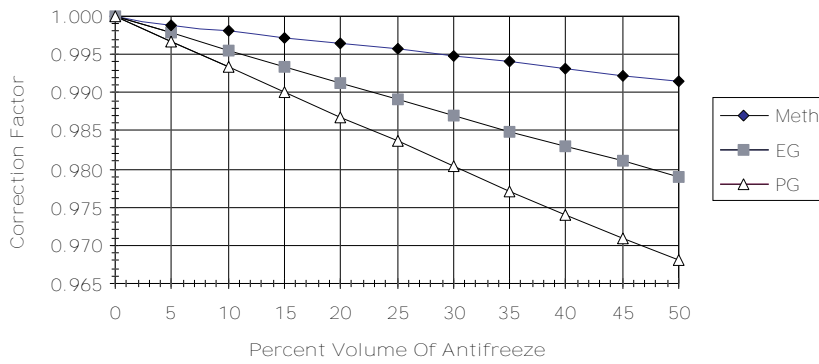


Figure 14. Heating capacity correction factor

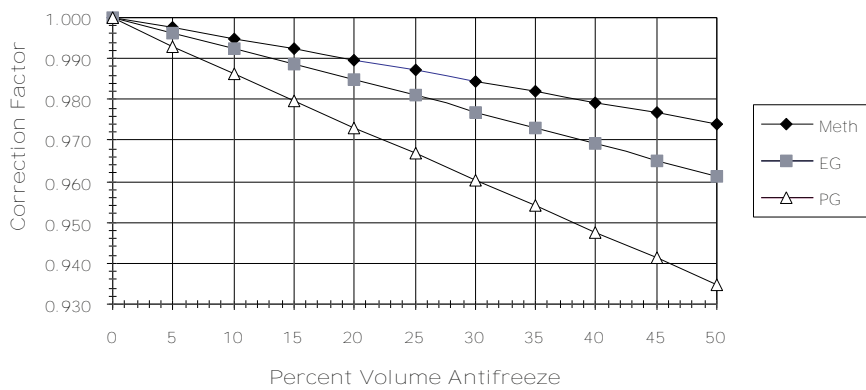
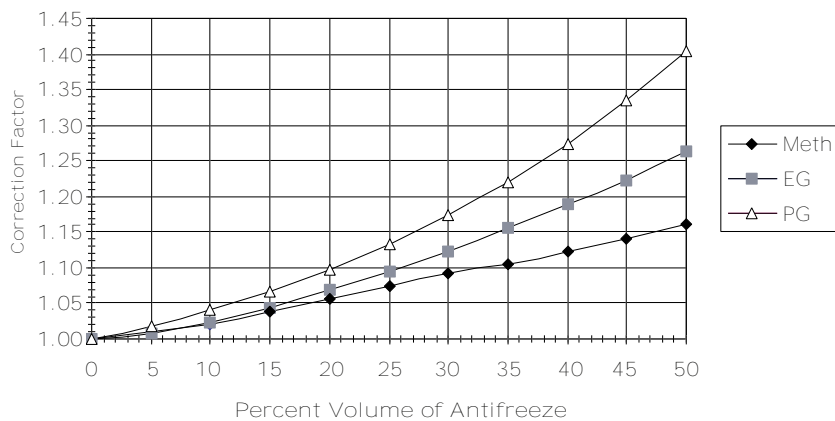


Figure 15. Water pressure drop correction factor



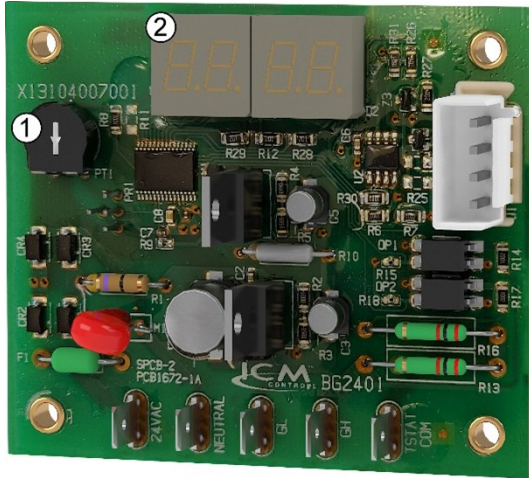
Unit Fan Performance

ECM Control Board

Units with Deluxe 24V

For GEV/H006-060, the ECM is programmed for constant torque and delivers airflow similar to a PSC motor while operating at a higher efficiency.

Figure 16. ECM control board



1. Potentiometer will be used to adjust the PWM output
2. Seven segment display

Using a screwdriver, the potentiometer will be used to adjust the PWM output from 20% to 100% PWM. Increasing the PWM will increase the motor speed. When setting the airflow for air balancing, the high-speed terminal (GH) must have 24Vac signal. This will ensure that the PWM output will be adjusted for the full load airflow.

The display will show the commanded motor speed percentage. If running on low speed (GL), the low-speed value will be displayed. If running in GH the high-speed value will be displayed. If both GH and GL input signals are present, the PWM output value will be the GH value.

Note: ECM control board is only on units with Deluxe 24V. Tracer® TU is used to adjust fan speed on units with Symbio™ 400-B controls.

Table 114. Fan performance GEV/H006

External Static Pressure												
	0.00		0.05		0.10		0.15		0.20		0.25	
CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM
127	0.014	401	0.015	468	0.017	533	0.019	594	0.021	653	0.024	710
133	0.014	403	0.015	471	0.017	535	0.020	596	0.022	655	0.024	711
143	0.014	409	0.016	475	0.018	539	0.020	600	0.023	658	0.025	714
152	0.014	414	0.016	480	0.018	544	0.021	604	0.023	662	0.026	717
162	0.014	421	0.016	487	0.019	550	0.021	609	0.024	667	0.027	721
171	0.014	428	0.017	493	0.019	556	0.022	615	0.025	672	0.028	726
181	0.015	437	0.017	501	0.020	563	0.023	622	0.026	678	0.030	732
190	0.015	445	0.018	509	0.021	570	0.024	629	0.028	684	0.031	738
200	0.016	455	0.019	519	0.022	579	0.026	637	0.029	692	0.033	745
209	0.016	465	0.020	528	0.023	588	0.027	645	0.031	700	0.034	752
228	0.018	487	0.022	549	0.026	608	0.030	664	0.034	717	0.038	769

Table 114. Fan performance GEV/H006 (continued)

External Static Pressure												
	0.30		0.35		0.40		0.45		0.50		0.55	
CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM
127	0.027	764	0.029	816	0.032	866	0.036	914	0.039	960	0.043	1005
133	0.027	765	0.030	817	0.033	866	0.036	914	0.040	960	0.044	1004
143	0.028	767	0.031	818	0.034	868	0.038	915	0.041	960	0.045	1004
152	0.029	770	0.032	821	0.036	870	0.039	916	0.043	962	0.047	1005
162	0.030	774	0.034	824	0.037	872	0.041	919	0.045	964	0.049	1007
171	0.032	778	0.035	828	0.039	876	0.042	922	0.046	966	0.050	1009
181	0.033	783	0.037	833	0.041	880	0.044	926	0.048	969	0.052	1012
190	0.035	789	0.038	838	0.042	885	0.046	930	0.050	973	0.055	1015
200	0.037	796	0.040	844	0.044	890	0.048	935	0.053	978	0.057	1019
209	0.038	802	0.042	850	0.046	896	0.051	940	0.055	982	0.059	1023
228	0.043	818	0.047	865	0.051	910	0.056	953	0.060	994	0.065	1034
External Static Pressure												
	0.60		0.65		0.70		0.75		0.80		0.85	
CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM
127	0.047	1048	0.051	1089	0.055	1130	0.060	1170	0.065	1208	0.070	1246
133	0.048	1047	0.052	1089	0.056	1129	0.061	1168	0.066	1207	0.071	1244
143	0.049	1047	0.054	1088	0.058	1128	0.063	1167	0.067	1205	0.072	1242
152	0.051	1047	0.055	1088	0.060	1127	0.064	1166	0.069	1204	0.074	1241
162	0.053	1048	0.057	1089	0.062	1128	0.066	1166	0.071	1203	0.076	1240
171	0.055	1050	0.059	1090	0.063	1129	0.068	1166	0.073	1203	0.078	1240
181	0.057	1052	0.061	1092	0.066	1130	0.070	1168	0.075	1204	0.080	1240
190	0.059	1055	0.063	1094	0.068	1132	0.073	1169	0.077	1205	0.082	1241
200	0.061	1059	0.066	1098	0.070	1135	0.075	1172	0.080	1207	0.085	1242
209	0.064	1063	0.068	1101	0.073	1138	0.078	1174	0.083	1210	0.088	1244
228	0.069	1073	0.074	1110	0.079	1146	0.084	1181	0.088	1216	0.093	1250
External Static Pressure												
	0.90		0.95		1.00		1.05					
CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM				
127	0.075	1283	0.081	1320	0.086	1357	0.092	1393				
133	0.076	1281	0.081	1318	0.087	1354	0.093	1391				
143	0.078	1279	0.083	1315	0.089	1351	0.094	1387				
152	0.079	1277	0.085	1313	0.090	1349	0.096	1384				
162	0.081	1276	0.086	1311	0.092	1347	0.098	1382				
171	0.083	1275	0.088	1310	0.094	1345	—	—				
181	0.085	1275	0.091	1310	0.096	1345	—	—				
190	0.088	1276	0.093	1310	0.098	1345	—	—				
200	0.090	1277	0.095	1311	—	—	—	—				
209	0.093	1278	0.098	1312	—	—	—	—				
228	—	—	—	—	—	—	—	—				



Unit Fan Performance

Table 115. Fan performance GEV/H009

External Static Pressure												
	0.00		0.05		0.10		0.15		0.20		0.25	
CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM
191	0.015	446	0.018	510	0.021	571	0.024	629	0.028	685	0.031	738
200	0.016	455	0.019	519	0.022	579	0.026	637	0.029	692	0.033	745
214	0.017	471	0.020	533	0.024	593	0.028	650	0.032	704	0.035	756
228	0.018	487	0.022	549	0.026	608	0.030	664	0.034	717	0.038	769
242	0.020	505	0.024	566	0.028	624	0.033	679	0.037	732	0.041	782
257	0.022	525	0.027	585	0.031	642	0.036	697	0.041	749	0.045	798
271	0.024	545	0.029	604	0.034	660	0.039	714	0.044	765	0.049	814
285	0.027	566	0.032	624	0.037	680	0.043	732	0.048	783	0.053	831
299	0.029	588	0.035	645	0.041	700	0.046	752	0.052	801	0.058	848
314	0.033	613	0.039	669	0.045	722	0.051	773	0.057	821	0.063	867
342	0.040	660	0.047	714	0.053	766	0.060	815	0.067	861	0.073	906
External Static Pressure												
	0.30		0.35		0.40		0.45		0.50		0.55	
CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM
191	0.035	789	0.039	838	0.043	885	0.046	930	0.051	973	0.055	1015
200	0.037	796	0.040	844	0.044	890	0.048	935	0.053	978	0.057	1019
214	0.039	806	0.043	854	0.048	899	0.052	943	0.056	985	0.061	1026
228	0.043	818	0.047	865	0.051	910	0.056	953	0.060	994	0.065	1034
242	0.046	831	0.050	877	0.055	921	0.060	963	0.064	1004	0.069	1043
257	0.050	845	0.055	891	0.059	934	0.064	976	0.069	1016	0.074	1054
271	0.054	860	0.059	905	0.064	947	0.069	988	0.074	1027	0.079	1065
285	0.058	876	0.064	920	0.069	962	0.074	1002	0.079	1040	0.084	1077
299	0.063	893	0.069	936	0.074	977	0.079	1016	0.085	1053	0.090	1089
314	0.068	911	0.074	953	0.080	993	0.085	1032	0.091	1068	0.097	1104
342	0.079	948	0.086	988	0.092	1026	0.098	1063	0.104	1098	0.110	1132
External Static Pressure												
	0.60		0.65		0.70		0.75		0.80		0.85	
CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM
191	0.059	1055	0.064	1095	0.068	1132	0.073	1169	0.078	1206	0.083	1241
200	0.061	1059	0.066	1098	0.070	1135	0.075	1172	0.080	1207	0.085	1242
214	0.065	1065	0.070	1103	0.074	1140	0.079	1176	0.084	1211	0.089	1246
228	0.069	1073	0.074	1110	0.079	1146	0.084	1181	0.088	1216	0.093	1250
242	0.074	1081	0.078	1118	0.083	1153	0.088	1188	0.093	1222	0.098	1255
257	0.079	1091	0.084	1127	0.089	1162	0.094	1196	0.099	1229	0.104	1261
271	0.084	1101	0.089	1137	0.094	1171	0.099	1204	0.104	1236	0.109	1268
285	0.089	1112	0.095	1147	0.100	1180	0.105	1213	0.110	1245	0.115	1276
299	0.095	1124	0.101	1158	0.106	1191	0.111	1222	0.116	1254	0.121	1284
314	0.102	1138	0.107	1170	0.113	1202	0.118	1233	0.123	1264	0.128	1293
342	0.116	1164	0.121	1195	0.127	1226	0.132	1255	0.138	1284	0.143	1312

Table 115. Fan performance GEV/H009 (continued)

External Static Pressure								
	0.90		0.95		1.00		1.05	
CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM
191	0.088	1276	0.093	1310	0.098	1345	0.104	1379
200	0.090	1277	0.095	1311	0.101	1345	0.106	1379
214	0.094	1279	0.099	1313	0.105	1346	0.110	1380
228	0.099	1283	0.104	1316	0.109	1349	0.114	1382
242	0.103	1288	0.108	1320	0.114	1352	0.119	1384
257	0.109	1293	0.114	1325	0.119	1357	0.124	1388
271	0.114	1300	0.119	1331	0.124	1362	0.130	1393
285	0.120	1307	0.125	1337	0.130	1367	0.135	1398
299	0.126	1314	0.131	1344	0.137	1374	—	—
314	0.134	1323	0.139	1352	0.144	1381	—	—
342	0.148	1340	0.153	1368	—	—	—	—

Table 116. Fan performance GEV/H012

External Static Pressure												
	0.00		0.05		0.10		0.15		0.20		0.25	
CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM
255	0.022	522	0.026	582	0.031	640	0.035	694	0.040	746	0.045	796
266	0.023	538	0.028	597	0.033	654	0.038	708	0.043	759	0.048	808
285	0.027	566	0.032	624	0.037	680	0.043	732	0.048	783	0.053	831
304	0.030	596	0.036	653	0.042	707	0.048	759	0.054	808	0.059	854
323	0.035	628	0.041	683	0.048	736	0.054	786	0.060	834	0.066	880
342	0.040	660	0.047	714	0.053	766	0.060	815	0.067	861	0.073	906
361	0.045	694	0.053	747	0.060	797	0.067	845	0.074	890	0.081	933
380	0.051	728	0.059	780	0.067	829	0.075	875	0.082	919	0.090	961
399	0.058	763	0.067	813	0.075	861	0.083	906	0.091	948	0.099	989
418	0.065	799	0.074	847	0.083	893	0.092	937	0.100	978	0.108	1017
456	0.082	869	0.092	915	0.102	958	0.111	999	0.121	1037	0.130	1073
External Static Pressure												
	0.30		0.35		0.40		0.45		0.50		0.55	
CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM
255	0.049	843	0.054	889	0.059	932	0.064	974	0.068	1014	0.073	1052
266	0.053	855	0.057	900	0.062	943	0.067	984	0.072	1023	0.077	1061
285	0.058	876	0.064	920	0.069	962	0.074	1002	0.079	1040	0.084	1077
304	0.065	899	0.070	941	0.076	982	0.081	1021	0.087	1058	0.092	1094
323	0.072	923	0.078	964	0.084	1004	0.089	1041	0.095	1078	0.101	1112
342	0.079	948	0.086	988	0.092	1026	0.098	1063	0.104	1098	0.110	1132
361	0.088	974	0.094	1013	0.101	1050	0.107	1085	0.113	1119	0.120	1151
380	0.097	1000	0.104	1038	0.110	1074	0.117	1108	0.124	1140	0.130	1172
399	0.106	1027	0.114	1063	0.121	1098	0.128	1131	0.135	1162	0.141	1192



Unit Fan Performance

Table 116. Fan performance GEV/H012 (continued)

External Static Pressure												
	0.30		0.35		0.40		0.45		0.50		0.55	
CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM
418	0.116	1054	0.124	1089	0.132	1122	0.139	1154	0.146	1184	0.153	1213
456	0.139	1108	0.147	1140	0.156	1170	0.164	1199	0.171	1227	0.179	1253
External Static Pressure												
	0.60		0.65		0.70		0.75		0.80		0.85	
CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM
255	0.078	1090	0.083	1126	0.088	1161	0.093	1195	0.098	1228	0.103	1260
266	0.082	1098	0.087	1133	0.092	1167	0.097	1201	0.102	1234	0.107	1266
285	0.089	1112	0.095	1147	0.100	1180	0.105	1213	0.110	1245	0.115	1276
304	0.097	1129	0.103	1162	0.108	1194	0.113	1226	0.118	1257	0.124	1287
323	0.106	1146	0.112	1178	0.117	1210	0.122	1240	0.128	1270	0.133	1299
342	0.116	1164	0.121	1195	0.127	1226	0.132	1255	0.138	1284	0.143	1312
361	0.126	1183	0.131	1213	0.137	1242	0.143	1270	0.148	1298	0.154	1325
380	0.136	1202	0.142	1231	0.148	1259	0.154	1286	0.160	1313	0.165	1339
399	0.148	1221	0.154	1249	0.160	1276	0.166	1302	0.172	1328	0.177	1353
418	0.160	1241	0.166	1267	0.173	1293	0.179	1318	0.185	1342	0.190	1366
456	0.186	1278	0.193	1303	0.200	1326	0.206	1348	0.213	1370	0.219	1392
External Static Pressure												
	0.90		0.95		1.00		1.05					
CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM				
255	0.108	1293	0.113	1324	0.118	1356	0.123	1388				
266	0.112	1297	0.117	1329	0.122	1360	0.128	1391				
285	0.120	1307	0.125	1337	0.130	1367	0.135	1398				
304	0.129	1317	0.134	1346	0.139	1376	—	—				
323	0.138	1328	0.143	1357	0.148	1385	—	—				
342	0.148	1340	0.153	1368	0.158	1395	—	—				
361	0.159	1352	0.164	1379	—	—	—	—				
380	0.170	1365	0.176	1391	—	—	—	—				
399	0.183	1377	—	—	—	—	—	—				
418	0.196	1390	—	—	—	—	—	—				
456	—	—	—	—	—	—	—	—				

Table 117. Fan performance GEV/H015

External Static Pressure														
	0.00		0.05		0.10		0.15		0.20		0.25		0.30	
CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM
318	0.016	421	0.020	478	0.023	533	0.027	586	0.032	636	0.036	685	0.041	732
333	0.018	429	0.021	486	0.025	540	0.029	592	0.033	643	0.038	691	0.043	737
356	0.020	443	0.023	498	0.027	552	0.031	603	0.036	653	0.041	700	0.046	746
380	0.022	457	0.026	512	0.030	564	0.034	615	0.039	664	0.044	710	0.049	755

Table 117. Fan performance GEV/H015 (continued)

External Static Pressure														
	0.00		0.05		0.10		0.15		0.20		0.25		0.30	
CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM
404	0.025	472	0.029	526	0.033	577	0.037	627	0.042	675	0.048	721	0.053	765
428	0.028	487	0.032	540	0.036	591	0.041	640	0.046	687	0.051	732	0.057	775
451	0.032	502	0.036	554	0.040	604	0.045	652	0.050	698	0.055	743	0.061	786
475	0.036	518	0.040	569	0.044	618	0.049	665	0.054	711	0.060	754	0.066	797
499	0.040	535	0.044	585	0.049	633	0.054	679	0.059	723	0.065	766	0.071	808
523	0.045	551	0.049	600	0.054	647	0.059	693	0.064	737	0.070	779	0.077	819
570	0.056	585	0.060	632	0.065	677	0.070	721	0.076	763	0.082	804	0.089	843
External Static Pressure														
	0.35		0.40		0.45		0.50		0.55		0.60		0.65	
CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM
318	0.046	777	0.052	820	0.057	861	0.063	901	0.069	939	0.075	975	0.081	1010
333	0.048	782	0.054	824	0.060	865	0.066	905	0.072	943	0.078	979	0.084	1014
356	0.052	790	0.057	832	0.063	872	0.069	911	0.076	949	0.082	984	0.089	1019
380	0.055	799	0.061	840	0.067	880	0.074	918	0.080	955	0.087	991	0.094	1025
404	0.059	808	0.065	849	0.072	888	0.078	926	0.085	962	0.092	997	0.099	1031
428	0.063	817	0.070	858	0.076	896	0.083	934	0.090	969	0.097	1004	0.105	1037
451	0.068	827	0.074	866	0.081	905	0.088	941	0.095	977	0.103	1011	0.110	1044
475	0.073	837	0.079	876	0.086	914	0.094	950	0.101	985	0.109	1019	0.116	1051
499	0.078	848	0.085	886	0.092	923	0.099	959	0.107	993	0.115	1026	0.123	1059
523	0.083	859	0.091	896	0.098	933	0.105	968	0.113	1002	0.121	1035	0.130	1066
570	0.096	881	0.103	917	0.111	953	0.119	987	0.127	1020	0.135	1052	0.144	1083
External Static Pressure														
	0.70		0.75		0.80		0.85		0.90		0.95		1.00	
CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM
318	0.087	1044	0.093	1076	0.100	1107	0.106	1137	0.112	1165	0.118	1193	0.123	1219
333	0.090	1047	0.097	1079	0.103	1110	0.109	1139	0.116	1168	0.122	1195	0.128	1221
356	0.095	1052	0.102	1084	0.109	1114	0.115	1144	0.122	1172	0.128	1199	0.135	1225
380	0.101	1057	0.108	1089	0.114	1119	0.121	1148	0.128	1176	0.135	1203	0.142	1230
404	0.106	1063	0.113	1094	0.121	1124	0.128	1153	0.135	1181	0.142	1208	0.149	1234
428	0.112	1069	0.120	1100	0.127	1130	0.135	1159	0.142	1186	0.150	1213	0.157	1239
451	0.118	1076	0.126	1106	0.134	1136	0.141	1164	0.149	1192	0.157	1219	0.165	1245
475	0.124	1082	0.132	1113	0.141	1142	0.149	1170	0.157	1198	0.165	1224	0.173	1250
499	0.131	1090	0.139	1120	0.148	1149	0.156	1177	0.165	1204	0.173	1231	0.182	1256
523	0.138	1097	0.147	1127	0.155	1156	0.164	1183	0.173	1211	0.182	1237	0.190	1263
570	0.153	1113	0.162	1142	0.171	1170	0.180	1197	0.190	1224	0.199	1250	0.208	1276



Unit Fan Performance

Table 117. Fan performance GEV/H015 (continued)

External Static Pressure												
	1.05		1.10		1.15		1.20		1.25		1.30	
CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM
318	0.129	1244	—	—	—	—	—	—	—	—	—	—
333	0.134	1247	0.139	1271	0.145	1295	0.150	1317	0.155	1339	0.160	1361
356	0.141	1250	0.147	1275	0.153	1298	0.158	1321	0.164	1344	—	—
380	0.149	1255	0.155	1279	0.161	1303	0.167	1326	0.173	1348	—	—
404	0.156	1260	0.163	1284	0.170	1308	0.176	1331	0.183	1353	—	—
428	0.165	1265	0.172	1289	0.179	1313	0.186	1336	—	—	—	—
451	0.173	1270	0.180	1294	0.188	1318	0.195	1342	—	—	—	—
475	0.181	1276	0.189	1300	0.197	1324	—	—	—	—	—	—
499	0.190	1282	0.198	1306	0.206	1330	—	—	—	—	—	—
523	0.199	1288	0.208	1313	—	—	—	—	—	—	—	—
570	0.217	1301	—	—	—	—	—	—	—	—	—	—

Table 118. Fan performance GEV/H018

External Static Pressure														
	0.00		0.05		0.10		0.15		0.20		0.25		0.30	
CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM
382	0.022	459	0.026	513	0.030	566	0.034	616	0.039	665	0.044	711	0.050	756
399	0.024	469	0.028	523	0.032	575	0.037	625	0.042	673	0.047	719	0.052	763
428	0.028	487	0.032	540	0.036	591	0.041	640	0.046	687	0.051	732	0.057	775
456	0.033	506	0.036	557	0.041	607	0.046	655	0.051	701	0.056	745	0.062	788
485	0.038	525	0.042	576	0.046	624	0.051	671	0.056	716	0.062	759	0.068	801
513	0.043	544	0.047	594	0.052	641	0.057	687	0.062	731	0.068	774	0.074	815
542	0.049	565	0.053	613	0.058	659	0.063	704	0.069	747	0.075	789	0.081	829
570	0.056	585	0.060	632	0.065	677	0.070	721	0.076	763	0.082	804	0.089	843
599	0.063	606	0.068	652	0.072	696	0.078	739	0.084	780	0.090	820	0.097	858
627	0.071	627	0.076	672	0.080	715	0.086	757	0.092	797	0.098	836	0.105	873
684	0.089	671	0.094	713	0.099	754	0.104	793	0.110	832	0.117	869	0.124	904
External Static Pressure														
	0.35		0.40		0.45		0.50		0.55		0.60		0.65	
CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM
382	0.055	799	0.061	841	0.068	881	0.074	919	0.081	956	0.087	991	0.094	1025
399	0.058	806	0.064	847	0.071	886	0.077	924	0.084	961	0.091	996	0.098	1029
428	0.063	817	0.070	858	0.076	896	0.083	934	0.090	969	0.097	1004	0.105	1037
456	0.069	829	0.075	868	0.082	907	0.089	943	0.096	978	0.104	1013	0.112	1045
485	0.075	841	0.081	880	0.089	918	0.096	954	0.103	988	0.111	1022	0.119	1054
513	0.081	854	0.088	892	0.095	929	0.103	964	0.111	998	0.119	1031	0.127	1063
542	0.088	867	0.095	905	0.103	941	0.111	975	0.119	1009	0.127	1041	0.135	1073
570	0.096	881	0.103	917	0.111	953	0.119	987	0.127	1020	0.135	1052	0.144	1083
599	0.104	895	0.111	931	0.119	965	0.127	999	0.136	1031	0.145	1063	0.154	1093

Table 118. Fan performance GEV/H018 (continued)

External Static Pressure														
	0.35		0.40		0.45		0.50		0.55		0.60		0.65	
CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM
627	0.112	909	0.120	944	0.128	978	0.136	1011	0.145	1043	0.154	1074	0.163	1104
684	0.132	939	0.140	972	0.148	1005	0.157	1036	0.166	1067	0.175	1097	0.185	1126
External Static Pressure														
	0.70		0.75		0.80		0.85		0.90		0.95		1.00	
CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM
382	0.101	1058	0.108	1089	0.115	1119	0.122	1149	0.129	1177	0.136	1204	0.143	1230
399	0.105	1062	0.112	1093	0.119	1123	0.127	1152	0.134	1180	0.141	1207	0.148	1233
428	0.112	1069	0.120	1100	0.127	1130	0.135	1159	0.142	1186	0.150	1213	0.157	1239
456	0.119	1077	0.127	1107	0.135	1137	0.143	1165	0.151	1193	0.159	1220	0.167	1246
485	0.127	1085	0.135	1116	0.143	1145	0.152	1173	0.160	1200	0.168	1227	0.177	1253
513	0.135	1094	0.144	1124	0.152	1153	0.161	1181	0.169	1208	0.178	1234	0.187	1260
542	0.144	1103	0.153	1133	0.162	1161	0.170	1189	0.179	1216	0.188	1242	0.197	1268
570	0.153	1113	0.162	1142	0.171	1170	0.180	1197	0.190	1224	0.199	1250	0.208	1276
599	0.163	1123	0.172	1151	0.181	1179	0.191	1207	0.200	1233	0.210	1259	0.220	1285
627	0.173	1133	0.182	1161	0.192	1189	0.202	1216	0.212	1242	0.221	1268	0.231	1293
684	0.194	1154	0.204	1182	0.215	1209	0.225	1235	0.235	1261	0.246	1287	0.257	1312
External Static Pressure														
	1.05		1.10		1.15		1.20		1.25		1.30		1.35	
CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM
382	0.149	1255	0.156	1280	0.162	1303	0.168	1326	0.174	1349	0.180	1371	0.185	1392
399	0.155	1259	0.162	1283	0.168	1307	0.175	1330	0.181	1352	0.187	1374	—	—
428	0.165	1265	0.172	1289	0.179	1313	0.186	1336	0.192	1359	0.199	1381	—	—
456	0.174	1271	0.182	1296	0.189	1319	0.197	1343	0.204	1366	0.211	1388	—	—
485	0.185	1278	0.193	1303	0.201	1327	0.208	1350	0.216	1373	—	—	—	—
513	0.195	1285	0.204	1310	0.212	1334	0.220	1358	0.228	1381	—	—	—	—
542	0.206	1293	0.215	1318	0.224	1342	0.233	1366	—	—	—	—	—	—
570	0.217	1301	0.227	1326	0.236	1350	—	—	—	—	—	—	—	—
599	0.229	1310	0.239	1334	0.249	1359	—	—	—	—	—	—	—	—
627	0.241	1318	0.251	1343	—	—	—	—	—	—	—	—	—	—
684	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Table 119. Fan performance GEV/H024

External Static Pressure														
	0.00		0.05		0.10		0.15		0.20		0.25		0.30	
CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM
509	0.048	460	0.051	499	0.054	537	0.058	574	0.061	610	0.066	646	0.070	681
532	0.048	468	0.051	506	0.055	544	0.059	581	0.063	617	0.067	652	0.073	687
570	0.049	482	0.053	520	0.057	556	0.061	593	0.066	628	0.071	663	0.077	698
608	0.051	496	0.055	533	0.060	570	0.064	606	0.070	641	0.075	675	0.082	709



Unit Fan Performance

Table 119. Fan performance GEV/H024 (continued)

External Static Pressure														
	0.00		0.05		0.10		0.15		0.20		0.25		0.30	
CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM
646	0.054	512	0.059	548	0.063	584	0.069	619	0.075	654	0.081	688	0.087	721
684	0.058	528	0.063	563	0.068	599	0.074	633	0.081	667	0.087	701	0.094	734
722	0.063	544	0.069	579	0.075	614	0.081	648	0.088	682	0.095	714	0.102	747
760	0.070	562	0.076	596	0.082	630	0.089	664	0.096	697	0.103	729	0.111	761
798	0.077	580	0.084	614	0.090	647	0.097	680	0.105	712	0.113	744	0.121	775
836	0.086	598	0.093	632	0.100	664	0.107	697	0.115	728	0.124	759	0.132	790
912	0.108	638	0.115	670	0.123	701	0.131	732	0.140	762	0.149	792	0.158	821
External Static Pressure														
	0.35		0.40		0.45		0.50		0.55		0.60		0.65	
CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM
509	0.076	715	0.081	749	0.087	782	0.093	814	0.099	845	0.106	876	0.113	907
532	0.078	721	0.084	754	0.090	787	0.096	819	0.103	850	0.110	881	0.118	911
570	0.083	731	0.089	764	0.095	797	0.102	828	0.110	859	0.117	890	0.125	919
608	0.088	742	0.095	775	0.102	807	0.109	838	0.117	869	0.125	899	0.134	928
646	0.094	754	0.102	786	0.109	817	0.117	848	0.125	878	0.134	908	0.143	937
684	0.102	766	0.109	797	0.117	828	0.126	859	0.134	889	0.143	918	0.153	947
722	0.110	778	0.118	810	0.127	840	0.135	870	0.144	900	0.154	928	0.163	957
760	0.119	792	0.128	822	0.137	852	0.146	882	0.155	911	0.165	939	0.175	967
798	0.130	805	0.139	836	0.148	865	0.157	894	0.167	923	0.177	951	0.188	978
836	0.141	820	0.150	849	0.160	878	0.170	907	0.180	935	0.190	962	0.201	989
912	0.167	850	0.177	878	0.188	906	0.198	934	0.209	961	0.220	987	0.231	1013
External Static Pressure														
	0.70		0.75		0.80		0.85		0.90		0.95		1.00	
CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM
509	0.121	936	0.128	965	0.136	993	0.144	1021	0.152	1048	0.161	1074	0.169	1100
532	0.125	941	0.133	969	0.141	998	0.149	1025	0.158	1052	0.167	1078	0.175	1104
570	0.133	948	0.142	977	0.150	1005	0.159	1032	0.168	1059	0.177	1085	0.186	1110
608	0.142	957	0.151	985	0.160	1013	0.169	1040	0.179	1066	0.188	1092	0.198	1117
646	0.152	966	0.161	993	0.170	1021	0.180	1048	0.190	1074	0.200	1099	0.210	1124
684	0.162	975	0.172	1002	0.182	1029	0.192	1056	0.202	1082	0.212	1107	0.223	1132
722	0.173	984	0.183	1012	0.193	1038	0.204	1065	0.215	1090	0.225	1115	0.236	1140
760	0.185	995	0.196	1021	0.206	1048	0.217	1074	0.228	1099	0.239	1124	0.250	1148
798	0.198	1005	0.209	1032	0.220	1058	0.231	1083	0.242	1108	0.254	1132	0.265	1157
836	0.212	1016	0.223	1042	0.234	1068	0.246	1093	0.257	1117	0.269	1142	0.281	1165
912	0.242	1039	0.254	1064	0.266	1089	0.278	1113	0.290	1137	0.302	1161	0.315	1184

Table 119. Fan performance GEV/H024 (continued)

External Static Pressure								
	1.05		1.10		1.15		1.20	
CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM
509	0.178	1125	0.187	1150	0.195	1174	0.205	1197
532	0.184	1129	0.194	1153	0.203	1177	0.212	1200
570	0.196	1135	0.205	1160	0.215	1183	—	—
608	0.208	1142	0.218	1166	0.228	1190	—	—
646	0.220	1149	0.231	1173	0.241	1196	—	—
684	0.233	1156	0.244	1180	—	—	—	—
722	0.247	1164	0.258	1188	—	—	—	—
760	0.262	1172	0.273	1195	—	—	—	—
798	0.277	1180	—	—	—	—	—	—
836	0.293	1189	—	—	—	—	—	—
912	—	—	—	—	—	—	—	—

Table 120. Fan performance GEV/H030

External Static Pressure														
	0.00		0.05		0.10		0.15		0.20		0.25		0.30	
CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM
637	0.053	508	0.058	545	0.062	581	0.068	616	0.073	651	0.079	685	0.086	718
665	0.056	519	0.061	556	0.066	591	0.071	626	0.077	660	0.084	694	0.091	727
713	0.062	540	0.067	576	0.073	610	0.079	645	0.086	678	0.093	711	0.100	744
760	0.070	562	0.076	596	0.082	630	0.089	664	0.096	697	0.103	729	0.111	761
808	0.080	585	0.086	618	0.093	651	0.100	684	0.108	716	0.116	748	0.124	779
855	0.091	608	0.098	641	0.105	673	0.113	705	0.121	736	0.129	767	0.138	797
903	0.105	633	0.112	665	0.120	697	0.128	728	0.137	758	0.145	788	0.155	817
950	0.121	659	0.128	690	0.136	720	0.145	750	0.154	780	0.163	809	0.173	838
998	0.139	686	0.147	716	0.156	745	0.164	775	0.173	803	0.183	832	0.193	859
1045	0.159	713	0.168	742	0.176	771	0.185	799	0.195	827	0.205	854	0.215	881
1140	0.207	771	0.216	798	0.225	825	0.235	851	0.245	877	0.255	903	0.266	928
External Static Pressure														
	0.35		0.40		0.45		0.50		0.55		0.60		0.65	
CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM
637	0.093	751	0.100	783	0.107	815	0.115	846	0.123	876	0.132	906	0.140	935
665	0.098	760	0.105	791	0.113	823	0.121	853	0.130	883	0.139	913	0.148	942
713	0.108	775	0.116	807	0.124	837	0.133	867	0.142	897	0.151	926	0.161	954
760	0.119	792	0.128	822	0.137	852	0.146	882	0.155	911	0.165	939	0.175	967
808	0.133	809	0.142	839	0.151	869	0.161	897	0.170	926	0.181	954	0.191	981
855	0.147	827	0.157	856	0.166	885	0.176	913	0.187	941	0.197	968	0.208	995
903	0.164	846	0.174	875	0.184	903	0.194	931	0.205	958	0.216	984	0.227	1010
950	0.182	866	0.193	894	0.203	921	0.214	948	0.225	974	0.236	1000	0.248	1026
998	0.203	887	0.214	914	0.224	940	0.235	966	0.247	992	0.258	1017	0.270	1042



Unit Fan Performance

Table 120. Fan performance GEV/H030 (continued)

External Static Pressure														
	0.35		0.40		0.45		0.50		0.55		0.60		0.65	
CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM
1045	0.225	908	0.236	934	0.247	960	0.258	985	0.270	1010	0.282	1035	0.294	1059
1140	0.276	953	0.288	977	0.299	1001	0.311	1025	0.323	1048	0.335	1071	0.347	1094
External Static Pressure														
	0.70		0.75		0.80		0.85		0.90		0.95		1.00	
CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM
637	0.149	963	0.158	991	0.168	1019	0.177	1046	0.187	1072	0.197	1098	0.207	1123
665	0.157	970	0.166	998	0.176	1025	0.186	1052	0.196	1078	0.206	1103	0.216	1128
713	0.170	982	0.180	1009	0.191	1036	0.201	1062	0.211	1088	0.222	1113	0.233	1138
760	0.185	995	0.196	1021	0.206	1048	0.217	1074	0.228	1099	0.239	1124	0.250	1148
808	0.202	1008	0.212	1034	0.224	1060	0.235	1086	0.246	1110	0.258	1135	0.269	1159
855	0.219	1022	0.230	1047	0.242	1073	0.253	1098	0.265	1122	0.277	1146	0.289	1170
903	0.239	1036	0.250	1061	0.262	1086	0.274	1111	0.286	1135	0.298	1158	0.310	1181
950	0.259	1051	0.271	1076	0.283	1100	0.295	1124	0.308	1147	0.320	1170	0.333	1193
998	0.282	1067	0.294	1091	0.306	1115	0.319	1138	0.332	1161	0.344	1183	—	—
1045	0.306	1083	0.318	1106	0.331	1129	0.344	1152	0.356	1174	0.369	1196	—	—
1140	0.360	1116	0.373	1138	0.386	1160	0.399	1182	—	—	—	—	—	—
External Static Pressure														
	1.05		1.10		1.15									
CFM	kW	RPM	kW	RPM	kW	RPM								
637	0.217	1147	0.228	1171	0.238	1195								
665	0.227	1153	0.237	1177	0.248	1200								
713	0.244	1162	0.255	1186	—	—								
760	0.262	1172	0.273	1195	—	—								
808	0.281	1182	—	—	—	—								
855	0.301	1193	—	—	—	—								
903	—	—	—	—	—	—								
950	—	—	—	—	—	—								
998	—	—	—	—	—	—								
1045	—	—	—	—	—	—								
1140	—	—	—	—	—	—								

Table 121. Fan performance GEV/H036

External Static Pressure														
	0.00		0.05		0.10		0.15		0.20		0.25		0.30	
CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM
764	0.063	526	0.069	567	0.075	607	0.081	645	0.088	682	0.096	717	0.104	751
798	0.066	543	0.072	583	0.079	622	0.086	660	0.094	696	0.102	731	0.111	765
855	0.073	570	0.080	610	0.088	648	0.096	685	0.105	721	0.115	756	0.124	789
912	0.082	598	0.091	637	0.100	675	0.109	711	0.119	746	0.130	780	0.140	813

Table 121. Fan performance GEV/H036 (continued)

External Static Pressure														
	0.00		0.05		0.10		0.15		0.20		0.25		0.30	
CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM
969	0.094	625	0.104	663	0.114	700	0.125	736	0.136	771	0.147	804	0.159	837
1026	0.109	651	0.120	689	0.131	725	0.143	761	0.155	795	0.167	828	0.180	860
1083	0.127	676	0.139	714	0.151	750	0.163	785	0.176	818	0.190	851	0.203	882
1140	0.147	700	0.160	737	0.173	773	0.186	808	0.200	841	0.214	873	0.229	904
1197	0.170	724	0.183	760	0.198	796	0.212	830	0.227	863	0.241	894	0.256	925
1254	0.195	746	0.210	782	0.224	817	0.240	851	0.255	884	0.271	915	0.286	945
1368	0.253	788	0.269	823	0.285	858	0.302	891	0.319	923	0.336	953	0.353	983
External Static Pressure														
	0.35		0.40		0.45		0.50		0.55		0.60		0.65	
CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM
764	0.112	785	0.121	817	0.130	848	0.139	878	0.149	907	0.159	935	0.169	962
798	0.120	798	0.129	830	0.139	861	0.149	890	0.159	919	0.169	947	0.180	974
855	0.134	821	0.145	853	0.155	883	0.166	912	0.177	940	0.189	967	0.200	994
912	0.151	845	0.163	875	0.174	905	0.186	934	0.198	961	0.210	988	0.223	1014
969	0.171	868	0.183	898	0.196	927	0.208	955	0.221	983	0.234	1009	0.247	1034
1026	0.193	891	0.206	920	0.219	949	0.233	977	0.246	1004	0.260	1029	0.274	1055
1083	0.217	913	0.231	942	0.245	970	0.259	998	0.273	1024	0.288	1050	0.302	1074
1140	0.243	934	0.258	963	0.272	991	0.287	1018	0.302	1044	0.317	1069	0.333	1093
1197	0.272	955	0.287	983	0.302	1011	0.318	1037	0.334	1063	0.349	1088	0.365	1112
1254	0.302	974	0.318	1003	0.334	1030	0.350	1056	0.367	1082	0.383	1106	0.399	1130
1368	0.370	1012	0.387	1039	0.404	1066	0.421	1092	0.438	1117	0.455	1141	0.472	1164
External Static Pressure														
	0.70		0.75		0.80		0.85		0.90		0.95		1.00	
CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM
764	0.179	989	0.190	1014	0.201	1039	0.212	1063	0.223	1086	0.234	1109	0.245	1131
798	0.191	1000	0.202	1025	0.213	1050	0.225	1073	0.236	1096	0.248	1119	0.260	1141
855	0.212	1019	0.224	1044	0.236	1068	0.248	1091	0.261	1114	0.273	1136	0.285	1158
912	0.235	1039	0.248	1063	0.261	1087	0.274	1110	0.287	1132	0.299	1154	0.312	1175
969	0.261	1059	0.274	1083	0.287	1106	0.301	1129	0.314	1151	0.328	1172	0.341	1193
1026	0.288	1079	0.302	1102	0.316	1125	0.330	1147	0.344	1169	0.358	1190	—	—
1083	0.317	1098	0.331	1121	0.346	1144	0.361	1166	0.375	1187	—	—	—	—
1140	0.348	1117	0.363	1140	0.378	1162	0.393	1184	—	—	—	—	—	—
1197	0.381	1135	0.396	1158	0.412	1180	—	—	—	—	—	—	—	—
1254	0.415	1153	0.431	1175	0.447	1197	—	—	—	—	—	—	—	—
1368	0.489	1186	—	—	—	—	—	—	—	—	—	—	—	—



Unit Fan Performance

Table 121. Fan performance GEV/H036 (continued)

External Static Pressure						
	1.05		1.10		1.15	
CFM	kW	RPM	kW	RPM	kW	RPM
764	0.256	1153	0.268	1174	0.279	1195
798	0.271	1162	0.283	1183	—	—
855	0.297	1179	0.310	1199	—	—
912	0.325	1196	—	—	—	—
969	—	—	—	—	—	—
1026	—	—	—	—	—	—
1083	—	—	—	—	—	—
1140	—	—	—	—	—	—
1197	—	—	—	—	—	—
1254	—	—	—	—	—	—
1368	—	—	—	—	—	—

Table 122. Fan performance GEV/H042

External Static Pressure														
	0.00		0.05		0.10		0.15		0.20		0.25		0.30	
CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM
891	0.078	588	0.086	627	0.095	665	0.104	702	0.114	737	0.124	771	0.134	804
931	0.086	607	0.095	646	0.104	683	0.114	719	0.125	755	0.135	788	0.146	821
998	0.101	638	0.112	676	0.123	713	0.134	749	0.145	783	0.157	816	0.169	849
1064	0.121	668	0.132	705	0.144	742	0.156	777	0.169	811	0.182	843	0.195	875
1131	0.143	697	0.156	734	0.169	770	0.183	804	0.196	837	0.210	870	0.224	901
1197	0.170	724	0.183	760	0.198	796	0.212	830	0.227	863	0.241	894	0.256	925
1264	0.200	750	0.214	786	0.229	821	0.245	855	0.260	887	0.276	918	0.292	949
1330	0.232	774	0.248	810	0.264	845	0.280	878	0.297	910	0.313	941	0.330	971
1397	0.269	798	0.286	833	0.302	867	0.319	900	0.337	932	0.354	963	0.371	992
1463	0.308	820	0.326	855	0.343	889	0.361	921	0.379	953	0.397	983	0.414	1012
1596	0.397	861	0.416	895	0.435	928	0.453	960	0.472	991	0.491	1021	0.510	1050
External Static Pressure														
	0.35		0.40		0.45		0.50		0.55		0.60		0.65	
CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM
891	0.145	836	0.156	867	0.167	897	0.179	926	0.190	953	0.202	980	0.214	1007
931	0.158	853	0.169	883	0.181	912	0.193	941	0.206	968	0.218	995	0.231	1021
998	0.182	880	0.194	909	0.207	938	0.220	966	0.234	993	0.247	1019	0.261	1045
1064	0.208	905	0.222	935	0.236	963	0.250	991	0.264	1017	0.278	1043	0.293	1068
1131	0.239	931	0.253	960	0.268	988	0.283	1015	0.298	1041	0.313	1066	0.328	1090
1197	0.272	955	0.287	983	0.302	1011	0.318	1037	0.334	1063	0.349	1088	0.365	1112
1264	0.308	978	0.324	1006	0.340	1033	0.356	1059	0.373	1085	0.389	1109	0.405	1133
1330	0.346	1000	0.363	1027	0.380	1054	0.397	1080	0.414	1105	0.430	1129	0.447	1153
1397	0.388	1021	0.406	1048	0.423	1075	0.440	1100	0.458	1125	0.475	1149	0.492	1172

Table 122. Fan performance GEV/H042 (continued)

External Static Pressure															
	0.35		0.40		0.45		0.50		0.55		0.60		0.65		
CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	
1463	0.432	1040	0.450	1068	0.468	1094	0.486	1119	0.504	1144	0.521	1167	0.539	1190	
1596	0.529	1077	0.548	1104	0.566	1130	0.585	1154	0.603	1178	—	—	—	—	

External Static Pressure																
	0.70		0.75		0.80		0.85		0.90		0.95		1.00		1.05	
CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM
891	0.227	1032	0.239	1056	0.252	1080	0.264	1103	0.277	1126	0.289	1147	0.302	1169	0.315	1189
931	0.244	1046	0.256	1070	0.269	1093	0.283	1116	0.296	1138	0.309	1160	0.322	1181	—	—
998	0.274	1069	0.288	1093	0.302	1116	0.315	1138	0.329	1160	0.343	1181	—	—	—	—
1064	0.307	1092	0.321	1115	0.336	1138	0.350	1160	0.365	1181	—	—	—	—	—	—
1131	0.343	1114	0.358	1137	0.373	1159	0.388	1181	—	—	—	—	—	—	—	—
1197	0.381	1135	0.396	1158	0.412	1180	—	—	—	—	—	—	—	—	—	—
1264	0.421	1156	0.437	1178	0.453	1200	—	—	—	—	—	—	—	—	—	—
1330	0.464	1175	0.480	1197	—	—	—	—	—	—	—	—	—	—	—	—
1397	0.509	1194	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1463	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1596	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Table 123. Fan performance GEV/H048

External Static Pressure														
	0.00		0.05		0.10		0.15		0.20		0.25		0.30	
CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM
1018	0.040	378	0.056	418	0.073	457	0.089	494	0.106	530	0.122	564	0.138	598
1064	0.044	387	0.061	426	0.078	464	0.095	501	0.112	537	0.129	571	0.146	604
1140	0.053	401	0.071	440	0.089	478	0.107	514	0.124	549	0.142	583	0.160	616
1216	0.065	417	0.084	455	0.102	492	0.121	527	0.139	562	0.158	595	0.177	628
1292	0.080	433	0.099	471	0.118	507	0.138	542	0.157	576	0.176	608	0.196	640
1368	0.097	450	0.117	487	0.137	523	0.157	557	0.178	590	0.198	622	0.218	653
1444	0.119	469	0.139	505	0.160	539	0.181	573	0.201	605	0.222	637	0.243	667
1520	0.143	488	0.165	523	0.186	557	0.207	590	0.229	622	0.250	653	0.272	682
1596	0.172	508	0.194	542	0.216	576	0.238	608	0.260	639	0.282	669	0.305	698
1672	0.205	530	0.227	563	0.250	595	0.272	627	0.295	657	0.318	686	0.341	715
1824	0.284	576	0.307	607	0.331	638	0.355	668	0.379	696	0.403	724	0.427	751

External Static Pressure														
	0.35		0.40		0.45		0.50		0.55		0.60		0.65	
CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM
1018	0.155	630	0.171	662	0.187	692	0.204	721	0.220	750	0.237	777	0.253	803
1064	0.163	637	0.180	668	0.197	698	0.214	727	0.231	755	0.248	782	0.265	808
1140	0.178	647	0.196	678	0.214	708	0.232	736	0.250	764	0.268	791	0.286	817
1216	0.195	659	0.214	689	0.233	718	0.252	746	0.271	774	0.290	800	0.309	826



Unit Fan Performance

Table 123. Fan performance GEV/H048 (continued)

External Static Pressure														
	0.35		0.40		0.45		0.50		0.55		0.60		0.65	
CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM
1292	0.215	671	0.235	700	0.255	729	0.275	757	0.294	784	0.314	810	0.334	835
1368	0.238	684	0.259	713	0.279	741	0.300	768	0.321	795	0.342	820	0.363	845
1444	0.265	697	0.286	726	0.307	753	0.328	780	0.350	806	0.372	831	0.394	855
1520	0.294	711	0.316	739	0.338	766	0.360	792	0.383	818	0.405	843	0.428	866
1596	0.327	726	0.350	754	0.373	780	0.396	806	0.419	831	0.442	855	0.465	878
1672	0.364	742	0.388	769	0.411	795	0.435	820	0.459	844	0.483	868	0.507	891
1824	0.451	777	0.476	802	0.501	827	0.525	851	0.551	874	0.576	896	0.601	918
External Static Pressure														
	0.70		0.75		0.80		0.85		0.90		0.95		1.00	
CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM
1018	0.270	829	0.287	854	0.303	877	0.320	901	0.337	923	0.354	945	0.371	966
1064	0.282	834	0.300	858	0.317	882	0.334	905	0.352	927	0.370	949	0.387	970
1140	0.304	842	0.323	866	0.341	890	0.360	913	0.378	935	0.397	956	0.416	977
1216	0.328	851	0.348	875	0.367	898	0.387	920	0.406	942	0.426	964	0.446	984
1292	0.355	860	0.375	883	0.395	906	0.416	929	0.437	950	0.457	971	0.478	992
1368	0.384	869	0.405	892	0.426	915	0.448	937	0.469	959	0.491	979	0.513	1000
1444	0.416	879	0.438	902	0.460	924	0.482	946	0.505	967	0.528	988	0.551	1008
1520	0.451	890	0.473	912	0.497	934	0.520	956	0.543	976	0.567	997	0.591	1016
1596	0.489	901	0.513	923	0.537	945	0.561	966	0.585	986	0.610	1006	0.634	1025
1672	0.531	913	0.556	935	0.580	956	0.605	976	0.630	996	0.656	1016	0.681	1035
1824	0.627	939	0.653	960	0.680	980	0.706	999	0.733	1018	0.760	1037	0.787	1055
External Static Pressure														
	1.05		1.10		1.15		1.20		1.25		1.30		1.35	
CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM
1018	0.388	986	0.405	1006	0.423	1025	0.440	1044	0.458	1062	0.475	1080	0.493	1098
1064	0.405	990	0.423	1010	0.441	1030	0.459	1048	0.478	1067	0.496	1085	0.515	1102
1140	0.435	997	0.454	1017	0.473	1036	0.492	1055	0.512	1073	0.531	1091	0.551	1109
1216	0.466	1005	0.486	1024	0.506	1043	0.527	1062	0.548	1080	0.568	1098	0.589	1116
1292	0.499	1012	0.521	1031	0.542	1050	0.564	1069	0.585	1087	0.607	1105	0.629	1123
1368	0.535	1020	0.557	1039	0.580	1058	0.603	1076	0.625	1095	0.648	1112	0.672	1130
1444	0.574	1027	0.597	1047	0.620	1065	0.644	1084	0.668	1102	0.692	1120	0.716	1137
1520	0.615	1036	0.639	1055	0.664	1073	0.688	1091	0.713	1109	0.738	1127	0.764	1144
1596	0.659	1044	0.685	1063	0.710	1081	0.736	1099	0.761	1117	0.788	1135	0.814	1152
1672	0.707	1054	0.733	1072	0.760	1090	0.786	1108	0.813	1125	0.840	1143	0.867	1160
1824	0.814	1073	0.842	1091	0.870	1109	0.898	1126	0.927	1143	0.956	1160	0.985	1177

Table 123. Fan performance GEV/H048 (continued)

External Static Pressure												
	1.40		1.45		1.50		1.55		1.60		1.65	
CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM
1018	0.511	1115	0.529	1132	0.547	1148	0.566	1164	0.584	1180	0.603	1196
1064	0.533	1119	0.552	1136	0.571	1153	0.590	1169	0.610	1185	—	—
1140	0.571	1126	0.591	1143	0.611	1160	0.632	1176	0.653	1193	—	—
1216	0.611	1133	0.632	1150	0.653	1167	0.675	1184	0.697	1200	—	—
1292	0.652	1140	0.674	1157	0.697	1174	0.720	1191	—	—	—	—
1368	0.695	1147	0.719	1164	0.743	1181	0.767	1198	—	—	—	—
1444	0.741	1154	0.766	1172	0.791	1189	—	—	—	—	—	—
1520	0.789	1162	0.815	1179	0.841	1196	—	—	—	—	—	—
1596	0.841	1169	0.867	1186	—	—	—	—	—	—	—	—
1672	0.895	1177	0.923	1194	—	—	—	—	—	—	—	—
1824	1.014	1193	—	—	—	—	—	—	—	—	—	—

Table 124. Fan performance GEV/H060

External Static Pressure														
	0.00		0.05		0.10		0.15		0.20		0.25		0.30	
CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM
1273	0.076	429	0.095	467	0.114	503	0.133	538	0.152	572	0.172	605	0.191	637
1330	0.088	442	0.108	479	0.127	515	0.147	549	0.167	583	0.187	615	0.207	647
1425	0.113	464	0.133	500	0.154	535	0.175	569	0.195	602	0.216	633	0.237	664
1520	0.143	488	0.165	523	0.186	557	0.207	590	0.229	622	0.250	653	0.272	682
1615	0.180	513	0.202	547	0.224	580	0.246	612	0.268	643	0.291	673	0.313	702
1710	0.223	541	0.246	574	0.268	606	0.291	637	0.314	666	0.337	695	0.361	723
1805	0.273	570	0.296	602	0.320	633	0.343	662	0.367	691	0.391	719	0.415	746
1900	0.331	601	0.355	632	0.379	661	0.403	690	0.427	718	0.452	745	0.477	771
1995	0.397	634	0.421	663	0.446	692	0.471	720	0.496	746	0.521	772	0.546	797
2090	0.472	669	0.497	697	0.522	725	0.547	751	0.572	777	0.598	801	0.624	825
2280	0.649	747	0.675	772	0.701	797	0.727	821	0.753	844	0.780	866	0.806	887
External Static Pressure														
	0.35		0.40		0.45		0.50		0.55		0.60		0.65	
CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM
1273	0.210	668	0.230	698	0.249	726	0.269	754	0.288	781	0.308	807	0.328	833
1330	0.227	677	0.247	706	0.267	735	0.287	762	0.307	789	0.328	815	0.348	840
1425	0.258	694	0.279	722	0.300	750	0.321	777	0.342	803	0.364	828	0.386	853
1520	0.294	711	0.316	739	0.338	766	0.360	792	0.383	818	0.405	843	0.428	866
1615	0.336	730	0.359	757	0.382	784	0.405	809	0.428	834	0.452	858	0.475	881
1710	0.384	751	0.408	777	0.432	802	0.456	827	0.480	851	0.504	874	0.529	897
1805	0.439	773	0.464	798	0.488	823	0.513	847	0.538	870	0.563	892	0.589	914
1900	0.502	796	0.527	821	0.552	844	0.578	867	0.603	890	0.629	911	0.656	933
1995	0.572	821	0.597	845	0.623	868	0.650	890	0.676	911	0.703	932	0.730	952



Unit Fan Performance

Table 124. Fan performance GEV/H060 (continued)

External Static Pressure														
	0.35		0.40		0.45		0.50		0.55		0.60		0.65	
CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM
2090	0.650	848	0.676	871	0.703	893	0.730	914	0.757	934	0.784	954	0.812	974
2280	0.834	908	0.861	929	0.889	948	0.917	967	—	—	—	—	—	—
External Static Pressure														
	0.70		0.75		0.80		0.85		0.90		0.95		1.00	
CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM
1273	0.348	857	0.368	881	0.388	904	0.408	927	0.429	948	0.449	969	0.470	990
1330	0.369	864	0.390	888	0.410	911	0.431	933	0.453	954	0.474	975	0.495	996
1425	0.407	877	0.429	900	0.451	922	0.473	944	0.496	965	0.518	986	0.541	1006
1520	0.451	890	0.473	912	0.497	934	0.520	956	0.543	976	0.567	997	0.591	1016
1615	0.499	904	0.523	926	0.547	947	0.572	968	0.596	988	0.621	1008	0.646	1028
1710	0.554	919	0.578	940	0.604	961	0.629	982	0.655	1001	0.680	1021	0.706	1040
1805	0.614	935	0.640	956	0.666	976	0.692	996	0.719	1015	0.746	1034	0.773	1053
1900	0.682	953	0.709	973	0.736	993	0.763	1012	0.790	1030	0.818	1049	0.846	1067
1995	0.757	972	0.784	991	0.812	1010	0.840	1029	0.868	1047	0.897	1064	0.926	1082
2090	0.840	993	0.868	1011	0.897	1029	0.925	1047	0.954	1064	0.984	1081	1.013	1098
2280	—	—	—	—	—	—	—	—	—	—	—	—	—	—
External Static Pressure														
	1.05		1.10		1.15		1.20		1.25		1.30		1.35	
CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM
1273	0.491	1010	0.512	1030	0.533	1049	0.554	1067	0.576	1086	0.597	1104	0.619	1121
1330	0.517	1016	0.539	1035	0.561	1054	0.583	1073	0.605	1091	0.628	1109	0.650	1126
1425	0.564	1025	0.587	1045	0.610	1063	0.633	1082	0.657	1100	0.681	1118	0.705	1135
1520	0.615	1036	0.639	1055	0.664	1073	0.688	1091	0.713	1109	0.738	1127	0.764	1144
1615	0.671	1047	0.696	1065	0.722	1084	0.748	1102	0.774	1119	0.800	1137	0.827	1154
1710	0.733	1058	0.759	1077	0.786	1095	0.813	1112	0.840	1130	0.868	1147	0.895	1164
1805	0.800	1071	0.828	1089	0.855	1106	0.883	1124	0.912	1141	0.940	1158	0.969	1174
1900	0.874	1084	0.903	1102	0.931	1119	0.960	1136	0.990	1152	1.020	1169	1.050	1185
1995	0.955	1099	0.984	1116	1.014	1132	1.044	1149	1.075	1165	—	—	—	—
2090	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2280	—	—	—	—	—	—	—	—	—	—	—	—	—	—
External Static Pressure														
	1.40		1.45		1.50		1.55							
CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM						
1273	0.641	1139	0.663	1156	0.686	1172	0.709	1189						
1330	0.673	1144	0.696	1161	0.720	1178	0.743	1195						
1425	0.729	1153	0.754	1170	0.778	1187	—	—						
1520	0.789	1162	0.815	1179	0.841	1196	—	—						
1615	0.854	1171	0.881	1188	—	—	—	—						
1710	0.923	1181	0.952	1198	—	—	—	—						

Table 124. Fan performance GEV/H060 (continued)

CFM	External Static Pressure								
	1.40		1.45		1.50		1.55		
	kW	RPM	kW	RPM	kW	RPM	kW	RPM	
1805	0.999	1191	—	—	—	—	—	—	—
1900	—	—	—	—	—	—	—	—	—
1995	—	—	—	—	—	—	—	—	—
2090	—	—	—	—	—	—	—	—	—
2280	—	—	—	—	—	—	—	—	—

Figure 17. Fan performance curve 6 tons GEH072³

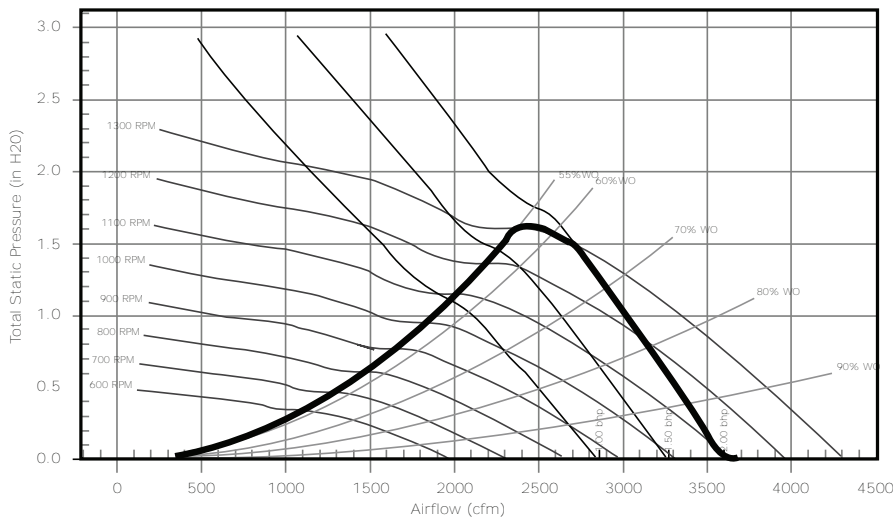


Table 125. Fan performance 6 tons GEH072 (includes wet coil, no filter)

Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, No Drive Loss Included and No Return Air Filter)													
	0.1		0.2		0.3		0.4		0.5		0.6		0.7	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1920	632(a)	0.35(a)	682(a)	0.40(a)	729(a)	0.46(a)	774(a)	0.51(a)	818(a)	0.57(a)	860(a)	0.62(a)	901(a)	0.68(a)
2160	699(a)	0.49(a)	745(a)	0.55(a)	787(a)	0.60(a)	829(a)	0.66(a)	869(a)	0.72(a)	907(a)	0.79(a)	945(b)	0.85(b)
2400	767(a)	0.66(a)	808(a)	0.72(a)	848(a)	0.78(a)	886(a)	0.85(a)	923(a)	0.91(a)	959(b)	0.98(b)	994(c)	1.05(c)
2640	836(a)	0.86(a)	874(a)	0.93(a)	911(a)	1.00(a)	946(c)	1.07(c)	980(c)	1.14(c)	1014(c)	1.21(c)	1047(c)	1.28(c)
2880	905(c)	1.10(c)	940(c)	1.17(c)	974(c)	1.25(c)	1008(c)	1.33(c)	1039(c)	1.40(c)	1071(c)	1.48(c)	1102(d)	1.56(d)
Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, No Drive Loss Included and No Return Air Filter)													
	0.8		0.9		1.0		1.1		1.2		1.3			
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1920	941(b)	0.74(b)	979(b)	0.80(b)	1027(b)	0.89(b)	1077(b)	0.98(b)	1120(c)	1.06(c)	1159(c)	1.14(c)		
2160	982(b)	0.91(b)	1018(b)	0.98(b)	1053(c)	1.05(c)	1087(c)	1.12(c)	1122(c)	1.19(c)	1171(c)	1.30(c)		
2400	1029(c)	1.12(c)	1062(c)	1.19(c)	1095(c)	1.26(c)	1128(c)	1.33(c)	1159(c)	1.41(c)	1191(c)	1.49(c)		
2640	1078(c)	1.36(c)	1111(c)	1.44(c)	1142(d)	1.51(d)	1171(d)	1.59(d)	1202(d)	1.67(d)	1231(d)	1.75(d)		
2880	1132(d)	1.64(d)	1161(d)	1.72(d)	1191(d)	1.80(d)	1220(d)	1.89(d)	1248(d)	1.97(d)	—	—		

³ Includes wet coil, no filter



Unit Fan Performance

Table 125. Fan performance 6 tons GEH072 (includes wet coil, no filter) (continued)

Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, No Drive Loss Included and No Return Air Filter)													
	0.1		0.2		0.3		0.4		0.5		0.6		0.7	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP

Digit 12 - Drive Package		
Legend	single speed motor	two speed motor
(a)	A	1
(b)	B	2
(c)	C	3
(d)	D	4

Figure 18. Fan performance curve (top supply) 6 tons GEV072⁴

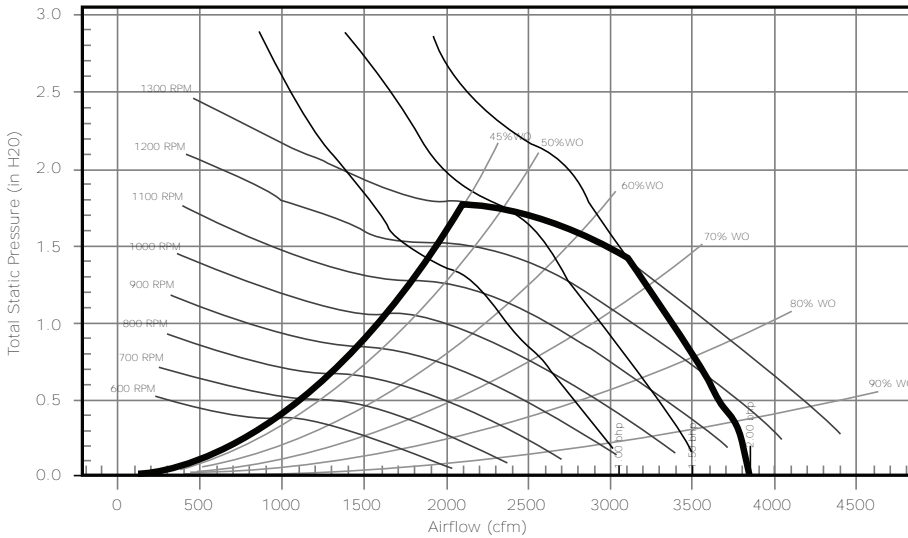


Table 126. Fan performance (top supply) 6 tons GEV072 (includes wet coil, no filter)

Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, No Drive Loss Included and No Return Air Filter)													
	0.1		0.2		0.3		0.4		0.5		0.6		0.7	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1920	595(a)	0.27(a)	649(a)	0.32(a)	698(a)	0.36(a)	744(a)	0.40(a)	788(a)	0.45(a)	830(a)	0.50(a)	871(a)	0.55(a)
2160	655(a)	0.37(a)	705(a)	0.42(a)	751(a)	0.47(a)	794(a)	0.52(a)	835(a)	0.57(a)	874(a)	0.63(a)	912(b)	0.68(b)
2400	717(a)	0.50(a)	763(a)	0.56(a)	806(a)	0.61(a)	846(a)	0.67(a)	884(a)	0.72(a)	921(b)	0.78(b)	957(b)	0.83(b)
2640	780(a)	0.65(a)	822(a)	0.71(a)	862(a)	0.78(a)	900(b)	0.84(b)	937(b)	0.90(b)	971(b)	0.96(b)	1005(c)	1.02(c)
2880	844(a)	0.84(a)	882(a)	0.90(a)	920(b)	0.97(b)	956(c)	1.04(c)	990(c)	1.10(c)	1023(c)	1.17(c)	1055(c)	1.23(c)
Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, No Drive Loss Included and No Return Air Filter)													
	0.8		0.9		1.0		1.1		1.2		1.3			
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1920	912(b)	0.60(b)	953(b)	0.65(b)	993(b)	0.70(b)	1034(b)	0.76(b)	1072(b)	0.84(b)	1111(b)	0.92(b)		
2160	949(b)	0.74(b)	985(b)	0.79(b)	1021(b)	0.85(b)	1058(b)	0.90(b)	1094(b)	0.95(b)	1129(c)	1.02(c)		
2400	991(b)	0.89(b)	1024(b)	0.96(b)	1057(c)	1.02(c)	1091(c)	1.08(c)	1123(c)	1.14(c)	1157(c)	1.20(c)		

⁴ Includes wet coil, no filter

Table 126. Fan performance (top supply) 6 tons GEV072 (includes wet coil, no filter) (continued)

Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, No Drive Loss Included and No Return Air Filter)													
	0.1		0.2		0.3		0.4		0.5		0.6		0.7	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2640	1038(c)	1.08(c)	1069(c)	1.15(c)	1100(c)	1.21(c)	1130(c)	1.28(c)	1161(c)	1.35(c)	1191(c)	1.42(c)		
2880	1086(c)	1.30(c)	1116(c)	1.36(c)	1145(c)	1.43(c)	1175(d)	1.51(d)	1203(d)	1.58(d)	1231(d)	1.66(d)		

Digit 12 - Drive Package		
Legend	single speed motor	two speed motor
(a)	A	1
(b)	B	2
(c)	C	3
(d)	D	4

Figure 19. Fan performance curve (front/back supply) 6 tons GEV072⁵

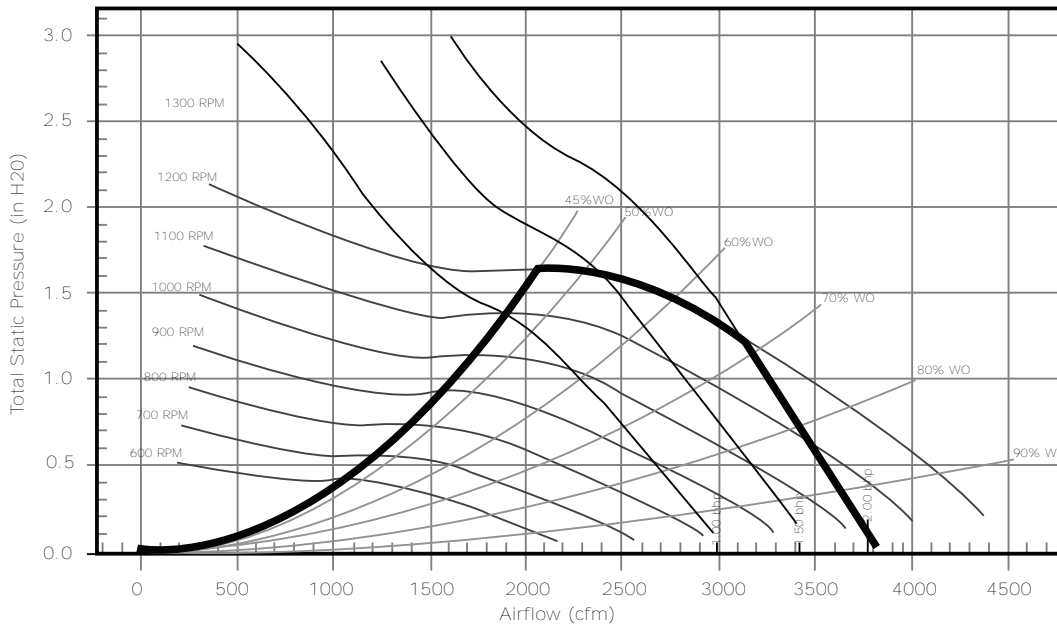


Table 127. Fan performance (front/back supply) 6 tons GEV072 (includes wet coil, no filter)

Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, No Drive Loss Included and No Return Air Filter)													
	0.1		0.2		0.3		0.4		0.5		0.6		0.7	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1920	559(a)	0.30(a)	611(a)	0.34(a)	660(a)	0.39(a)	706(a)	0.44(a)	749(a)	0.48(a)	790(a)	0.53(a)	831(a)	0.59(a)
2160	616(a)	0.41(a)	663(a)	0.46(a)	708(a)	0.51(a)	751(a)	0.56(a)	792(a)	0.62(a)	830(a)	0.67(a)	867(a)	0.73(a)
2400	674(a)	0.55(a)	717(a)	0.60(a)	759(a)	0.66(a)	799(a)	0.72(a)	837(a)	0.78(a)	873(a)	0.84(a)	909(b)	0.90(b)
2640	733(a)	0.71(a)	773(a)	0.78(a)	811(a)	0.84(a)	849(a)	0.90(a)	884(a)	0.97(a)	919(c)	1.03(c)	953(c)	1.10(c)
2880	793(a)	0.91(a)	830(a)	0.98(a)	865(c)	1.05(c)	900(c)	1.12(c)	934(c)	1.19(c)	966(c)	1.26(c)	998(c)	1.33(c)

⁵ Includes wet coil, no filter



Unit Fan Performance

Table 127. Fan performance (front/back supply) 6 tons GEV072 (includes wet coil, no filter) (continued)

Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, No Drive Loss Included and No Return Air Filter)													
	0.1		0.2		0.3		0.4		0.5		0.6		0.7	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, No Drive Loss Included and No Return Air Filter)													
	0.8		0.9		1.0		1.1		1.2		1.3			
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1920	869(a)	0.64(a)	907(b)	0.70(b)	947(b)	0.76(b)	988(b)	0.83(b)	1030(b)	0.90(b)	1068(b)	0.97(b)		
2160	904(b)	0.78(b)	939(b)	0.84(b)	974(b)	0.91(b)	1008(b)	0.97(b)	1042(c)	1.04(c)	1079(c)	1.11(c)		
2400	943(b)	0.96(b)	975(c)	1.02(c)	1007(c)	1.08(c)	1040(c)	1.15(c)	1071(c)	1.22(c)	1102(c)	1.29(c)		
2640	985(c)	1.16(c)	1016(c)	1.23(c)	1046(c)	1.29(c)	1076(c)	1.36(c)	1106(c)	1.43(c)	1135(d)	1.51(d)		
2880	1029(c)	1.40(c)	1060(c)	1.47(c)	1088(d)	1.54(d)	1116(d)	1.61(d)	1144(d)	1.69(d)	1172(d)	1.77(d)		

Digit 12 - Drive Package		
Legend	single speed motor	two speed motor
(a)	A	1
(b)	B	2
(c)	C	3
(d)	D	4

Figure 20. Fan performance curve 7.5 tons GEH090⁶

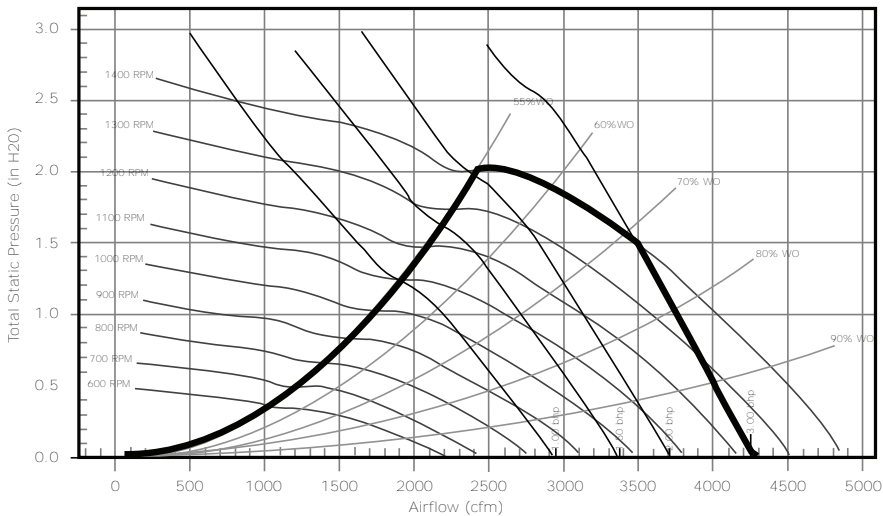


Table 128. Fan performance 7.5 tons GEH090 (includes wet coil, no filter)

Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, No Drive Loss Included and No Return Air Filter)															
	0.1		0.2		0.3		0.4		0.5		0.6		0.7		0.8	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2400	727(a)	0.59(a)	769(a)	0.65(a)	810(a)	0.72(a)	849(a)	0.78(a)	886(a)	0.84(a)	923(a)	0.90(a)	958(a)	0.96(a)	993(c)	1.03(c)
2700	809(a)	0.82(a)	845(a)	0.89(a)	883(a)	0.96(a)	919(b)	1.03(b)	953(b)	1.10(b)	986(c)	1.17(c)	1018(c)	1.24(c)	1051(c)	1.31(c)
3000	891(b)	1.11(b)	924(b)	1.19(b)	957(b)	1.26(b)	991(c)	1.34(c)	1023(c)	1.42(c)	1053(c)	1.50(c)	1083(d)	1.57(d)	1113(d)	1.65(d)

⁶ Includes wet coil, no filter

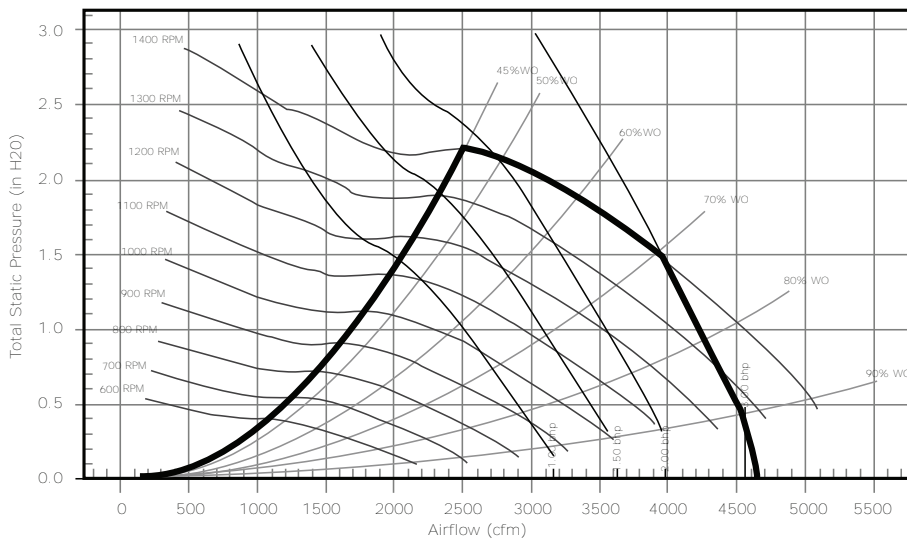
Table 128. Fan performance 7.5 tons GEH090 (includes wet coil, no filter) (continued)

Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, No Drive Loss Included and No Return Air Filter)															
	0.1		0.2		0.3		0.4		0.5		0.6		0.7		0.8	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3300	975(b)	1.47(b)	1003(d)	1.54(d)	1033(d)	1.63(d)	1064(d)	1.71(d)	1095(d)	1.80(d)	1124(d)	1.89(d)	1152(d)	1.97(d)	1179(e)	2.06(e)
3600	1059(d)	1.89(d)	1084(d)	1.97(d)	1111(e)	2.06(e)	1140(e)	2.15(e)	1168(e)	2.25(e)	1196(e)	2.35(e)	1222(e)	2.44(e)	1248(e)	2.53(e)

Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, No Drive Loss Included and No Return Air Filter)													
	0.9		1.0		1.1		1.2		1.3		1.4		1.5	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2400	1026(c)	1.09(c)	1059(c)	1.16(c)	1091(c)	1.23(c)	1123(c)	1.30(c)	1154(c)	1.37(c)	1185(c)	1.45(c)	1217(d)	1.53(d)
2700	1082(c)	1.38(c)	1113(c)	1.45(c)	1143(d)	1.53(d)	1172(d)	1.60(d)	1202(d)	1.68(d)	1230(d)	1.76(d)	1257(d)	1.83(d)
3000	1143(d)	1.73(d)	1171(d)	1.81(d)	1199(d)	1.89(d)	1228(d)	1.97(d)	1255(e)	2.05(e)	1281(e)	2.13(e)	1308(e)	2.21(e)
3300	1206(e)	2.14(e)	1233(e)	2.22(e)	1259(e)	2.31(e)	1286(e)	2.40(e)	1312(e)	2.49(e)	1337(e)	2.57(e)	1362(e)	2.66(e)
3600	1273(e)	2.62(e)	1298(e)	2.71(e)	1323(e)	2.81(e)	1348(e)	2.90(e)	1372(e)	2.99(e)	—	—	—	—

Digit 12 - Drive Package		
Legend	single speed motor	two speed motor
(a)	A	1
(b)	B	2
(c)	C	3
(d)	D	4
(e)	E	5

Figure 21. Fan performance curve (top supply) 7.5 tons GEV090⁷



⁷ Includes wet coil, no filter



Unit Fan Performance

Table 129. Fan performance (top supply) 7.5 tons GEV090 (includes wet coil, no filter)

Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, No Drive Loss Included and No Return Air Filter)															
	0.1		0.2		0.3		0.4		0.5		0.6		0.7		0.8	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2400	655(a)	0.44(a)	703(a)	0.49(a)	748(a)	0.54(a)	790(a)	0.59(a)	830(a)	0.64(a)	868(b)	0.70(b)	905(b)	0.75(b)	941(b)	0.81(b)
2700	725(a)	0.61(a)	768(a)	0.66(a)	809(a)	0.72(a)	849(b)	0.78(b)	886(b)	0.84(b)	922(b)	0.90(b)	957(b)	0.96(b)	990(c)	1.02(c)
3000	797(a)	0.82(a)	836(a)	0.88(a)	873(b)	0.94(b)	910(c)	1.01(c)	945(c)	1.07(c)	979(c)	1.14(c)	1012(c)	1.20(c)	1043(d)	1.27(d)
3300	869(c)	1.07(c)	904(c)	1.14(c)	939(c)	1.21(c)	973(c)	1.28(c)	1006(c)	1.35(c)	1039(c)	1.43(c)	1069(d)	1.50(d)	1099(e)	1.57(e)
3600	942(c)	1.38(c)	974(c)	1.45(c)	1007(e)	1.53(e)	1038(e)	1.61(e)	1069(e)	1.68(e)	1099(e)	1.76(e)	1129(e)	1.84(e)	1157(e)	1.92(e)
Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, No Drive Loss Included and No Return Air Filter)															
	0.9		1.0		1.1		1.2		1.3		1.4		1.5			
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2400	977(b)	0.86(b)	1012(b)	0.92(b)	1045(b)	0.98(b)	1078(d)	1.04(d)	1111(d)	1.11(d)	1144(d)	1.17(d)	1177(d)	1.24(d)		
2700	1023(c)	1.08(c)	1055(d)	1.14(d)	1087(d)	1.21(d)	1118(d)	1.27(d)	1147(d)	1.34(d)	1178(d)	1.41(d)	1207(d)	1.47(d)		
3000	1074(d)	1.33(d)	1104(d)	1.40(d)	1133(d)	1.47(d)	1162(e)	1.54(e)	1191(e)	1.61(e)	1219(e)	1.68(e)	1246(e)	1.76(e)		
3300	1128(e)	1.64(e)	1157(e)	1.71(e)	1184(e)	1.79(e)	1211(e)	1.86(e)	1238(e)	1.94(e)	1265(f)	2.01(f)	1291(f)	2.09(f)		
3600	1185(e)	1.99(e)	1212(f)	2.07(f)	1239(f)	2.15(f)	1264(f)	2.23(f)	1290(f)	2.31(f)	1315(f)	2.39(f)	1340(f)	2.48(f)		

Digit 12 - Drive Package		
Legend	single speed motor	two speed motor
(a)	A	1
(b)	B	2
(c)	C	3
(d)	D	4
(e)	E	5
(f)	F	6

Figure 22. Fan performance curve (front/back supply) 7.5 tons GEV090⁸

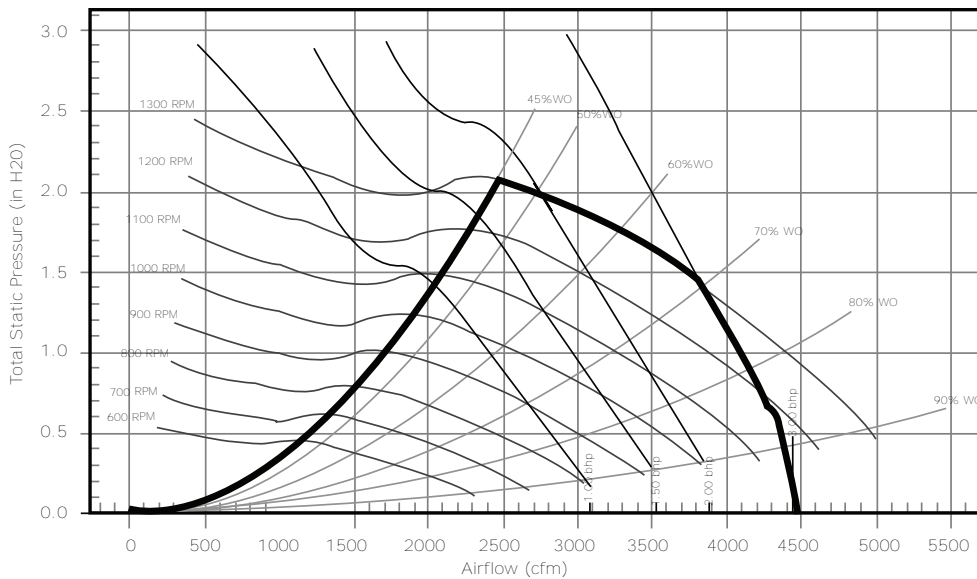


Table 130. Fan performance (front/back supply) 7.5 tons GEV090 (includes wet coil, no filter)

Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, No Drive Loss Included and No Return Air Filter)															
	0.1		0.2		0.3		0.4		0.5		0.6		0.7		0.8	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2400	620(a)	0.47(a)	666(a)	0.53(a)	709(a)	0.58(a)	750(a)	0.64(a)	790(a)	0.70(a)	828(a)	0.76(a)	864(a)	0.82(a)	900(a)	0.88(a)
2700	687(a)	0.66(a)	728(a)	0.72(a)	767(a)	0.78(a)	805(a)	0.84(a)	842(a)	0.91(a)	877(a)	0.97(a)	912(c)	1.04(c)	945(c)	1.11(c)
3000	754(a)	0.88(a)	792(a)	0.95(a)	828(b)	1.02(b)	863(b)	1.09(b)	897(b)	1.16(b)	930(c)	1.23(c)	962(c)	1.31(c)	993(c)	1.38(c)
3300	822(b)	1.16(b)	857(b)	1.24(b)	890(b)	1.31(b)	922(c)	1.39(c)	954(c)	1.46(c)	984(d)	1.54(d)	1015(d)	1.62(d)	1044(d)	1.70(d)
3600	891(b)	1.49(b)	922(d)	1.57(d)	954(d)	1.66(d)	984(d)	1.74(d)	1013(d)	1.82(d)	1042(d)	1.90(d)	1070(d)	1.98(d)	1098(e)	2.07(e)
Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, No Drive Loss Included and No Return Air Filter)															
	0.9		1.0		1.1		1.2		1.3		1.4		1.5			
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2400	934(a)	0.95(a)	966(c)	1.01(c)	999(c)	1.07(c)	1031(c)	1.13(c)	1063(c)	1.19(c)	1093(c)	1.25(c)	1124(c)	1.31(c)		
2700	977(c)	1.18(c)	1008(c)	1.25(c)	1039(c)	1.32(c)	1068(c)	1.39(c)	1098(c)	1.46(c)	1126(d)	1.53(d)	1154(d)	1.59(d)		
3000	1024(c)	1.46(c)	1053(d)	1.53(d)	1083(d)	1.61(d)	1111(d)	1.69(d)	1138(d)	1.77(d)	1166(d)	1.84(d)	1192(d)	1.92(d)		
3300	1074(d)	1.78(d)	1102(d)	1.86(d)	1129(d)	1.95(d)	1156(e)	2.03(e)	1182(e)	2.12(e)	1208(e)	2.20(e)	1233(e)	2.28(e)		
3600	1125(e)	2.16(e)	1152(e)	2.25(e)	1178(e)	2.34(e)	1204(e)	2.43(e)	1230(e)	2.52(e)	1255(e)	2.61(e)	1279(e)	2.70(e)		

Digit 12 - Drive Package		
Legend	single speed motor	two speed motor
(a)	A	1
(b)	B	2
(c)	C	3
(d)	D	4
(e)	E	5

⁸ Includes wet coil, no filter



Unit Fan Performance

Figure 23. Fan performance curve 10 tons GEH120⁹

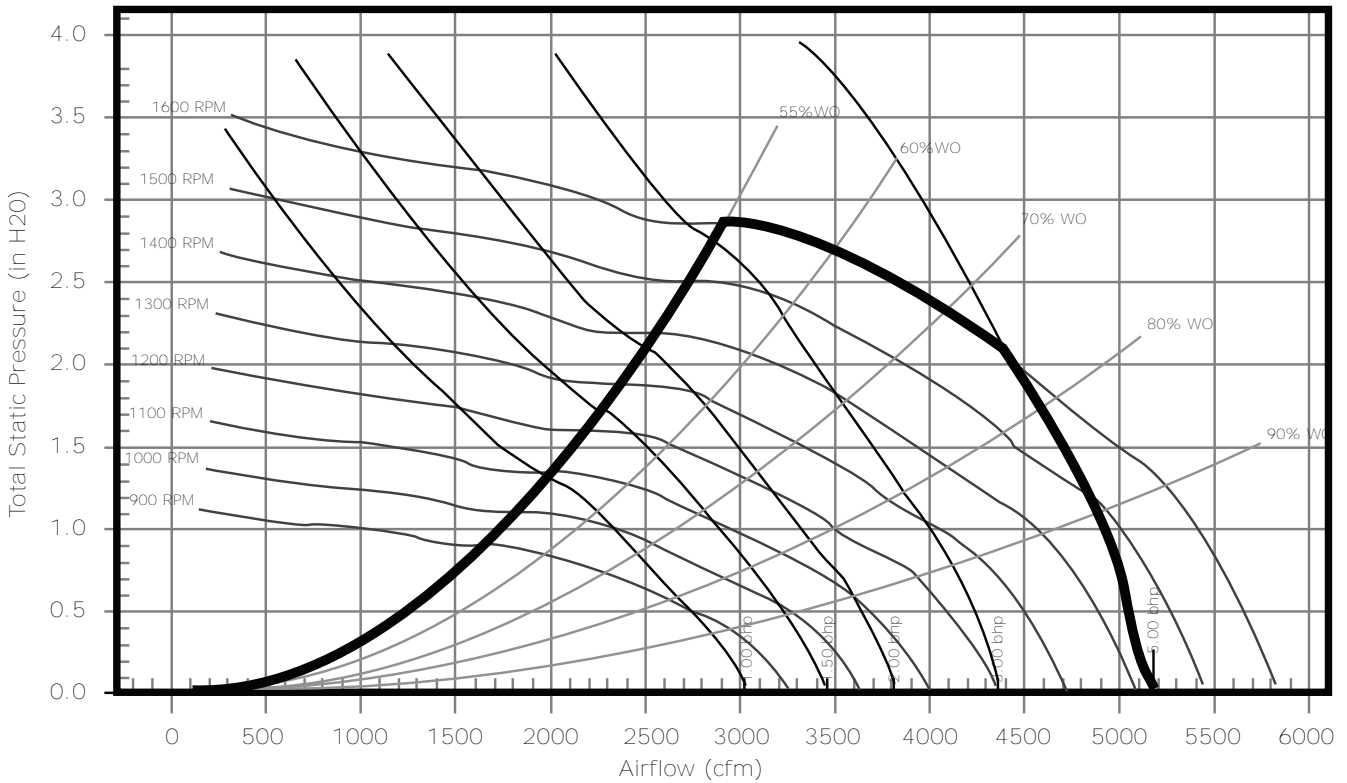


Table 131. Fan performance 10 tons GEH120 (includes wet coil, no filter)

Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, No Drive Loss Included and No Return Air Filter)															
	0.1		0.2		0.3		0.4		0.5		0.6		0.7		0.8	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3200	897(a)	1.23(a)	916(a)	1.27(a)	935(a)	1.31(a)	958(a)	1.36(a)	987(a)	1.43(a)	1018(b)	1.51(b)	1051(b)	1.60(b)	1081(b)	1.68(b)
3600	1005(b)	1.74(b)	1022(b)	1.78(b)	1038(b)	1.83(b)	1055(b)	1.87(b)	1076(b)	1.94(b)	1102(c)	2.01(c)	1129(c)	2.10(c)	1158(c)	2.20(c)
4000	1114(c)	2.37(c)	1128(c)	2.42(c)	1143(c)	2.47(c)	1158(c)	2.52(c)	1173(c)	2.57(c)	1192(c)	2.64(c)	1214(c)	2.72(c)	1238(c)	2.82(c)
4400	1222(e)	3.15(e)	1235(e)	3.20(e)	1249(e)	3.26(e)	1262(e)	3.31(e)	1276(e)	3.37(e)	1290(e)	3.42(e)	1306(e)	3.49(e)	1326(e)	3.58(e)
4800	1331(e)	4.08(e)	1343(f)	4.14(f)	1355(f)	4.19(f)	1367(f)	4.25(f)	1380(f)	4.31(f)	1392(f)	4.37(f)	1405(f)	4.43(f)	1419(f)	4.50(f)
Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, No Drive Loss Included and No Return Air Filter)															
	0.9		1.0		1.1		1.2		1.3		1.4		1.5		1.6	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3200	1109(b)	1.76(b)	1138(b)	1.84(b)	1164(b)	1.92(b)	1192(c)	2.01(c)	1219(c)	2.09(c)	1246(c)	2.17(c)	1272(c)	2.25(c)	1298(c)	2.34(c)
3600	1186(c)	2.29(c)	1213(c)	2.39(c)	1239(c)	2.48(c)	1264(c)	2.57(c)	1288(c)	2.65(c)	1312(c)	2.74(c)	1336(f)	2.83(f)	1361(f)	2.93(f)
4000	1264(c)	2.92(c)	1289(e)	3.02(e)	1315(f)	3.13(f)	1340(f)	3.24(f)	1363(f)	3.34(f)	1385(f)	3.43(f)	1408(f)	3.54(f)	1429(f)	3.63(f)
4400	1347(e)	3.68(e)	1369(f)	3.78(f)	1392(f)	3.90(f)	1416(f)	4.02(f)	1440(f)	4.13(f)	1463(f)	4.25(f)	1484(f)	4.36(f)	1505(f)	4.47(f)
4800	1437(e)	4.60(e)	1455(f)	4.70(f)	1475(f)	4.81(f)	1496(f)	4.93(f)	—	—	—	—	—	—	—	—

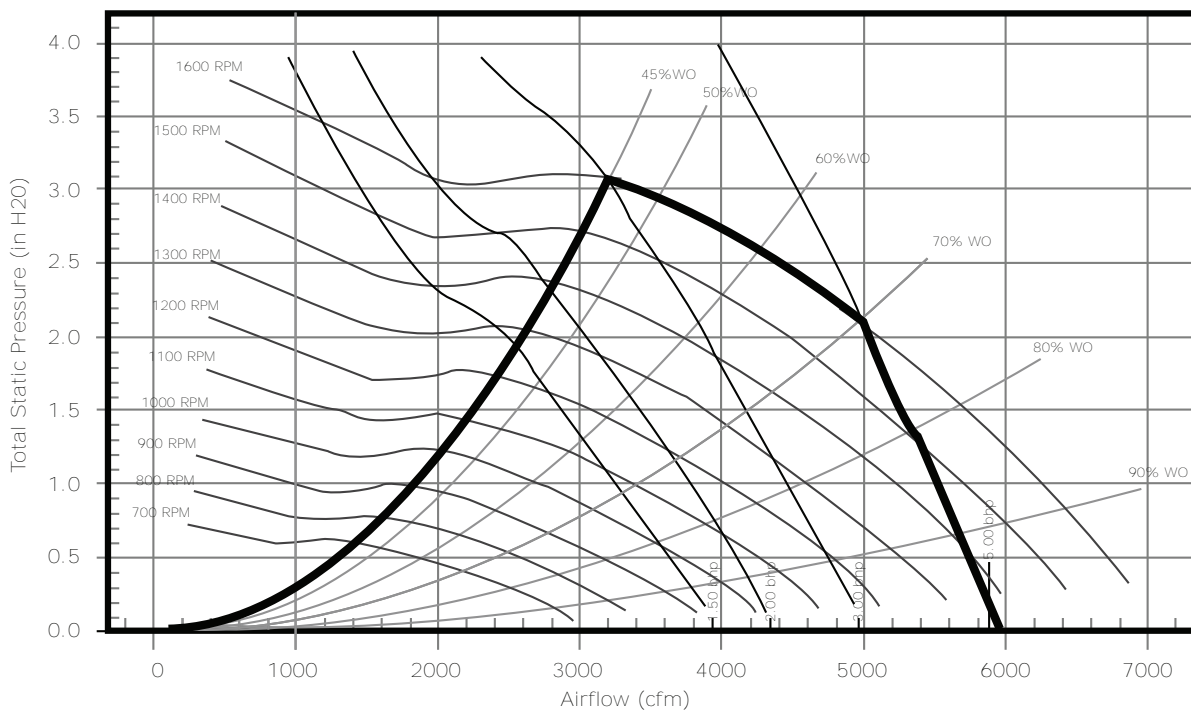
⁹ Includes wet coil, no filter

Table 131. Fan performance 10 tons GEH120 (includes wet coil, no filter) (continued)

Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, No Drive Loss Included and No Return Air Filter)															
	0.1		0.2		0.3		0.4		0.5		0.6		0.7		0.8	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, No Drive Loss Included and No Return Air Filter)															
	1.7		1.8		1.9		2.0									
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP								
3200	1323(d)	2.42(d)	1349(d)	2.51(d)	1374(d)	2.60(d)	1398(d)	2.68(d)								
3600	1384(f)	3.02(f)	1408(f)	3.12(f)	1431(f)	3.21(f)	1454(f)	3.30(f)								
4000	1452(f)	3.74(f)	1474(f)	3.84(f)	1496(f)	3.94(f)	1517(f)	4.04(f)								
4400	1526(f)	4.58(f)	1546(f)	4.69(f)	1565(f)	4.80(f)	1586(f)	4.91(f)								
4800	—	—	—	—	—	—	—	—								

Digit 12 - Drive Package		
Legend	single speed motor	two speed motor
(a)	A	1
(b)	B	2
(c)	C	3
(d)	D	4
(e)	E	5
(f)	F	6

Figure 24. Fan performance curve (top supply) 10 tons GEV120¹⁰



¹⁰Includes wet coil, no filter

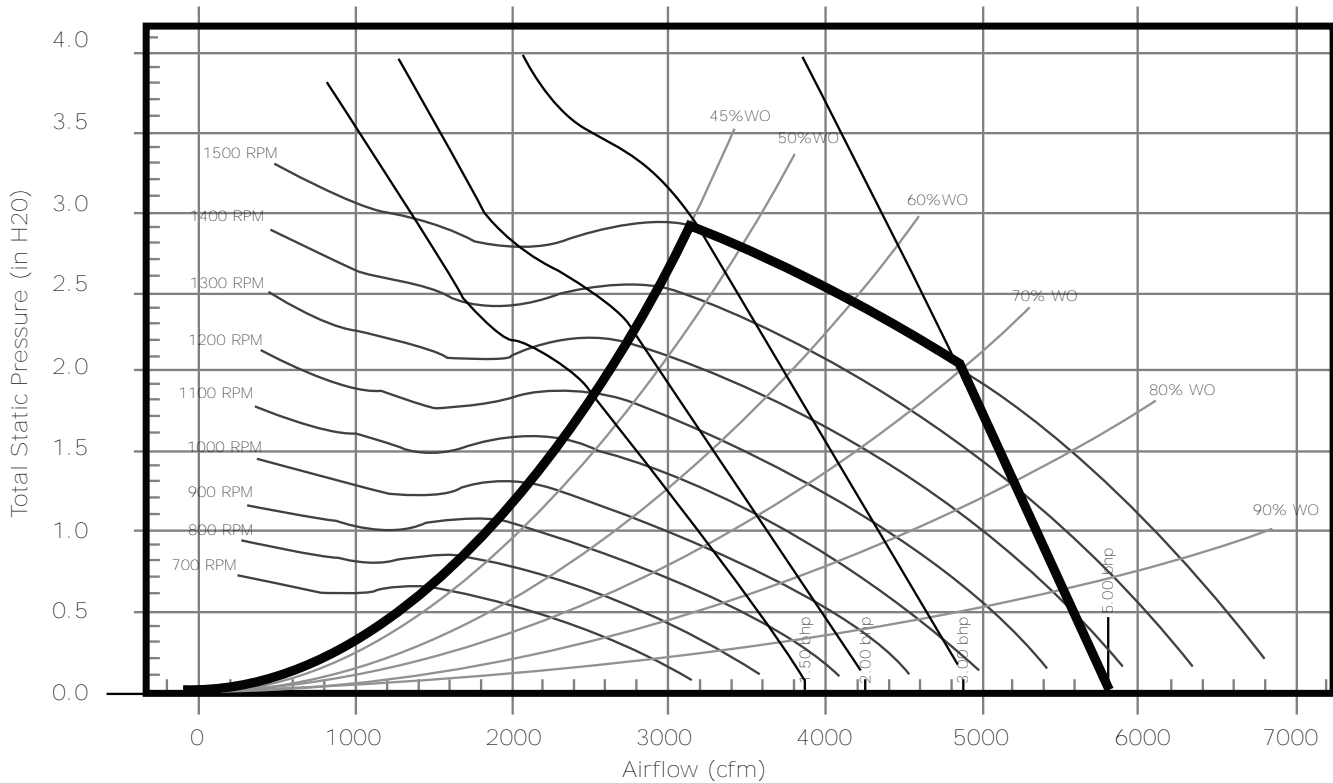


Unit Fan Performance

Table 132. Fan performance (top supply) 10 tons GEV120 (includes wet coil, no filter)

Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, No Drive Loss Included and No Return Air Filter)															
	0.1		0.2		0.3		0.4		0.5		0.6		0.7		0.8	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3200	759(a)	0.83(a)	797(a)	0.89(a)	833(a)	0.95(a)	868(a)	1.01(a)	903(a)	1.08(a)	937(a)	1.16(a)	970(a)	1.22(a)	1003(a)	1.29(a)
3600	845(a)	1.16(a)	878(a)	1.23(a)	912(a)	1.30(a)	944(a)	1.36(a)	975(a)	1.44(a)	1006(b)	1.51(b)	1036(c)	1.59(c)	1066(c)	1.68(c)
4000	932(b)	1.58(b)	962(b)	1.66(b)	992(b)	1.73(b)	1021(b)	1.80(b)	1050(b)	1.87(b)	1079(b)	1.95(b)	1106(d)	2.04(d)	1134(d)	2.13(d)
4400	1019(d)	2.08(d)	1046(d)	2.17(d)	1074(d)	2.25(d)	1101(d)	2.33(d)	1128(d)	2.41(d)	1154(d)	2.49(d)	1180(d)	2.58(d)	1205(d)	2.67(d)
4800	1108(d)	2.69(d)	1132(d)	2.78(d)	1157(d)	2.87(d)	1182(d)	2.96(d)	1207(f)	3.05(f)	1232(f)	3.14(f)	1256(f)	3.22(f)	1279(f)	3.31(f)
Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, No Drive Loss Included and No Return Air Filter)															
	0.9		1.0		1.1		1.2		1.3		1.4		1.5		1.6	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3200	1035(a)	1.35(a)	1065(a)	1.42(a)	1095(a)	1.49(a)	1124(c)	1.56(c)	1153(c)	1.63(c)	1181(c)	1.70(c)	1208(c)	1.77(c)	1234(c)	1.84(c)
3600	1096(c)	1.75(c)	1125(c)	1.82(c)	1154(c)	1.89(c)	1181(c)	1.97(c)	1207(d)	2.04(d)	1234(d)	2.13(d)	1260(d)	2.21(d)	1285(d)	2.29(d)
4000	1161(d)	2.22(d)	1188(d)	2.32(d)	1215(d)	2.40(d)	1241(d)	2.47(d)	1266(d)	2.55(d)	1293(d)	2.63(d)	1316(d)	2.71(d)	1341(e)	2.81(e)
4400	1230(d)	2.76(d)	1255(d)	2.87(d)	1280(d)	2.97(d)	1304(f)	3.07(f)	1329(f)	3.16(f)	1353(g)	3.25(g)	1376(g)	3.33(g)	1399(g)	3.41(g)
4800	1303(f)	3.41(f)	1326(f)	3.51(f)	1349(f)	3.62(f)	1371(g)	3.73(g)	1394(g)	3.85(g)	1417(g)	3.96(g)	1439(g)	4.06(g)	1461(g)	4.16(g)
Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, No Drive Loss Included and No Return Air Filter)															
	1.7		1.8		1.9		2.0									
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP								
3200	1261(c)	1.91(c)	1286(c)	1.98(c)	1313(d)	2.06(d)	1336(e)	2.13(e)								
3600	1310(d)	2.37(d)	1335(d)	2.45(d)	1359(e)	2.52(e)	1382(e)	2.60(e)								
4000	1365(e)	2.90(e)	1387(e)	2.99(e)	1411(g)	3.08(g)	1434(g)	3.16(g)								
4400	1422(g)	3.50(g)	1445(g)	3.60(g)	1467(g)	3.69(g)	1488(g)	3.79(g)								
4800	1483(g)	4.25(g)	1505(g)	4.34(g)	1525(g)	4.43(g)	1547(g)	4.52(g)								

Digit 12 - Drive Package		
Legend	single speed motor	two speed motor
(a)	A	1
(b)	B	2
(c)	C	3
(d)	D	4
(e)	E	5
(f)	F	6
(g)	G	7

Figure 25. Fan performance curve (front/back supply) 10 tons GEV120¹¹

Table 133. Fan performance (front/back supply) 10 tons GEV120 (includes wet coil, no filter)

Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, No Drive Loss Included and No Return Air Filter)															
	0.1		0.2		0.3		0.4		0.5		0.6		0.7		0.8	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3200	727(a)	0.90(a)	761(a)	0.96(a)	794(a)	1.03(a)	829(a)	1.10(a)	863(a)	1.17(a)	896(a)	1.24(a)	929(a)	1.31(a)	962(a)	1.38(a)
3600	809(a)	1.26(a)	840(a)	1.33(a)	870(a)	1.41(a)	900(a)	1.48(a)	931(b)	1.56(b)	961(b)	1.64(b)	991(b)	1.71(b)	1021(c)	1.79(c)
4000	893(b)	1.71(b)	920(b)	1.79(b)	947(b)	1.87(b)	974(b)	1.96(b)	1001(d)	2.04(d)	1029(d)	2.12(d)	1057(d)	2.21(d)	1084(d)	2.30(d)
4400	977(d)	2.25(d)	1002(d)	2.34(d)	1027(d)	2.44(d)	1051(d)	2.53(d)	1076(d)	2.62(d)	1100(d)	2.71(d)	1126(d)	2.80(d)	1151(d)	2.90(d)
4800	1061(d)	2.91(d)	1084(f)	3.01(f)	1107(f)	3.11(f)	1130(f)	3.21(f)	1152(f)	3.30(f)	1175(f)	3.40(f)	1198(f)	3.51(f)	1220(f)	3.61(f)
Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, No Drive Loss Included and No Return Air Filter)															
	0.9		1.0		1.1		1.2		1.3		1.4		1.5		1.6	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3200	993(a)	1.45(a)	1023(c)	1.52(c)	1053(c)	1.60(c)	1081(c)	1.67(c)	1109(c)	1.74(c)	1136(c)	1.81(c)	1162(c)	1.88(c)	1189(c)	1.96(c)
3600	1049(c)	1.87(c)	1078(c)	1.95(c)	1106(d)	2.03(d)	1133(d)	2.11(d)	1160(d)	2.20(d)	1187(d)	2.28(d)	1212(d)	2.36(d)	1237(d)	2.44(d)
4000	1111(d)	2.38(d)	1138(d)	2.47(d)	1163(d)	2.56(d)	1190(d)	2.65(d)	1214(d)	2.74(d)	1239(d)	2.83(d)	1264(e)	2.92(e)	1288(e)	3.01(e)
4400	1176(d)	2.99(d)	1201(f)	3.09(f)	1225(f)	3.18(f)	1248(f)	3.28(f)	1273(g)	3.38(g)	1296(g)	3.47(g)	1319(g)	3.57(g)	1343(g)	3.67(g)
4800	1243(f)	3.71(f)	1266(g)	3.81(g)	1289(g)	3.91(g)	1311(g)	4.02(g)	1334(g)	4.12(g)	1356(g)	4.23(g)	1378(g)	4.33(g)	1399(g)	4.44(g)

¹¹ Includes wet coil, no filter



Unit Fan Performance

Table 133. Fan performance (front/back supply) 10 tons GEV120 (includes wet coil, no filter) (continued)

Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, No Drive Loss Included and No Return Air Filter)															
	0.1		0.2		0.3		0.4		0.5		0.6		0.7		0.8	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, No Drive Loss Included and No Return Air Filter)															
	1.7		1.8		1.9		2.0									
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP								
3200	1214(d)	2.03(d)	1239(d)	2.11(d)	1264(e)	2.18(e)	1289(e)	2.27(e)								
3600	1260(e)	2.52(e)	1284(e)	2.60(e)	1308(e)	2.68(e)	1332(e)	2.77(e)								
4000	1311(g)	3.10(g)	1335(g)	3.19(g)	1357(g)	3.28(g)	1378(g)	3.37(g)								
4400	1365(g)	3.77(g)	1387(g)	3.87(g)	1409(g)	3.97(g)	1430(g)	4.07(g)								
4800	1422(g)	4.55(g)	1443(g)	4.66(g)	1463(g)	4.76(g)	1483(g)	4.87(g)								

Digit 12 - Drive Package		
Legend	single speed motor	two speed motor
(a)	A	1
(b)	B	2
(c)	C	3
(d)	D	4
(e)	E	5
(f)	F	6
(g)	G	7

Figure 26. Fan performance curve 12.5 tons GEH150¹²



¹² Includes wet coil, no filter



Unit Fan Performance

Table 134. Fan performance 12.5 tons GEH150 (includes wet coil, no filter)

Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, No Drive Loss Included and No Return Air Filter)															
	0.1		0.2		0.3		0.4		0.5		0.6		0.7		0.8	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
4000	559(a)	0.89(a)	590(a)	0.96(a)	622(a)	1.05(a)	654(a)	1.14(a)	685(a)	1.23(a)	717(a)	1.32(a)	749(a)	1.42(a)	779(b)	1.52(b)
4500	622(a)	1.24(a)	648(a)	1.33(a)	677(a)	1.42(a)	706(b)	1.52(b)	734(b)	1.62(b)	761(b)	1.72(b)	790(b)	1.82(b)	819(b)	1.93(b)
5000	686(b)	1.69(b)	709(b)	1.77(b)	734(b)	1.87(b)	760(b)	1.98(b)	786(c)	2.09(c)	811(c)	2.20(c)	836(c)	2.31(c)	861(c)	2.42(c)
5500	750(c)	2.23(c)	771(c)	2.32(c)	793(c)	2.42(c)	816(c)	2.53(c)	840(c)	2.65(c)	863(c)	2.77(c)	886(c)	2.89(c)	909(e)	3.02(e)
6000	815(c)	2.88(c)	833(c)	2.97(c)	853(e)	3.08(e)	874(e)	3.20(e)	895(e)	3.32(e)	917(e)	3.45(e)	939(e)	3.58(e)	960(e)	3.71(e)
Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, No Drive Loss Included and No Return Air Filter)															
	0.9		1.0		1.1		1.2		1.3		1.4		1.5		1.6	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
4000	807(b)	1.61(b)	833(b)	1.71(b)	857(b)	1.80(b)	881(b)	1.89(b)	905(b)	1.98(b)	928(d)	2.07(d)	951(d)	2.16(d)	974(d)	2.26(d)
4500	846(c)	2.04(c)	872(c)	2.15(c)	898(c)	2.26(c)	921(d)	2.36(d)	944(d)	2.46(d)	965(d)	2.56(d)	987(d)	2.66(d)	1009(d)	2.77(d)
5000	887(c)	2.54(c)	912(d)	2.66(d)	937(d)	2.78(d)	962(d)	2.91(d)	985(e)	3.03(e)	1007(e)	3.14(e)	1027(f)	3.26(f)	1047(f)	3.37(f)
5500	932(e)	3.14(e)	954(e)	3.26(e)	978(e)	3.40(e)	1002(e)	3.53(e)	1024(f)	3.66(f)	1047(f)	3.80(f)	1068(f)	3.93(f)	1090(f)	4.07(f)
6000	981(e)	3.85(e)	1002(e)	3.98(e)	1022(f)	4.11(f)	1044(f)	4.26(f)	1065(f)	4.40(f)	1086(f)	4.54(f)	1108(f)	4.69(f)	1128(f)	4.83(f)
Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, No Drive Loss Included and No Return Air Filter)															
	1.7		1.8		1.9		2.0									
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP								
4000	996(d)	2.36(d)	1018(d)	2.46(d)	1040(d)	2.57(d)	1061(d)	2.67(d)								
4500	1030(d)	2.88(d)	1049(d)	2.97(d)	1069(f)	3.08(f)	1090(f)	3.19(f)								
5000	1067(f)	3.48(f)	1087(f)	3.60(f)	1106(f)	3.71(f)	1125(f)	3.83(f)								
5500	1109(f)	4.19(f)	1127(f)	4.32(f)	1146(f)	4.44(f)	1164(f)	4.57(f)								
6000	1148(f)	4.98(f)	—	—	—	—	—	—								

Digit 12 - Drive Package		
Legend	single speed motor	two speed motor
(a)	A	1
(b)	B	2
(c)	C	3
(d)	D	4
(e)	E	5
(f)	F	6



Unit Fan Performance

Figure 27. Fan performance curve (top supply) 12.5 tons GEV150¹³

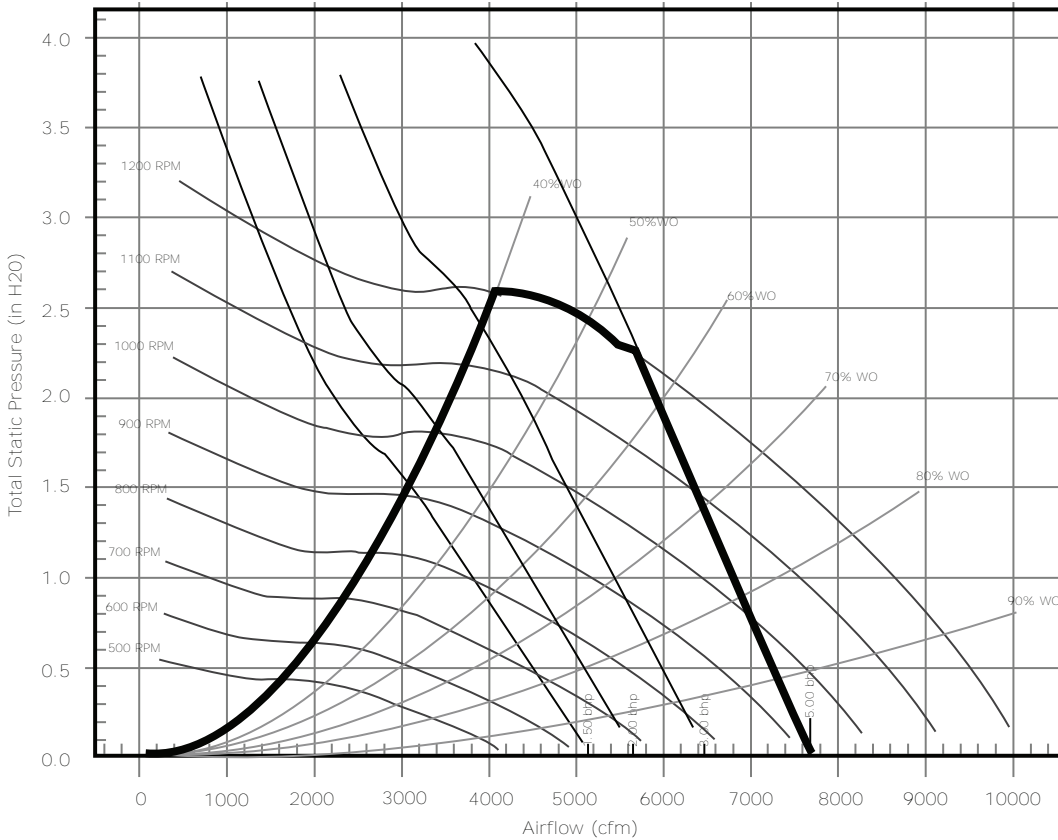


Table 135. Fan performance (top supply) 12.5 tons GEV150 (includes wet coil, no filter)

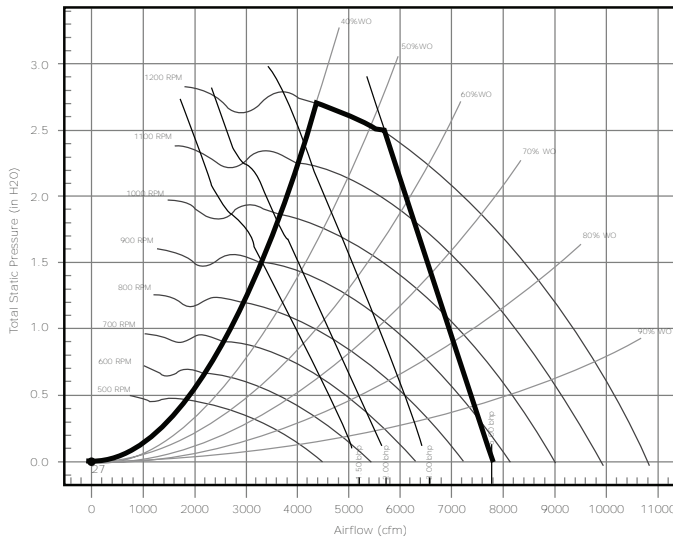
Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, 3% Drive Loss Included and No Return Air Filter)													
	0.1		0.2		0.3		0.4		0.5		0.6		0.7	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
4000	—	—	—	—	—	—	626(a)	1.07(a)	660(a)	1.16(a)	692(a)	1.25(a)	724(a)	1.34(a)
4500	—	—	607(a)	1.22(a)	639(a)	1.31(a)	671(a)	1.41(a)	702(a)	1.52(a)	733(a)	1.62(a)	762(a)	1.72(a)
5000	630(a)	1.50(a)	661(a)	1.62(a)	690(a)	1.72(a)	718(a)	1.83(a)	747(a)	1.94(a)	776(a)	2.06(a)	803(b)	2.17(b)
5500	686(a)	1.96(a)	716(a)	2.10(a)	742(b)	2.22(b)	768(b)	2.33(b)	794(b)	2.45(b)	820(b)	2.58(b)	847(b)	2.71(b)
6000	743(b)	2.52(b)	771(b)	2.68(b)	796(b)	2.81(b)	820(b)	2.94(b)	844(b)	3.06(b)	868(b)	3.19(b)	892(d)	3.33(d)
Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, 3% Drive Loss Included and No Return Air Filter)													
	0.8		0.9		1.0		1.1		1.2		1.3		1.4	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
4000	754(a)	1.43(a)	783(a)	1.52(a)	810(a)	1.62(a)	837(a)	1.72(a)	864(a)	1.81(a)	890(a)	1.90(a)	915(c)	1.99(c)
4500	791(a)	1.82(a)	818(a)	1.92(a)	845(a)	2.02(a)	871(b)	2.12(b)	896(b)	2.23(b)	920(b)	2.34(b)	943(c)	2.45(c)
5000	830(b)	2.29(b)	856(b)	2.40(b)	882(b)	2.51(b)	906(b)	2.62(b)	931(b)	2.73(b)	954(c)	2.84(c)	977(c)	2.96(c)
5500	872(b)	2.83(b)	897(b)	2.96(b)	921(b)	3.08(b)	944(d)	3.21(d)	967(d)	3.33(d)	990(d)	3.45(d)	1013(d)	3.57(d)
6000	916(d)	3.47(d)	939(d)	3.61(d)	962(d)	3.75(d)	985(d)	3.88(d)	1007(d)	4.02(d)	1028(d)	4.15(d)	1050(d)	4.29(d)

¹³Includes wet coil, no filter

Table 135. Fan performance (top supply) 12.5 tons GEV150 (includes wet coil, no filter) (continued)

Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, 3% Drive Loss Included and No Return Air Filter)													
	0.1		0.2		0.3		0.4		0.5		0.6		0.7	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, 3% Drive Loss Included and No Return Air Filter)													
	1.5		1.6		1.7		1.8		1.9		2.0			
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP		
4000	939(c)	2.09(c)	963(c)	2.19(c)	987(c)	2.29(c)	1010(c)	2.39(c)	1034(c)	2.50(c)	1059(c)	2.61(c)		
4500	967(c)	2.56(c)	991(c)	2.19(c)	1013(c)	2.76(c)	1035(c)	2.87(c)	1057(c)	2.98(c)	1077(c)	3.09(c)		
5000	999(c)	3.08(c)	1021(c)	3.21(c)	1043(d)	3.33(d)	1065(d)	3.45(d)	1085(d)	3.56(d)	1106(d)	3.68(d)		
5500	1034(d)	3.69(d)	1056(d)	3.82(d)	1076(d)	3.95(d)	1097(d)	4.09(d)	1117(d)	4.22(d)	1136(d)	4.35(d)		
6000	1070(d)	4.42(d)	1091(d)	4.55(d)	1111(d)	4.68(d)	1131(d)	4.81(d)	—	—	—	—		

Digit 12 - Drive Package		
Legend	single speed motor	two speed motor
(a)	A	1
(b)	B	2
(c)	C	3
(d)	D	4

Figure 28. Fan performance curve (front/back supply) 12.5 tons GEV150¹⁴

Table 136. Fan performance (front/back supply) 12.5 tons GEV150 (includes wet coil, no filter)

Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, 3% Drive Loss Included and No Return Air Filter)													
	0.1		0.2		0.3		0.4		0.5		0.6		0.7	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
4000	—	—	—	—	—	—	—	—	626(a)	1.11(a)	658(a)	1.20(a)	689(a)	1.28(a)
4500	—	—	—	—	606(a)	1.28(a)	636(a)	1.37(a)	666(a)	1.46(a)	695(a)	1.55(a)	723(a)	1.64(a)
5000	—	—	626(a)	1.58(a)	654(a)	1.68(a)	681(a)	1.78(a)	708(a)	1.88(a)	735(a)	1.98(a)	761(b)	2.08(b)

¹⁴ Includes wet coil, no filter

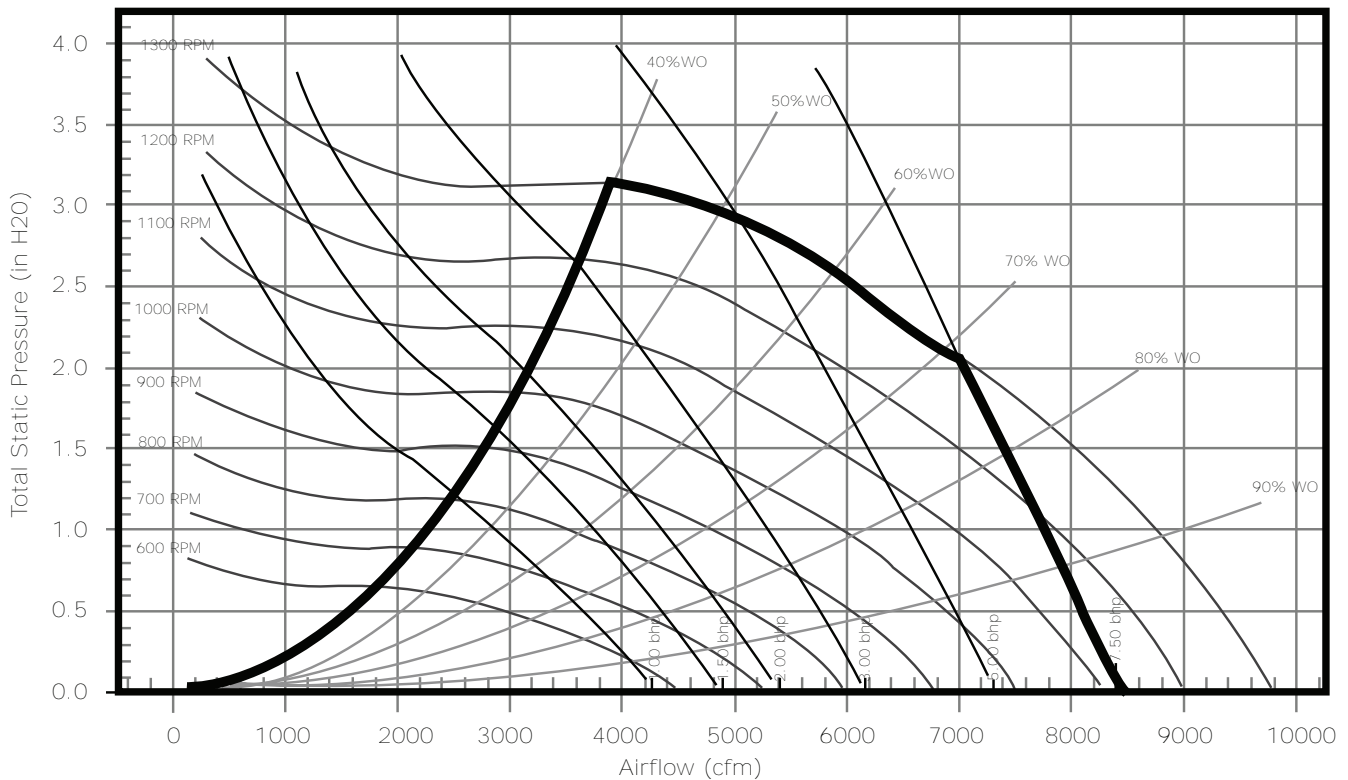


Unit Fan Performance

Table 136. Fan performance (front/back supply) 12.5 tons GEV150 (includes wet coil, no filter) (continued)

Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, 3% Drive Loss Included and No Return Air Filter)													
	0.1		0.2		0.3		0.4		0.5		0.6		0.7	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
5500	652(a)	1.95(a)	677(b)	2.06(b)	703(b)	2.17(b)	728(b)	2.28(b)	753(b)	2.39(b)	778(b)	2.50(b)	802(b)	2.61(b)
6000	707(b)	2.51(b)	730(b)	2.63(b)	753(b)	2.75(b)	777(b)	2.87(b)	800(b)	2.99(b)	—	—	—	—
Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, 3% Drive Loss Included and No Return Air Filter)													
	0.8		0.9		1.0		1.1		1.2		1.3		1.4	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
4000	719(a)	1.36(a)	749(a)	1.45(a)	778(a)	1.54(a)	805(a)	1.62(a)	832(a)	1.71(a)	858(a)	1.80(a)	884(a)	1.89(a)
4500	751(a)	1.74(a)	779(a)	1.84(a)	806(a)	1.93(a)	833(b)	2.03(b)	858(b)	2.12(b)	884(b)	2.22(b)	908(c)	2.32(c)
5000	787(b)	2.19(b)	812(b)	2.29(b)	838(b)	2.40(b)	863(b)	2.51(b)	888(c)	2.62(c)	911(c)	2.72(c)	935(c)	2.83(c)
5500	826(b)	2.72(b)	850(b)	2.83(b)	873(b)	2.95(b)	897(d)	3.07(d)	919(d)	3.18(d)	942(d)	3.30(d)	965(d)	3.42(d)
6000	—	—	890(d)	3.46(d)	912(d)	3.59(d)	933(d)	3.71(d)	955(d)	3.84(d)	976(d)	3.97(d)	997(d)	4.10(d)
Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, 3% Drive Loss Included and No Return Air Filter)													
	1.5		1.6		1.7		1.8		1.9		2.0			
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
4000	910(c)	1.98(c)	936(c)	2.08(c)	962(c)	2.18(c)	987(c)	2.29(c)	1011(c)	2.39(c)	1035(c)	2.49(c)		
4500	932(c)	2.42(c)	955(c)	2.51(c)	978(c)	2.61(c)	1002(c)	2.72(c)	1025(c)	2.83(c)	1048(c)	2.94(c)		
5000	958(c)	2.93(c)	980(d)	3.04(d)	1002(d)	3.15(d)	1024(d)	3.25(d)	1046(d)	3.37(d)	1067(d)	3.48(d)		
5500	987(d)	3.54(d)	1009(d)	3.65(d)	1030(d)	3.77(d)	1050(d)	3.88(d)	1071(d)	4.00(d)	1091(d)	4.12(d)		
6000	1017(d)	4.22(d)	1038(d)	4.35(d)	1059(d)	4.48(d)	1078(d)	4.60(d)	1099(d)	4.73(d)	1118(d)	4.86(d)		

Digit 12 - Drive Package		
Legend	single speed motor	two speed motor
(a)	A	1
(b)	B	2
(c)	C	3
(d)	D	4

Figure 29. Fan performance curve 15 tons GEH180¹⁵

Table 137. Fan performance 15 tons GEH180 (includes wet coil, no filter)

Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, No Drive Loss Included and No Return Air Filter)															
	0.1		0.2		0.3		0.4		0.5		0.6		0.7		0.8	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
4800	660(a)	1.50(a)	685(a)	1.58(a)	711(a)	1.68(a)	738(a)	1.78(a)	765(a)	1.89(a)	791(a)	1.99(a)	817(c)	2.10(c)	844(c)	2.22(c)
5400	737(b)	2.11(b)	758(b)	2.20(b)	781(b)	2.30(b)	805(b)	2.41(b)	828(b)	2.53(b)	853(c)	2.65(c)	876(c)	2.77(c)	899(c)	2.89(c)
6000	815(b)	2.88(b)	833(b)	2.97(b)	853(d)	3.08(d)	874(d)	3.20(d)	895(d)	3.32(d)	917(d)	3.45(d)	939(d)	3.58(d)	960(d)	3.71(d)
6600	892(d)	3.81(d)	909(d)	3.91(d)	927(d)	4.02(d)	945(d)	4.14(d)	965(d)	4.27(d)	984(d)	4.41(d)	1004(d)	4.55(d)	1023(e)	4.69(e)
7200	971(d)	4.92(d)	986(f)	5.03(f)	1002(f)	5.15(f)	1018(f)	5.27(f)	1036(f)	5.41(f)	1053(f)	5.55(f)	1071(f)	5.70(f)	1089(f)	5.86(f)
Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, No Drive Loss Included and No Return Air Filter)															
	0.9		1.0		1.1		1.2		1.3		1.4		1.5		1.6	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
4800	870(c)	2.33(c)	896(c)	2.45(c)	921(c)	2.56(c)	946(c)	2.68(c)	969(c)	2.79(c)	990(c)	2.90(c)	1011(c)	3.00(c)	1031(e)	3.12(e)
5400	922(d)	3.01(d)	946(d)	3.14(d)	969(d)	3.26(d)	993(d)	3.40(d)	1016(d)	3.53(d)	1039(e)	3.66(e)	1060(e)	3.79(e)	1081(e)	3.92(e)
6000	981(d)	3.85(d)	1002(d)	3.98(d)	1022(e)	4.11(e)	1044(e)	4.26(e)	1065(e)	4.40(e)	1086(e)	4.54(e)	1108(e)	4.69(e)	1128(e)	4.83(e)
6600	1043(e)	4.84(e)	1062(e)	4.99(e)	1081(f)	5.13(f)	1100(f)	5.28(f)	1119(f)	5.43(f)	1138(f)	5.58(f)	1157(g)	5.74(g)	1177(g)	5.90(g)
7200	1107(f)	6.01(f)	1125(f)	6.17(f)	1143(f)	6.33(f)	1160(g)	6.49(g)	1178(g)	6.65(g)	1195(g)	6.81(g)	1212(g)	6.97(g)	1229(g)	7.13(g)

¹⁵Includes wet coil, no filter



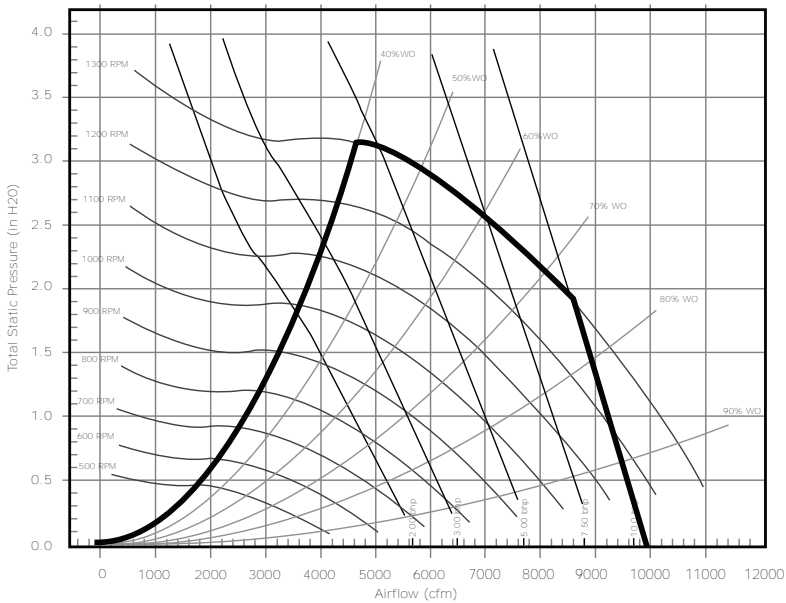
Unit Fan Performance

Table 137. Fan performance 15 tons GEH180 (includes wet coil, no filter) (continued)

Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, No Drive Loss Included and No Return Air Filter)															
	0.1		0.2		0.3		0.4		0.5		0.6		0.7		0.8	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, No Drive Loss Included and No Return Air Filter)															
	1.7		1.8		1.9		2.0									
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP								
4800	1051(e)	3.23(e)	1071(e)	3.34(e)	1091(e)	3.45(e)	1111(e)	3.56(e)								
5400	1100(e)	4.04(e)	1119(e)	4.16(e)	1138(e)	4.29(e)	1156(e)	4.41(e)								
6000	1148(e)	4.98(e)	1168(g)	5.13(g)	1187(g)	5.27(g)	1205(g)	5.41(g)								
6600	1196(g)	6.05(g)	1215(g)	6.22(g)	1234(g)	6.37(g)	1253(g)	6.54(g)								
7200	1248(g)	7.31(g)	1266(g)	7.48(g)	—	—	—	—								

Digit 12 - Drive Package		
Legend	single speed motor	two speed motor
(a)	A	1
(b)	B	2
(c)	C	3
(d)	D	4
(e)	E	5
(f)	F	6
(g)	G	7

Figure 30. Fan performance curve (top supply) 15 tons GEV180¹⁶



¹⁶Includes wet coil, no filter

Table 138. Fan performance (top supply) 15 tons GEV180 (includes wet coil, no filter)

Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, 3% Drive Loss Included and No Return Air Filter)															
	0.1		0.2		0.3		0.4		0.5		0.6		0.7		0.8	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
4800	—	—	—	—	—	—	669(a)	1.55(a)	698(a)	1.66(a)	727(a)	1.77(a)	754(a)	1.87(a)	781(a)	1.98(a)
5400	—	—	670(a)	1.84(a)	698(a)	1.96(a)	724(a)	2.08(a)	750(a)	2.20(a)	777(a)	2.32(a)	802(a)	2.44(a)	827(a)	2.56(a)
6000	710(a)	2.37(a)	731(a)	2.47(a)	758(a)	2.60(a)	782(a)	2.73(a)	806(a)	2.86(a)	830(a)	3.00(a)	853(b)	3.13(b)	877(b)	3.26(b)
6600	—	—	794(b)	3.23(b)	819(b)	3.37(b)	843(b)	3.52(b)	864(b)	3.66(b)	886(b)	3.81(b)	907(b)	3.95(b)	928(b)	4.09(b)
7200	848(b)	4.06(b)	860(b)	4.14(b)	880(b)	4.28(b)	904(b)	4.45(b)	924(b)	4.60(b)	943(b)	4.76(b)	963(b)	4.92(b)	—	—
Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, 3% Drive Loss Included and No Return Air Filter)															
	0.9		1.0		1.1		1.2		1.3		1.4		1.5		1.6	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
4800	808(a)	2.08(a)	834(a)	2.19(a)	860(a)	2.30(a)	885(a)	2.41(a)	909(c)	2.52(c)	933(c)	2.63(c)	956(c)	2.73(c)	979(c)	2.84(c)
5400	852(a)	2.68(a)	876(a)	2.80(a)	900(c)	2.92(c)	923(c)	3.04(c)	946(b)	3.17(b)	969(b)	3.29(b)	991(b)	3.41(b)	1013(b)	3.53(b)
6000	899(b)	3.40(b)	922(b)	3.53(b)	944(b)	3.66(b)	966(b)	3.80(b)	987(b)	3.93(b)	1008(b)	4.06(b)	1030(d)	4.20(d)	1050(d)	4.34(d)
6600	950(b)	4.24(b)	971(b)	4.39(b)	992(b)	4.54(b)	1012(b)	4.69(b)	1032(d)	4.83(d)	1053(d)	4.98(d)	1072(e)	5.12(e)	1091(e)	5.27(e)
7200	1003(e)	5.23(e)	1023(e)	5.39(e)	1042(e)	5.56(e)	1061(e)	5.72(e)	1080(e)	5.88(e)	1099(e)	6.04(e)	1118(e)	6.20(e)	1136(e)	6.36(e)
Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, 3% Drive Loss Included and No Return Air Filter)															
	1.7		1.8		1.9		2.0									
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP								
4800	1001(c)	2.96(c)	1023(d)	3.07(d)	1045(d)	3.19(d)	1065(d)	3.30(d)								
5400	1034(d)	3.65(d)	1056(d)	3.78(d)	1075(d)	3.89(d)	1096(d)	4.02(d)								
6000	1071(d)	4.47(d)	1091(d)	4.61(d)	1111(d)	4.75(d)	1131(d)	4.88(d)								
6600	1111(e)	5.42(e)	1130(e)	5.57(e)	1149(e)	5.72(e)	1167(e)	5.87(e)								
7200	1154(e)	6.52(e)	1172(e)	6.67(e)	1190(e)	6.83(e)	—	—								

Digit 12 - Drive Package		
Legend	single speed motor	two speed motor
(a)	A	1
(b)	B	2
(c)	C	3
(d)	D	4
(e)	E	5



Unit Fan Performance

Figure 31. Fan performance curve (front/back supply) 15 tons GEV180¹⁷

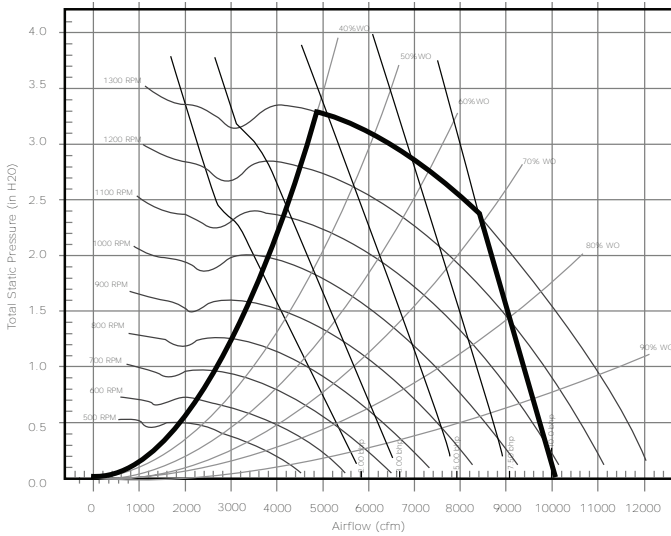


Table 139. Fan performance (front/back supply) 15 tons GEV180 (includes wet coil, no filter)

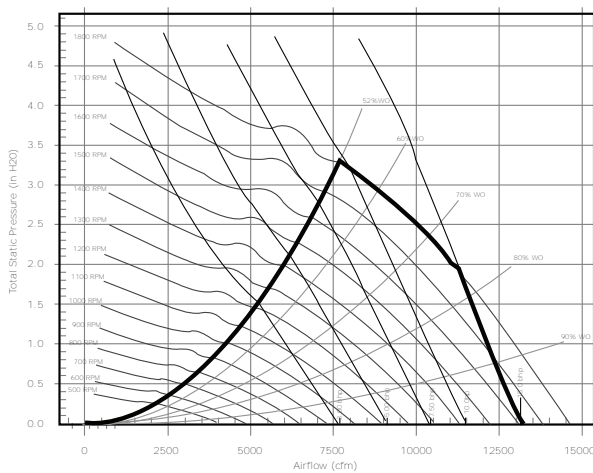
Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, No Drive Loss Included and No Return Air Filter)															
	0.1		0.2		0.3		0.4		0.5		0.6		0.7		0.8	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
4800	—	—	—	—	—	—	—	—	668(a)	1.60(a)	696(a)	1.70(a)	724(a)	1.79(a)	750(a)	1.89(a)
5400	—	—	—	—	665(a)	1.92(a)	692(a)	2.03(a)	717(a)	2.13(a)	743(a)	2.24(a)	768(a)	2.35(a)	793(a)	2.46(a)
6000	670(a)	2.28(a)	696(a)	2.41(a)	722(a)	2.54(a)	746(a)	2.66(a)	770(a)	2.78(a)	793(a)	2.91(a)	816(a)	3.02(a)	839(b)	3.14(b)
6600	732(a)	3.01(a)	755(b)	3.15(b)	780(b)	3.30(b)	802(b)	3.43(b)	824(b)	3.56(b)	846(b)	3.70(b)	867(b)	3.83(b)	888(b)	3.96(b)
7200	795(b)	3.89(b)	815(b)	4.03(b)	838(b)	4.19(b)	860(b)	4.35(b)	880(b)	4.49(b)	900(b)	4.63(b)	920(b)	4.78(b)	940(b)	4.93(b)
Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, No Drive Loss Included and No Return Air Filter)															
	0.9		1.0		1.1		1.2		1.3		1.4		1.5		1.6	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
4800	776(a)	1.98(a)	802(a)	2.08(a)	827(a)	2.18(a)	853(a)	2.28(a)	878(a)	2.38(a)	902(c)	2.48(c)	925(c)	2.59(c)	949(c)	2.69(c)
5400	818(a)	2.57(a)	841(a)	2.67(a)	864(a)	2.78(a)	887(a)	2.88(a)	910(c)	3.00(c)	934(c)	3.12(c)	955(c)	3.22(c)	978(d)	3.34(d)
6000	861(b)	3.27(b)	884(b)	3.39(b)	906(b)	3.51(b)	927(b)	3.63(b)	947(b)	3.74(b)	969(d)	3.86(d)	990(d)	3.98(d)	1011(d)	4.11(d)
6600	908(b)	4.09(b)	929(b)	4.23(b)	950(b)	4.36(b)	970(d)	4.50(d)	990(d)	4.63(d)	1010(d)	4.76(d)	1029(d)	4.89(d)	1048(d)	5.02(d)
7200	—	—	—	—	—	—	1016(e)	5.50(e)	1035(e)	5.65(e)	1053(e)	5.80(e)	1071(e)	5.94(e)	1090(e)	6.09(e)
Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, No Drive Loss Included and No Return Air Filter)															
	1.7		1.8		1.9		2.0									
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP								
4800	972(c)	2.79(c)	995(c)	2.90(c)	1018(c)	3.01(c)	1040(d)	3.11(d)								
5400	999(d)	3.45(d)	1021(d)	3.57(d)	1041(d)	3.68(d)	1063(d)	3.80(d)								
6000	1031(d)	4.23(d)	1051(d)	4.35(d)	1071(d)	4.48(d)	1090(d)	4.61(d)								
6600	1066(e)	5.14(e)	1085(e)	5.28(e)	1105(e)	5.42(e)	1124(e)	5.56(e)								
7200	1107(e)	6.22(e)	1125(e)	6.36(e)	1142(e)	6.50(e)	1160(e)	6.65(e)								

¹⁷ Includes wet coil, no filter

Table 139. Fan performance (front/back supply) 15 tons GEV180 (includes wet coil, no filter) (continued)

Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, No Drive Loss Included and No Return Air Filter)															
	0.1		0.2		0.3		0.4		0.5		0.6		0.7		0.8	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP

Digit 12 - Drive Package		
Legend	single speed motor	two speed motor
(a)	A	1
(b)	B	2
(c)	C	3
(d)	D	4
(e)	E	5

Figure 32. Fan performance curve (top supply) 20 tons GEV240¹⁸

Table 140. Fan performance (top supply) 20 tons GEV240 (includes wet coil, no filter)

Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, 3% Drive Loss Included and No Return Air Filter)													
	0.1		0.2		0.3		0.4		0.5		0.6		0.7	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
6400	—	—	893(a)	2.17(a)	928(a)	2.31(a)	962(a)	2.46(a)	995(a)	2.61(a)	1028(a)	2.76(a)	1059(a)	2.91(a)
7200	956(a)	2.83(a)	988(a)	3.00(a)	1019(a)	3.16(a)	1049(a)	3.32(a)	1080(a)	3.49(a)	1110(b)	3.66(b)	1139(b)	3.83(b)
8000	1055(a)	3.84(a)	1085(a)	4.03(a)	1113(b)	4.21(b)	1141(b)	4.39(b)	1168(b)	4.57(b)	1195(b)	4.76(b)	1222(b)	4.95(b)
8800	—	—	—	—	—	—	1234(c)	5.67(c)	1259(c)	5.87(c)	1283(c)	6.07(c)	1308(c)	6.27(c)
9600	1255(c)	6.54(c)	1280(c)	6.76(c)	1305(c)	6.98(c)	1328(c)	7.20(c)	1352(c)	7.42(c)	1374(d)	7.63(d)	1397(d)	7.85(d)
Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, 3% Drive Loss Included and No Return Air Filter)													
	0.8		0.9		1.0		1.1		1.2		1.3		1.4	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
6400	1091(b)	3.07(b)	1120(b)	3.22(b)	1149(b)	3.37(b)	1179(b)	3.53(b)	1207(b)	3.69(b)	1236(b)	3.85(b)	1263(b)	4.01(b)
7200	1168(b)	4.00(b)	1196(b)	4.17(b)	1224(b)	4.34(b)	1250(b)	4.52(b)	1277(b)	4.69(b)	1302(b)	4.86(b)	1328(b)	5.03(b)
8000	1249(c)	5.13(c)	1275(c)	5.32(c)	1301(c)	5.52(c)	1326(c)	5.70(c)	1352(c)	5.90(c)	1376(c)	6.08(c)	1399(c)	6.28(c)

¹⁸ Includes wet coil, no filter

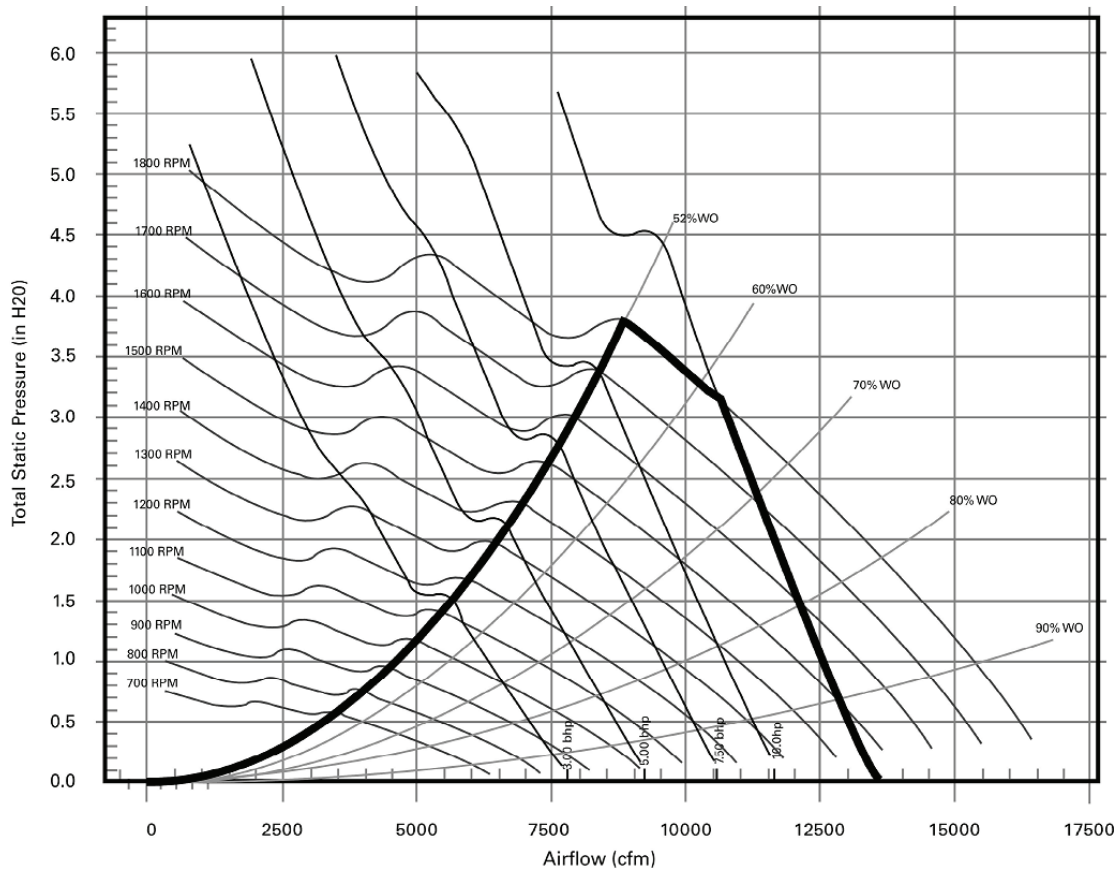


Unit Fan Performance

Table 140. Fan performance (top supply) 20 tons GEV240 (includes wet coil, no filter) (continued)

Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, 3% Drive Loss Included and No Return Air Filter)													
	0.1		0.2		0.3		0.4		0.5		0.6		0.7	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
8800	1333(c)	6.48(c)	1357(c)	6.69(c)	1382(c)	6.90(c)	1405(c)	7.11(c)	1429(c)	7.32(c)	1452(c)	7.53(c)	1474(f)	7.73(f)
9600	1420(d)	8.07(d)	1443(d)	8.30(d)	1465(d)	8.53(d)	1487(f)	8.75(f)	1509(f)	8.98(f)	1531(f)	9.21(f)	1553(f)	9.44(f)
Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, 3% Drive Loss Included and No Return Air Filter)													
	1.5		1.6		1.7		1.8		1.9		2.0		2.1	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
6400	1289(b)	4.17(b)	1317(b)	4.35(b)	1343(b)	4.51(b)	1369(c)	4.68(c)	1394(c)	4.85(c)	1420(c)	5.04(c)	1444(c)	5.21(c)
7200	1353(c)	5.22(c)	1378(c)	5.39(c)	1403(c)	5.57(c)	1428(c)	5.77(c)	1451(c)	5.95(c)	1475(c)	6.13(c)	1498(e)	6.32(e)
8000	1423(c)	6.47(c)	1447(c)	6.66(c)	1469(c)	6.85(c)	1492(f)	7.05(f)	1515(f)	7.25(f)	1537(f)	7.45(f)	1559(f)	7.65(f)
8800	1496(f)	7.94(f)	1519(f)	8.16(f)	1540(f)	8.36(f)	1562(f)	8.58(f)	1583(f)	8.78(f)	1605(f)	9.01(f)	1625(f)	9.22(f)
9600	1574(f)	9.67(f)	1595(f)	9.90(f)	1616(g)	10.12(g)	1637(g)	10.36(g)	1656(g)	10.58(g)	1676(g)	10.80(g)	1696(g)	11.04(g)
Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, 3% Drive Loss Included and No Return Air Filter)													
	2.2		2.3		2.4		2.4		2.6		2.7		2.8	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
6400	1470(c)	5.40(c)	1496(e)	5.59(e)	1523(e)	5.80(e)	—	—	—	—	—	—	—	—
7200	1523(e)	6.52(e)	1545(e)	6.71(e)	1568(e)	6.91(e)	1589(e)	7.10(e)	1612(e)	7.31(e)	1635(e)	7.51(e)	1656(f)	7.71(f)
8000	1581(f)	7.85(f)	1603(f)	8.06(f)	1624(f)	8.26(f)	1647(f)	8.49(f)	1668(f)	8.70(f)	1688(f)	8.91(f)	1708(f)	9.12(f)
8800	1646(f)	9.43(f)	1666(f)	9.65(f)	1687(f)	9.87(f)	1707(g)	10.09(g)	1727(g)	10.32(g)	1747(g)	10.54(g)	1767(g)	10.78(g)
9600	1715(g)	11.26(g)	1735(g)	11.50(g)	1754(g)	11.74(g)	1773(g)	11.96(g)	1793(g)	12.22(g)	—	—	—	—
Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, 3% Drive Loss Included and No Return Air Filter)													
	2.9		3.0											
	RPM	BHP	RPM	BHP										
6400	—	—	—	—										
7200	1680(f)	7.94(f)	1704(f)	8.17(f)										
8000	1728(f)	9.33(f)	1748(f)	9.54(f)										
8800	1786(g)	11.00(g)	—	—										
9600	—	—	—	—										

Digit 12 - Drive Package		
Legend	single speed motor	two speed motor
(a)	A	1
(b)	B	2
(c)	C	3
(d)	D	4
(e)	E	5
(f)	F	6
(g)	G	7

Figure 33. Fan performance curve (front/back supply) 20 tons GEV240¹⁹

Table 141. Fan performance (front/back supply) 20 tons GEV240 (includes wet coil, no filter)

Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, 3% Drive Loss Included and No Return Air Filter)													
	0.1		0.2		0.3		0.4		0.5		0.6		0.7	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
6400	—	—	—	—	—	—	—	—	899(a)	2.43(a)	931(a)	2.57(a)	962(a)	2.70(a)
7200	—	—	—	—	910(a)	2.94(a)	941(a)	3.10(a)	972(a)	3.25(a)	1001(a)	3.41(a)	1030(a)	3.56(a)
8000	933(a)	3.58(a)	962(a)	3.75(a)	990(a)	3.91(a)	1019(a)	4.09(a)	1048(a)	4.26(a)	1075(a)	4.43(a)	1102(b)	4.60(b)
8800	1021(a)	4.73(a)	1047(a)	4.91(a)	1073(a)	5.09(a)	1100(c)	5.28(c)	1126(c)	5.48(c)	1151(c)	5.67(c)	1176(c)	5.86(c)
9600	1109(c)	6.10(c)	1133(c)	6.30(c)	1157(c)	6.50(c)	1181(c)	6.70(c)	1205(c)	6.91(c)	1229(c)	7.12(c)	1253(c)	7.33(c)
Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, 3% Drive Loss Included and No Return Air Filter)													
	0.8		0.9		1.0		1.1		1.2		1.3		1.4	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
6400	993(a)	2.85(a)	1023(a)	2.99(a)	1052(a)	3.13(a)	1080(a)	3.27(a)	1107(b)	3.41(b)	1134(b)	3.55(b)	1160(b)	3.69(b)
7200	1059(a)	3.72(a)	1086(a)	3.87(a)	1114(b)	4.03(b)	1140(b)	4.19(b)	1166(b)	4.35(b)	1192(b)	4.51(b)	1217(b)	4.66(b)
8000	1128(b)	4.77(b)	1154(b)	4.95(b)	1179(c)	5.12(c)	1204(c)	5.29(c)	1230(c)	5.47(c)	1253(c)	5.64(c)	1277(d)	5.82(d)
8800	1201(c)	6.04(c)	1225(c)	6.23(c)	1249(c)	6.42(c)	1272(d)	6.61(d)	1295(d)	6.79(d)	1317(d)	6.98(d)	1340(d)	7.18(d)
9600	1276(e)	7.54(e)	1298(e)	7.74(e)	1320(e)	7.94(e)	1342(e)	8.14(e)	1364(e)	8.35(e)	1385(e)	8.55(e)	1406(e)	8.76(e)

¹⁹ Includes wet coil, no filter

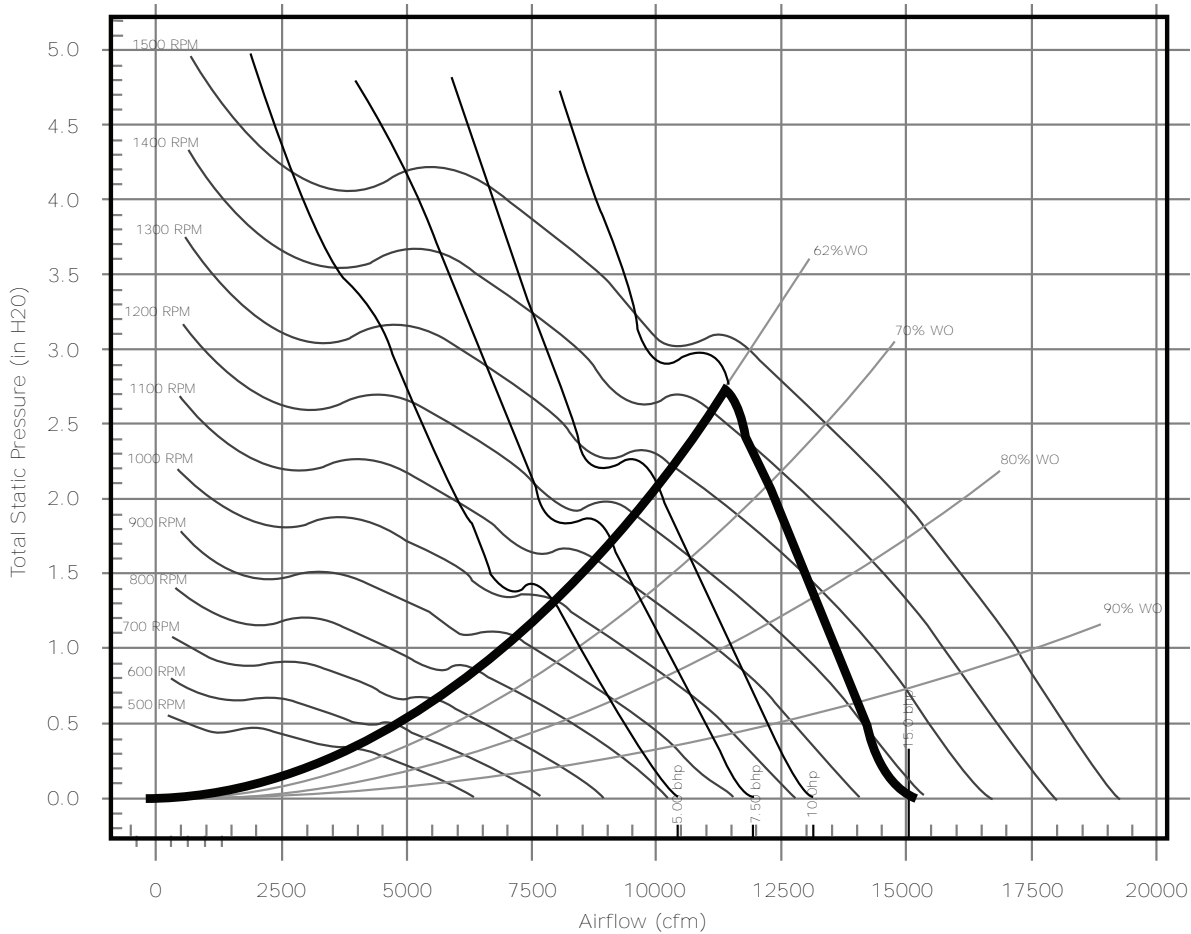


Unit Fan Performance

Table 141. Fan performance (front/back supply) 20 tons GEV240 (includes wet coil, no filter) (continued)

Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, 3% Drive Loss Included and No Return Air Filter)													
	0.1		0.2		0.3		0.4		0.5		0.6		0.7	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, 3% Drive Loss Included and No Return Air Filter)													
	1.5		1.6		1.7		1.8		1.9		2.0		2.1	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
6400	1186(b)	3.83(b)	1211(b)	3.97(b)	1235(b)	4.10(b)	1258(b)	4.24(b)	1282(b)	4.38(b)	1307(b)	4.54(b)	—	—
7200	1241(b)	4.82(b)	1265(b)	4.97(b)	1288(d)	5.13(d)	1313(d)	5.30(d)	1335(d)	5.45(d)	1357(d)	5.62(d)	1378(d)	5.76(d)
8000	1300(d)	6.00(d)	1323(d)	6.17(d)	1346(d)	6.35(d)	1368(d)	6.52(d)	1390(d)	6.70(d)	1412(d)	6.88(d)	1432(d)	7.05(d)
8800	1362(d)	7.37(d)	1384(e)	7.56(e)	1406(e)	7.76(e)	1426(e)	7.95(e)	1449(e)	8.15(e)	1469(e)	8.34(e)	1489(g)	8.53(g)
9600	1428(e)	8.97(e)	1448(e)	9.18(e)	1470(e)	9.40(e)	1489(g)	9.60(g)	1510(g)	9.82(g)	1529(g)	10.03(g)	—	—
Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, 3% Drive Loss Included and No Return Air Filter)													
	2.2		2.3		2.4		2.4		2.6		2.7		2.8	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
6400	—	—	—	—	—	—	—	—	—	—	—	—	—	—
7200	1399(d)	5.91(d)	1420(d)	6.07(d)	1442(d)	6.24(d)	—	—	—	—	—	—	—	—
8000	1454(d)	7.23(d)	1475(d)	7.41(d)	1494(g)	7.58(g)	1513(g)	7.75(g)	1533(g)	7.92(g)	1551(g)	8.08(g)	1570(g)	8.25(g)
8800	1509(g)	8.72(g)	1529(g)	8.92(g)	1548(g)	9.11(g)	1567(g)	9.30(g)	1587(g)	9.50(g)	1605(g)	9.69(g)	1625(g)	9.89(g)
9600	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, 3% Drive Loss Included and No Return Air Filter)													
	2.9		3.0											
	RPM	BHP	RPM	BHP										
6400	—	—	—	—										
7200	—	—	—	—										
8000	1589(g)	8.43(g)	1608(g)	8.61(g)										
8800	—	—	—	—										
9600	—	—	—	—										

Digit 12 - Drive Package		
Legend	single speed motor	two speed motor
(a)	A	1
(b)	B	2
(c)	C	3
(d)	D	4
(e)	E	5
(g)	G	7

Figure 34. Fan performance curve (with 11x15 blower wheel) 25 tons GEV300²⁰

Table 142. Fan performance (top supply with 11x15 blower wheel) 25 tons GEV300 (includes wet coil, no filter)

Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, 3% Drive Loss Included and No Return Air Filter)													
	0.1		0.2		0.3		0.4		0.5		0.6		0.7	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
8000	—	—	—	—	—	—	760(a)	3.23(a)	787(a)	3.42(a)	814(a)	3.60(a)	839(a)	3.79(a)
9000	—	—	781(a)	3.98(a)	805(a)	4.17(a)	829(a)	4.36(a)	853(a)	4.57(a)	878(a)	4.79(a)	901(a)	5.00(a)
10000	—	—	858(b)	5.36(b)	879(b)	5.57(b)	901(b)	5.78(b)	923(b)	6.00(b)	945(b)	6.23(b)	966(b)	6.48(b)
11000	917(b)	6.81(b)	936(b)	7.04(b)	955(b)	7.26(b)	975(b)	7.50(b)	994(d)	7.73(d)	1014(d)	7.98(d)	1034(d)	8.23(d)
12000	997(d)	8.79(d)	1015(d)	9.05(d)	1032(d)	9.29(d)	1050(d)	9.54(d)	1068(d)	9.79(d)	1086(f)	10.05(f)	1104(f)	10.31(f)
Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, 3% Drive Loss Included and No Return Air Filter)													
	0.8		0.9		1.0		1.1		1.2		1.3		1.4	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
8000	866(a)	3.99(a)	891(a)	4.19(a)	916(a)	4.38(a)	939(a)	4.57(a)	963(a)	4.76(a)	987(b)	4.97(b)	1011(b)	5.19(b)
9000	925(b)	5.21(b)	948(b)	5.43(b)	971(b)	5.65(b)	993(b)	5.87(b)	1016(b)	6.10(b)	1037(b)	6.31(b)	1058(b)	6.52(b)
10000	988(b)	6.72(b)	1009(b)	6.95(b)	1030(b)	7.18(b)	1051(b)	7.41(b)	1072(d)	7.66(d)	1092(d)	7.91(d)	1112(d)	8.16(d)
11000	1054(d)	8.50(d)	1074(d)	8.76(d)	1093(d)	9.02(d)	1112(d)	9.27(d)	1131(d)	9.53(d)	1150(d)	9.78(d)	1169(f)	10.06(f)

²⁰ Includes wet coil, no filter



Unit Fan Performance

Table 142. Fan performance (top supply with 11x15 blower wheel) 25 tons GEV300 (includes wet coil, no filter) (continued)

Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, 3% Drive Loss Included and No Return Air Filter)													
	0.1		0.2		0.3		0.4		0.5		0.6		0.7	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
12000	1122(f)	10.59(f)	1141(f)	10.88(f)	1158(f)	11.17(f)	1177(f)	11.47(f)	1194(f)	11.74(f)	1212(f)	12.02(f)	1229(f)	12.29(f)
Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, 3% Drive Loss Included and No Return Air Filter)													
	1.5		1.6		1.7		1.8		1.9		2.0		2.1	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
8000	1037(b)	5.43(b)	—	—	—	—	—	—	—	—	—	—	—	—
9000	1080(c)	6.74(c)	1101(c)	6.97(c)	1122(c)	7.21(c)	1144(c)	7.46(c)	—	—	—	—	—	—
10000	1132(d)	8.41(d)	1151(d)	8.65(d)	1170(e)	8.88(e)	1190(e)	9.13(e)	1209(e)	9.37(e)	1227(e)	9.60(e)	1247(e)	9.88(e)
11000	1187(f)	10.32(f)	1206(f)	10.60(f)	1224(f)	10.88(f)	1243(f)	11.16(f)	1261(f)	11.42(f)	1278(f)	11.68(f)	1295(f)	11.94(f)
12000	1247(f)	12.57(f)	1264(f)	12.86(f)	1281(f)	13.15(f)	1298(f)	13.46(f)	1315(f)	13.76(f)	1331(f)	14.04(f)	1349(f)	14.37(f)
Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, 3% Drive Loss Included and No Return Air Filter)													
	2.2		2.3											
	RPM	BHP	RPM	BHP										
8000	—	—	—	—										
9000	—	—	—	—										
10000	1266(f)	10.16(f)	1286(f)	10.45(f)										
11000	1313(f)	12.21(f)	1330(f)	12.47(f)										
12000	1365(f)	14.65(f)	1381(f)	14.93(f)										

Digit 12 - Drive Package		
Legend	single speed motor	two speed motor
(a)	A	1
(b)	B	2
(c)	C	3
(d)	D	4
(e)	E	5
(f)	F	6

Figure 35. Fan performance curve (top supply with 12x12 blower wheel) 25 tons GEV300²¹

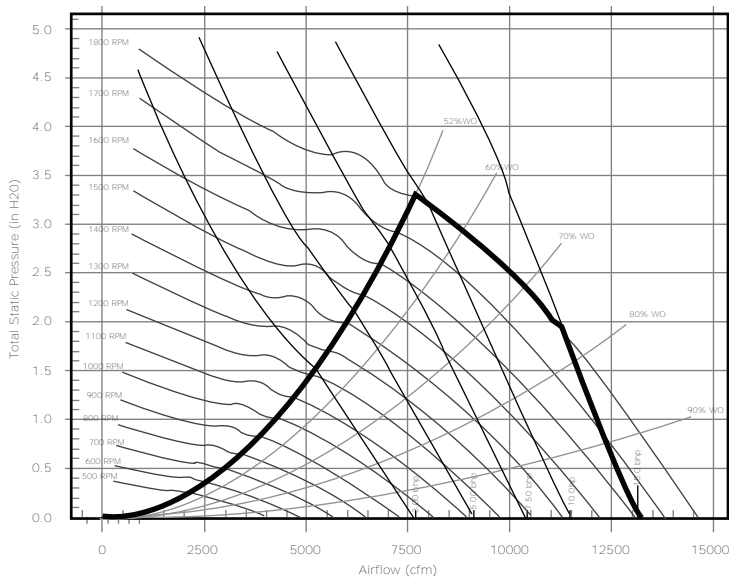


Table 143. Fan performance (top supply with 12x12 blower wheel) 25 tons GEV300 (includes wet coil, no filter)

Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, 3% Drive Loss Included and No Return Air Filter)															
	1.6		1.7		1.8		1.9		2.0		2.1		2.2		2.3	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
8000	1434(g)	6.56(g)	1458(g)	6.76(g)	1481(g)	6.96(g)	1503(g)	7.14(g)	1525(g)	7.34(g)	1548(g)	7.55(g)	1569(h)	7.74(h)	1592(h)	7.96(h)
9000	—	—	—	—	—	—	1588(h)	9.07(h)	1609(h)	9.29(h)	1629(h)	9.50(h)	1650(h)	9.73(h)	1670(h)	9.94(h)
10000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
11000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, 3% Drive Loss Included and No Return Air Filter)															
	2.4		2.5		2.6		2.7		2.8		2.9		3.0			
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP		
8000	1613(h)	8.16(h)	1635(h)	8.37(h)	1657(h)	8.60(h)	1677(h)	8.80(h)	1698(h)	9.01(h)	1718(h)	9.22(h)	1738(h)	9.43(h)		
9000	1691(h)	10.17(h)	1710(h)	10.39(h)	1731(h)	10.63(h)	1749(h)	10.84(h)	1769(j)	11.07(j)	1790(j)	11.32(j)	—	—		
10000	1775(j)	12.58(j)	—	—	—	—	—	—	—	—	—	—	—	—		
11000	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
12000	—	—	—	—	—	—	—	—	—	—	—	—	—	—		

Digit 12 - Drive Package		
Legend	single speed motor	two speed motor
(g)	G	7
(h)	H	8
(j)	J	9

²¹. Includes wet coil, no filter



Unit Fan Performance

Figure 36. Fan performance curve (front/back supply with 11x15 blower wheel) 25 tons GEV300²²

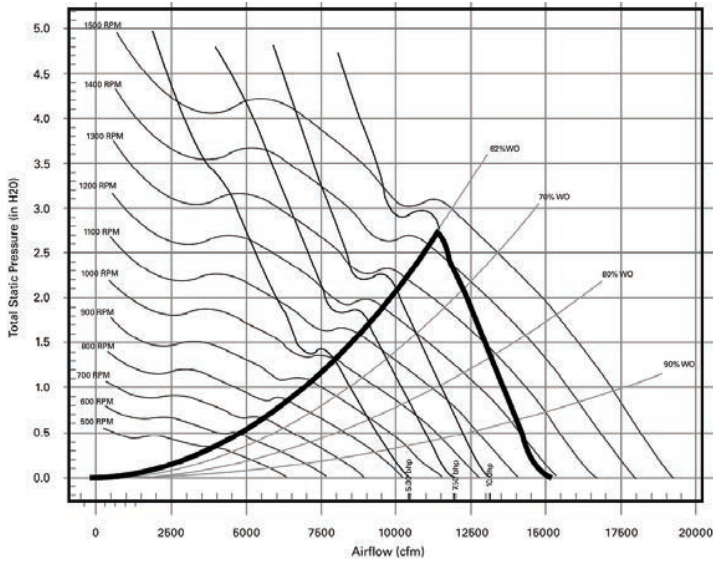


Table 144. Fan performance (front/back supply with 11x15 blower wheel) 25 tons GEV300 (includes wet coil, no filter)

Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, 3% Drive Loss Included and No Return Air Filter)													
	0.1		0.2		0.3		0.4		0.5		0.6		0.7	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
8000	—	—	—	—	—	—	—	—	—	—	755(a)	3.42(a)	780(a)	3.59(a)
9000	—	—	—	—	760(a)	4.18(a)	777(a)	4.31(a)	795(a)	4.44(a)	814(a)	4.58(a)	836(a)	4.75(a)
10000	—	—	—	—	835(b)	5.64(b)	849(b)	5.78(b)	864(b)	5.92(b)	880(b)	6.06(b)	897(b)	6.21(b)
11000	885(b)	7.09(b)	898(b)	7.25(b)	910(b)	7.41(b)	923(d)	7.56(d)	936(d)	7.72(d)	950(d)	7.87(d)	965(d)	8.02(d)
12000	963(d)	9.17(d)	975(d)	9.35(d)	987(d)	9.52(d)	998(d)	9.69(d)	1010(d)	9.86(d)	1022(d)	10.02(d)	—	—
Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, 3% Drive Loss Included and No Return Air Filter)													
	0.8		0.9		1.0		1.1		1.2		1.3		1.4	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
8000	804(a)	3.75(a)	829(a)	3.93(a)	853(a)	4.10(a)	876(a)	4.27(a)	898(a)	4.43(a)	921(a)	4.61(a)	944(a)	4.80(a)
9000	859(a)	4.95(a)	881(b)	5.14(b)	903(b)	5.33(b)	925(b)	5.52(b)	946(b)	5.71(b)	966(b)	5.90(b)	987(b)	6.09(b)
10000	916(b)	6.39(b)	936(b)	6.59(b)	957(b)	6.82(b)	976(b)	7.02(b)	996(b)	7.23(b)	1016(b)	7.44(b)	1035(d)	7.65(d)
11000	980(d)	8.18(d)	996(d)	8.37(d)	1014(d)	8.58(d)	1032(d)	8.81(d)	1050(d)	9.04(d)	1069(d)	9.28(d)	1087(d)	9.51(d)
12000	—	—	—	—	—	—	—	—	1107(d)	11.16(d)	1124(d)	11.41(d)	1141(d)	11.67(d)
Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, 3% Drive Loss Included and No Return Air Filter)													
	1.5		1.6		1.7		1.8		1.9		2.0		2.1	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
8000	967(a)	4.99(a)	990(b)	5.21(b)	1015(b)	5.47(b)	—	—	—	—	—	—	—	—
9000	1008(b)	6.29(b)	1028(b)	6.48(b)	1047(b)	6.67(b)	1067(c)	6.88(c)	1087(c)	7.11(c)	1109(c)	7.36(c)	—	—
10000	1054(d)	7.87(d)	1073(d)	8.08(d)	1091(d)	8.29(d)	1110(d)	8.52(d)	1127(d)	8.72(d)	1146(e)	8.94(e)	1164(e)	9.16(e)
11000	1105(d)	9.74(d)	1122(d)	9.97(d)	1140(d)	10.21(d)	—	—	—	—	—	—	—	—

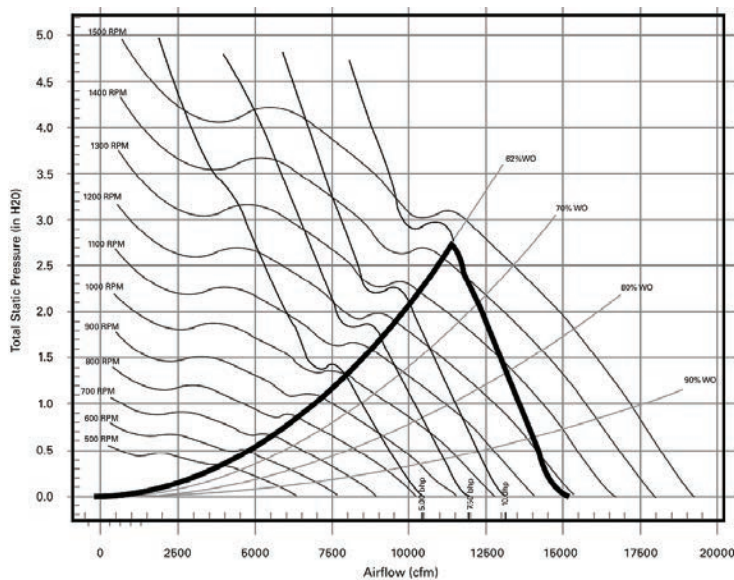
²² Includes wet coil, no filter

Table 144. Fan performance (front/back supply with 11x15 blower wheel) 25 tons GEV300 (includes wet coil, no filter) (continued)

Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, 3% Drive Loss Included and No Return Air Filter)													
	0.1		0.2		0.3		0.4		0.5		0.6		0.7	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
12000	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, 3% Drive Loss Included and No Return Air Filter)													
	2.2		2.3		2.4									
	RPM	BHP	RPM	BHP	RPM	BHP								
8000	—	—	—	—	—	—								
9000	—	—	—	—	—	—								
10000	1182(e)	9.40(e)	1200(e)	9.64(e)	1219(e)	9.91(e)								
11000	—	—	—	—	—	—								
12000	—	—	—	—	—	—								

Digit 12 - Drive Package		
Legend	single speed motor	two speed motor
(a)	A	1
(b)	B	2
(c)	C	3
(d)	D	4
(e)	E	5

Figure 37. Fan performance curve (front/back supply with 12x12 blower wheel) 25 tons GEV300²³



²³ Includes wet coil, no filter



Unit Fan Performance

Table 145. Fan performance (front/back supply with 12x12 blower wheel) 25 tons GEV300 (includes wet coil, no filter)

Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, 3% Drive Loss Included and No Return Air Filter)													
	1.8		1.9		2.0		2.1		2.2		2.3		2.4	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
8000	1356(g)	6.25(g)	1379(g)	6.42(g)	1400(g)	6.59(g)	1422(g)	6.76(g)	1443(g)	6.93(g)	1463(g)	7.1(g)	1484(g)	7.27(g)
9000	—	—	—	—	—	—	1490(h)	8.55(h)	1510(h)	8.74(h)	1531(h)	8.94(h)	1549(h)	9.12(h)
10000	—	—	—	—	—	—	—	—	—	—	—	—	—	—
11000	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12000	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Std Airflow CFM	Unit External Static Pressure inches W.G. (Wet Coil, 3% Drive Loss Included and No Return Air Filter)													
	2.5		2.6		2.7		2.8		2.9		3.0			
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP		
8000	1505(h)	7.45(h)	1522(h)	7.6(h)	1542(h)	7.76(h)	1562(h)	7.94(h)	1581(h)	8.11(h)	1600(h)	8.29(h)		
9000	1569(h)	9.32(h)	1588(h)	9.5(h)	1608(h)	9.71(h)	1625(h)	9.89(h)	1644(h)	10.08(h)	1662(h)	10.28(h)		
10000	—	—	1658(j)	11.76(j)	1676(j)	11.96(j)	1693(j)	12.17(j)	1711(j)	12.38(j)	1729(j)	12.6(j)		
11000	—	—	—	—	—	—	1765(j)	14.82(j)	—	—	—	—		
12000	—	—	—	—	—	—	—	—	—	—	—	—		

Digit 12 - Drive Package		
Legend	single speed motor	two speed motor
(g)	G	7
(h)	H	8
(j)	J	9

Table 146. Added pressure drop through optional filters (inches water column), 0.5 to 5 tons, GE*006-060

Model No.	CFM	2" MERV 8	2" MERV13	4" MERV 8	4" MERV13
GEV/H006	152	0.03	0.06	0.02	0.04
GEV/H006	162	0.04	0.06	0.02	0.05
GEV/H006	171	0.04	0.06	0.02	0.05
GEV/H006	181	0.04	0.07	0.02	0.05
GEV/H006	190	0.04	0.07	0.02	0.05
GEV/H006	200	0.05	0.08	0.02	0.05
GEV/H006	209	0.05	0.08	0.03	0.06
GEV/H006	219	0.05	0.08	0.03	0.06
GEV/H006	228	0.06	0.09	0.03	0.06
GEV/H009	228	0.06	0.09	0.03	0.06
GEV/H009	242	0.06	0.09	0.03	0.07
GEV/H009	257	0.06	0.10	0.03	0.07
GEV/H009	271	0.07	0.11	0.04	0.07
GEV/H009	285	0.07	0.11	0.04	0.08
GEV/H009	299	0.08	0.12	0.04	0.08
GEV/H009	314	0.08	0.13	0.05	0.09



Unit Fan Performance

Table 146. Added pressure drop through optional filters (inches water column), 0.5 to 5 tons, GE*006-060 (continued)

Model No.	CFM	2" MERV 8	2" MERV13	4" MERV 8	4" MERV13
GEV/H009	328	0.09	0.13	0.05	0.09
GEV/H009	342	0.09	0.14	0.05	0.10
GEV/H012	304	0.08	0.12	0.04	0.09
GEV/H012	323	0.08	0.13	0.05	0.09
GEV/H012	342	0.09	0.14	0.05	0.10
GEV/H012	361	0.10	0.15	0.06	0.11
GEV/H012	380	0.10	0.16	0.06	0.11
GEV/H012	399	0.11	0.17	0.07	0.12
GEV/H012	418	0.11	0.18	0.07	0.13
GEV/H012	437	0.12	0.19	0.08	0.14
GEV/H012	456	0.13	0.20	0.08	0.15
GEV/H015	380	0.07	0.11	0.04	0.08
GEV/H015	404	0.08	0.12	0.04	0.09
GEV/H015	428	0.08	0.13	0.05	0.09
GEV/H015	451	0.09	0.14	0.05	0.10
GEV/H015	475	0.09	0.15	0.06	0.10
GEV/H015	499	0.10	0.16	0.06	0.11
GEV/H015	523	0.10	0.17	0.07	0.12
GEV/H015	546	0.11	0.18	0.07	0.13
GEV/H015	570	0.12	0.19	0.08	0.13
GEV/H018	456	0.09	0.14	0.05	0.10
GEV/H018	485	0.10	0.15	0.06	0.11
GEV/H018	513	0.10	0.16	0.06	0.12
GEV/H018	542	0.11	0.17	0.07	0.12
GEV/H018	570	0.12	0.19	0.08	0.13
GEV/H018	599	0.12	0.20	0.08	0.14
GEV/H018	627	0.13	0.21	0.09	0.15
GEV/H018	656	0.14	0.22	0.10	0.16
GEV/H018	684	0.14	0.23	0.10	0.17
GEV/H024	608	0.11	0.17	0.07	0.12
GEV/H024	646	0.11	0.18	0.07	0.13
GEV/H024	684	0.12	0.19	0.08	0.14
GEV/H024	722	0.13	0.21	0.09	0.15
GEV/H024	760	0.14	0.22	0.10	0.16
GEV/H024	798	0.14	0.24	0.10	0.18
GEV/H024	836	0.15	0.25	0.11	0.19
GEV/H024	874	0.16	0.27	0.12	0.20
GEV/H024	912	0.17	0.28	0.13	0.22
GEV/H030	760	0.14	0.22	0.10	0.16
GEV/H030	808	0.15	0.24	0.11	0.18



Unit Fan Performance

Table 146. Added pressure drop through optional filters (inches water column), 0.5 to 5 tons, GE*006-060 (continued)

Model No.	CFM	2" MERV 8	2" MERV13	4" MERV 8	4" MERV13
GEV/H030	855	0.16	0.26	0.12	0.20
GEV/H030	903	0.17	0.28	0.13	0.21
GEV/H030	950	0.18	0.30	0.14	0.23
GEV/H030	998	0.19	0.32	0.16	0.25
GEV/H030	1045	0.20	0.34	0.17	0.27
GEV/H030	1093	0.21	0.36	0.18	0.29
GEV/H030	1140	0.22	0.38	0.20	0.31
GEV/H036	912	0.12	0.19	0.08	0.14
GEV/H036	969	0.13	0.20	0.09	0.15
GEV/H036	1026	0.14	0.22	0.09	0.16
GEV/H036	1083	0.14	0.23	0.10	0.18
GEV/H036	1140	0.15	0.25	0.11	0.19
GEV/H036	1197	0.16	0.27	0.12	0.20
GEV/H036	1254	0.17	0.28	0.13	0.22
GEV/H036	1311	0.18	0.30	0.15	0.24
GEV/H036	1368	0.19	0.32	0.16	0.25
GEV/H042	1064	0.14	0.23	0.10	0.17
GEV/H042	1131	0.15	0.25	0.11	0.19
GEV/H042	1197	0.16	0.27	0.12	0.20
GEV/H042	1264	0.17	0.29	0.14	0.22
GEV/H042	1330	0.18	0.31	0.15	0.24
GEV/H042	1397	0.19	0.33	0.16	0.26
GEV/H042	1463	0.20	0.35	0.18	0.28
GEV/H042	1530	0.21	0.37	0.19	0.30
GEV/H042	1596	0.22	0.39	0.21	0.33
GEV/H048	1216	0.12	0.19	0.08	0.14
GEV/H048	1292	0.13	0.21	0.09	0.15
GEV/H048	1368	0.14	0.23	0.10	0.17
GEV/H048	1444	0.15	0.24	0.11	0.18
GEV/H048	1520	0.16	0.26	0.12	0.20
GEV/H048	1596	0.17	0.28	0.13	0.21
GEV/H048	1672	0.17	0.29	0.14	0.23
GEV/H048	1748	0.18	0.31	0.15	0.25
GEV/H048	1824	0.19	0.33	0.16	0.26
GEV/H060	1520	0.16	0.26	0.12	0.20
GEV/H060	1615	0.17	0.28	0.13	0.22
GEV/H060	1710	0.18	0.30	0.15	0.24
GEV/H060	1805	0.19	0.33	0.16	0.26
GEV/H060	1900	0.20	0.35	0.18	0.28
GEV/H060	1995	0.21	0.37	0.19	0.31

Table 146. Added pressure drop through optional filters (inches water column), 0.5 to 5 tons, GE*006-060 (continued)

Model No.	CFM	2" MERV 8	2" MERV13	4" MERV 8	4" MERV13
GEV/H060	2090	0.23	0.40	0.21	0.33
GEV/H060	2185	0.24	0.43	0.23	0.36
GEV/H060	2280	0.25	0.45	0.25	0.38

Table 147. Added pressure drop through optional filters (inches water column), 6 to 25 tons, GE*072-300

Model No.	CFM	MERV 8	MERV 13
GEHK072	1920	0.09	0.10
GEHK072	2160	0.10	0.12
GEHK072	2400	0.12	0.14
GEHK072	2640	0.13	0.15
GEHK072	2880	0.15	0.17
GEHK090	2400	0.12	0.14
GEHK090	2700	0.13	0.16
GEHK090	3000	0.15	0.18
GEHK090	3300	0.17	0.21
GEHK090	3600	0.19	0.23
GEHK120	3200	0.17	0.20
GEHK120	3600	0.19	0.23
GEHK120	4000	0.22	0.27
GEHK120	4400	0.25	0.31
GEHK120	4800	0.28	0.35
GEHK150	4000	0.17	0.20
GEHK150	4500	0.19	0.23
GEHK150	5000	0.22	0.27
GEHK150	5500	0.25	0.31
GEHK150	6000	0.28	0.35
GEHK180	4800	0.21	0.25
GEHK180	5400	0.24	0.30
GEHK180	6000	0.28	0.35
GEHK180	6600	0.32	0.40
GEHK180	7200	0.36	0.46
GEVK072	1920	0.08	0.09
GEVK072	2160	0.10	0.11
GEVK072	2400	0.11	0.12
GEVK072	2640	0.12	0.14
GEVK072	2880	0.14	0.16
GEVK090	2400	0.11	0.12
GEVK090	2700	0.13	0.15
GEVK090	3000	0.14	0.17
GEVK090	3300	0.16	0.19



Unit Fan Performance

Table 147. Added pressure drop through optional filters (inches water column), 6 to 25 tons, GE*072-300 (continued)

Model No.	CFM	MERV 8	MERV 13
GEVK090	3600	0.18	0.21
GEVK120	3200	0.15	0.18
GEVK120	3600	0.18	0.21
GEVK120	4000	0.20	0.25
GEVK120	4400	0.23	0.28
GEVK120	4800	0.26	0.32
GEVK150	4000	0.09	0.11
GEVK150	4500	0.11	0.12
GEVK150	5000	0.12	0.14
GEVK150	5500	0.14	0.16
GEVK150	6000	0.15	0.18
GEVK180	4800	0.12	0.14
GEVK180	5400	0.13	0.16
GEVK180	6000	0.15	0.18
GEVK180	6600	0.17	0.21
GEVK180	7200	0.19	0.23
GEVK240	6400	0.17	0.20
GEVK240	7200	0.19	0.23
GEVK240	8000	0.22	0.27
GEVK240	8800	0.25	0.31
GEVK240	9600	0.28	0.35
GEVK300	8000	0.22	0.27
GEVK300	9000	0.26	0.32
GEVK300	10000	0.30	0.37
GEVK300	11000	0.34	0.43
GEVK300	12000	0.38	0.49

Note: Added pressure drop should be considered when utilizing optional MERV 8 and MERV 13 filters.



Controls

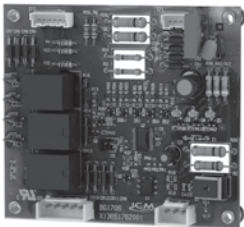
From our industry-leading building automation systems to equipment controls and sensors, Trane offers a complete portfolio of controls products. Trane unit mounted controls are mounted, wired, configured and tested to deliver a high quality product with time savings at the job site. Our building controls are web-based, flexible and scalable, mobile, easy to use and install, and support open standard protocols such as BACnet®.

Deluxe 24V Electronic Controls

The 24 V deluxe design is a microprocessor-based control board conveniently located in the control box. The board is unique to Trane water-source products and is designed to control the unit as well as provide outputs for unit status and fault detection.

The board is factory wired to a terminal point to provide all necessary terminals for field connections.

Figure 38. Deluxe 24V control board



The 24V deluxe design may be applied as a stand-alone control system. The stand-alone design provides accurate temperature control directly through a wall-mounted electronic thermostat.

This system set-up may be utilized in a replacement design where a single unit retrofit is needed. It may be easily interfaced with a field provided control system by way of the factory installed termination point. This stand-alone control is frequently utilized on small jobs where a building controller may not be necessary, or where field installed direct digital controls are specified.

The stand-alone system design provides a low cost option of installation while still allowing room control for each unit. The electric controls includes the following:

- Connection points for low voltage field wiring
- 100 VA Transformer
- Anti-short cycle compressor protection
- Brown out protection
- Compressor contactor
- Compressor delay on start
- Compressor lock-out
- Condensate overflow
- Electric heat and compressor enable (6 to 25 tons)
- Freeze protection
- High pressure switch
- Hot gas reheat
- Low pressure switch
- Low pressure time delay
- Random start delay
- Reversing valve coil
- Soft lockout mode

Deluxe 24V Features

Anti-short Cycle Timer

The anti-short cycle timer provides a three minute time delay between compressor stop and compressor restart.

Brown-out Protection

The brown-out protection function measures the input voltage to the controller and halts the compressor operation. Once a brown-out situation has occurred, the anti-short cycle timer will become energized. The general fault contact will not be affected by this condition. The voltage will continue to be monitored until the voltage increases. The compressors will be enabled at this time if all start-up time delays have expired, and all safeties have been satisfied.

Compressor Disable

The compressor disable relay provides a temporary disable in compressor operation. The signal would be provided from a water loop controller in the system. It would disable the compressor because of low water flow, peak limiting or if the unit goes into an unoccupied state. Once the compressor has been disabled, the anti-short cycle time period will begin. Once the compressor disable signal is no longer present, and all safeties are satisfied, the control will allow the compressor to restart.

Diagnostics

Three LEDs (light emitting diodes) are provided for indicating the operating mode of the controller. See the unit IOM for diagnostics or troubleshooting through the use of the LEDs.

Generic Relay

A generic relay is on the board and may be available for field use. Many factory options utilize this relay, and it will be unavailable for field use in those applications.

A 24 Vac signal will energize the relay coil on terminals R1 and R2. Terminals C (common), NO (normally open), and NC (normally closed) will be provided for the relay contacts.

Random Start

The random start relay provides a time delay start-up of the compressor when cycling in the occupied mode. A new start delay time between 3 and 10 seconds is applied each time power is enabled to the unit.

Safety Control

The deluxe controller receives separate input signals from the refrigerant high pressure switch, low suction pressure switch, freezestat and condensate overflow.

In a high pressure situation, the compressor contactor is de-energized, which suspends compressor operation. The control will go into soft lockout mode initializing a three minute time delay and a random start of 3 to 10 second time delays. Once these delays have expired, the unit will be allowed to run. If a high pressure situation occurs within one hour of the first situation, the control will be placed into a manual lockout mode, halting compressor operation, and initiating the general alarm.

In a low temperature situation, the low pressure switch will transition open after the compressor starts. If the switch is open for 45 seconds during compressor start, the unit will go into soft lockout mode initializing a three minute time delay and a random start of 3 to 10 second time delays. Once these delays have expired, the unit will be allowed to run. If the low pressure situation occurs again within 30 minutes, and the device is open for more than 45 seconds, the control will be placed into a manual lockout mode, halting compressor operation, and initiating the general alarm.

In a condensate overflow situation, the control will go into manual lockout mode, halting compressor operation, and initiating the general alarm.

The general alarm is initiated when the control goes into a manual lockout mode for either high pressure, low pressure, freezestat or condensate overflow conditions.

High and Low Pressure Switches

System safety devices are provided through the use of low/high pressure switches in the refrigeration circuit to help prevent compressor damage. The low pressure switch is set to activate at refrigerant pressures of 40 psig to fit most applications. In cases where a low charge, or excessive loss of charge occurs, each compressor comes equipped with an external overload device to halt the compressor operation.

The high pressure switch prevents compressor operation during high or excessive discharge pressures that exceed 600 psig.

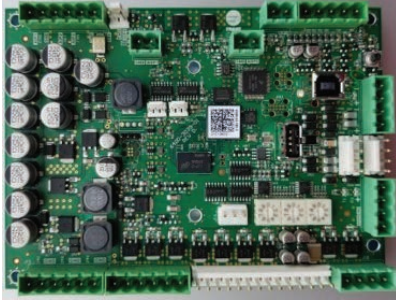
Figure 39. High and low pressure switches



Symbio™/Tracer® Controls

The Symbio 400-B controller offers the combined advantages of simple and dependable operation with the latest Trane-designed controller. Standard control features include options normally available on more elaborate control systems. All control options are available factory-configured or can be field-configured using Tracer® TU for the Symbio 400-B controllers. For more detailed information, see *Symbio™ 400-B/500 Programmable Controllers Water Source Heat Pump (WSHP) - Installation, Operation, and Maintenance* (BAS-SVX092*-EN). Symbio 400-B is DDC that when applied to water-source equipment provide control of the entire unit, as well as outputs for unit status and fault detection. Each device is factory installed, commissioned, and tested to ensure the highest level of quality in unit design.

Figure 40. Symbio 400-B



Each controller feature and option was selected to coordinate with the unit hardware to provide greater energy efficiency and equipment safety to prolong the equipment life.

Trane WSHP with DDC controllers features include 75VA transformer, compressor contactor, compressor lockout function, random start delay, heating/cooling status, occupied/unoccupied mode, low pressure switch, high pressure switch, fan and filter status optional, reversing valve, fan motor, termination points (for low voltage field wiring), condensate overflow and freeze protection. Additional features include two-position water isolation valve support (for variable speed pumping). Optional features include boilerless control for electric heat, waterside economizer, hot gas reheat (for dehumidification) .

Symbio 400-B/500

The Symbio 400-B/500 is a BTL Listed BACnet® controller that can operate stand-alone or within a Building Automation system such as Tracer SC.

Symbio 400-B/500 Functions Include:

Boilerless Control Electric Heat

The controller supports a single stage of boilerless electric heat operation.

Electric heat is used when boilerless heat is enabled/configured and the EWT is too low for compressor operation. When this condition is met, the two-position isolation valve will be closed shutting down the water flow to the unit.

Supplemental Electric Heat (6 to 25 Tons Only)

When the unit is configured for boilerless control, the EWT will be used to determine whether DX heating should be disabled and the electric heater enabled. When these conditions are met, the two-position isolation valve(s) are driven open for three minutes and the entering water temperature reading is taken. The determination as to whether or not to utilize electric heat will be made and the controller will take appropriate action. If boilerless electric heat is enabled, then the isolation valve will be closed, shutting down the water flow to the unit.

When the unit is configured for concurrent operation of DX heating (compressor in heat pump mode) and electric heat, the electric heat will act as a second stage of heat for single compressor units, and a third stage of heat for dual compressor units.

To confirm belt-drive fan system is operational for safety purposes, all 6 to 25 ton units configured with electric heat includes a fan-proving switch installed from the factory.

Note: *With concurrent (or supplemental) electric heat, the electric heater is field provided.*

Compressor Operation

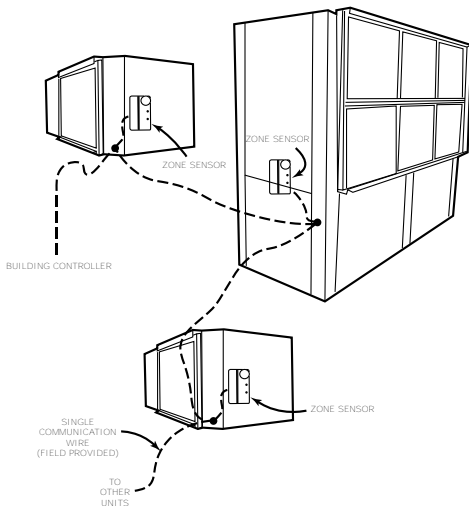
The compressor is cycled on and off to meet heating or cooling zone demands. Units (for 6 to 25 tons, single and dual compressor) use the unit capacity and pulse width modulation (PWM) logic along with minimum on/off timers to determine the

compressor's operation. The compressor is controlled ON for longer periods as capacity increases and shorter periods as capacity decreases.

Condensate Overflow

When condensate reaches the trip point, a condensate overflow signal generates a diagnostic which disables the fan, unit water valves (if present), and compressor. The unit will remain in a halted state until the condensation returns to a normal level. At this time, the switch in the drain pan will automatically reset. However, the controller's condensate overflow diagnostic must be manually reset to clear the diagnostic and restart the unit.

Figure 41. Building control advantages



The Symbio 400-B/500 controllers have the ability to share information with one or several units on the same communication link.

An advantage of installing a Symbio 400-B/500 is its capability to work with other BACnet® controllers. This provides greater flexibility to the building owner, as well as greater flexibility in design.

Integrating the Symbio 400-B/500 on water-source equipment, and tying it to a Tracer SC or other BAS system provides a complete building management system. With a Building Automation system like a Tracer SC, the system can initiate an alarm on a loss of performance on equipment malfunctions; allowing problems to be handled in a timely manner before compromising comfort.

This type of application would most commonly be used for a large space(s) that may require more than one unit. In addition to this application design, Symbio 400-B/500 controller provides a way for units located within the same space to share the same zone sensor to prevent units from simultaneously heating and cooling in the same space.

Note: *The sharing of information is made possible with a twisted pair of wire and a building automation system or through Trane's service tools*

Data Sharing

The Symbio 400-B/500 controller are capable of sending or receiving data (setpoints, fan request, or space temperature) to and from other controllers on the communication link. This allows multiple units to share a common space temperature sensor in both stand-alone and building automation applications.

Dehumidification

Dehumidification²⁴ for the water-source heat pump is applicable with the Symbio 400-B/500. The controller is capable of directing one stage of DX cooling in conjunction with one stage of reheat (hot gas reheat).

Dehumidification can only occur when the controller is in the cooling mode. A humidity sensor is used to measure the zones relative humidity (RH), then compares the zone relative humidity to the relative humidity enable/disable setpoint parameters. The dehumidification enable and disable points are configurable.

²⁴ For 6 to 25 ton units, applicable to single and dual circuited

Fan Operation

The supply air fan operates at the predetermined speed in the occupied or occupied standby mode. When switch is set to AUTO, the fan is configured for cycling ON with heating or cooling. In heat mode, the fan will run for 30 seconds beyond compressor shutdown in both occupied and unoccupied mode.

Filter Maintenance Timer

The controller filter status is based on the unit fans cumulative run hours. The controller compares the fan run time against an adjustable fan run hours limit and recommends unit maintenance as required.

High and Low Pressure Switches

The Symbio 400-B/500 detects the state of the high pressure or low pressure switches. When a fault is sensed by one of these switches, the corresponding message is sent to the controller to be logged into the fault log. When the circuit returns to normal, the high pressure control and low pressure control automatically reset. If a second fault is detected within a thirty-minute time span, the unit must be manually reset.

Occupancy Modes

The four operations of the Symbio 400-B/500 controller include occupied, occupied standby, occupied bypass and unoccupied.

In an occupied situation, the controller uses occupied heating and cooling setpoints to provide heating and cooling to the building. This occupied operation is normally used during the daytime hours when the building is at the highest occupancy level.

In an occupied standby situation, the controllers heating and cooling setpoints are usually wider than the occupied setpoints. This occupied standby operation is used during daytime hours when people are not present in the space (such as lunchtime or recess). To determine the space occupancy, an occupancy sensor is applied.

In an unoccupied situation, the controller assumes the building is vacant, which normally falls in evening hours when a space may be empty. In the unoccupied mode, the controller uses the default unoccupied heating and cooling setpoints stored in the controller. When the building is in unoccupied mode, individual units may be manually placed into timed override of the unoccupied mode at the units wall sensor. During timed override, the controller interprets the request and initiates the occupied setpoint operation, then reports the effective occupancy mode as occupied bypass.

In the occupied bypass mode, the controller applies the occupied heating and cooling setpoint for a 120-minute time limit.

Random Start

To prevent all of the units in a building from energizing major loads at the same time, the controller observes a random start from 0 to 25 seconds. This timer halts the controller until the random start time expires.

Reversing Valve Operation

For cooling, the reversing valve output is energized simultaneously with the compressor. It will remain energized until the controller turns on the compressor for heating. At this time, the reversing valve moves to a de-energized state. In the event of a power failure or controller OFF situation, the reversing valve output will default to the heating (de-energized) state.

Entering Water Temperature Sampling

The controller will sample the entering water temperature to determine proper control action for units equipped with boilerless electric heat or waterside economizer.

Waterside Economizer

Entering water temperature (EWT) sampling will automatically occur at power up when the unit is equipped with a waterside economizer (WSE). The EWT is used to determine if economizing is feasible. When the conditions are met, the two-position isolation valve(s) are driven open for three minutes and the EWT reading is taken. The determination as to whether or not the economizer can be enabled will be made and the controller will take appropriate action. The isolation valve will remain open regardless if the WSE or the DX cooling is enabled.

The unit's waterside economizer will contain a 2-position water valve wired to the controller. The economizing water coil will be optimized to provide 100% of the unit capacity at 80.6°F/66.2°F return air temperature with 45°F entering water. The flow rate is established at 86 F entering water temperature and 96°F leaving water temperature.

Low leaving air protection will be furnished to protect the unit against delivering air that is cold enough to sweat discharge air grilles. Coil icing protection will also be provided.

Waterside economizer cooling will be active during occupied, unoccupied and standby cooling modes.



Controls

Water Isolation Valve

Variable speed pumping systems are supported by the controller when two-position water isolation valves (12 VA max) are present. The valves are normally closed unless DX heating, DX cooling, waterside economizer or dehumidification is requested. When the two-position isolation valves are driven open for operation, the outputs will be driven for 20 seconds to ensure adequate water flow before the compressor outputs are energized.

Isolation Valve “ON” Control

The two-position isolation valve output will be energized (controlled open) during compressor heating, compressor cooling, waterside economizing or dehumidification.

When the isolation valve is driven open for compressor operation, the output will be energized 20 seconds (configurable) prior to the compressor and indoor fan (if not already energized) outputs to ensure adequate water flow to the heat exchanger.

Isolation Valve “OFF” Control

The two-position isolation valve output will be de-energized (controlled closed) when there is no longer a call for compressor or WSE operation. The valve will remain open for 1 minute after call to disable compressor or WSE.

Trane® Air-Fi® Wireless Systems



Trane Air-Fi wireless systems provides significant advantages to better meet customer by providing a lower initial cost; ease of installation for reduced risk; increased reliability and flexibility for easier problem solving; and fewer maintenance issues for worry-free operation and cost savings over the life of the system. Trane Air-Fi wireless systems helps save time and money, with industry-leading technology and performance.

Air-Fi® Wireless Communications Interface (WCI)

The Air-Fi® Wireless Communications Interface (WCI) enables wireless communications between system controls, unit controls, and wireless sensors for Trane control products that use the BACnet® protocol. The WCI replaces the need for communications wire in all system applications.

Air-Fi® Wireless Communications Sensor (WCS)

The Air-Fi Wireless Communications Sensor (WCS) is compatible with any Trane controller that uses a WCI, except the Tracer SC. The WCS provides the same functions as many currently available Trane wired sensors. No further software or hardware is necessary for site evaluation, installation, or maintenance. Space temperature is standard on all models. (A service tool cannot be connected to a Trane wireless sensor.)

Three WCS models are available:

- Digital display (WCS-SD) model
- Base (WCS-SB) model has no exposed display or user interface
- 2% relative humidity sensor module (WCS-SH), which can be field installed inside either the WCS-SD or WCS-SB

In most applications, one WCS-SD or WCS-SB sensor will be used per WCI acting as a router. However, up to six (6) WCS-SD or WCS-SB sensors can be associated to a single equipment controller or BCI.

Compatibility with Previous Generation Wireless Zone Products

Our previous line of wireless zone sensors (WZS, WTS, and WDS) are not compatible with the Air-Fi® Wireless Communications Interface (WCI).

The new Air-Fi Wireless Communications Sensor (WCS) are compatible with old WCIs that have updated firmware.

Wired Zone Sensors

Wired zone sensors can be used with Air-Fi® wireless systems.

Thermostats and Zone Sensors

Table 148. Thermostat selection for use with the deluxe controller













Thermostat	Part Number	Description
	X13511535010	1 Heat/1 Cool, non-programmable commercial thermostat for conventional air conditioners and heat pumps that are configured without auxiliary heat <ul style="list-style-type: none"> • 1 H/1 C
	X13511536010	3 Heat/2 Cool, non-programmable commercial thermostat for conventional air conditioners and heat pumps that are configured with or without auxiliary heat. <ul style="list-style-type: none"> • 3 H/2 C
	X13511537010	3 Heat/2 Cool, programmable commercial thermostat for conventional (rooftop) air conditioners and heat pumps that are configured with or without auxiliary heat. <ul style="list-style-type: none"> • 3 H/2 C
	X13511538010	3Heat/2 Cool, programmable touch screen thermostat for conventional air conditioners and heat pump systems. The thermostat will provide the human interface, zone temperature sensing both local and optional remote temperature sensing, and setpoint scheduling on a daily/weekly basis. This thermostat can also display humidity with a control signal for dehumidification with a local humidity sensor or optional remote humidity sensor. <ul style="list-style-type: none"> • 3 H/2 C
	Pivot — BAYSTAT814A-W.	Pivot Smart Thermostat is a Wi-Fi/ethernet thermostat for commercial applications. It has a very simple interface for occupants to adjust the thermostat. Cooling and heating control of multiple systems is made even easier and faster when connected to the Pivot App. Supports 2 stage heat pump with auxiliary heat.
	XL824 - TCONT824AS52DB.	The XL824 Smart thermostat is a Wi-Fi/ethernet thermostat for Residential applications such as single family homes, condominiums and apartments. Supports 2 stage heat pump with auxiliary heat. The XL824 can be connected to the Nexia Home App and other home automation systems.

Table 149. Zone sensor selection for use with Symbio™ 400-B/500 controller

Sensor	Part Number	Description
	X13790886010	Wired temperature sensor with an LCD display <ul style="list-style-type: none"> • Allows an occupant to control the temperature setpoint, request timed override of system operation, and provides a COMM module to service technicians. Symbio 400-B/500 Compatible
	X13651467020	Communication Module <ul style="list-style-type: none"> • Sold in packs of 12 • Provides local RJ22 connection to Trane® service tools for easy, low cost maintenance.
	X13511529010	Zone Sensor <ul style="list-style-type: none"> • Symbio 400-B/500 compatible • External setpoint adjustment wheel
	X13511527010	Zone Sensor <ul style="list-style-type: none"> • Symbio 400-B/500 compatible • External setpoint adjustment wheel • ON and CANCEL buttons
	X1379084501	Zone Sensor <ul style="list-style-type: none"> • Symbio 400-B/500 compatible • External setpoint adjustment wheel • ON and CANCEL buttons • Fan switch AUTO-OFF
	X1379044401	Temperature and relative humidity sensor <ul style="list-style-type: none"> • Symbio 400-B/500 compatible



Thermostats and Zone Sensors

Table 149. Zone sensor selection for use with Symbio™ 400-B/500 controller (continued)






Sensor	Part Number	Description
	X13790993001	<p>Commercial Touch Screen Programmable Zone Sensor</p> <ul style="list-style-type: none"> • Supports Standby, Occupied, and Unoccupied • 7 day, 5+2 day, and 5+1+1 day • Cannot be used with BAS as sensor ties up BACnet link. For use with factory-programmed Symbio 400-B/500. <p>Notes:</p> <ul style="list-style-type: none"> • <i>Adjusting the rotary switch on Symbio 400-B/500 may be required to correspond address configuration in the sensor. See the installation manual for more information.</i> • <i>Additional configuration is needed in the field to use the Programmable zone sensors (to put BAS points in service on Symbio 400-B/500).</i>
	X13790992001	<p>Residential Touch Screen Programmable Zone Sensor</p> <ul style="list-style-type: none"> • Supports Awake, Away, Home, and Sleep • 7 day, 5+2 day, and 5+1+1 day • Cannot be used with BAS as sensor ties up BACnet link. For use with factory-programmed Symbio 400-B/500. <p>Notes:</p> <ul style="list-style-type: none"> • <i>Adjusting the rotary switch on Symbio 400-B/500 may be required to correspond address configuration in the sensor. See the installation manual for more information.</i> • <i>Additional configuration is needed in the field to use the Programmable zone sensors (to put BAS points in service on Symbio 400-B/500).</i>

Table 150. Wireless zone sensor selection for use with Symbio 400-B/500 controller

Sensor	Part Number	Description
	X13790955010	<p>Trane Air-Fi@ WCS-SD (display)</p> <ul style="list-style-type: none"> • Symbio 400-B/500 Compatible • Easy-to-use interface for clear and simple monitoring and control
	X13790956010	<p>Trane Air-Fi WCS-SB (base)</p> <ul style="list-style-type: none"> • Symbio 400-B/500 Compatible • Simplicity • Eliminates local temperature control when higher control level is required.
	X13790973030	<p>Wireless communications sensor accessory—2% relative humidity (RH) sensor module (WCS-SH) The optional RH sensor module plugs in to any WCS model, further simplifying installation by eliminating the needed for additional wiring.</p>



Electrical Data

Table 151. Electrical data single speed blower motor (6 to 25 tons)

Model No.	Volts	Total Unit FLA	Comp RLA (ea)	Comp LRA (ea)	No. of Comp.	Blower Motor FLA	Blower Motor hp	Fan Motor Num	Minimum Circuit Ampacity	Maximum Overcurrent Protective Device
GEHK072	208/60/1	39.9	16.7	93.5	2	6.50	1	1	44.1	60
GEHK072	230/60/1	39.9	16.7	93.5	2	6.50	1	1	44.1	60
GEHK072	208/60/1	42.7	16.7	93.5	2	9.30	1.5	1	46.9	60
GEHK072	230/60/1	42.3	16.7	93.5	2	8.90	1.5	1	46.5	60
GEHK072	208/60/1	44.6	16.7	93.5	2	11.20	2	1	48.8	60
GEHK072	230/60/1	43.6	16.7	93.5	2	10.20	2	1	47.8	60
GEHK072	208/60/3	27.9	12.2	97.5	2	3.50	1	1	31.0	40
GEHK072	230/60/3	28.2	12.2	97.5	2	3.80	1	1	31.3	40
GEHK072	460/60/3	13.4	5.8	44.3	2	1.80	1	1	14.9	20
GEHK072	208/60/3	30.0	12.2	97.5	2	5.60	1.5	1	33.1	45
GEHK072	230/60/3	29.2	12.2	97.5	2	4.80	1.5	1	32.3	40
GEHK072	460/60/3	14.0	5.8	44.3	2	2.40	1.5	1	15.5	20
GEHK072	208/60/3	31.5	12.2	97.5	2	7.10	2	1	34.6	45
GEHK072	230/60/3	30.6	12.2	97.5	2	6.20	2	1	33.7	45
GEHK072	460/60/3	14.7	5.8	44.3	2	3.10	2	1	16.2	20
GEHK090	208/60/3	29.2	12.2/13.5	97.5/120.4	2	3.50	1	1	32.6	45
GEHK090	230/60/3	29.5	12.2/13.5	97.5/120.4	2	3.80	1	1	32.9	45
GEHK090	460/60/3	14.0	5.8/6.4	44.3/50	2	1.80	1	1	15.6	20
GEHK090	208/60/3	31.3	12.2/13.5	97.5/120.4	2	5.60	1.5	1	34.7	45
GEHK090	230/60/3	30.5	12.2/13.5	97.5/120.4	2	4.80	1.5	1	33.9	45
GEHK090	460/60/3	14.6	5.8/6.4	44.3/50	2	2.40	1.5	1	16.2	20
GEHK090	208/60/3	32.8	12.2/13.5	97.5/120.4	2	7.10	2	1	36.2	45
GEHK090	230/60/3	31.9	12.2/13.5	97.5/120.4	2	6.20	2	1	35.3	45
GEHK090	460/60/3	15.3	5.8/6.4	44.3/50	2	3.10	2	1	16.9	20
GEHK090	575/60/3	11.9	4.5/5.1	27.1/41	2	2.30	2	1	13.2	15
GEHK090	208/60/3	35.1	12.2/13.5	97.5/120.4	2	9.40	3	1	38.5	50
GEHK090	230/60/3	33.9	12.2/13.5	97.5/120.4	2	8.20	3	1	37.3	50
GEHK090	460/60/3	16.3	5.8/6.4	44.3/50	2	4.10	3	1	17.9	20
GEHK090	575/60/3	12.9	4.5/5.1	27.1/41	2	3.30	3	1	14.2	15
GEHK120	208/60/3	37.6	16.0	156.4	2	5.60	1.5	1	41.6	50
GEHK120	230/60/3	36.8	16.0	156.4	2	4.80	1.5	1	40.8	50
GEHK120	460/60/3	16.6	7.1	69.0	2	2.40	1.5	1	18.4	25
GEHK120	208/60/3	39.1	16.0	156.4	2	7.10	2	1	43.1	50
GEHK120	230/60/3	38.2	16.0	156.4	2	6.20	2	1	42.2	50
GEHK120	460/60/3	17.3	7.1	69.0	2	3.10	2	1	19.1	25
GEHK120	575/60/3	15.1	6.4	47.8	2	2.30	2	1	16.7	20
GEHK120	208/60/3	41.4	16.0	156.4	2	9.40	3	1	45.4	60



Electrical Data

Table 151. Electrical data single speed blower motor (6 to 25 tons) (continued)

Model No.	Volts	Total Unit FLA	Comp RLA (ea)	Comp LRA (ea)	No. of Comp.	Blower Motor FLA	Blower Motor hp	Fan Motor Num	Minimum Circuit Ampacity	Maximum Overcurrent Protective Device
GEHK120	230/60/3	40.2	16.0	156.4	2	8.20	3	1	44.2	60
GEHK120	460/60/3	18.3	7.1	69.0	2	4.10	3	1	20.1	25
GEHK120	575/60/3	16.1	6.4	47.8	2	3.30	3	1	17.7	20
GEHK120	208/60/3	46.0	16.0	156.4	2	14.00	5	1	50.0	60
GEHK120	230/60/3	45.0	16.0	156.4	2	13.00	5	1	49.0	60
GEHK120	460/60/3	20.7	7.1	69.0	2	6.50	5	1	22.5	25
GEHK120	575/60/3	18.1	6.4	47.8	2	5.30	5	1	19.7	25
GEHK150	208/60/3	50.4	22.4	166.2	2	5.60	1.5	1	56.0	70
GEHK150	230/60/3	49.6	22.4	166.2	2	4.80	1.5	1	55.2	70
GEHK150	460/60/3	20.8	9.2	74.6	2	2.40	1.5	1	23.1	30
GEHK150	575/60/3	16.7	7.2	54.0	2	2.30	2	1	18.5	25
GEHK150	208/60/3	51.9	22.4	166.2	2	7.10	2	1	57.5	70
GEHK150	230/60/3	51.0	22.4	166.2	2	6.20	2	1	56.6	70
GEHK150	460/60/3	21.5	9.2	74.6	2	3.11	2	1	23.8	30
GEHK150	575/60/3	16.7	7.2	54.0	2	2.30	2	1	18.5	25
GEHK150	208/60/3	54.2	22.4	166.2	2	9.40	3	1	59.8	80
GEHK150	230/60/3	53.0	22.4	166.2	2	8.20	3	1	58.6	80
GEHK150	460/60/3	22.5	9.2	74.6	2	4.10	3	1	24.8	30
GEHK150	575/60/3	17.7	7.2	54.0	2	3.30	3	1	19.5	25
GEHK150	208/60/3	58.8	22.4	166.2	2	14.00	5	1	64.4	80
GEHK150	230/60/3	57.8	22.4	166.2	2	13.00	5	1	63.4	80
GEHK150	460/60/3	24.9	9.2	74.6	2	6.50	5	1	27.2	35
GEHK150	575/60/3	19.7	7.2	54.0	2	5.30	5	1	21.5	25
GEHK180	208/60/3	62.5	27.7	191.0	2	7.10	2	1	69.4	90
GEHK180	230/60/3	61.6	27.7	191.0	2	6.20	2	1	68.5	90
GEHK180	460/60/3	26.1	11.5	103.0	2	3.11	2	1	29.0	40
GEHK180	575/60/3	20.3	9.0	78.0	2	2.30	2	1	22.6	30
GEHK180	208/60/3	64.8	27.7	191.0	2	9.40	3	1	71.7	90
GEHK180	230/60/3	63.6	27.7	191.0	2	8.20	3	1	70.5	90
GEHK180	460/60/3	27.1	11.5	103.0	2	4.10	3	1	30.0	40
GEHK180	575/60/3	21.3	9.0	78.0	2	3.30	3	1	23.6	30
GEHK180	208/60/3	69.4	27.7	191.0	2	14.00	5	1	76.3	100
GEHK180	230/60/3	68.4	27.7	191.0	2	13.00	5	1	75.3	100
GEHK180	460/60/3	29.5	11.5	103.0	2	6.50	5	1	32.4	40
GEHK180	575/60/3	23.3	9.0	78.0	2	5.30	5	1	25.6	30
GEHK180	208/60/3	75.4	27.7	191.0	2	20.00	7.5	1	82.3	110
GEHK180	230/60/3	74.8	27.7	191.0	2	19.40	7.5	1	81.7	100
GEHK180	460/60/3	32.7	11.5	103.0	2	9.70	7.5	1	35.6	45
GEHK180	575/60/3	26.0	9	78	2	8.00	7.5	1	28.3	35

Table 151. Electrical data single speed blower motor (6 to 25 tons) (continued)

Model No.	Volts	Total Unit FLA	Comp RLA (ea)	Comp LRA (ea)	No. of Comp.	Blower Motor FLA	Blower Motor hp	Fan Motor Num	Minimum Circuit Ampacity	Maximum Overcurrent Protective Device
GEVK072	208/60/1	39.9	16.7	93.5	2	6.55	1	1	44.1	60
GEVK072	230/60/1	39.9	16.7	93.5	2	6.50	1	1	44.1	60
GEVK072	208/60/1	42.7	16.7	93.5	2	9.30	1.5	1	46.9	60
GEVK072	230/60/1	42.3	16.7	93.5	2	8.90	1.5	1	46.5	60
GEVK072	208/60/1	44.6	16.7	93.5	2	11.20	2	1	48.8	60
GEVK072	230/60/1	43.6	16.7	93.5	2	10.23	2	1	47.8	60
GEVK072	208/60/3	27.9	12.2	97.5	2	3.50	1	1	31.0	40
GEVK072	230/60/3	28.2	12.2	97.5	2	3.80	1	1	31.3	40
GEVK072	460/60/3	13.4	5.8	44.3	2	1.80	1	1	14.9	20
GEVK072	208/60/3	30.0	12.2	97.5	2	5.60	1.5	1	33.1	45
GEVK072	230/60/3	29.2	12.2	97.5	2	4.80	1.5	1	32.3	40
GEVK072	460/60/3	14.0	5.8	44.3	2	2.40	1.5	1	15.5	20
GEVK072	208/60/3	31.5	12.2	97.5	2	7.10	2	1	34.6	45
GEVK072	230/60/3	30.6	12.2	97.5	2	6.20	2	1	33.7	45
GEVK072	460/60/3	14.7	5.8	44.3	2	3.11	2	1	16.2	20
GEVK090	208/60/3	29.2	12.2/13.5	97.5/120.4	2	3.50	1	1	32.6	45
GEVK090	230/60/3	29.5	12.2/13.5	97.5/120.4	2	3.80	1	1	32.9	45
GEVK090	460/60/3	14.0	5.8/6.4	44.3/50	2	1.80	1	1	15.6	20
GEVK090	208/60/3	29.2	12.2/13.5	97.5/120.4	2	3.50	1	1	32.6	45
GEVK090	230/60/3	27.5	12.2/13.5	97.5/120.4	2	1.80	1	1	30.9	40
GEVK090	460/60/3	15.7	5.8/6.4	44.3/50	2	3.50	1	1	17.3	20
GEVK090	208/60/3	31.3	12.2/13.5	97.5/120.4	2	5.60	1.5	1	34.7	45
GEVK090	230/60/3	30.5	12.2/13.5	97.5/120.4	2	4.80	1.5	1	33.9	45
GEVK090	460/60/3	14.6	5.8/6.4	44.3/50	2	2.40	1.5	1	16.2	20
GEVK090	208/60/3	31.3	12.2/13.5	97.5/120.4	2	5.60	1.5	1	34.7	45
GEVK090	230/60/3	30.5	12.2/13.5	97.5/120.4	2	4.80	1.5	1	33.9	45
GEVK090	460/60/3	14.6	5.8/6.4	44.3/50	2	2.40	1.5	1	16.2	20
GEVK090	208/60/3	31.3	12.2/13.5	97.5/120.4	2	5.60	1.5	1	34.7	45
GEVK090	230/60/3	30.5	12.2/13.5	97.5/120.4	2	4.80	1.5	1	33.9	45
GEVK090	460/60/3	14.6	5.8/6.4	44.3/50	2	2.40	1.5	1	16.2	20
GEVK090	208/60/3	32.8	12.2/13.5	97.5/120.4	2	7.10	2	1	36.2	45
GEVK090	230/60/3	31.9	12.2/13.5	97.5/120.4	2	6.20	2	1	35.3	45
GEVK090	460/60/3	15.3	5.8/6.4	44.3/50	2	3.11	2	1	16.9	20
GEVK090	575/60/3	11.9	4.5/5.1	27.1/41	2	2.30	2	1	13.2	15
GEVK090	208/60/3	32.8	12.2/13.5	97.5/120.4	2	7.10	2	1	36.2	45
GEVK090	230/60/3	31.9	12.2/13.5	97.5/120.4	2	6.20	2	1	35.3	45
GEVK090	460/60/3	15.3	5.8/6.4	44.3/50	2	3.11	2	1	16.9	20
GEVK090	575/60/3	11.9	4.5/5.1	27.1/41	2	2.30	2	1	13.2	15
GEVK090	208/60/3	35.1	12.2/13.5	97.5/120.4	2	9.40	3	1	38.5	50



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Table 151. Electrical data single speed blower motor (6 to 25 tons) (continued)

Model No.	Volts	Total Unit FLA	Comp RLA (ea)	Comp LRA (ea)	No. of Comp.	Blower Motor FLA	Blower Motor hp	Fan Motor Num	Minimum Circuit Ampacity	Maximum Overcurrent Protective Device
GEVK090	230/60/3	33.9	12.2/13.5	97.5/120.4	2	8.20	3	1	37.3	50
GEVK090	460/60/3	16.3	5.8/6.4	44.3/50	2	4.10	3	1	17.9	20
GEVK090	575/60/3	12.9	4.5/5.1	27.1/41	2	3.30	3	1	14.2	15
GEVK090	208/60/3	35.1	12.2/13.5	97.5/120.4	2	9.40	3	1	38.5	50
GEVK090	230/60/3	33.9	12.2/13.5	97.5/120.4	2	8.20	3	1	37.3	50
GEVK090	460/60/3	16.3	5.8/6.4	44.3/50	2	4.10	3	1	17.9	20
GEVK090	575/60/3	12.9	4.5/5.1	27.1/41	2	3.30	3	1	14.2	15
GEVK120	208/60/3	37.6	16	156.4	2	5.60	1.5	1	41.6	50
GEVK120	230/60/3	36.8	16	156.4	2	4.80	1.5	1	40.8	50
GEVK120	460/60/3	16.6	7.1	69	2	2.40	1.5	1	18.4	25
GEVK120	208/60/3	39.1	16	156.4	2	7.10	2	1	43.1	50
GEVK120	230/60/3	38.2	16	156.4	2	6.20	2	1	42.2	50
GEVK120	460/60/3	17.3	7.1	69	2	3.11	2	1	19.1	25
GEVK120	575/60/3	15.1	6.4	47.8	2	2.30	2	1	16.7	20
GEVK120	208/60/3	41.4	16	156.4	2	9.40	3	1	45.4	60
GEVK120	230/60/3	40.2	16	156.4	2	8.20	3	1	44.2	60
GEVK120	460/60/3	18.3	7.1	69	2	4.10	3	1	20.1	25
GEVK120	575/60/3	16.1	6.4	47.8	2	3.30	3	1	17.7	20
GEVK120	208/60/3	46.0	16	156.4	2	14.00	5	1	50.0	60
GEVK120	230/60/3	45.0	16	156.4	2	13.00	5	1	49.0	60
GEVK120	460/60/3	20.7	7.1	69	2	6.50	5	1	22.5	25
GEVK120	575/60/3	18.1	6.4	47.8	2	5.30	5	1	19.7	25
GEVK150	208/60/3	51.9	22.4	166.2	2	7.10	2	1	57.5	70
GEVK150	230/60/3	51.0	22.4	166.2	2	6.20	2	1	56.6	70
GEVK150	460/60/3	21.5	9.2	74.6	2	3.11	2	1	23.8	30
GEVK150	575/60/3	16.7	7.2	54	2	2.30	2	1	18.5	25
GEVK150	208/60/3	54.2	22.4	166.2	2	9.40	3	1	59.8	80
GEVK150	230/60/3	53.0	22.4	166.2	2	8.20	3	1	58.6	80
GEVK150	460/60/3	22.5	9.2	74.6	2	4.10	3	1	24.8	30
GEVK150	575/60/3	17.7	7.2	54	2	3.30	3	1	19.5	25
GEVK150	208/60/3	58.8	22.4	166.2	2	14.00	5	1	64.4	80
GEVK150	230/60/3	57.8	22.4	166.2	2	13	5	1	63.4	80
GEVK150	460/60/3	24.9	9.2	74.6	2	6.5	5	1	27.2	35
GEVK150	575/60/3	19.7	7.2	54	2	5.3	5	1	21.5	25
GEVK180	208/60/3	64.8	27.7	191	2	9.4	3	1	71.7	90
GEVK180	230/60/3	63.6	27.7	191	2	8.2	3	1	70.5	90
GEVK180	460/60/3	27.1	11.5	103	2	4.1	3	1	30.0	40
GEVK180	575/60/3	21.3	9	78	2	3.3	3	1	23.6	30
GEVK180	208/60/3	69.4	27.7	191	2	14	5	1	76.3	100

Table 151. Electrical data single speed blower motor (6 to 25 tons) (continued)

Model No.	Volts	Total Unit FLA	Comp RLA (ea)	Comp LRA (ea)	No. of Comp.	Blower Motor FLA	Blower Motor hp	Fan Motor Num	Minimum Circuit Ampacity	Maximum Overcurrent Protective Device
GEVK180	230/60/3	68.4	27.7	191	2	13	5	1	75.3	100
GEVK180	460/60/3	29.5	11.5	103	2	6.5	5	1	32.4	40
GEVK180	575/60/3	23.3	9	78	2	5.3	5	1	25.6	30
GEVK180	208/60/3	75.4	27.7	191	2	20	7.5	1	82.3	110
GEVK180	230/60/3	74.8	27.7	191	2	19.4	7.5	1	81.7	100
GEVK180	460/60/3	32.7	11.5	103	2	9.7	7.5	1	35.6	45
GEVK180	575/60/3	26	9	78	2	8	7.5	1	28.3	35
GEVK240	208/60/3	71	28.5	255	2	14	5	1	78.1	100
GEVK240	230/60/3	70	28.5	255	2	13	5	1	77.1	100
GEVK240	460/60/3	33.5	13.5	123	2	6.5	5	1	36.9	50
GEVK240	575/60/3	26.7	10.7	93.7	2	5.3	5	1	29.4	40
GEVK240	208/60/3	77	28.5	255	2	20	7.5	1	84.1	110
GEVK240	230/60/3	76.4	28.5	255	2	19.4	7.5	1	83.5	110
GEVK240	460/60/3	36.7	13.5	123	2	9.7	7.5	1	40.1	50
GEVK240	575/60/3	29.4	10.7	93.7	2	8	7.5	1	32.1	40
GEVK240	208/60/3	77	28.5	255	2	20	7.5	1	84.1	110
GEVK240	230/60/3	76.4	28.5	255	2	19.4	7.5	1	83.5	110
GEVK240	460/60/3	36.7	13.5	123	2	9.7	7.5	1	40.1	50
GEVK240	575/60/3	29.4	10.7	93.7	2	8	7.5	1	32.1	40
GEVK240	208/60/3	83	28.5	255	2	26	10	1	90.1	110
GEVK240	230/60/3	82	28.5	255	2	25	10	1	89.1	110
GEVK240	460/60/3	39.5	13.5	123	2	12.5	10	1	42.9	50
GEVK240	575/60/3	31.4	10.7	93.7	2	10	10	1	34.1	40
GEVK240	208/60/3	83	28.5	255	2	26	10	1	90.1	110
GEVK240	230/60/3	82	28.5	255	2	25	10	1	89.1	110
GEVK240	460/60/3	39.5	13.5	123	2	12.5	10	1	42.9	50
GEVK240	575/60/3	31.4	10.7	93.7	2	10	10	1	34.1	40
GEVK240	208/60/3	94	28.5	255	2	37	15	1	101.1	125
GEVK240	230/60/3	93	28.5	255	2	36	15	1	100.1	125
GEVK240	460/60/3	45	13.5	123	2	18	15	1	48.4	60
GEVK240	575/60/3	35.5	10.7	93.7	2	14.1	15	1	38.2	45
GEVK240	208/60/3	94	28.5	255	2	37	15	1	101.1	125
GEVK240	230/60/3	93	28.5	255	2	36	15	1	100.1	125
GEVK240	460/60/3	45	13.5	123	2	18	15	1	48.4	60
GEVK240	575/60/3	35.5	10.7	93.7	2	14.1	15	1	38.2	45
GEVK300	208/60/3	95.6	40.8	270	2	14	5	1	105.8	125
GEVK300	230/60/3	94.6	40.8	270	2	13	5	1	104.8	125
GEVK300	460/60/3	45.3	19.4	147	2	6.5	5	1	50.2	60
GEVK300	575/60/3	32.7	13.7	109	2	5.3	5	1	36.1	45



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Table 151. Electrical data single speed blower motor (6 to 25 tons) (continued)

Model No.	Volts	Total Unit FLA	Comp RLA (ea)	Comp LRA (ea)	No. of Comp.	Blower Motor FLA	Blower Motor hp	Fan Motor Num	Minimum Circuit Ampacity	Maximum Overcurrent Protective Device
GEVK300	208/60/3	101.6	40.8	270	2	20	7.5	1	111.8	150
GEVK300	230/60/3	101	40.8	270	2	19.4	7.5	1	111.2	150
GEVK300	460/60/3	48.5	19.4	147	2	9.7	7.5	1	53.4	70
GEVK300	575/60/3	35.4	13.7	109	2	8	7.5	1	38.8	50
GEVK300	208/60/3	107.6	40.8	270	2	26	10	1	117.8	150
GEVK300	230/60/3	106.6	40.8	270	2	25	10	1	116.8	150
GEVK300	460/60/3	51.3	19.4	147	2	12.5	10	1	56.2	70
GEVK300	575/60/3	37.4	13.7	109	2	10	10	1	40.8	50
GEVK300	208/60/3	118.6	40.8	270	2	37	15	1	128.8	150
GEVK300	230/60/3	117.6	40.8	270	2	36	15	1	127.8	150
GEVK300	460/60/3	56.8	19.4	147	2	18	15	1	61.7	80
GEVK300	575/60/3	41.5	13.7	109	2	14.1	15	1	44.9	50

Table 152. Electrical data - ECM motors - (0.5 to 5 tons) GEV/H

Model No.	Unit Volts	Total Unit FLA	Comp RLA (ea)	Comp LRA (ea)	Blower Motor FLA	Blower Motor HP	Minimum Circuit Ampacity	Maximum Overcurrent Protective Device
GEV/H006	208-230/60/1	4.7	4.3	27.0	0.4	1/3	6/6	15/15
GEV/H006	265/60/1	4.0	3.6	22.0	0.4	1/3	5	15
GEV/H009	208-230/60/1	5.2	4.3	27.0	0.9	1/3	7/7	15/15
GEV/H009	265/60/1	4.4	3.6	22.0	0.8	1/3	6	15
GEV/H012	208-230/60/1	7.4	6.0	27.0	1.4	1/3	9/9	15/15
GEV/H012	265/60/1	7.2	6.0	32.0	1.2	1/3	9	15
GEV/H015	208-230/60/1	8.7	7.7	33.0	1.0	1/3	11/11	15/15
GEV/H015	265/60/1	7.5	6.7	37.0	0.8	1/3	10	15
GEV/H018	208-230/60/1	11.6	10.2	35.0	1.4	1/3	15/15	20/20
GEV/H018	265/60/1	9.6	8.4	40.0	1.2	1/3	12	20
GEV/H024	208-230/60/1	13.4	11.4	64.4	2.0	1/2	17/17	25/25
GEV/H024	265/60/1	12.0	10.3	60.5	1.7	1/2	15	20
GEV/H024	208-230/60/3	9.7	7.7	59.9	2.0	1/2	12/12	15/15
GEV/H024	460/60/3	4.8	3.8	32.4	1.0	1/2	6	15
GEV/H030	208-230/60/1	15.0	12.7	75.6	2.3	3/4	19/19	30/30
GEV/H030	208-230/60/3	11.9	9.6	67.7	2.3	3/4	15/15	20/20
GEV/H030	265/60/1	13.5	11.5	84.0	2.0	3/4	17	25
GEV/H030	460/60/3	5.6	4.5	38.1	1.1	3/4	7	15
GEV/H036	208-230/60/1	19.3	16.2	109.0	3.1	3/4	24/24	35/35
GEV/H036	265/60/1	18.9	16.2	107.4	2.7	3/4	23	35
GEV/H036	208-230/60/3	16.5	13.4	102.8	3.1	3/4	20/20	30/30
GEV/H036	460/60/3	7.9	6.4	50.0	1.5	3/4	10	15
GEV/H042	208-230/60/1	23.4	19.5	123.0	3.9	3/4	29/29	45/45
GEV/H042	208-230/60/3	17.4	13.4	102.8	3.9	3/4	21/21	30/30
GEV/H042	460/60/3	8.1	6.1	50.0	2.0	1	10	15

Table 152. Electrical data - ECM motors - (0.5 to 5 tons) GEV/H (continued)

Model No.	Unit Volts	Total Unit FLA	Comp RLA (ea)	Comp LRA (ea)	Blower Motor FLA	Blower Motor HP	Minimum Circuit Ampacity	Maximum Overcurrent Protective Device
GEV/H048	208-230/60/1	27.0	22.2	127.0	4.8	1	33/33	50/50
GEV/H048	208-230/60/3	19.9	15.1	120.4	4.8	1	24/24	35/35
GEV/H048	460/60/3	9.6	7.2	50.0	2.4	1	12	15
GEV/H060	208-230/60/1	32.5	27.1	157.0	5.4	1	40/40	60/60
GEV/H060	208-230/60/3	23.8	18.4	156.4	5.4	1	29/29	45/45
GEV/H060	460/60/3	10.9	8.2	69.0	2.7	1	13	20

Table 153. Electrical data two speed blower motor (6 to 25 tons)

Model	Volts	Total Unit FLA	Comp RLA (ea)	Comp LRA (ea)	No. of Comp	Blower Motor FLA	Blower Motor HP	Fan Motors No.	Minimum Circuit Ampacity	Maximum Overcurrent Protection
GEHK072	208/60/3	27.7	12.2	97.5	2	3.3	1	1	30.75	40
GEHK072	230/60/3	27.4	12.2	97.5	2	3.0	1	1	30.45	40
GEHK072	460/60/3	13.1	5.8	44.3	2	1.5	1	1	14.55	20
GEHK072	208/60/3	29.3	12.2	97.5	2	4.9	1.5	1	32.35	40
GEHK072	230/60/3	28.8	12.2	97.5	2	4.4	1.5	1	31.85	40
GEHK072	460/60/3	13.8	5.8	44.3	2	2.2	1.5	1	15.25	20
GEHK072	208/60/3	31.1	12.2	97.5	2	6.7	2	1	34.15	45
GEHK072	230/60/3	30.5	12.2	97.5	2	6.1	2	1	33.55	45
GEHK072	460/60/3	14.7	5.8	44.3	2	3.1	2	1	16.15	20
GEHK090	208/60/3	29.0	12.2/13.5	97.5/120.4	2	3.3	1	1	32.38	45
GEHK090	230/60/3	28.7	12.2/13.5	97.5/120.4	2	3.0	1	1	32.08	45
GEHK090	460/60/3	13.7	5.8/6.4	44.3/50	2	1.5	1	1	15.30	20
GEHK090	208/60/3	30.6	12.2/13.5	97.5/120.4	2	4.9	1.5	1	33.98	45
GEHK090	230/60/3	30.1	12.2/13.5	97.5/120.4	2	4.4	1.5	1	33.48	45
GEHK090	460/60/3	14.4	5.8/6.4	44.3/50	2	2.2	1.5	1	16.00	20
GEHK090	208/60/3	32.4	12.2/13.5	97.5/120.4	2	6.7	2	1	35.78	45
GEHK090	230/60/3	31.8	12.2/13.5	97.5/120.4	2	6.1	2	1	35.17	45
GEHK090	460/60/3	15.3	5.8/6.4	44.3/50	2	3.1	2	1	16.90	20
GEHK090	208/60/3	34.5	12.2/13.5	97.5/120.4	2	8.8	3	1	37.88	50
GEHK090	230/60/3	33.7	12.2/13.5	97.5/120.4	2	8.0	3	1	37.08	50
GEHK090	460/60/3	16.2	5.8/6.4	44.3/50	2	4.0	3	1	17.80	20
GEHK120	208/60/3	36.9	16.0	156.4	2	4.9	1.5	1	40.90	50
GEHK120	230/60/3	36.4	16.0	156.4	2	4.4	1.5	1	40.40	50
GEHK120	460/60/3	16.4	7.1	69	2	2.2	1.5	1	18.18	25
GEHK120	208/60/3	38.7	16.0	156.4	2	6.7	2	1	42.70	50
GEHK120	230/60/3	38.1	16.0	156.4	2	6.1	2	1	42.10	50
GEHK120	460/60/3	17.3	7.1	69	2	3.1	2	1	19.08	25
GEHK120	208/60/3	40.8	16.0	156.4	2	8.8	3	1	44.80	60
GEHK120	230/60/3	40.0	16.0	156.4	2	8.0	3	1	44.00	60
GEHK120	460/60/3	18.2	7.1	69	2	4.0	3	1	19.98	25
GEHK120	208/60/3	46.6	16.0	156.4	2	14.6	5	1	50.60	60
GEHK120	230/60/3	45.2	16.0	156.4	2	13.2	5	1	49.20	60



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Table 153. Electrical data two speed blower motor (6 to 25 tons) (continued)

Model	Volts	Total Unit FLA	Comp RLA (ea)	Comp LRA (ea)	No. of Comp	Blower Motor FLA	Blower Motor HP	Fan Motors No.	Minimum Circuit Ampacity	Maximum Overcurrent Protection
GEHK120	460/60/3	20.8	7.1	69	2	6.6	5	1	22.58	25
GEHK150	208/60/3	49.7	22.4	166.2	2	4.9	1.5	1	55.30	70
GEHK150	230/60/3	49.2	22.4	166.2	2	4.4	1.5	1	54.80	70
GEHK150	460/60/3	20.6	9.2	74.6	2	2.2	1.5	1	22.90	30
GEHK150	208/60/3	51.5	22.4	166.2	2	6.7	2	1	57.10	70
GEHK150	230/60/3	50.9	22.4	166.2	2	6.1	2	1	56.50	70
GEHK150	460/60/3	21.5	9.2	74.6	2	3.1	2	1	23.80	30
GEHK150	208/60/3	53.6	22.4	166.2	2	8.8	3	1	59.20	80
GEHK150	230/60/3	52.8	22.4	166.2	2	8.0	3	1	58.40	80
GEHK150	460/60/3	22.4	9.2	74.6	2	4.0	3	1	24.70	30
GEHK150	208/60/3	59.4	22.4	166.2	2	14.6	5	1	65.00	80
GEHK150	230/60/3	58.0	22.4	166.2	2	13.2	5	1	63.60	80
GEHK150	460/60/3	25.0	9.2	74.6	2	6.6	5	1	27.30	35
GEHK180	208/60/3	62.1	27.7	191	2	6.7	2	1	69.03	90
GEHK180	230/60/3	61.5	27.7	191	2	6.1	2	1	68.43	90
GEHK180	460/60/3	26.1	11.5	103	2	3.1	2	1	28.98	40
GEHK180	208/60/3	64.2	27.7	191	2	8.8	3	1	71.13	90
GEHK180	230/60/3	63.4	27.7	191	2	8.0	3	1	70.33	90
GEHK180	460/60/3	27.0	11.5	103	2	4.0	3	1	29.88	40
GEHK180	208/60/3	70.0	27.7	191	2	14.6	5	1	76.93	100
GEHK180	230/60/3	68.6	27.7	191	2	13.2	5	1	75.53	100
GEHK180	460/60/3	29.6	11.5	103	2	6.6	5	1	32.48	40
GEHK180	208/60/3	77.5	27.7	191	2	22.1	7.5	1	84.43	110
GEHK180	230/60/3	75.4	27.7	191	2	20.0	7.5	1	82.33	110
GEHK180	460/60/3	33.0	11.5	103	2	10.0	7.5	1	35.88	45
GEVK072	208/60/3	27.7	12.2	97.5	2	3.3	1	1	30.75	40
GEVK072	230/60/3	27.4	12.2	97.5	2	3.0	1	1	30.45	40
GEVK072	460/60/3	13.1	5.8	44.3	2	1.5	1	1	14.55	20
GEVK072	208/60/3	29.3	12.2	97.5	2	4.9	1.5	1	32.35	40
GEVK072	230/60/3	28.8	12.2	97.5	2	4.4	1.5	1	31.85	40
GEVK072	460/60/3	13.8	5.8	44.3	2	2.2	1.5	1	15.25	20
GEVK072	208/60/3	31.1	12.2	97.5	2	6.7	2	1	34.15	45
GEVK072	230/60/3	30.5	12.2	97.5	2	6.1	2	1	33.55	45
GEVK072	460/60/3	14.7	5.8	44.3	2	3.1	2	1	16.15	20
GEVK090	208/60/3	29.0	12.2/13.5	97.5/120.4	2	3.3	1	1	32.38	45
GEVK090	230/60/3	28.7	12.2/13.5	97.5/120.4	2	3.0	1	1	32.08	45
GEVK090	460/60/3	13.7	5.8/6.4	44.3/50	2	1.5	1	1	15.30	20
GEVK090	208/60/3	29.0	12.2/13.5	97.5/120.4	2	3.3	1	1	32.38	45
GEVK090	230/60/3	27.2	12.2/13.5	97.5/120.4	2	1.5	1	1	30.58	40
GEVK090	460/60/3	15.5	5.8/6.4	44.3/50	2	3.3	1	1	17.10	20
GEVK090	208/60/3	30.6	12.2/13.5	97.5/120.4	2	4.9	1.5	1	33.98	45
GEVK090	230/60/3	30.1	12.2/13.5	97.5/120.4	2	4.4	1.5	1	33.48	45
GEVK090	460/60/3	14.4	5.8/6.4	44.3/50	2	2.2	1.5	1	16.00	20

Table 153. Electrical data two speed blower motor (6 to 25 tons) (continued)

Model	Volts	Total Unit FLA	Comp RLA (ea)	Comp LRA (ea)	No. of Comp	Blower Motor FLA	Blower Motor HP	Fan Motors No.	Minimum Circuit Ampacity	Maximum Overcurrent Protection
GEVK090	208/60/3	30.6	12.2/13.5	97.5/120.4	2	4.9	1.5	1	33.98	45
GEVK090	230/60/3	30.1	12.2/13.5	97.5/120.4	2	4.4	1.5	1	33.48	45
GEVK090	460/60/3	14.4	5.8/6.4	44.3/50	2	2.2	1.5	1	16.00	20
GEVK090	208/60/3	30.6	12.2/13.5	97.5/120.4	2	4.9	1.5	1	33.98	45
GEVK090	230/60/3	30.1	12.2/13.5	97.5/120.4	2	4.4	1.5	1	33.48	45
GEVK090	460/60/3	14.4	5.8/6.4	44.3/50	2	2.2	1.5	1	16.00	20
GEVK090	208/60/3	32.4	12.2/13.5	97.5/120.4	2	6.7	2	1	35.78	45
GEVK090	230/60/3	31.8	12.2/13.5	97.5/120.4	2	6.1	2	1	35.17	45
GEVK090	460/60/3	15.3	5.8/6.4	44.3/50	2	3.1	2	1	16.90	20
GEVK090	208/60/3	32.4	12.2/13.5	97.5/120.4	2	6.7	2	1	35.78	45
GEVK090	230/60/3	31.8	12.2/13.5	97.5/120.4	2	6.1	2	1	35.17	45
GEVK090	460/60/3	15.3	5.8/6.4	44.3/50	2	3.1	2	1	16.90	20
GEVK090	208/60/3	34.5	12.2/13.5	97.5/120.4	2	8.8	3	1	37.88	50
GEVK090	230/60/3	33.7	12.2/13.5	97.5/120.4	2	8.0	3	1	37.08	50
GEVK090	460/60/3	16.2	5.8/6.4	44.3/50	2	4.0	3	1	17.80	20
GEVK090	208/60/3	34.5	12.2/13.5	97.5/120.4	2	8.8	3	1	37.88	50
GEVK090	230/60/3	33.7	12.2/13.5	97.5/120.4	2	8.0	3	1	37.08	50
GEVK090	460/60/3	16.2	5.8/6.4	44.3/50	2	4.0	3	1	17.80	20
GEVK120	208/60/3	36.9	16.0	156.4	2	4.9	1.5	1	40.90	50
GEVK120	230/60/3	36.4	16.0	156.4	2	4.4	1.5	1	40.40	50
GEVK120	460/60/3	16.4	7.1	69	2	2.2	1.5	1	18.18	25
GEVK120	208/60/3	38.7	16.0	156.4	2	6.7	2	1	42.70	50
GEVK120	230/60/3	38.1	16.0	156.4	2	6.1	2	1	42.10	50
GEVK120	460/60/3	17.3	7.1	69	2	3.1	2	1	19.08	25
GEVK120	208/60/3	40.8	16.0	156.4	2	8.8	3	1	44.80	60
GEVK120	230/60/3	40.0	16.0	156.4	2	8.0	3	1	44.00	60
GEVK120	460/60/3	18.2	7.1	69	2	4.0	3	1	19.98	25
GEVK120	208/60/3	46.6	16.0	156.4	2	14.6	5	1	50.60	60
GEVK120	230/60/3	45.2	16.0	156.4	2	13.2	5	1	49.20	60
GEVK120	460/60/3	20.8	7.1	69	2	6.6	5	1	22.58	25
GEVK150	208/60/3	51.5	22.4	166.2	2	6.7	2	1	57.10	70
GEVK150	230/60/3	50.9	22.4	166.2	2	6.1	2	1	56.50	70
GEVK150	460/60/3	21.5	9.2	74.6	2	3.1	2	1	23.80	30
GEVK150	208/60/3	53.6	22.4	166.2	2	8.8	3	1	59.20	80
GEVK150	230/60/3	52.8	22.4	166.2	2	8.0	3	1	58.40	80
GEVK150	460/60/3	22.4	9.2	74.6	2	4.0	3	1	24.70	30
GEVK150	208/60/3	59.4	22.4	166.2	2	14.6	5	1	65.00	80
GEVK150	230/60/3	58.0	22.4	166.2	2	13.2	5	1	63.60	80
GEVK150	460/60/3	25.0	9.2	74.6	2	6.6	5	1	27.30	35
GEVK180	208/60/3	64.2	27.7	191	2	8.8	3	1	71.13	90
GEVK180	230/60/3	63.4	27.7	191	2	8.0	3	1	70.33	90
GEVK180	460/60/3	27.0	11.5	103	2	4.0	3	1	29.88	40
GEVK180	208/60/3	70.0	27.7	191	2	14.6	5	1	76.93	100



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Table 153. Electrical data two speed blower motor (6 to 25 tons) (continued)

Model	Volts	Total Unit FLA	Comp RLA (ea)	Comp LRA (ea)	No. of Comp	Blower Motor FLA	Blower Motor HP	Fan Motors No.	Minimum Circuit Ampacity	Maximum Overcurrent Protection
GEVK180	230/60/3	68.6	27.7	191	2	13.2	5	1	75.53	100
GEVK180	460/60/3	29.6	11.5	103	2	6.6	5	1	32.48	40
GEVK180	208/60/3	77.5	27.7	191	2	22.1	7.5	1	84.43	110
GEVK180	230/60/3	75.4	27.7	191	2	20.0	7.5	1	82.33	110
GEVK180	460/60/3	33.0	11.5	103	2	10.0	7.5	1	35.88	45
GEVK240	208/60/3	71.6	28.5	255	2	14.6	5	1	78.72	100
GEVK240	230/60/3	70.2	28.5	255	2	13.2	5	1	77.33	100
GEVK240	460/60/3	33.6	13.5	123	2	6.6	5	1	36.98	50
GEVK240	208/60/3	79.1	28.5	255	2	22.1	7.5	1	86.23	110
GEVK240	230/60/3	77.0	28.5	255	2	20.0	7.5	1	84.13	110
GEVK240	460/60/3	37	13.5	123	2	10	7.5	1	40.375	50
GEVK240	208/60/3	79.1	28.5	255	2	22.1	7.5	1	86.225	110
GEVK240	230/60/3	77	28.5	255	2	20	7.5	1	84.125	110
GEVK240	460/60/3	37	13.5	123	2	10	7.5	1	40.375	50
GEVK240	208/60/3	84.6	28.5	255	2	27.6	10	1	91.725	110
GEVK240	230/60/3	82	28.5	255	2	25	10	1	89.125	110
GEVK240	460/60/3	40	13.5	123	2	13	10	1	43.375	50
GEVK240	208/60/3	84.6	28.5	255	2	27.6	10	1	91.725	110
GEVK240	230/60/3	82	28.5	255	2	25	10	1	89.125	110
GEVK240	460/60/3	40	13.5	123	2	13	10	1	43.375	50
GEVK240	460/60/3	47	13.5	123	2	20	15	1	50.375	60
GEVK240	460/60/3	47	13.5	123	2	20	15	1	50.375	60
GEVK300	208/60/3	96.2	40.8	270	2	14.6	5	1	106.4	125
GEVK300	230/60/3	94.8	40.8	270	2	13.2	5	1	105	125
GEVK300	460/60/3	45.4	19.4	147	2	6.6	5	1	50.25	60
GEVK300	208/60/3	103.7	40.8	270	2	22.1	7.5	1	113.9	150
GEVK300	230/60/3	101.6	40.8	270	2	20	7.5	1	111.8	150
GEVK300	460/60/3	48.8	19.4	147	2	10	7.5	1	53.65	70
GEVK300	208/60/3	109.2	40.8	270	2	27.6	10	1	119.4	150
GEVK300	230/60/3	106.6	40.8	270	2	25	10	1	116.8	150
GEVK300	460/60/3	51.8	19.4	147	2	13	10	1	56.65	70
GEVK300	460/60/3	58.8	19.4	147	2	20	15	1	63.65	80

Table 154. Electrical minimum and maximum (0.5 to 25 tons)

Digit 8	Rated Voltage	Hz	pH	Min Utiliz. Volts	Max Utiliz. Volts
1	208	60	1	197	229
2	230	60	1	207	253
3	208	60	3	187	229
4	460	60	3	414	506
5	575	60	3	518	633
6	220-240	50	1	198	264
7	265	60	1	239	292
8	230	60	3	207	253
9	380-415	50	3	342	456
A	208-230	60	1	197	253
B	208-230	60	3	187	253

Table 155. GEV/H Electric duct heater data (0.5-6T)

MODEL	EH Size	Volts	kW	Amps	EH MOP
GEV/H006	Medium	208-230/60/1	1.2/1.5	5.9/6.5	15
GEV/H006	Medium	265/60/1	1.4	5.2	15
GEV/H009	Medium	208-230/60/1	1.2/1.5	5.9/6.5	15
GEV/H009	Medium	265/60/1	1.4	5.2	15
GEV/H012	Medium	208-230/60/1	1.2/1.5	5.9/6.5	15
GEV/H012	Medium	265/60/1	1.4	5.2	15
GEV/H015	Medium	208-230/60/1	2.0/2.5	9.8/10.9	15
GEV/H015	Medium	265/60/1	2.3	8.6	15
GEV/H018	Medium	208-230/60/1	2.0/2.5	9.8/10.9	15
GEV/H018	Medium	265/60/1	2.3	8.6	15
GEV/H024	Medium	208-230/60/1	3.3/4.0	15.7/17.4	25
GEV/H024	Medium	265/60/1	3.7	13.8	20
GEV/H024	Medium	208-230/60/3	3.3/4.0	9.1/10.1	15
GEV/H024	Medium	460/60/3	3.7	4.6	15
GEV/H030	Medium	208-230/60/1	3.3/4.0	15.7/17.4	25
GEV/H030	Medium	208-230/60/3	3.3/4.0	9.1/10.1	20
GEV/H030	Medium	265/60/1	3.7	13.8	15
GEV/H030	Medium	460/60/3	3.7	4.6	15
GEV/H036	Low	208-230/60/1	4.9/6.0	23.6/26.1	35
GEV/H036	Medium	208-230/60/1	8.2/10.0	39.3/43.5	60
GEV/H036	High	208-230/60/1	12.3/15.0	59.0/65.2	90
GEV/H036	Low	265/60/1	5.5	20.7	30
GEV/H036	Medium	265/60/1	9.2	34.5	50
GEV/H036	High	265/60/1	13.7	51.8	70
GEV/H036	Low	208-230/60/3	4.9/6.0	13.6/15.1	20



Electrical Data

Table 155. GEV/H Electric duct heater data (0.5-6T) (continued)

MODEL	EH Size	Volts	kW	Amps	EH MOP
GEV/H036	Medium	208-230/60/3	8.2/10.0	22.7/25.1	35
GEV/H036	High	208-230/60/3	12.3/15.0	34.1/37.7	50
GEV/H036	Low	460/60/3	5.5	6.9	15
GEV/H036	Medium	460/60/3	9.2	11.5	20
GEV/H036	High	460/60/3	13.8	17.3	25
GEV/H042	Low	208-230/60/1	4.9/6.0	23.6/26.1	35
GEV/H042	Medium	208-230/60/1	8.2/10.0	39.3/43.5	60
GEV/H042	High	208-230/60/1	12.3/15.0	59.0/65.2	90
GEV/H042	Low	208-230/60/3	4.9/6.0	13.6/15.1	20
GEV/H042	Medium	208-230/60/3	8.2/10.0	22.7/25.1	35
GEV/H042	High	208-230/60/3	12.3/15.0	34.1/37.7	50
GEV/H042	Low	460/60/3	5.5	6.9	15
GEV/H042	Medium	460/60/3	9.2	11.5	20
GEV/H042	High	460/60/3	13.8	17.3	25
GEV/H048	Low	208-230/60/1	4.9/6.0	23.6/26.1	35
GEV/H048	Medium	208-230/60/1	8.2/10.0	39.3/43.5	60
GEV/H048	High	208-230/60/1	12.3/15.0	59.0/65.2	90
GEV/H048	Low	208-230/60/3	4.9/6.0	13.6/15.1	20
GEV/H048	Medium	208-230/60/3	8.2/10.0	22.7/25.1	35
GEV/H048	High	208-230/60/3	12.3/15.0	34.1/37.7	50
GEV/H048	Low	460/60/3	5.5	6.9	15
GEV/H048	Medium	460/60/3	9.2	11.5	20
GEV/H048	High	460/60/3	13.8	17.3	25
GEV/H048	High	575/60/3	13.7	13.8	35
GEV/H060	Low	208-230/60/1	4.9/6.0	23.6/26.1	35
GEV/H060	Medium	208-230/60/1	8.2/10.0	39.3/43.5	60
GEV/H060	High	208-230/60/1	12.3/15.0	59.0/65.2	90
GEV/H060	Low	208-230/60/3	4.9/6.0	13.6/15.1	20
GEV/H060	Medium	208-230/60/3	8.2/10.0	22.7/25.1	35
GEV/H060	High	208-230/60/3	12.3/15.0	34.1/37.7	50
GEV/H060	Low	460/60/3	5.5	6.9	15
GEV/H060	Medium	460/60/3	9.2	11.5	20
GEV/H060	High	460/60/3	13.8	17.3	25
GEV/H060	High	575/60/3	13.7	13.8	35

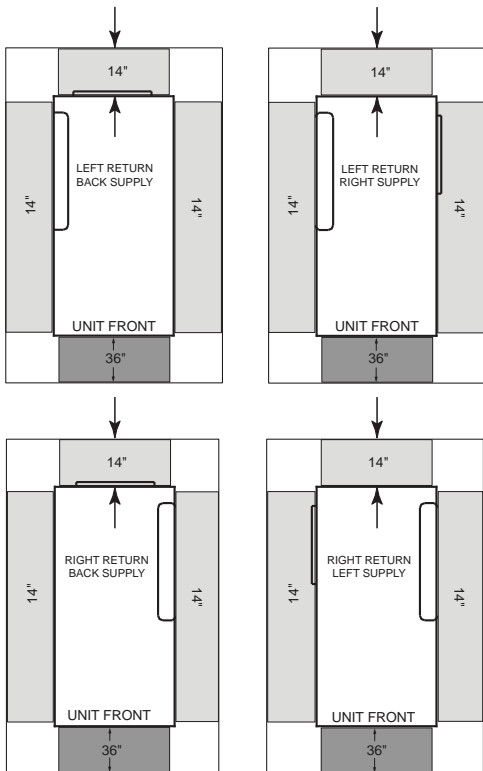
Note: Electric heat performance table with heat rise data can be found in Electric Heat and 575V Water Source Heat Pump 0 to 5 Tons Installation Instructions (WSHP-SVN011*-EN).

Unit Dimensions

Service Clearances

Per NEC requirements, 36-inches of access and working space is provided and maintained around all control boxes and electrical equipment to permit ready and safe operation and maintenance of such equipment. Local codes may require more clearance to electrical equipment. Check all code requirements prior to unit installation.

Figure 42. Clearances - GEH 0.5 to 5 tons

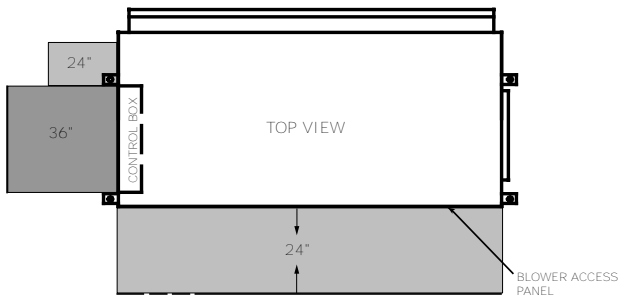


A minimum 14-inch clearance for servicing the unit is required for all 0.5 to 5 tons configurations from other mechanical and electrical equipment (where shown) to enable panel removal from the unit for service/maintenance ability. The optimum clearance required is 20-inches.

Notes:

- Return air direction (left-hand or right hand) is NOT field convertible. Units must be ordered with correct return air side.
- For horizontal models, be sure to allow enough clearance between the condensate drain and the ceiling to allow for pitching of the condensate line. See for pitching requirements.

Figure 43. Clearance - GEH 6 to 15 tons

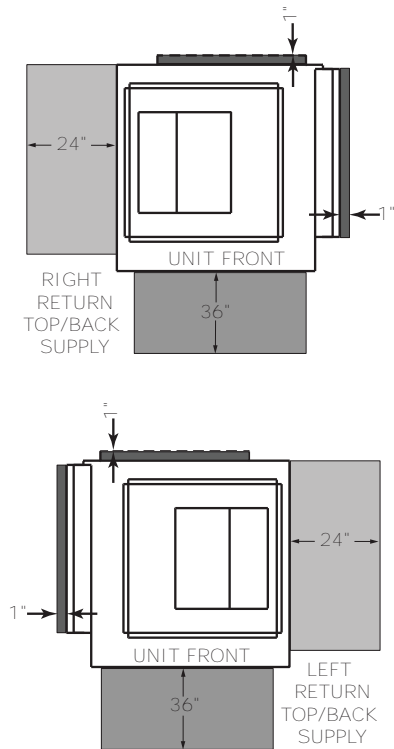


Service clearance dimensions for the GEH 6 to 15 tons horizontal includes a two-side access appropriate for control and blower motor/wheel access.

Note: For horizontal models, confirm enough clearance between the condensate drain and the ceiling for pitching of the condensate line. See for pitching requirements.

Unit Dimensions

Figure 44. Clearance – GEV 0.5 to 5 tons



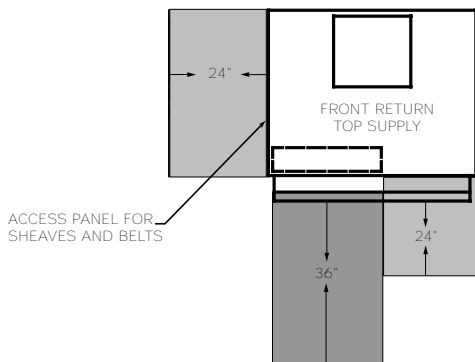
A 24-inch clearance from other mechanical and electrical equipment (where shown) is recommended for most unit configurations. This will enable panel removal from the unit for service/maintenance.

The 24-inch side clearance on GEVK 0.5 to 5T models is for optimal access only. Side clearance is not a requirement as most components can be accessed from the front of the unit.

A 1-inch minimum clearance between the filter rack and any obstacle is required for units in a free return application to provide proper air flow to the air-to-refrigerant coil. A 12-inch minimum clearance between the filter rack and any obstacle should be provided to properly attached ductwork.

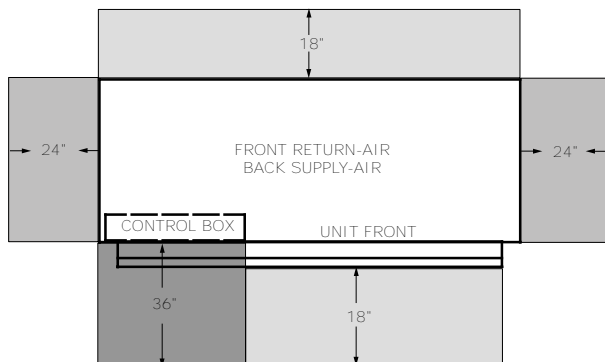
The 1-inch dimension shown in the back of the unit represents the supply duct collar for the back supply option. This clearance is needed to clear these flanges.

Figure 45. Clearance - GEV 6 to 10 tons



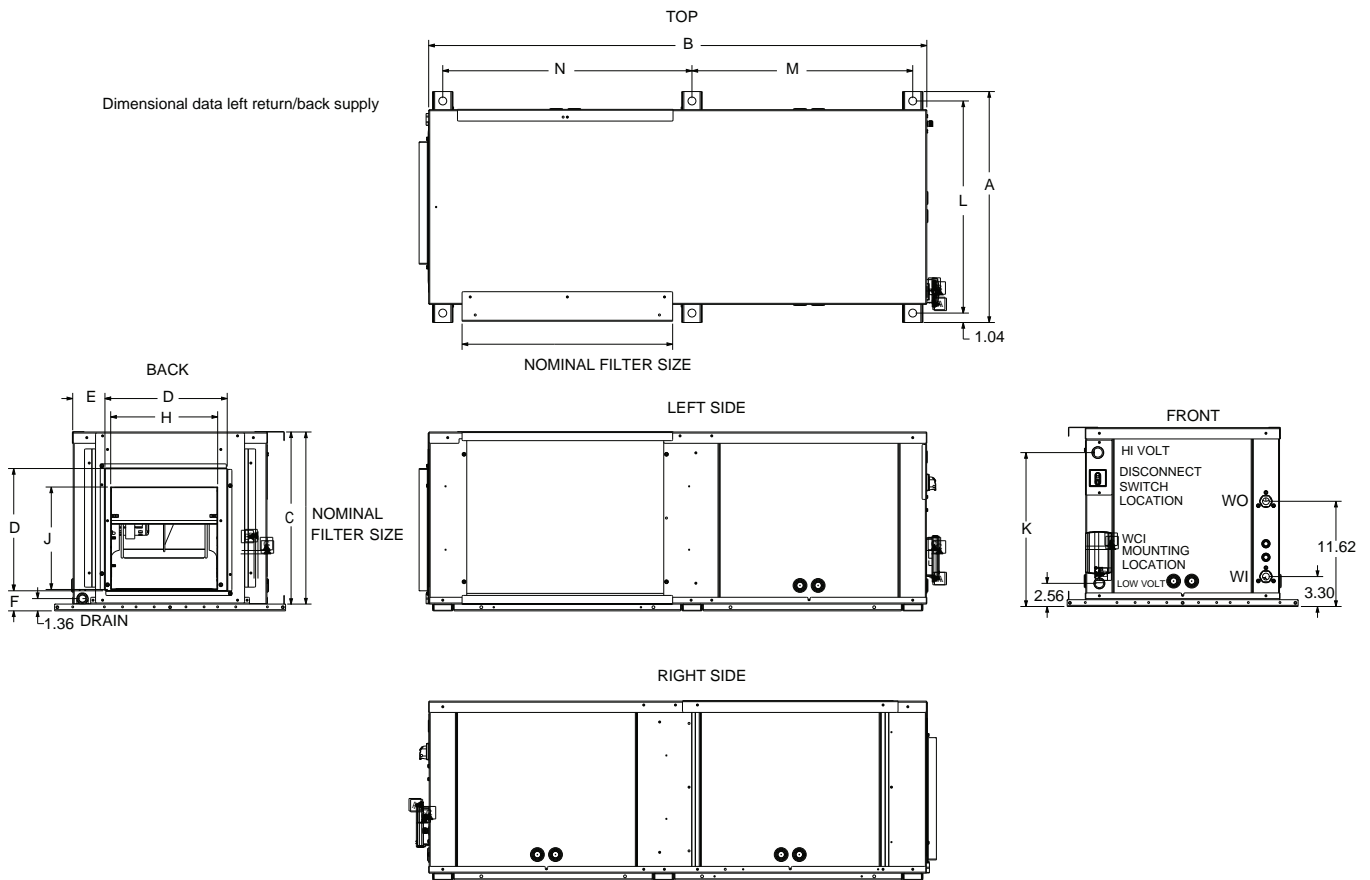
A 24-inch clearance from other mechanical and electrical equipment (where shown) is recommended for all configurations. The unit may be serviced through the front access panel or remaining open sides.

Figure 46. Clearance - GEV 12.5 to 25 tons



A 24-inch clearance from other mechanical and electrical equipment (where shown) is recommended for all configurations. The unit may be serviced through the front access panel.

Dimensional Data

Figure 47. Left return/back supply (GEHK)

Table 156. Dimensional data left return/back supply (GEHK)

Cab Size	GEHK	Width		Depth	Height	Duct Collar			Blower Opening		Hi Volt	Unit hanging location				Nominal Filter Size	W.I. NPTI	W.O. NPTI	DRAIN NPTI
		A	B			D	E	F	H	J		K	L	M	N				
A	006-012	23.00	41.00	15.75	11.50	3.50	2.25	7.88	7.63	13.00	21.00	17.50	20.50	14 x 16	0.50	0.50	0.75		
B	015, 018	25.50	46.00	17.75	13.50	3.50	2.00	10.13	9.38	15.00	23.50	19.88	23.00	16 x 19	0.50	0.50	0.75		
C	024, 030	25.50	49.00	18.75	13.50	3.88	2.25	10.50	11.25	16.00	23.50	21.38	24.50	17 x 20	0.75	0.75	0.75		
D	036, 042	25.50	55.00	19.75	13.50	3.50	2.25	11.75	11.25	17.00	23.50	24.38	27.50	18 x 23	0.75	0.75	0.75		
E	048, 060	28.00	68.00	21.75	16.50	3.63	2.13	13.88	13.50	19.00	26.00	30.88	34.00	20 x 30	1.00	1.00	0.75		

Note: Dimensions represent unit hanging dimensions including base rails for hanging.

Table 157. Horizontal cabinet dimensions left return/back supply (GEHK)

GEHK	Width	Depth	Height
006-012	19.00	41.00	15.00
015-018	21.50	46.00	17.00
024-030	21.50	49.00	18.00
036-042	21.50	55.00	19.00
048-060	24.00	68.00	21.00

Note: Cabinet dimensions only. Not including hanging brackets and base rails.



Unit Dimensions

Figure 48. Left return/right supply (GEHK)

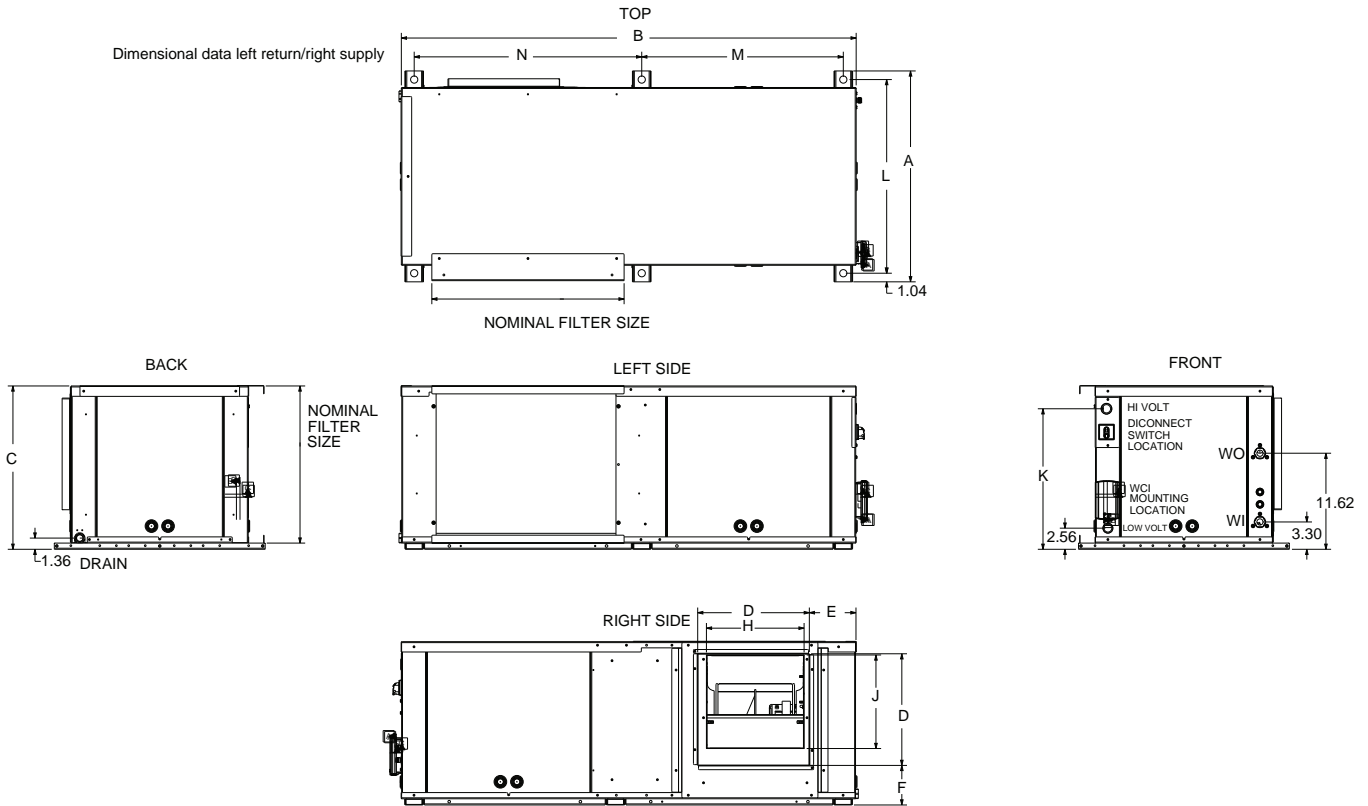


Table 158. Dimensional data left return/right supply (GEHK)

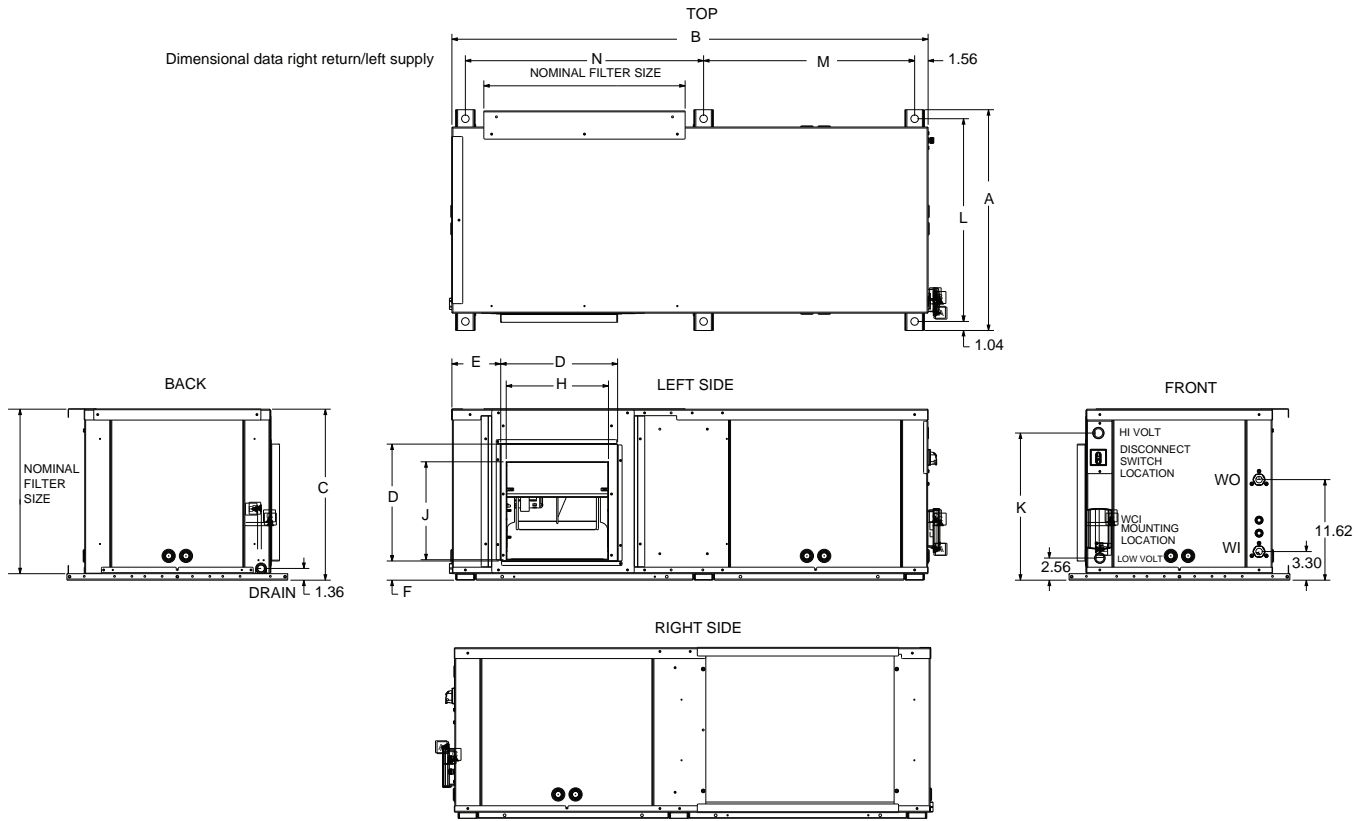
Cab Size	GEHK	Width	Depth	Height	Duct Collar	Duct Collar Location		Blower Opening		Hi Volt	Unit hanging location			Nominal Filter Size	W.I. NPTI	W.O. NPTI	DRAIN NPTI
		A	B	C	D	E	F	H	J	K	L	M	N				
A	006-012	23.00	41.00	15.75	11.50	5.75	3.00	7.88	7.63	13.00	21.00	17.50	20.50	14 x 16	0.50	0.50	0.75
B	015, 018	25.50	46.00	17.75	13.50	3.38	3.00	10.13	9.38	15.00	23.50	19.88	23.00	16 x 19	0.50	0.50	0.75
C	024, 030	25.50	49.00	18.75	13.50	5.88	4.00	10.50	11.25	16.00	23.50	21.38	24.50	17 x 20	0.75	0.75	0.75
D	036, 042	25.50	55.00	19.75	13.50	5.63	4.75	11.75	11.25	17.00	23.50	24.38	27.50	18 x 23	0.75	0.75	0.75
E	048, 060	28.00	68.00	21.75	16.50	5.63	3.88	13.88	13.50	19.00	26.00	30.88	34.00	20 x 30	1.00	1.00	0.75

Note: Dimensions represent unit hanging dimensions including base rails for hanging.

Table 159. Horizontal cabinet dimensions left return/right supply (GEHK)

GEHK	Width	Depth	Height
006-012	19.00	41.00	15.00
015-018	21.50	46.00	17.00
024-030	21.50	49.00	18.00
036-042	21.50	55.00	19.00
048-060	24.00	68.00	21.00

Note: Cabinet dimensions only. Not including hanging brackets and base rails.

Figure 49. Right return/left supply (GEHK)

Table 160. Dimensional data right return/left supply (GEHK)

Cab Size	GEHK	Width	Depth	Height	Duct Collar	Duct Collar Location		Blower Opening		Hi Volt	Unit hanging location			Nominal Filter Size	W.I. NPTI	W.O. NPTI	DRAIN NPTI
		A	B	C	D	E	F	H	J	K	L	M	N				
A	006-012	23.00	41.00	15.75	11.50	5.75	2.25	7.88	7.63	13.00	21.00	17.50	20.50	14 x 16	0.50	0.50	0.75
B	015, 018	25.50	46.00	17.75	13.50	5.50	2.00	10.13	9.38	15.00	23.50	19.88	23.00	16 x 19	0.50	0.50	0.75
C	024, 030	25.50	49.00	18.75	13.50	5.88	2.25	10.50	11.25	16.00	23.50	21.38	24.50	17 x 20	0.75	0.75	0.75
D	036-042	25.50	55.00	19.75	13.50	5.63	2.25	11.75	11.25	17.00	23.50	24.38	27.50	18 x 23	0.75	0.75	0.75
E	048, 060	28.00	68.00	21.75	16.50	5.63	2.13	13.88	13.50	19.00	26.00	30.88	34.00	20 x 30	1.00	1.00	0.75

Note: Dimensions represent unit hanging dimensions including base rails for hanging.

Table 161. Horizontal cabinet dimensions right return/left supply (GEHK)

GEHK	Width	Depth	Height
006-012	19.00	41.00	15.00
015-018	21.50	46.00	17.00
024-030	21.50	49.00	18.00
036-042	21.50	55.00	19.00
048-060	24.00	68.00	21.00

Note: Cabinet dimensions only. Not including hanging brackets and base rails.

Unit Dimensions

Figure 50. Right return/back supply (GEHK)

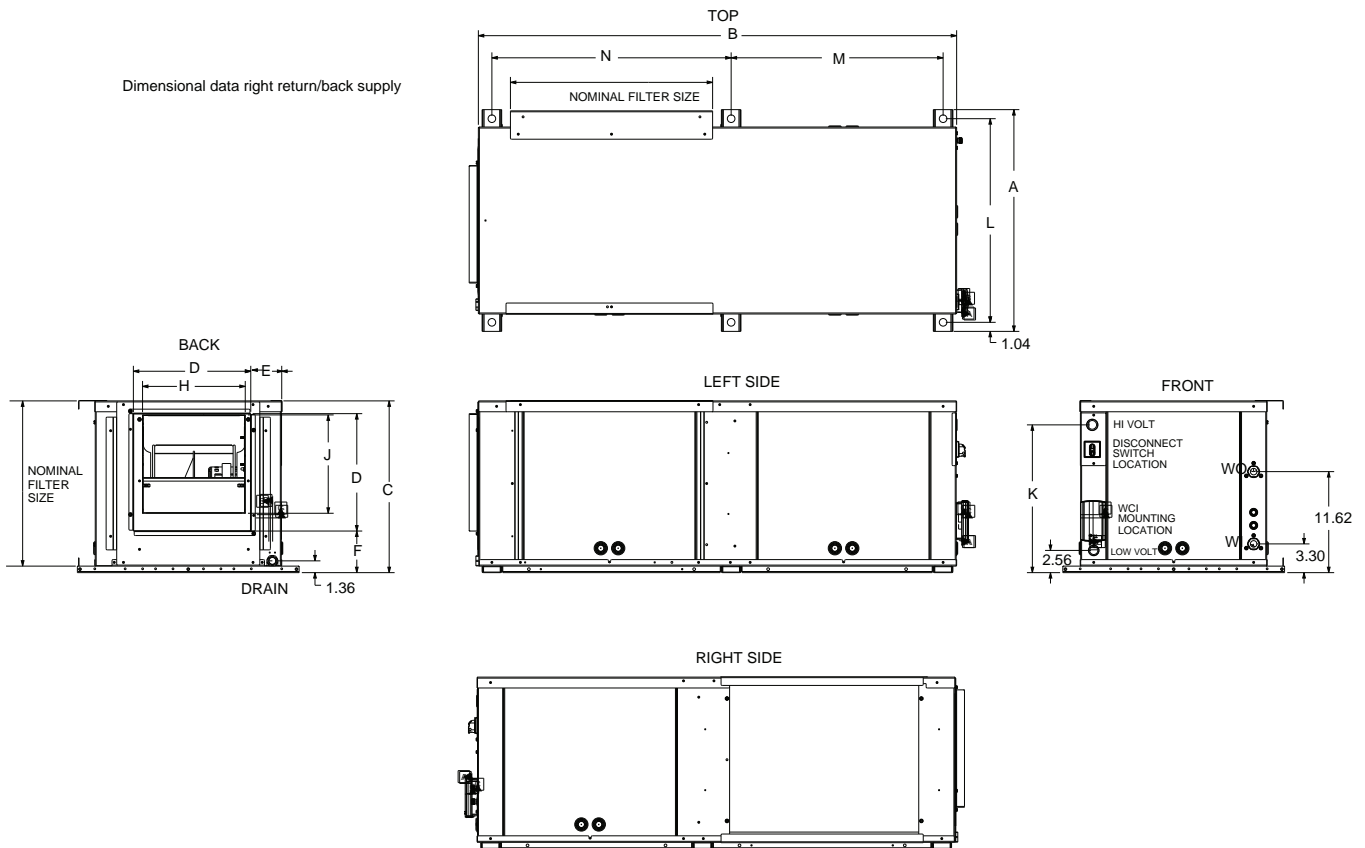


Table 162. Dimensional data right return/back supply (GEHK)

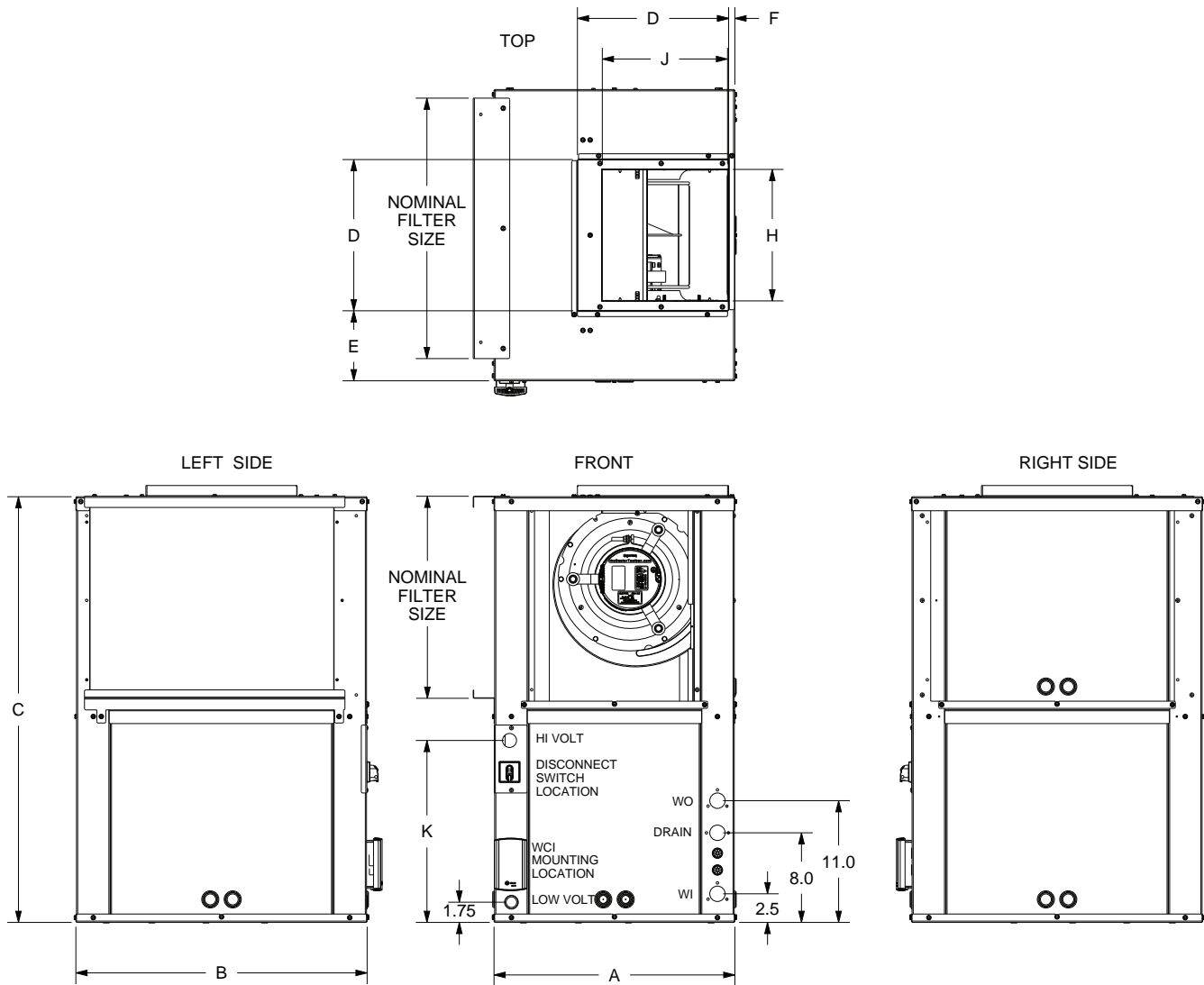
Cab Size	GEHK	Width	Depth	Height	Duct Collar	Duct Collar Location		Blower Opening		Hi Volt	Unit hanging location			Nominal Filter Size	W.I. NPTI	W.O. NPTI	DRAIN NPTI
		A	B	C	D	E	F	H	J	K	L	M	N				
A	006-012	23.00	41.00	15.75	11.50	3.50	3.00	7.88	7.63	13.00	21.00	17.50	20.50	14 x 16	0.50	0.50	0.75
B	015, 018	25.50	46.00	17.75	13.50	3.25	3.00	10.13	9.38	15.00	23.50	19.88	23.00	16 x 19	0.50	0.50	0.75
C	024, 030	25.50	49.00	18.75	13.50	3.88	4.00	10.50	11.25	16.00	23.50	21.38	24.50	17 x 20	0.75	0.75	0.75
D	036, 042	25.50	55.00	19.75	13.50	3.50	4.75	11.75	11.25	17.00	23.50	24.38	27.50	18 x 23	0.75	0.75	0.75
E	048, 060	28.00	68.00	21.75	16.50	3.63	3.88	13.88	13.50	19.00	26.00	30.88	34.00	20 x 30	1.00	1.00	0.75

Note: Dimensions represent unit hanging dimensions including base rails for hanging.

Table 163. Horizontal cabinet dimensions right return/back supply (GEHK)

GEHK	Width	Depth	Height
006-012	19.00	41.00	15.00
015-018	21.50	46.00	17.00
024-030	21.50	49.00	18.00
036-042	21.50	55.00	19.00
048-060	24.00	68.00	21.00

Note: Cabinet dimensions only. Not including hanging brackets and base rails.

Figure 51. Left return/top supply (GEVK)

Table 164. Dimensional data left return/top supply (GEVK)

Cab Size	GEVK	Width	Depth	Height	Duct Collar	Duct Collar Location			Blower Opening		Hi Volt	Nominal Filter Size	W.I. NPTI	W.O. NPTI	Drain NPTI
		A	B	C	D	E	F	G	H	J	K				
A	006-012	19.00	19.00	30.00	11.38	3.70	1.40	3.50	8.00	7.70	12.25	14 x 16	0.50	0.50	0.75
B	015-018	21.50	21.50	34.00	13.25	4.00	1.00	3.50	10.50	9.60	14.25	16 x 19	0.50	0.50	0.75
C	024-030	21.50	23.00	36.00	13.25	4.75	0.63	3.50	10.50	11.30	15.25	17 x 20	0.75	0.75	0.75
D	036-042	21.50	26.00	38.00	13.25	6.25	0.63	3.50	11.80	11.30	16.25	18 x 23	0.75	0.75	0.75
E	048-060	24.00	32.50	42.00	16.50	7.25	0.75	3.50	13.70	13.50	18.25	20 x 30	1	1	0.75

Note: Units in a free return application will require more than a 1-in. clearance to provide proper air flow to the unit's air-to-refrigerant coil.



Unit Dimensions

Figure 52. Right return/top supply (GEVK)

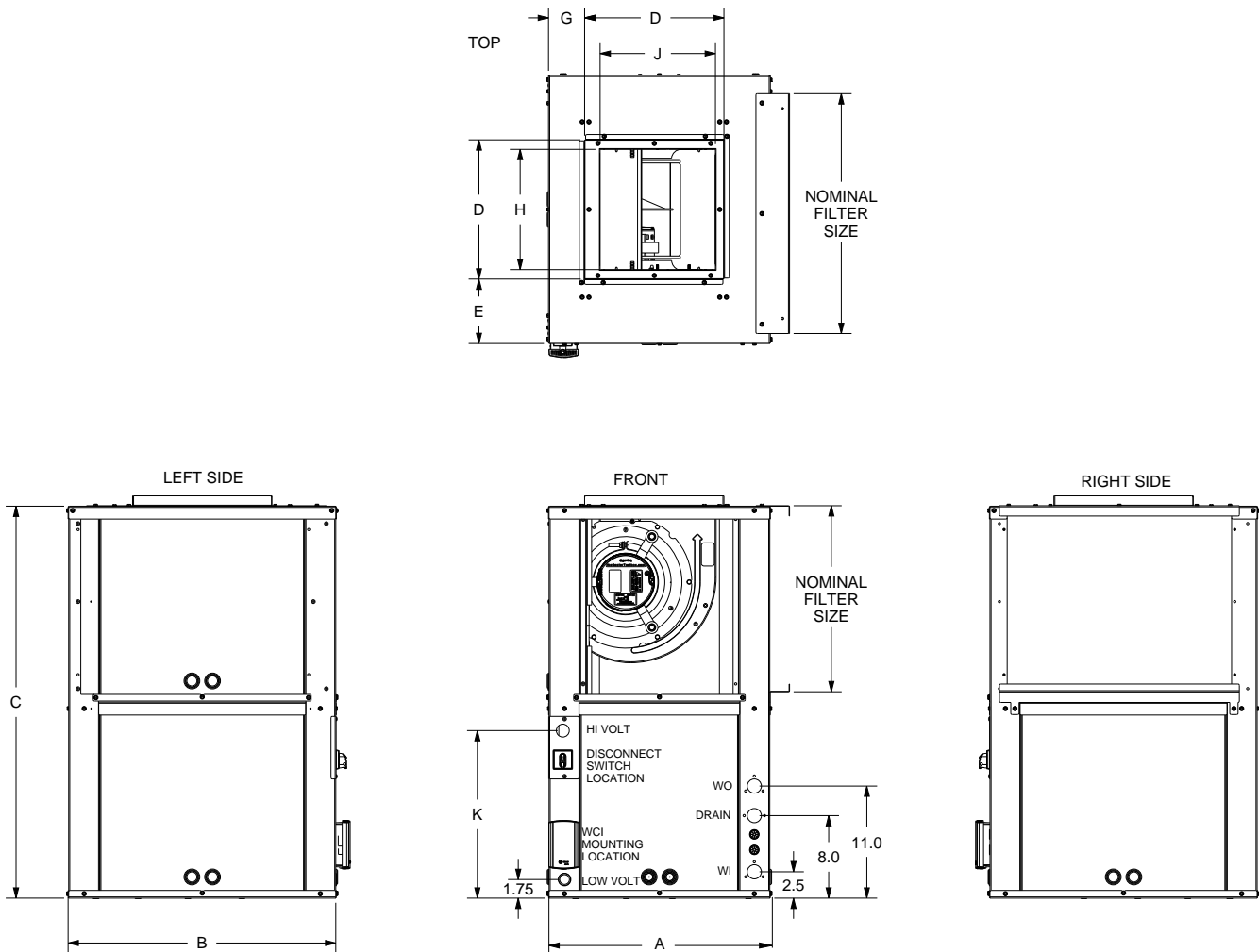
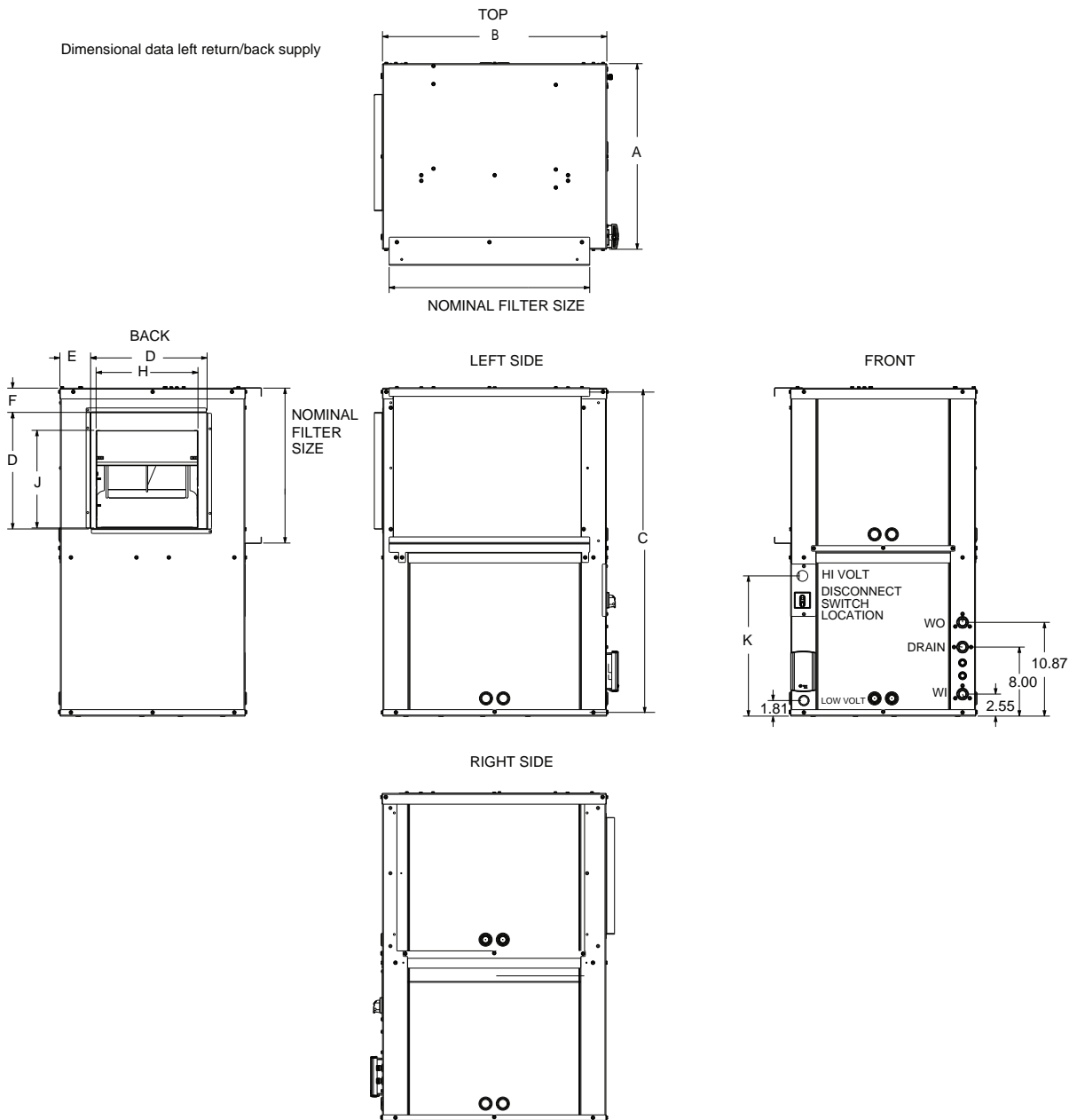


Table 165. Dimensional data right return/top supply (GEVK)

Cab Size	GEVK	Width	Depth	Height	Duct Collar	Duct Collar Location			Blower Opening		Hi Volt	Nominal Filter Size	W.I. NPTI	W.O. NPTI	Drain NPTI
		A	B	C	D	E	F	G	H	J	K				
A	006-012	19.00	19.00	30.00	11.38	3.70	1.40	3.50	8.00	7.70	12.25	14 x 16	0.50	0.50	0.75
B	015-018	21.50	21.50	34.00	13.25	4.00	1.00	3.50	10.50	9.60	14.25	16 x 19	0.50	0.50	0.75
C	024-030	21.50	23.00	36.00	13.25	4.75	0.63	3.50	10.50	11.30	15.25	17 x 20	0.75	0.75	0.75
D	036-042	21.50	26.00	38.00	13.25	6.25	0.63	3.50	11.80	11.30	16.25	18 x 23	0.75	0.75	0.75
E	048-060	24.00	32.50	42.00	16.50	7.25	0.75	3.50	13.70	13.50	18.25	20 x 30	1	1	0.75

Note: Units in a free return application will require more than a 1-in. clearance to provide proper air flow to the unit's air-to-refrigerant coil.

Figure 53. Left return/back supply (GEVK)

Table 166. Dimensional data left return/back supply (GEVK)

Cab Size	GEVK	Width	Depth	Height	Duct Collar Location			Blower Opening		Hi Volt	Nominal Filter Size	W.I. NPTI	W.O. NPTI	Drain NPTI
		A	B	C	D	E	F	H	J					
A	006-012	19.00	19.00	30.00	11.50	3.50	2.25	7.88	7.63	12.25	14 x 16	0.50	0.50	0.75
B	015,018	21.50	21.50	34.00	13.50	3.50	2.00	10.13	9.38	14.25	16 x 19	0.50	0.50	0.75
C	024,030	21.50	23.00	36.00	13.50	3.88	2.25	10.50	11.25	15.25	17 x 20	0.75	0.75	0.75
D	036,042	21.50	26.00	38.00	13.50	3.50	2.75	11.75	11.25	16.25	18 x 23	0.75	0.75	0.75
E	048,060	24.00	32.50	42.00	16.50	3.63	2.13	13.88	13.50	18.25	20 x 30	1	1	0.75

Note: Units in a free return application will require more than a 1-in. clearance to provide proper air flow to the unit's air-to-refrigerant coil.



Unit Dimensions

Figure 54. Right return/back supply (GEVK)

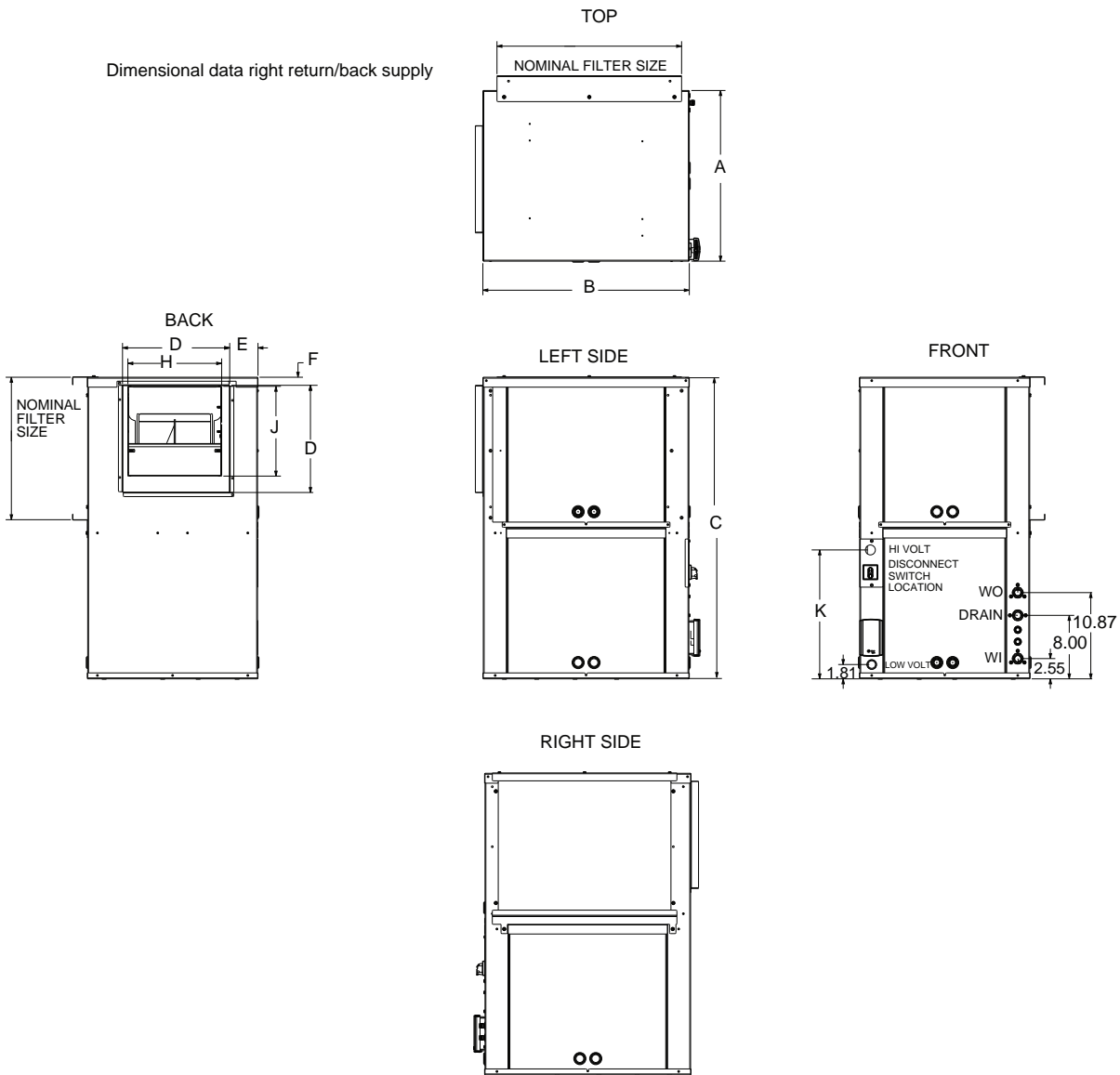


Table 167. Dimensional data right return/back supply (GEVK)

Cab Size	GEVK	Width	Depth	Height	Duct Collar	Duct Collar Location		Blower Opening		Hi Volt	Nominal Filter Size	W.I. NPTI	W.O. NPTI	Drain NPTI
		A	B			C	D	E	F					
A	006-012	19.00	19.00	30.00	11.50	3.50	1.00	7.88	7.63	12.25	14 x 16	0.50	0.50	0.75
B	015,018	21.50	21.50	34.00	13.50	3.25	1.00	10.13	9.38	14.25	16 x 19	0.50	0.50	0.75
C	024,030	21.50	23.00	36.00	13.50	3.88	1.00	10.50	11.25	15.25	17 x 20	0.75	0.75	0.75
D	036,042	21.50	26.00	38.00	13.50	3.50	1.00	11.75	11.25	16.25	18 x 23	0.75	0.75	0.75
E	048,060	24.00	32.50	42.00	16.50	3.63	1.00	13.88	13.50	18.25	20 x 30	1	1	0.75

Note: Units in a free return application will require more than a 1-in. clearance to provide proper air flow to the unit's air-to-refrigerant coil.

Figure 55. Right return/left supply - GEHK 6 to 10 tons (60 Hz); GEHK 6 to 7.5 tons (50 Hz)

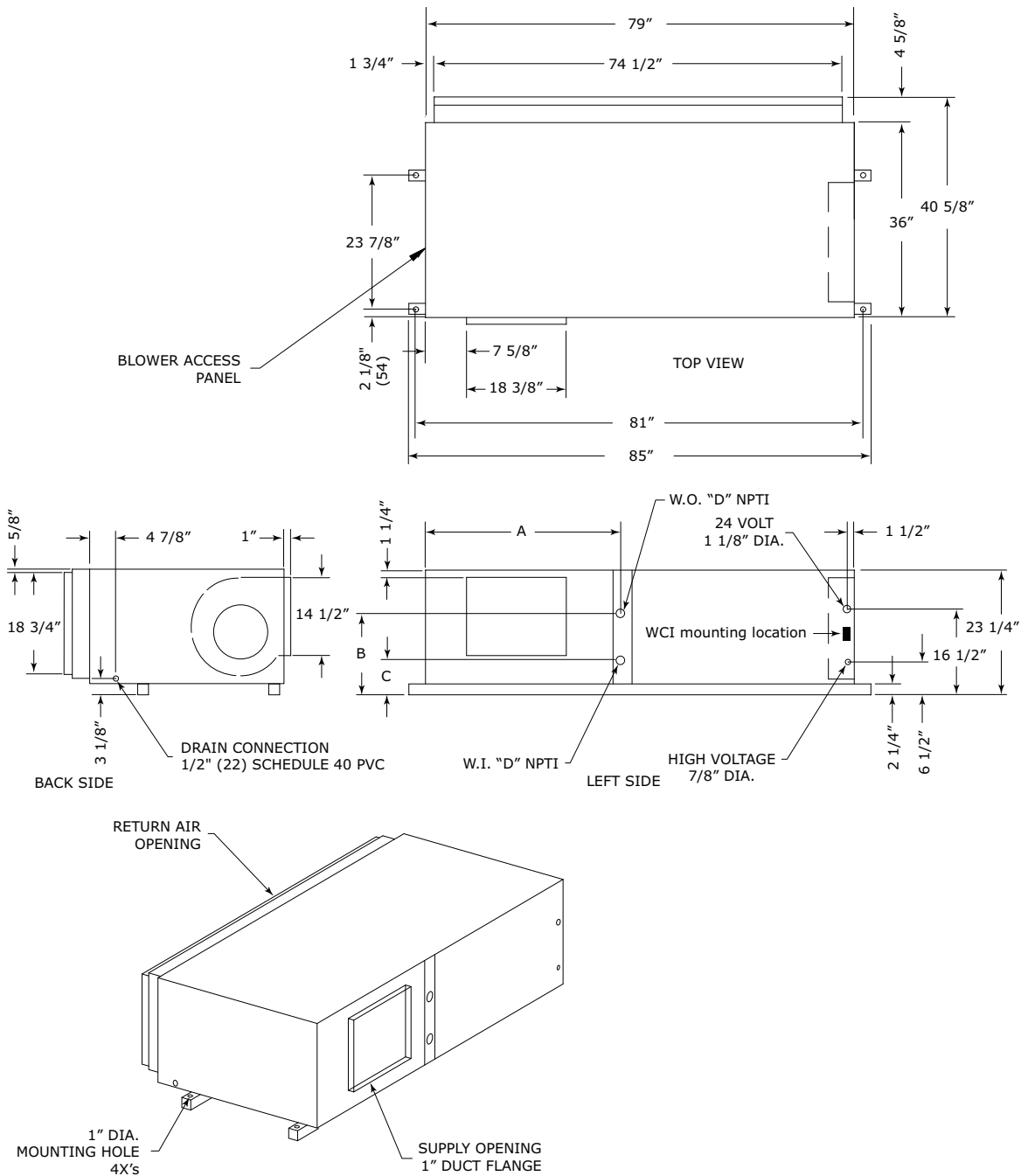


Table 168. Dimensional data right return/left supply - GEHK 6 to 10 tons (60 Hz); GEHK 6 to 7.5 tons (50 Hz)

GEH (60 Hz)	GEH (50 Hz)	A	B	C	D
72	—	36-1/4 in.	15-5/8 in.	6-5/8 in.	1-1/4 in.
90	72	36-1/8 in.	12-3/4 in.	6-3/4 in.	1-1/4 in.
120	90	36-1/8 in.	13 in.	7-1/4 in.	1-1/2 in.



Unit Dimensions

Figure 56. Right return/back supply - GEHK 6 to 10 tons (60 Hz); GEHK 6 to 7.5 tons (50 Hz)

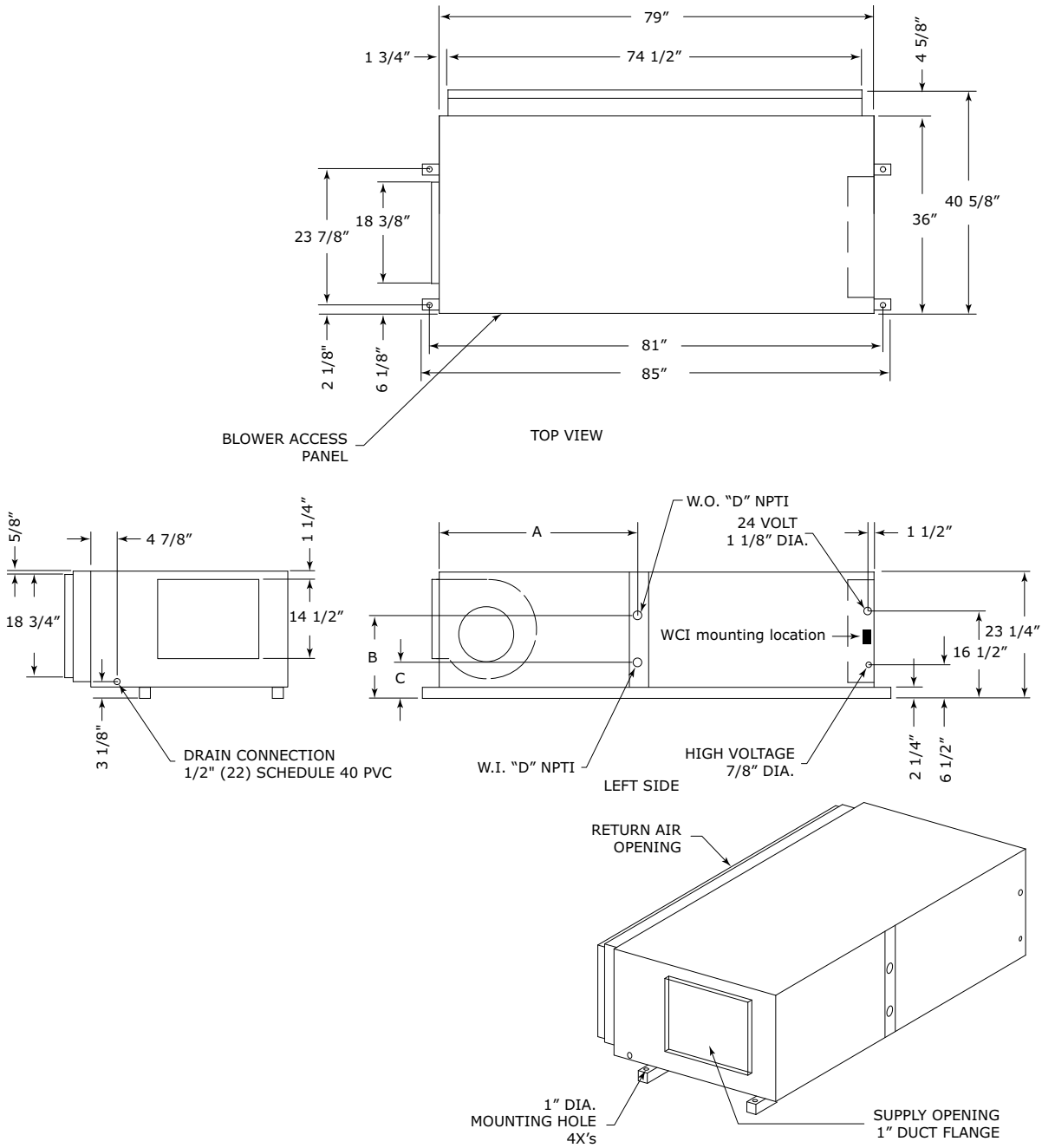
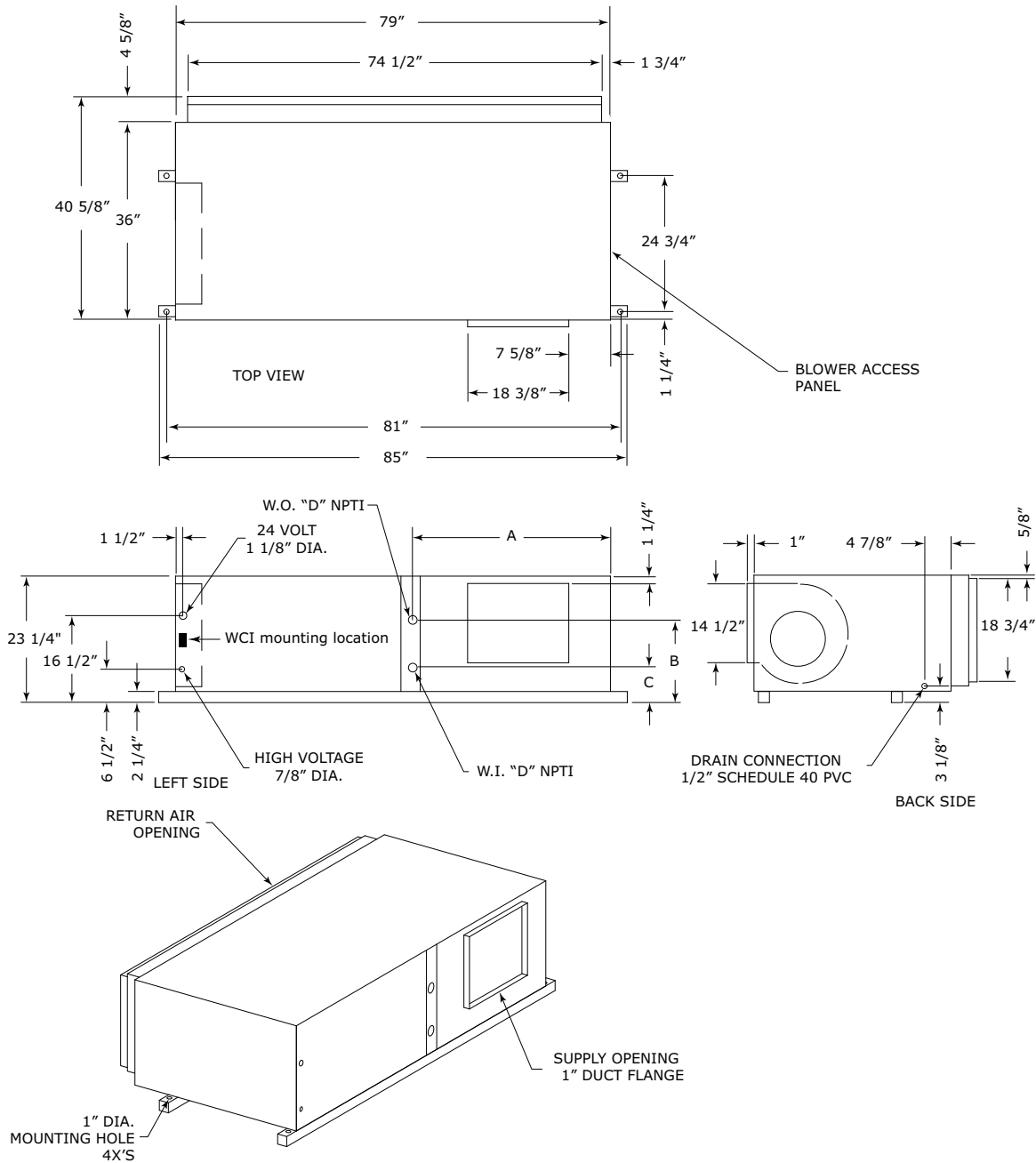


Table 169. Dimensional data right return/back supply - GEHK 6 to 10 tons (60 Hz); GEHK 6 to 7.5 tons (50 Hz)

GEH (60 Hz)	GEH (50 Hz)	A	B	C	D
72	—	36-1/4 in.	15-5/8 in.	6-5/8 in.	1-1/4 in.
90	72	36-1/8 in.	12-3/4 in.	6-3/4 in.	1-1/4 in.
120	90	36-1/8 in.	13 in.	7-1/4 in.	1-1/2 in.

Figure 57. Left return/right supply GEHK 6 to 10 tons (60 Hz); GEHK 6 to 7.5 tons (50 Hz)

Table 170. Dimensional data left return/right supply - GEHK 6 to 10 tons (60 Hz); GEHK 6 to 7.5 tons (50 Hz)

GEH (60 Hz)	GEH (50 Hz)	A	B	C	D
72	—	36-1/8 in.	17 in.	8 in.	1-1/4 in.
90	72	36-1/8 in.	13-3/4 in.	7-3/4 in.	1-1/4 in.
120	90	36-1/8 in.	13 in.	7-1/4 in.	1-1/2 in.

Unit Dimensions

Figure 58. Left return/back supply GEHK 6 to 10 tons (60 Hz); GEHK 6 to 7.5 tons (50 Hz)

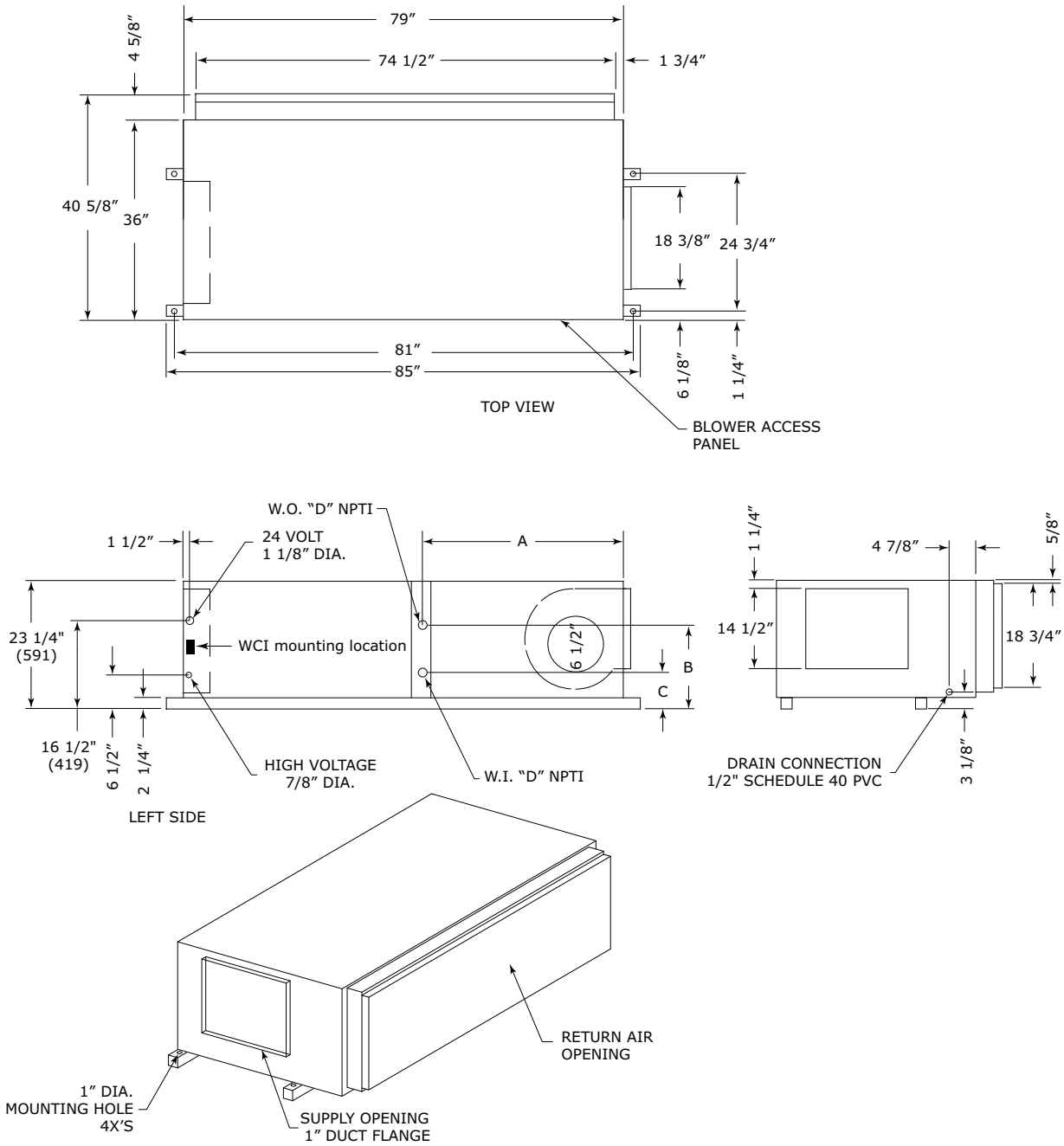
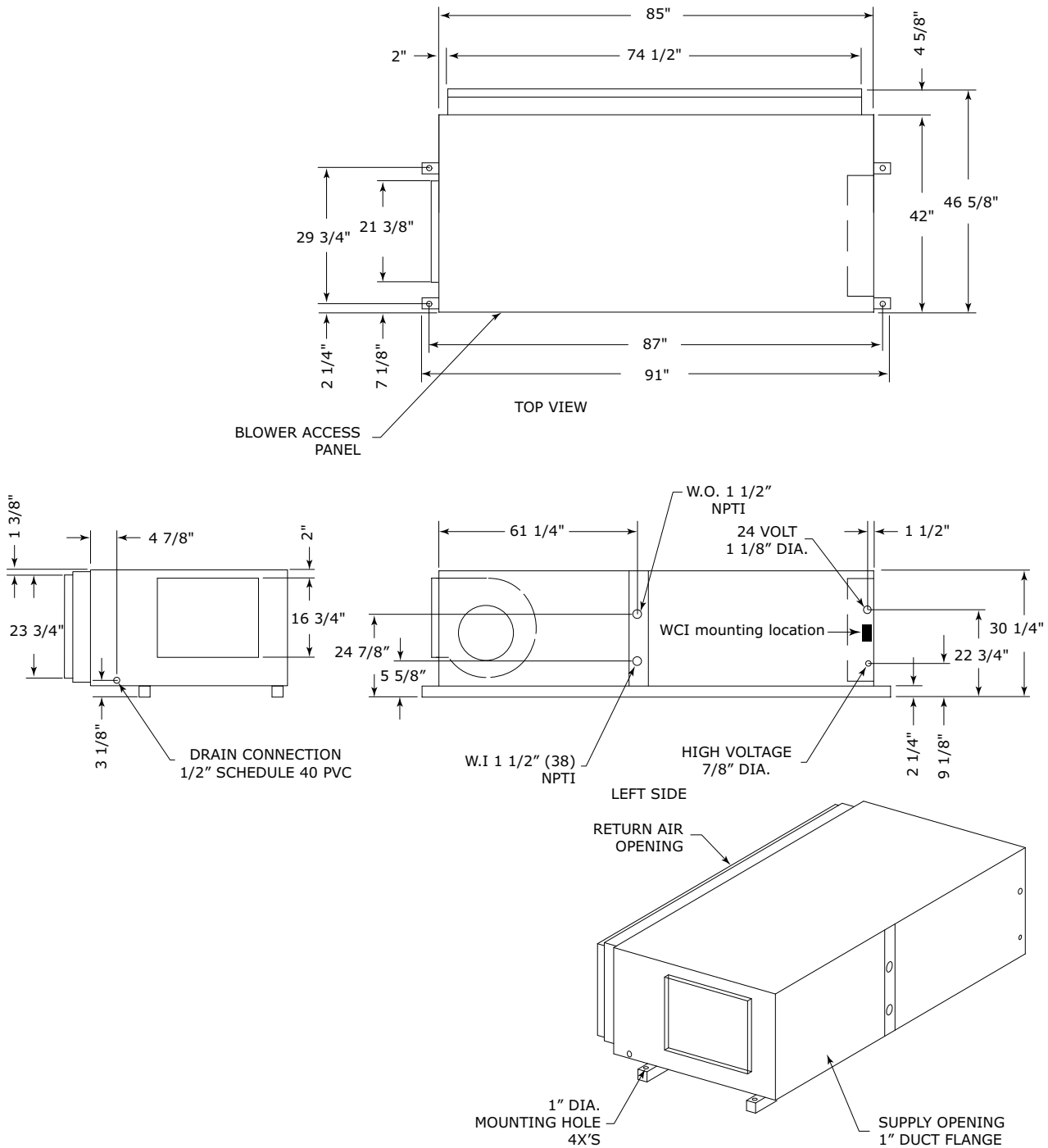


Table 171. Dimensional data left return/back supply GEHK 6 to 10 tons (60 Hz); GEHK 6 to 7.5 tons (50 Hz)

GEH (60 Hz)	GEH (50 Hz)	A	B	C	D
72	—	36-1/8 in.	17 in.	8 in.	1-1/4 in.
90	72	36-1/8 in.	13-3/4 in.	7-3/4 in.	1-1/4 in.
120	90	36-1/8 in.	13 in.	7-1/4 in.	1-1/2 in.

Figure 59. Right return/back supply GEHK 12.5 to 15 tons (60 Hz); GEHK 10 to 12.5 tons (50 Hz)





Unit Dimensions

Figure 60. Left return/right supply GEHK 12.5 to 15 tons (60 Hz); GEHK 10 to 12.5 tons (50 Hz)

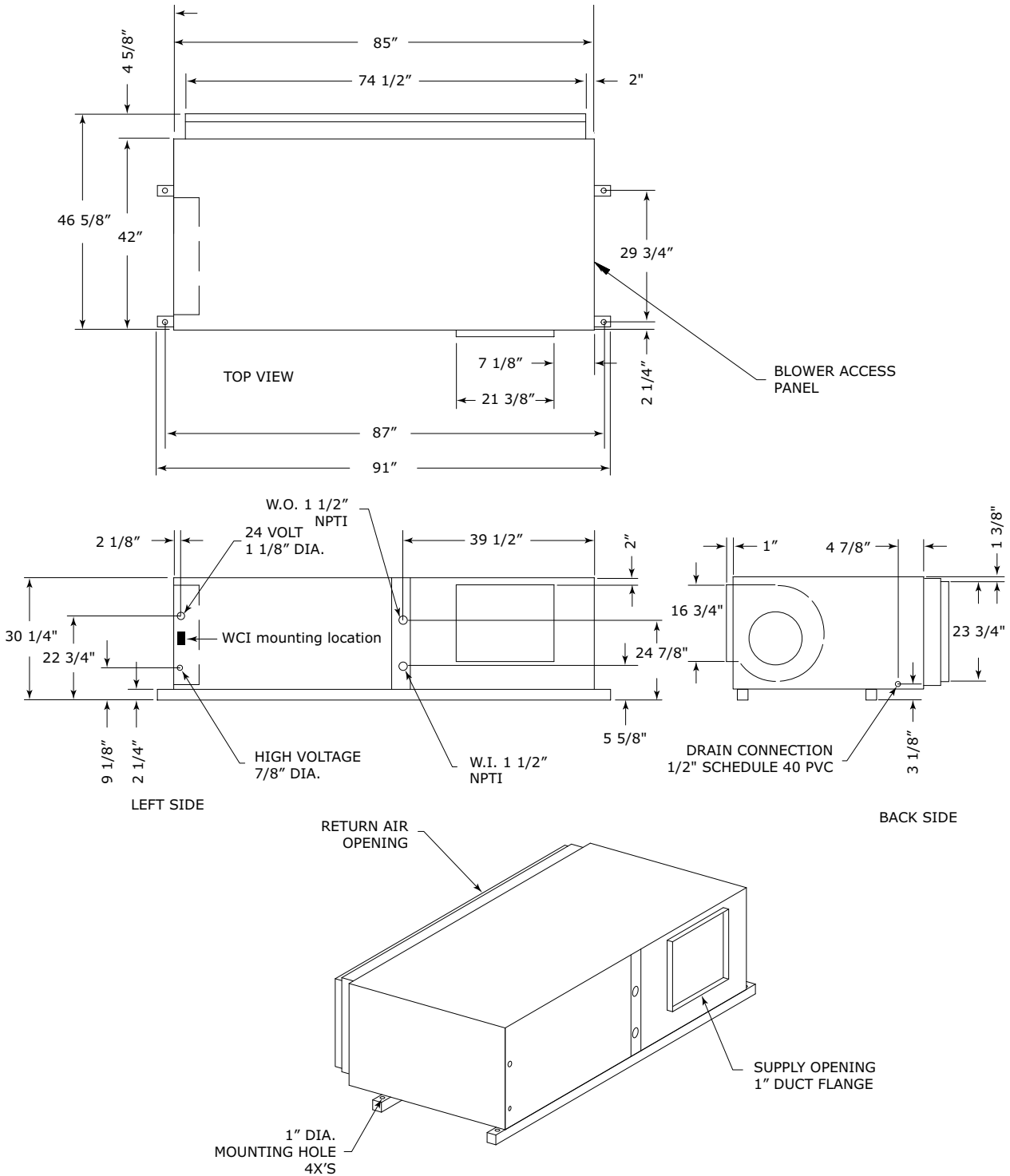
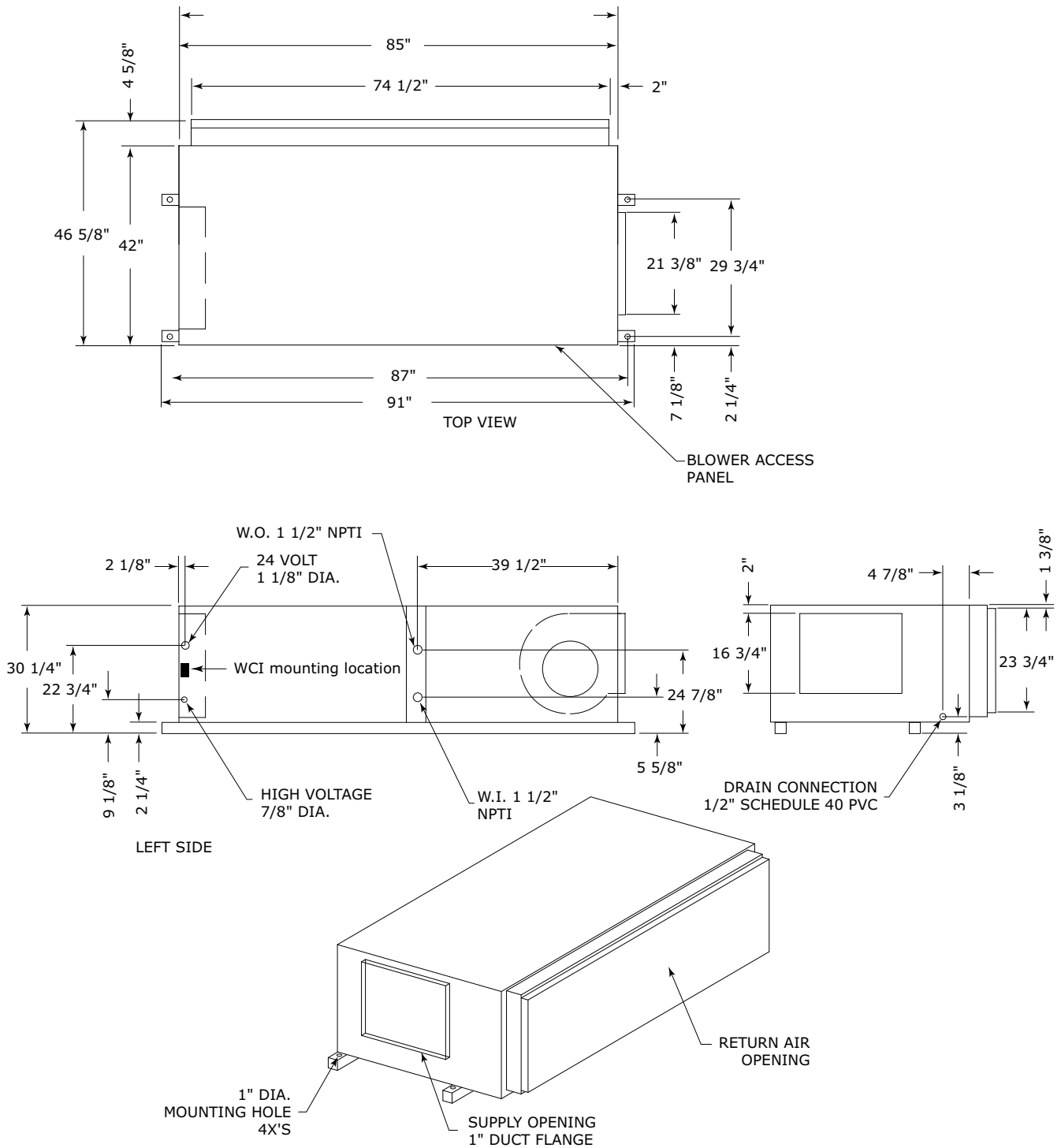


Figure 61. Left return/back supply GEHK 12.5 to 15 tons (60 Hz); GEHK 10 to 12.5 tons (50 Hz)





Unit Dimensions

Figure 62. Front return/back supply²⁵ GEVK 6 to 10 tons (60 Hz); 6 and 7.5 tons (50 Hz)

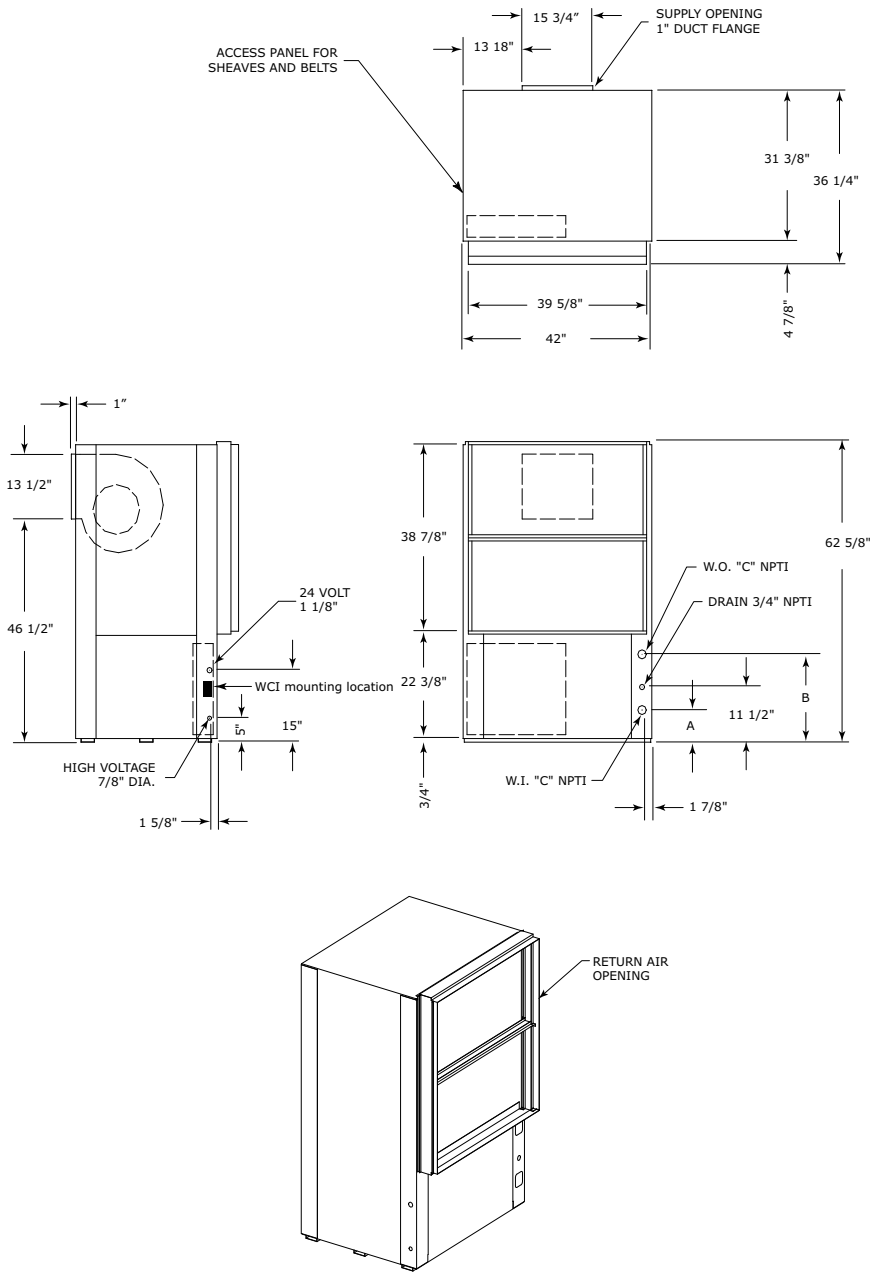
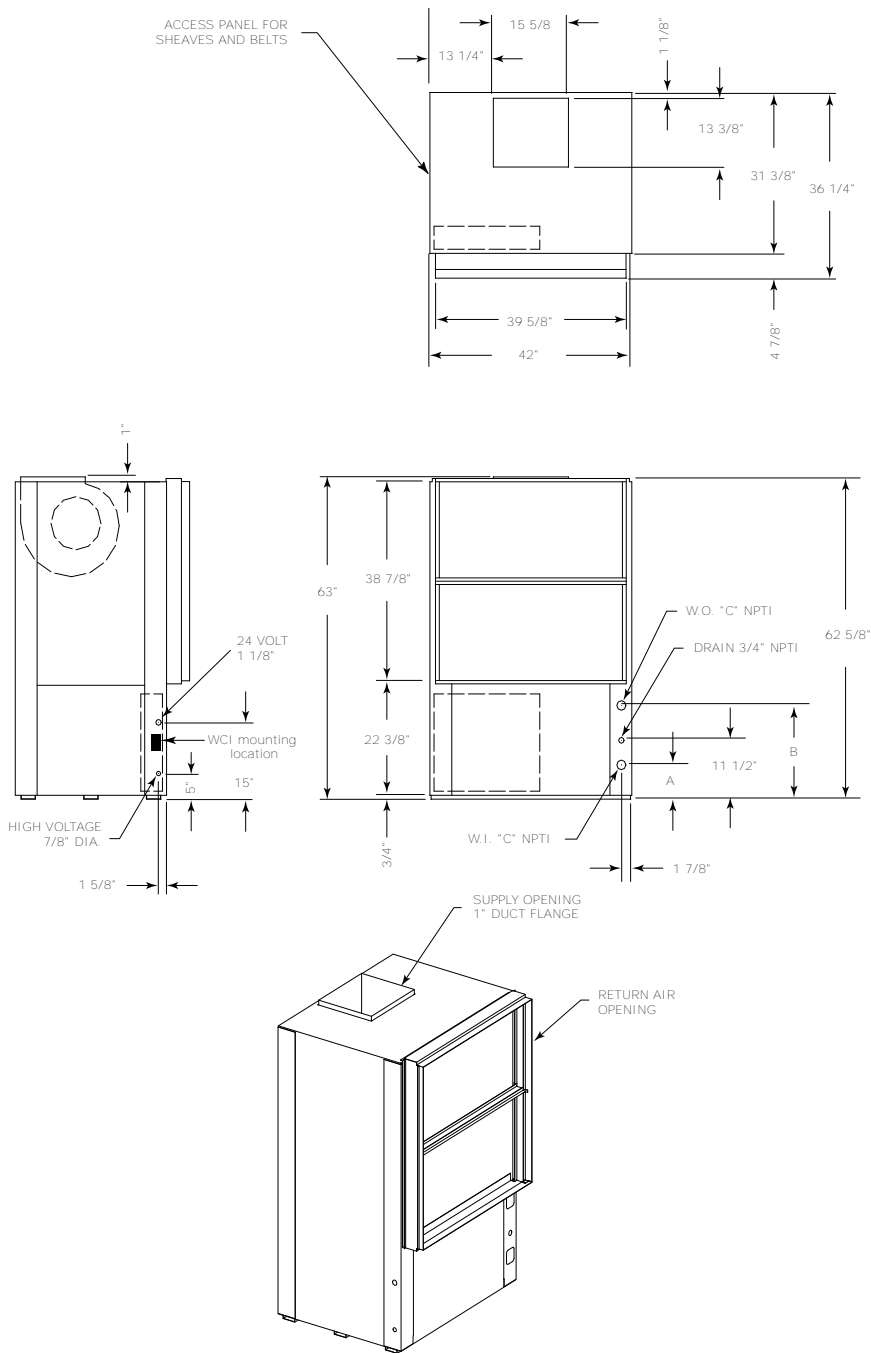


Table 172. Dimensional data front return/back supply GEVK 6 to 10 tons (60 Hz); 6 and 7.5 tons (50 Hz)

Unit (60 Hz)	Unit (50 Hz)	A	B	C
6.0 tons	—	6-5/8 in.	18-3/8 in.	1-1/4 in.
7.5 tons	6.0 tons	6-5/8 in.	18-3/8 in.	1-1/4 in.
10.0 tons	7.5 tons	6-1/2 in.	18-1/2 in.	1-1/2 in.

²⁵NEC requires that the GEV072-300 front return must be a non-ducted return.

Figure 63. Front return/top supply²⁶ GEVK 6 to 10 tons (60 Hz); 6 and 7.5 tons (50 Hz)

Table 173. Dimensional data front return/top supply GEVK 6 to 10 tons (60 Hz); 6 and 7.5 tons (50 Hz)

Unit (60 Hz)	Unit (50 Hz)	A	B	C
6.0 tons	—	6-5/8 in.	18-3/8 in.	1-1/4 in.
7.5 tons	6.0 tons	6-5/8 in.	18-3/8 in.	1-1/4 in.
10.0 tons	7.5 tons	6-1/2 in.	18-1/2 in.	1-1/2 in.

²⁶NEC requires that the GEV072-300 front return must be a non-ducted return.



Unit Dimensions

Figure 64. Back return/front supply²⁷ GEVK 6 to 10 tons (60 Hz); 6 and 7.5 tons (50 Hz)

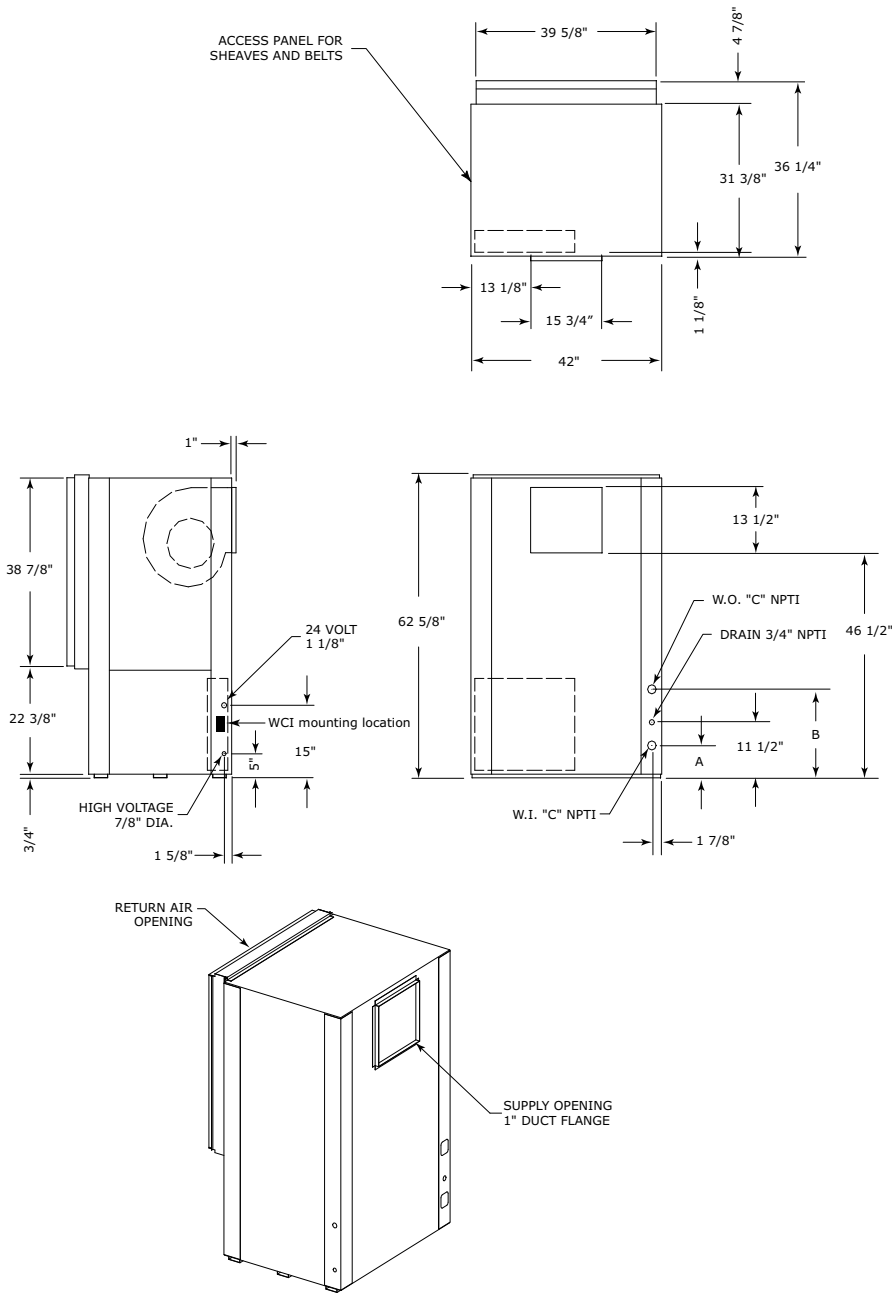
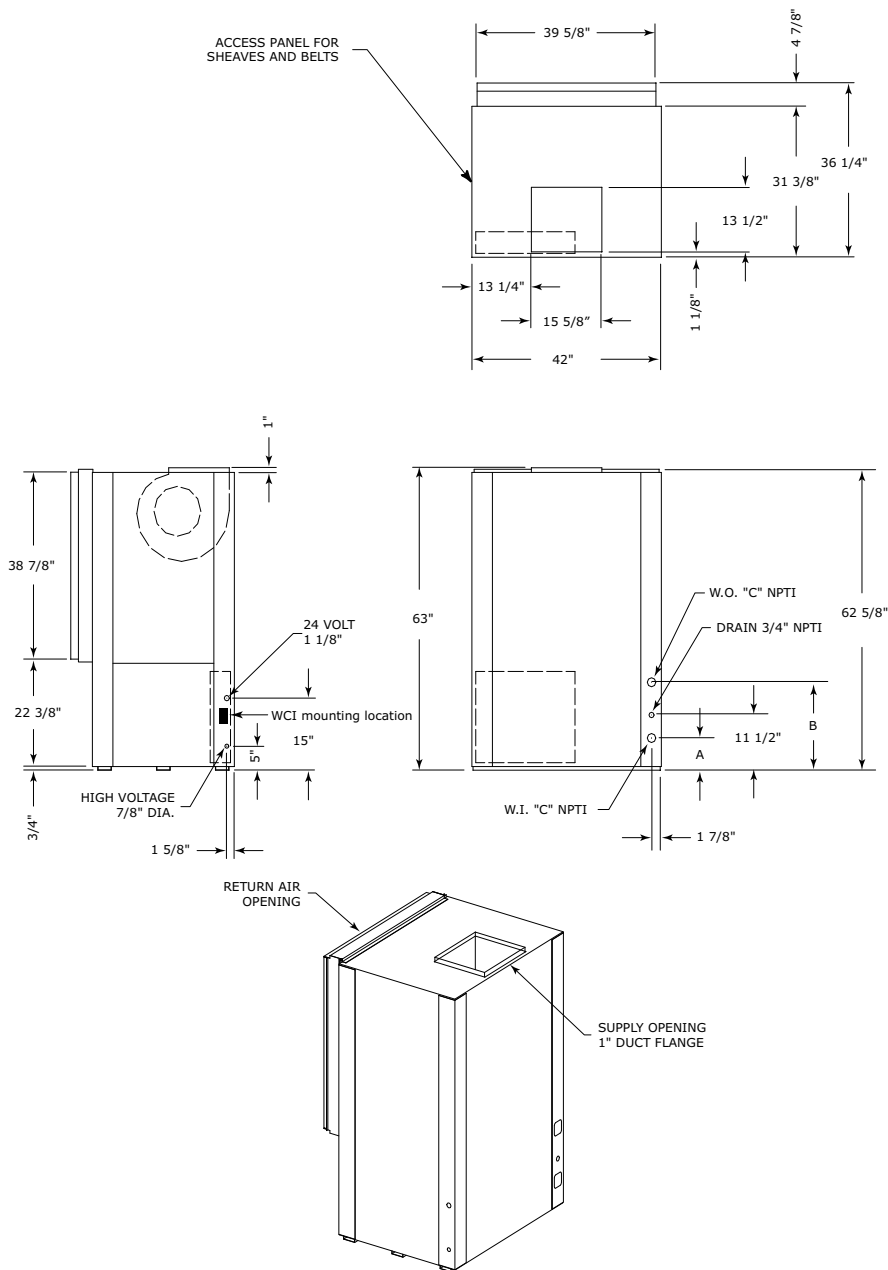


Table 174. Dimensional data back return/front supply GEVK 6 to 10 tons (60 Hz); 6 and 7.5 tons (50 Hz)

Unit (60 Hz)	Unit (50 Hz)	A	B	C
6.0 tons	—	6-5/8 in.	18-3/8 in.	1-1/4 in.
7.5 tons	6.0 tons	6-5/8 in.	18-3/8 in.	1-1/4 in.
10.0 tons	7.5 tons	6-1/2 in.	18-1/2 in.	1-1/2 in.

²⁷.NEC requires that the GEV072-300 front return must be a non-ducted return.

Figure 65. Back return/top supply²⁸ GEVK 6 to 10 tons (60 Hz); 6 and 7.5 tons (50 Hz)

Table 175. Dimensional data back return/top supply GEVK 6 to 10 tons (60 Hz); 6 and 7.5 tons (50 Hz)

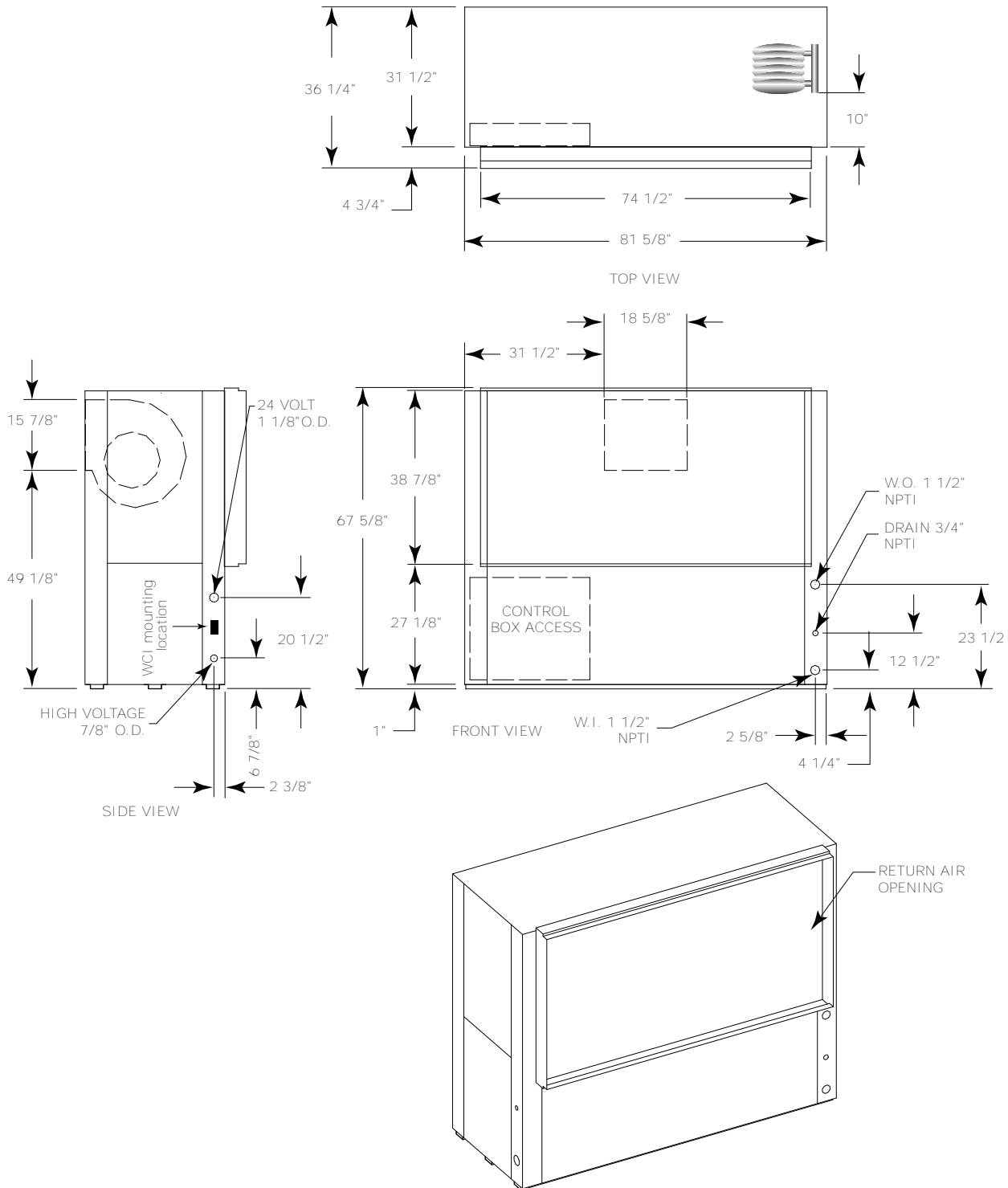
Unit (60 Hz)	Unit (50 Hz)	A	B	C
6.0 tons	—	6-5/8 in.	18-3/8 in.	1-1/4 in.
7.5 tons	6.0 tons	6-5/8 in.	18-3/8 in.	1-1/4 in.
10.0 tons	7.5 tons	6-1/2 in.	18-1/2 in.	1-1/2 in.

²⁸. NEC requires that the GEV072-300 front return must be a non-ducted return.



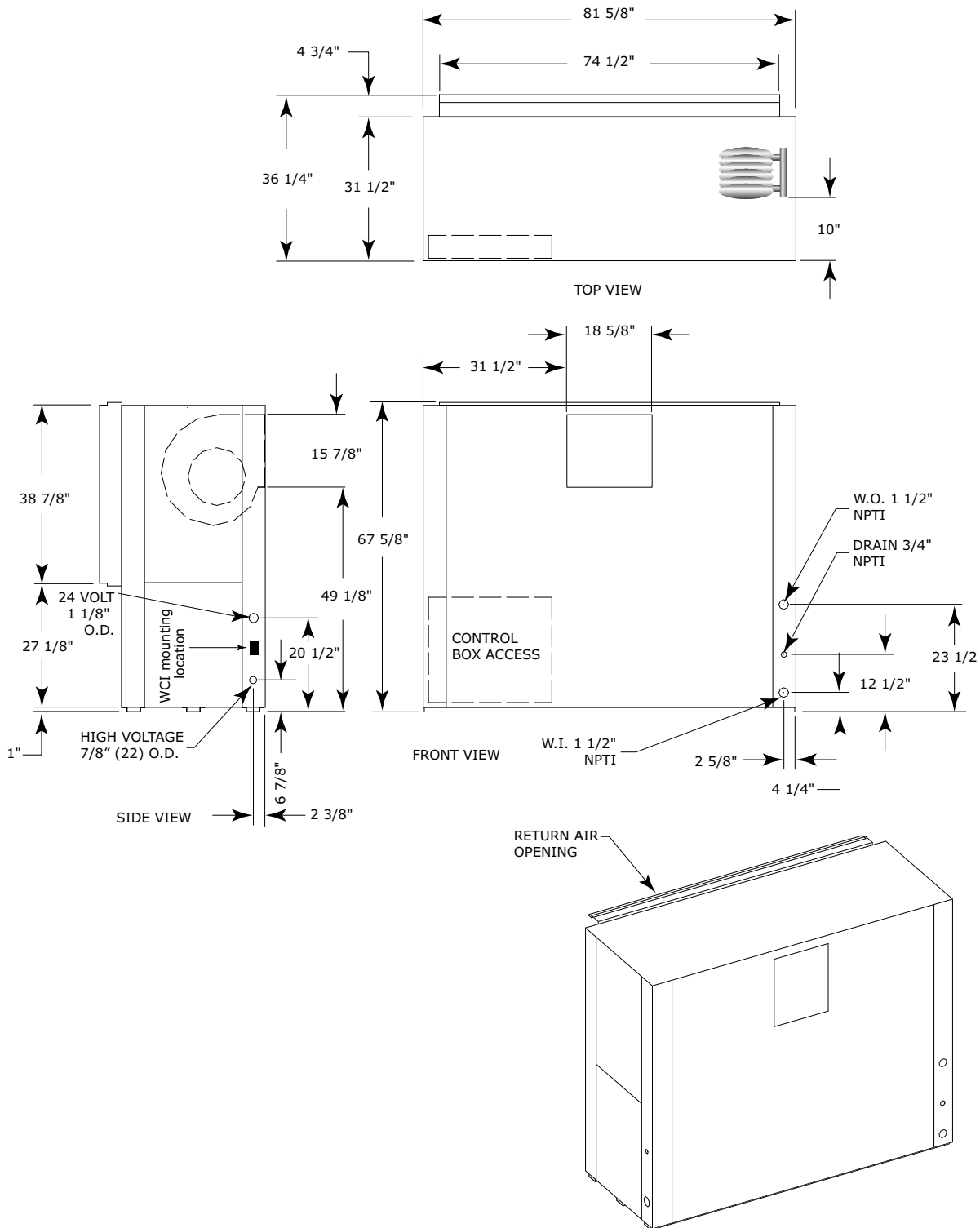
Unit Dimensions

Figure 66. Front return/back supply²⁹ GEVK 12.5 to 15 tons (60 Hz); GEVK 10 and 12.5 tons (50 Hz)



²⁹. NEC requires that the GEV072-300 front return must be a non-ducted return.

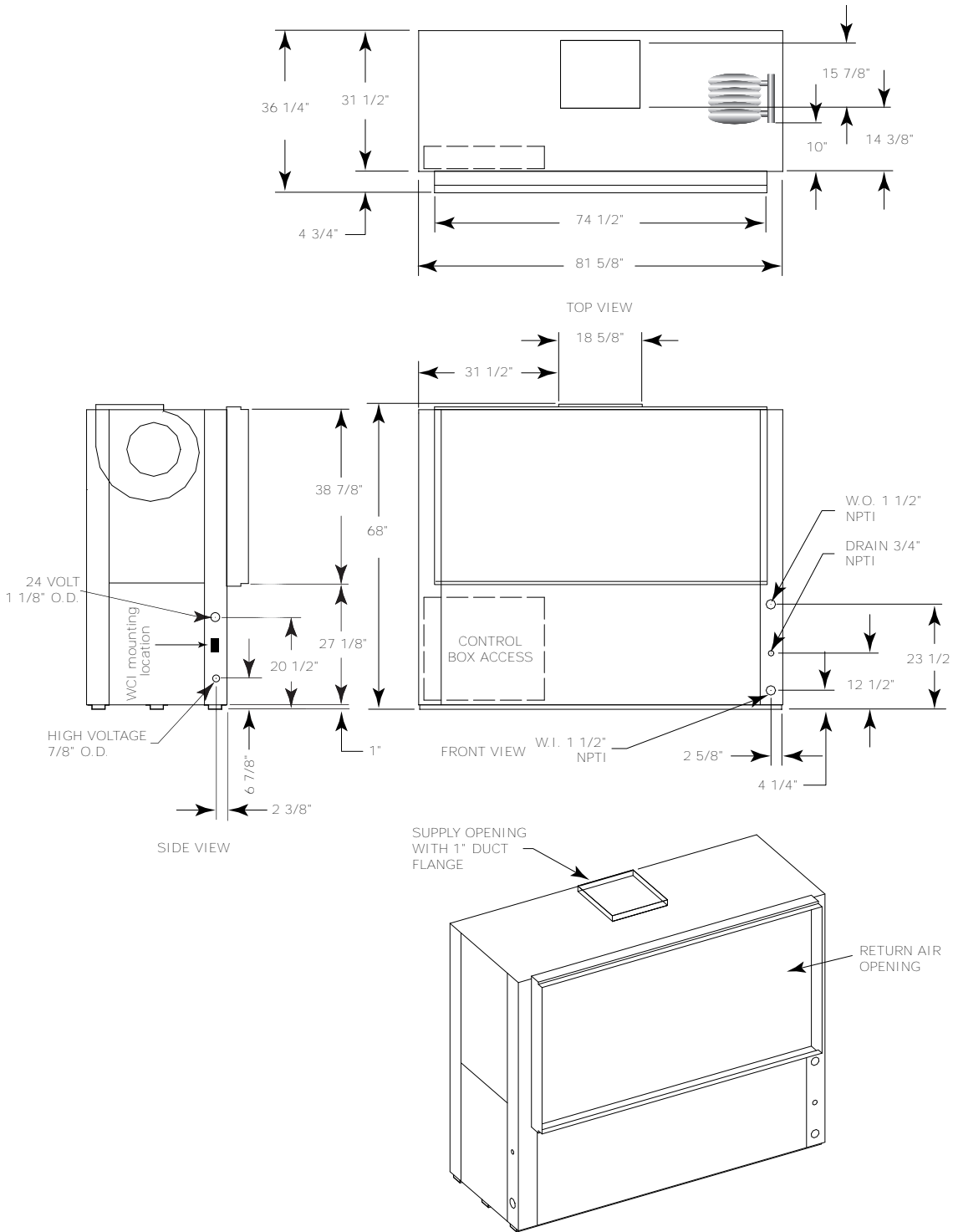
Figure 67. Back return/front supply GEVK 12.5 to 15 tons (60 Hz); GEVK 10 and 12.5 tons (50 Hz)





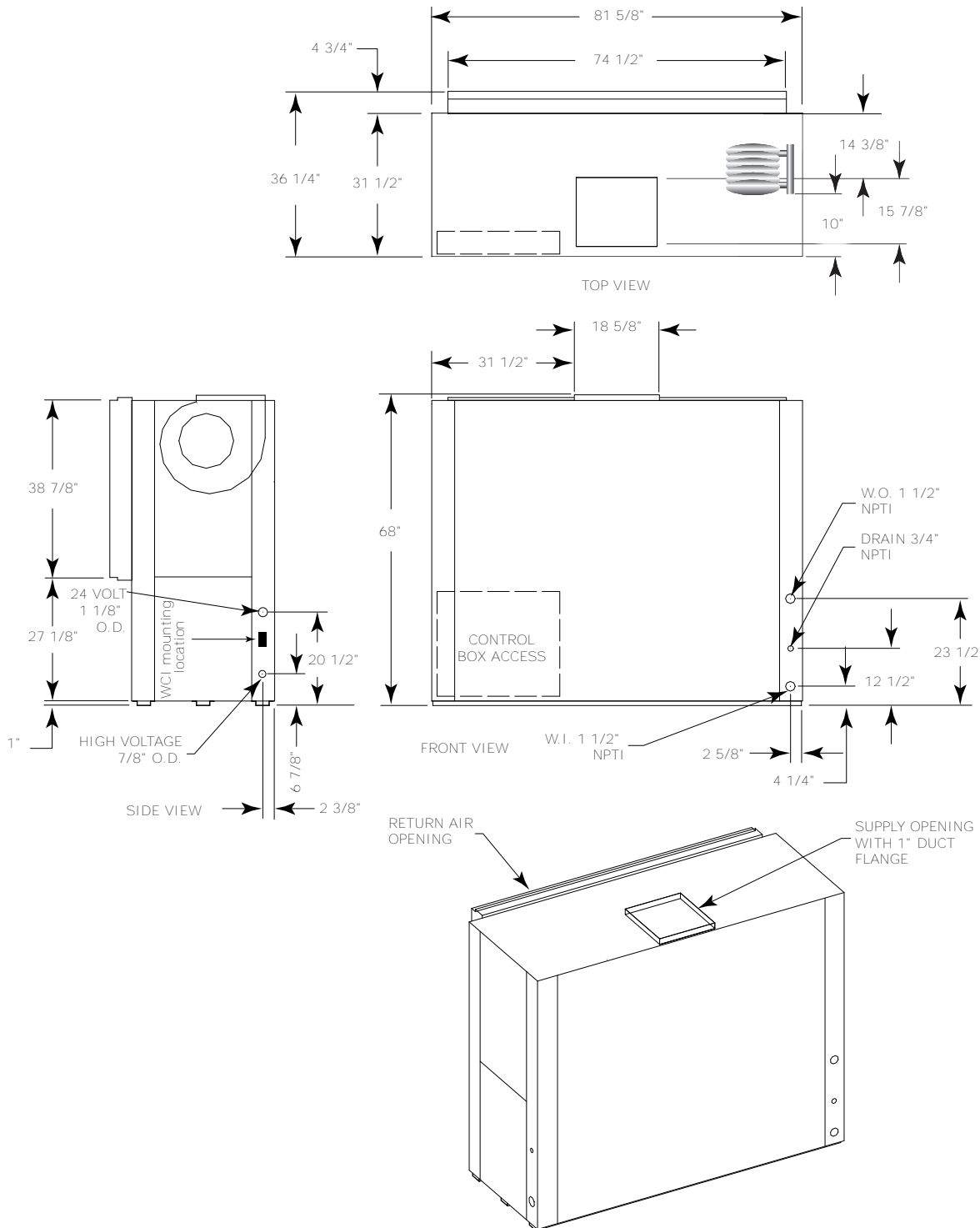
Unit Dimensions

Figure 68. Front return/top supply³⁰ GEVK 12.5 to 15 tons (60 Hz); GEVK 10 and 12.5 tons (50 Hz)



³⁰. NEC requires that the GEV072-300 front return must be a non-ducted return.

Figure 69. Back return/top supply³¹ GEVK 12.5 to 15 tons (60 Hz); GEVK 10 and 12.5 tons (50 Hz)



³¹.NEC requires that the GEV072-300 front return must be a non-ducted return.



Unit Dimensions

Figure 70. Front return/back supply³² GEVK 20 and 25 tons (60 Hz); GEVK 15 and 20 tons (50 Hz)

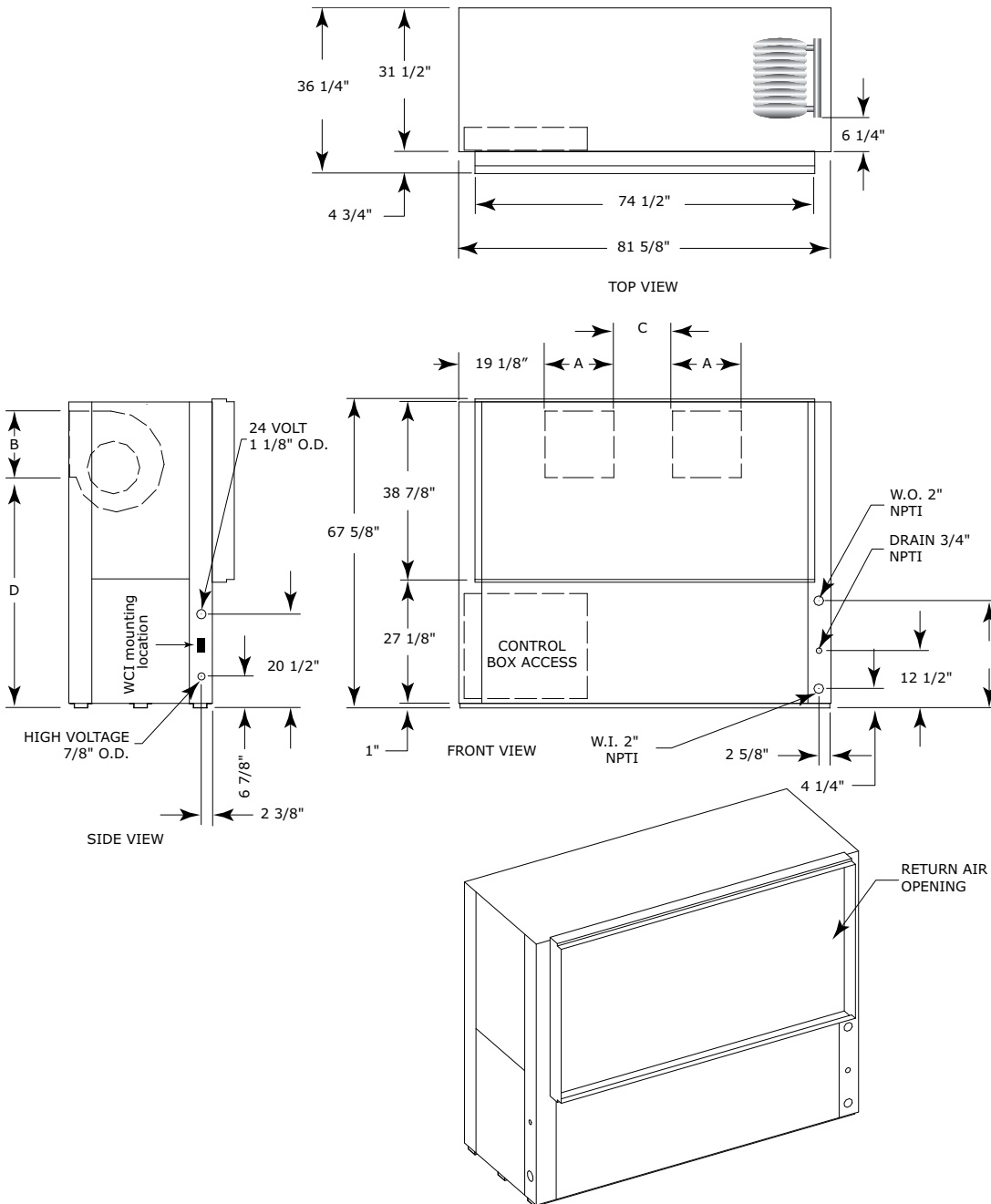
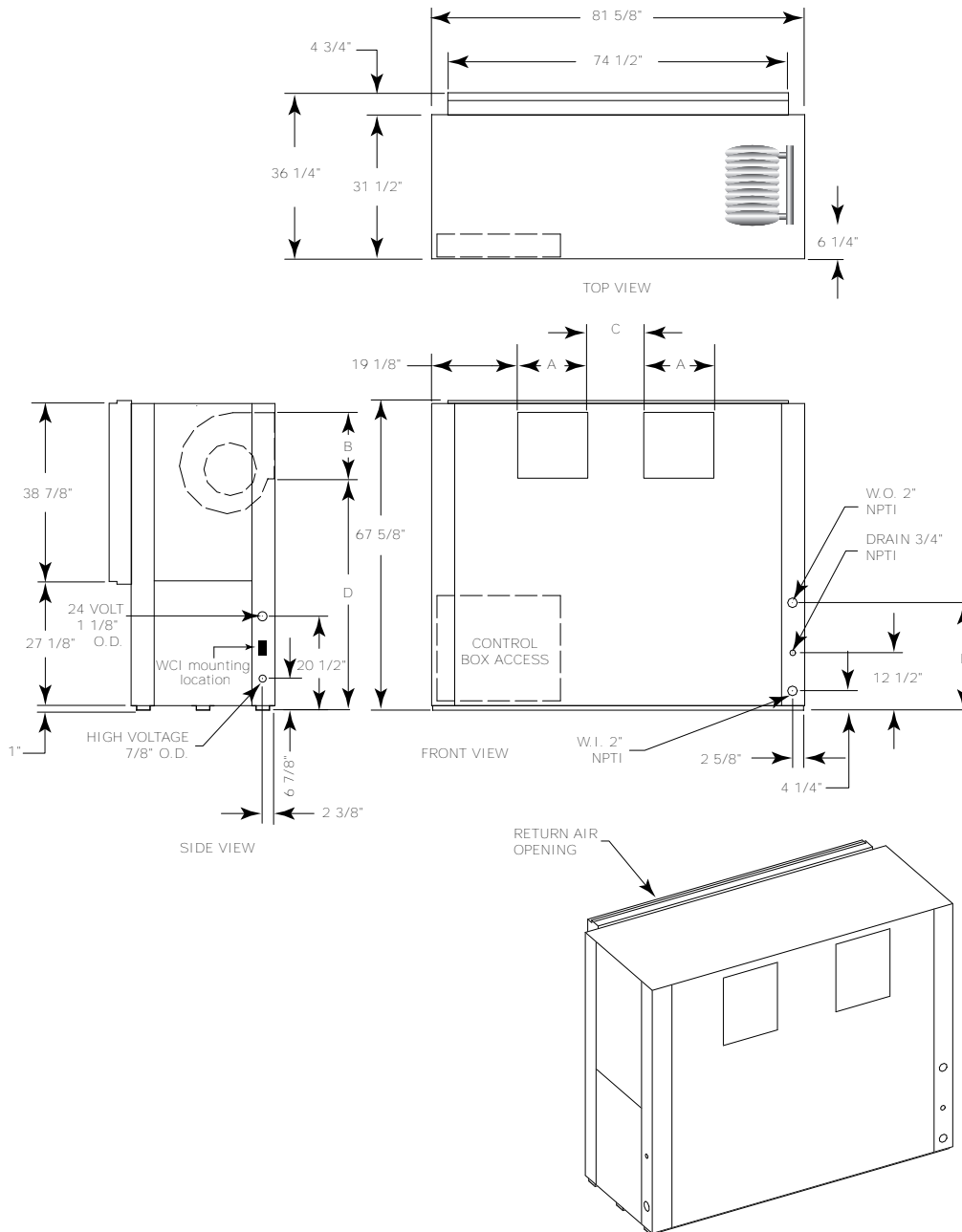


Table 176. Dimensional data front return/back supply GEVK 20 and 25 tons (60 Hz); GEVK 15 and 20 tons (50 Hz)

Unit (60 Hz)	Unit (50 Hz)	A	B	C	D	E
20 tons	15 tons	15-5/8 in.	13-1/2 in.	12 in.	51-5/8 in.	20-7/8 in.
25 tons Std Static	20 tons Std Static	14-3/4 in.	15-7/8 in.	13-7/8 in.	49-1/8 in.	23-1/2 in.
25 tons High Static	20 tons High Static	15-5/8 in.	13-1/2 in.	12 in.	51-5/8 in.	23-1/2 in.

³². NEC requires that the GEV072-300 front return must be a non-ducted return.

Figure 71. Back return/front supply³³ GEVK 20 and 25 tons (60 Hz); GEVK 15 and 20 tons (50 Hz)

Table 177. Dimensional data back return/front supply GEVK 20 and 25 tons (60 Hz); GEVK 15 and 20 tons (50 Hz)

Unit (60 Hz)	Unit (50 Hz)	A	B	C	D	E
20 tons	15 tons	15-5/8 in.	13-1/2 in.	12 in.	51-5/8 in.	20-7/8 in.
25 tons Std Static	20 tons Std Static	14-3/4 in.	15-7/8 in.	13-7/8 in.	49-1/8 in.	23-1/2 in.
25 tons High Static	20 tons High Static	15-5/8 in.	13-1/2 in.	12 in.	51-5/8 in.	23-1/2 in.

³³.NEC requires that the GEV072-300 front return must be a non-ducted return.



Unit Dimensions

Figure 72. Front return/top supply³⁴ GEVK 20 and 25 tons (60 Hz); GEVK 15 and 20 tons (50 Hz)

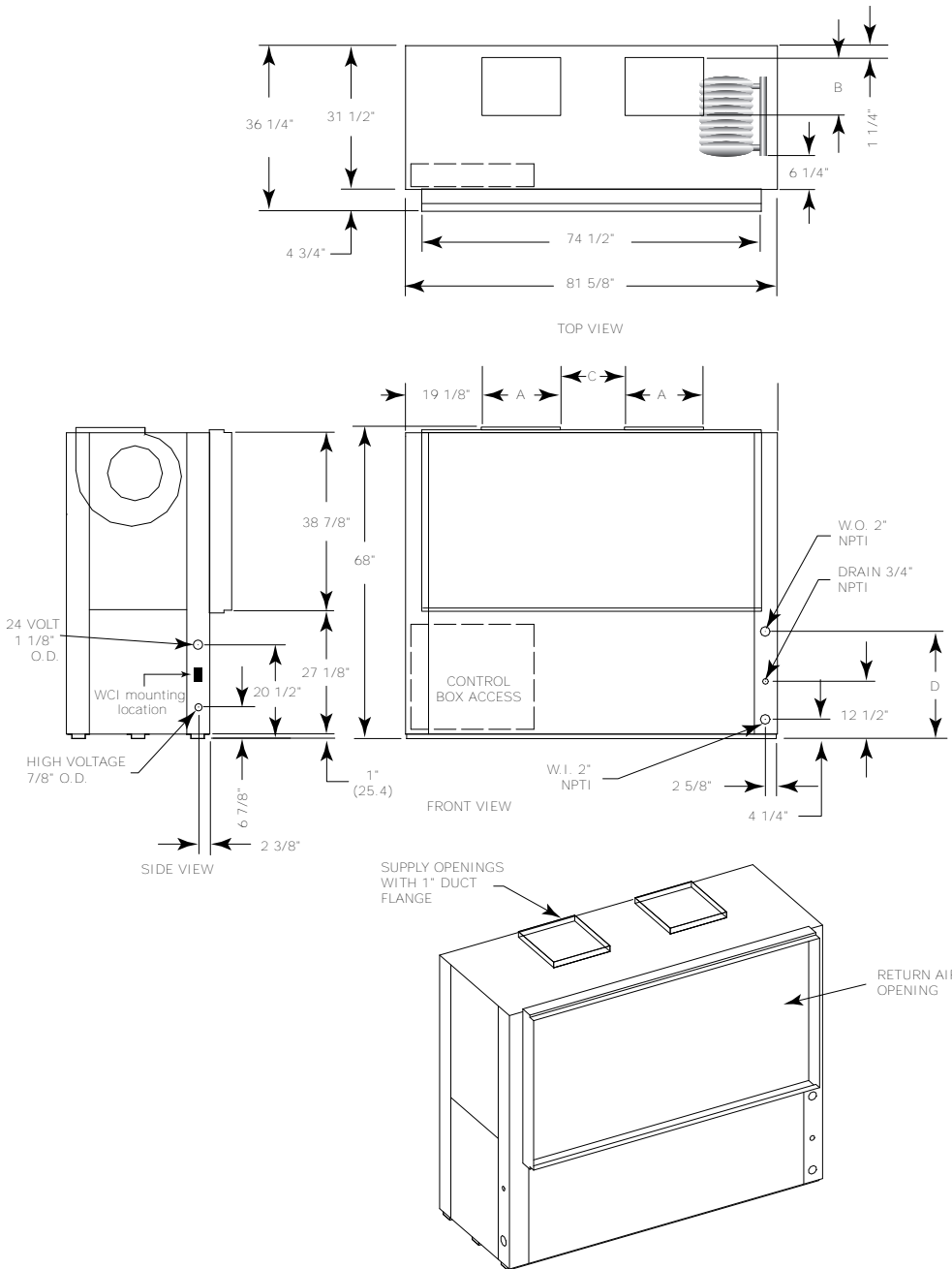
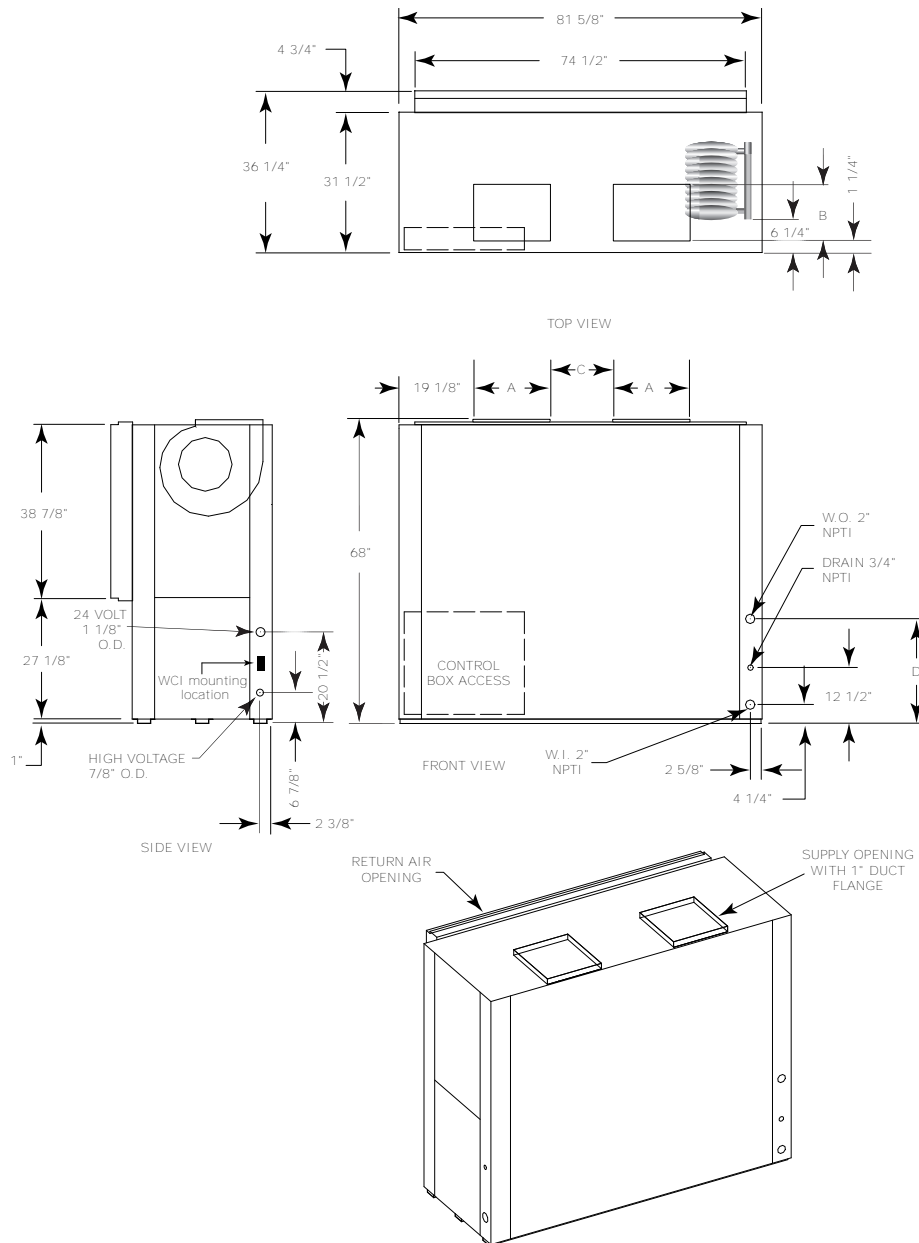


Table 178. Dimensional data front return/top supply GEVK 20 and 25 tons (60 Hz); GEVK 15 and 20 tons (50 Hz)

Unit (60 Hz)	Unit (50 Hz)	A	B	C	D
20 tons	15 tons	15-5/8 in.	13-1/2 in.	12 in.	20-7/8 in.
25 tons Std Static	20 tons Std Static	14-3/4 in.	15-7/8 in.	13-7/8 in.	23-1/2 in.
25 tons High Static	20 tons High Static	15-5/8 in.	13-1/2 in.	12 in.	23-1/2 in.

³⁴NEC requires that the GEV072-300 front return must be a non-ducted return.

Figure 73. Back return/top supply³⁵ GEVK 20 and 25 tons (60 Hz); GEVK 15 and 20 tons (50 Hz)

Table 179. Dimensional data back return/top supply GEVK 20 and 25 tons (240 and 300) 60 Hz; GEVK 15 and 20 tons (180 and 240) 50 Hz

Unit (60 Hz)	Unit (50 Hz)	A	B	C	D
20 tons	15 tons	15-5/8 in.	13-1/2 in.	12 in.	20-7/8 in.
25 tons Std Static	20 tons Std Static	14-3/4 in.	15-7/8 in.	13-7/8 in.	23-1/2 in.
25 tons High Static	20 tons High Static	15-5/8 in.	13-1/2 in.	12 in.	23-1/2 in.

³⁵NEC requires GEV072-300 front return must be non-ducted return.



Unit Dimensions

Figure 74. Waterside economizer³⁶ (GEHK)

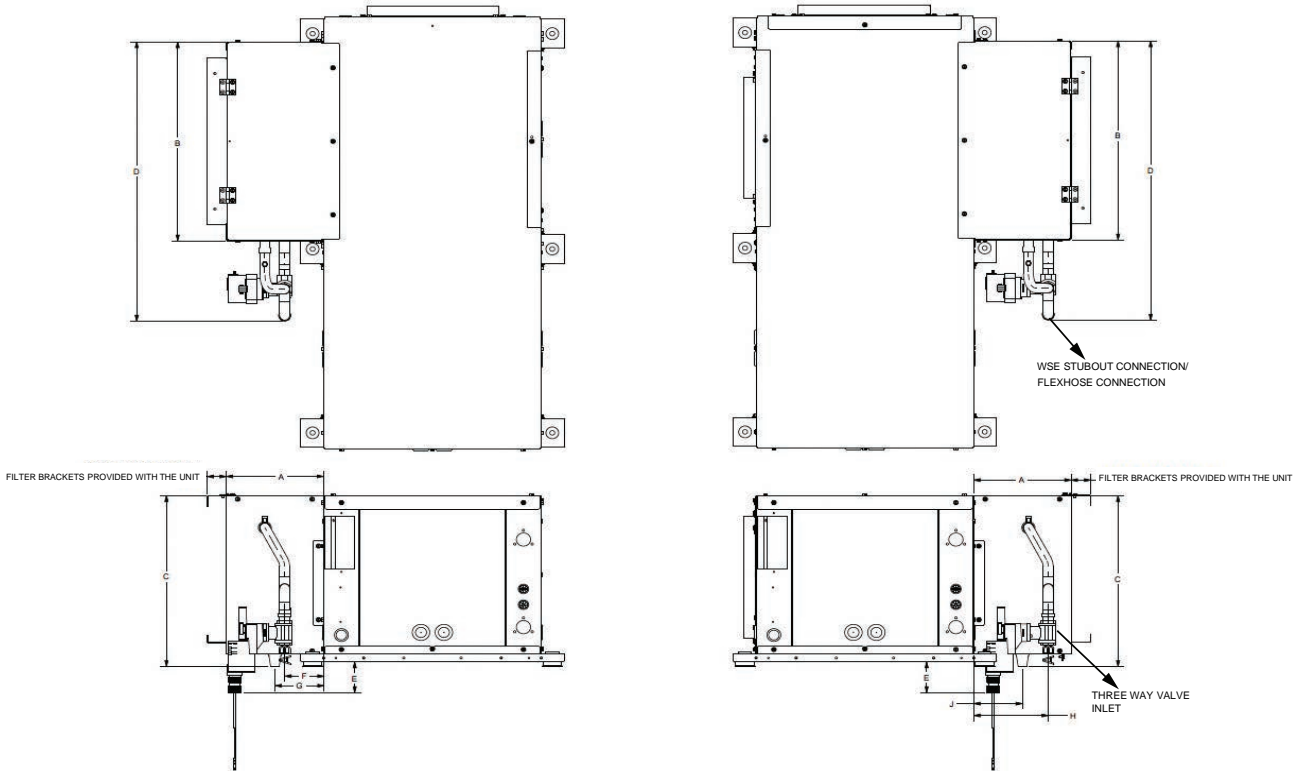


Table 180. Dimensional data waterside economizer (GEHK)

Unit	WSE Dimensions									Pipe Size	
	Width	Depth	Height	Depth W/ Piping	Cable Stick Down	Stubout Location (LH)	Drain Location (LH)	Stubout Location (RH)	Drain Location (RH)	Three Way Valve Inlet	WSE Stubout Connection/ Flex Hose Connection
	A	B	C	D	E	F	G	H	J	NPTI	NPTI
GEHK006-012	8.5	19.0	16.25	26.50	3.96	3.40	4.25	6.53	4.25	0.50	0.50
GEHK015-018		21.5	18.25	29.00						0.50	0.50
GEHK024-030		23.0	19.25	30.50	3.70					0.75	0.75
GEHK036-042		26.0	20.25	33.50	3.96					0.75	0.75
GEHK048-060		32.5	22.25	40.80	3.46			6.40	4.21	1	1

³⁶ Waterside economizer installation requires field piping.

Figure 75. Waterside economizer (GEVK)



Table 181. Dimensional data waterside economizer (GEVK)

Unit	WSE Dimensions		
	A (Width)	B (Depth)	C (Height)
GEVK006-012	8.5	19.0	16.25
GEVK015-018		21.5	18.25
GEVK024-030		23.0	19.25
GEVK036-042		26.0	20.25
GEVK048-060		32.5	22.25



Unit Dimensions

Figure 76. Waterside economizer (GEVK)

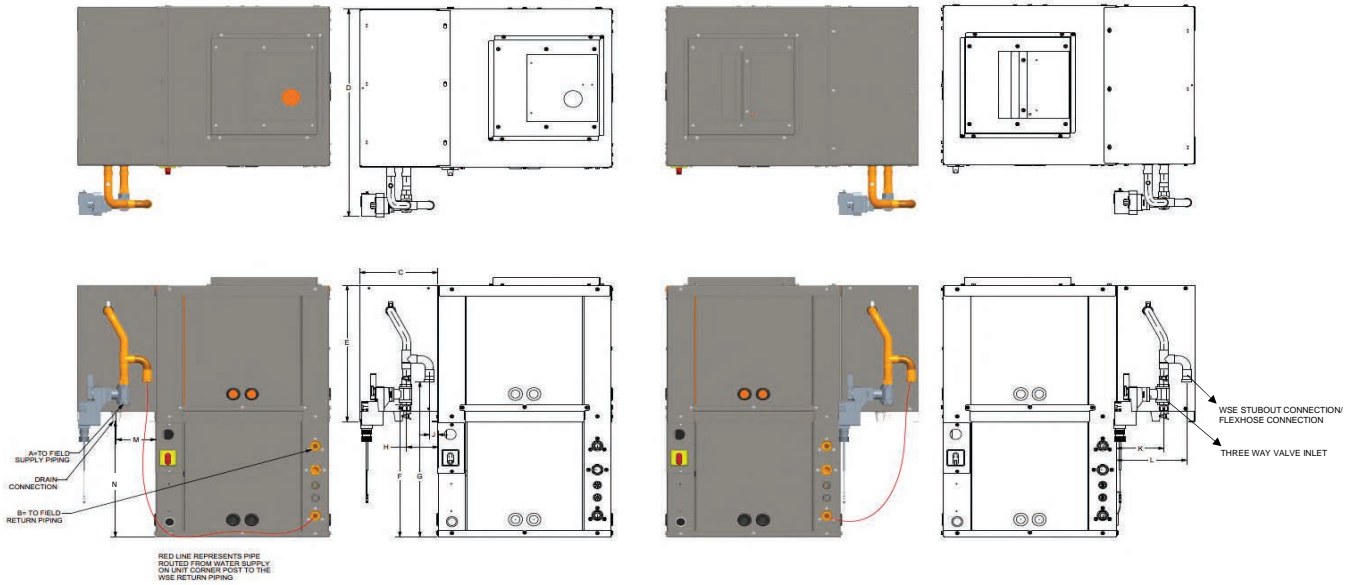
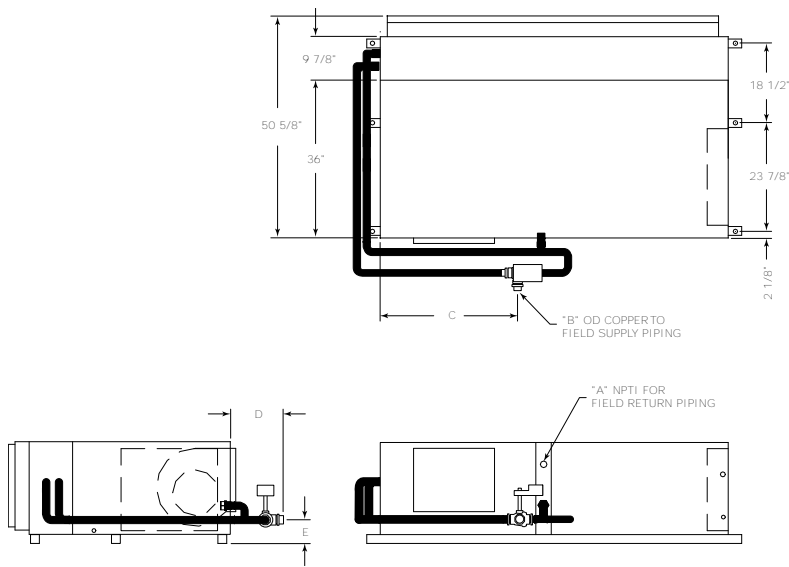
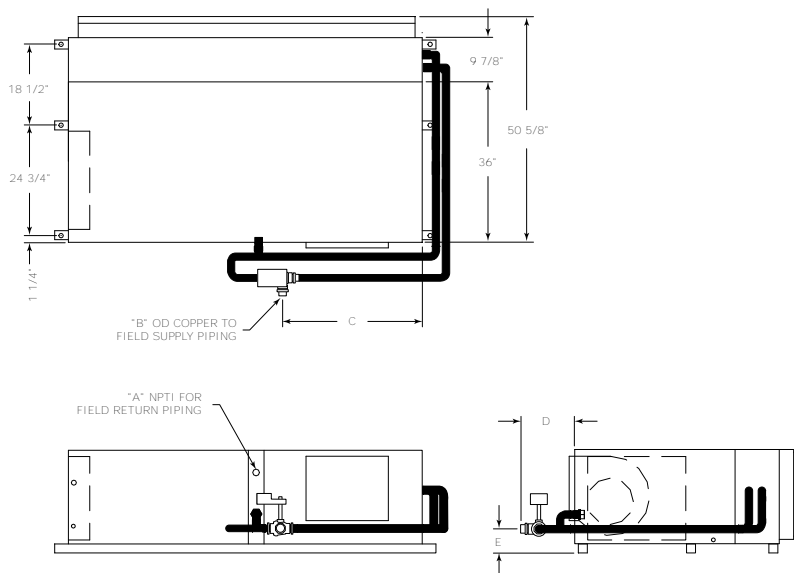


Table 182. Dimensional data waterside economizer (GEVK)

Unit	Pipe Size		WSE Dimensions										
	Three Way Valve Inlet	WSE Stubout Connection/ Flex Hose Connection	Width	Depth	Height	Height	Height	Width	Width	Width	Width	Width	Height
	NPTI	NPTI	C	D	E	F	G	H	J	K	L	M	N
GEVK006-012	0.50	0.50	8.5	25.0	16.25	15.75	18.50	3.5	0.95	5.18	7.68	4.3	13.78
GEVK015-018	0.50	0.50		27.5	18.25	17.80	20.50						15.78
GEVK024-030	0.75	0.75		29.0	19.25	18.88	21.50						16.78
GEVK036-042	0.75	0.75		32.0	20.25	19.60	22.20						17.70
GEVK048-060	1.00	1.00		39.0	22.25	22.00	24.50						19.79

Figure 77. GEHK 6 to 10 tons (60 Hz), GEHK 6 to 7.5 tons (50 Hz) - right return with waterside economizer³⁷

Figure 78. GEHK 6 to 10 tons (60 Hz), GEHK 6 to 7.5 tons (50 Hz) - left return with waterside economizer³⁷

Table 183. Dimensional data GEHK 6 to 10 tons (60 Hz), GEHK 6 to 7.5 tons (50 Hz), waterside economizer

GEH (60 Hz)	GEH (50 Hz)	A	B	C	D	E	Hanging Weight	Shipping Weight
72	—	1-1/4	1-3/8	31	9-7/8	3-7/8	138 lbs	168 lbs
90	72	1-1/4	1-3/8	31	9-7/8	3-7/8	144 lbs	174 lbs
120	90	1-1/2	1-5/8	30-3/4	12-1/2	4-1/2	166 lbs	196 lbs

³⁷. Field piping required on waterside economizer.



Unit Dimensions

Figure 79. GEHK 12.5 to 15 tons (60 Hz), GEHK 10 to 12.5 tons (50 Hz), right return with waterside economizer³⁸

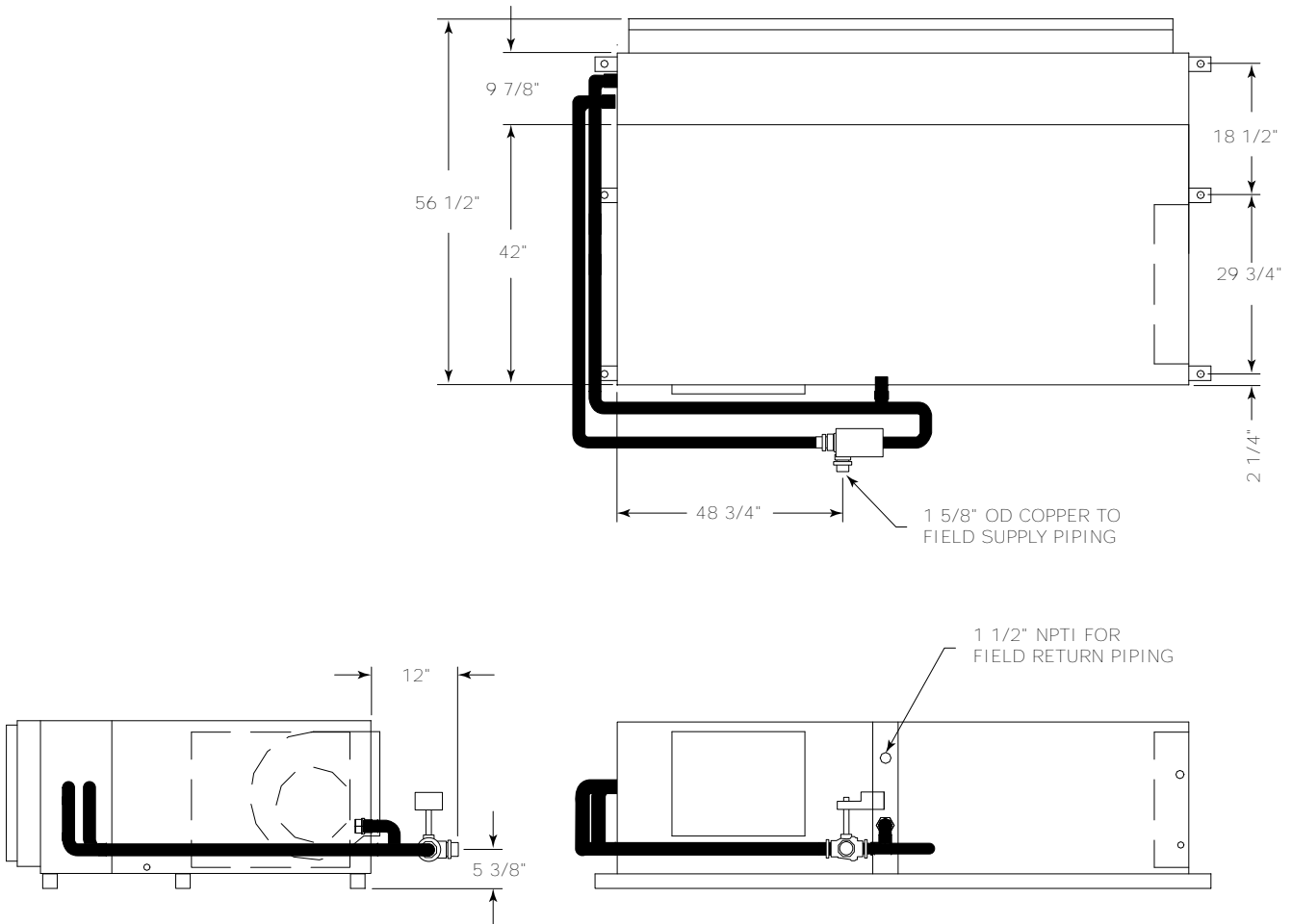
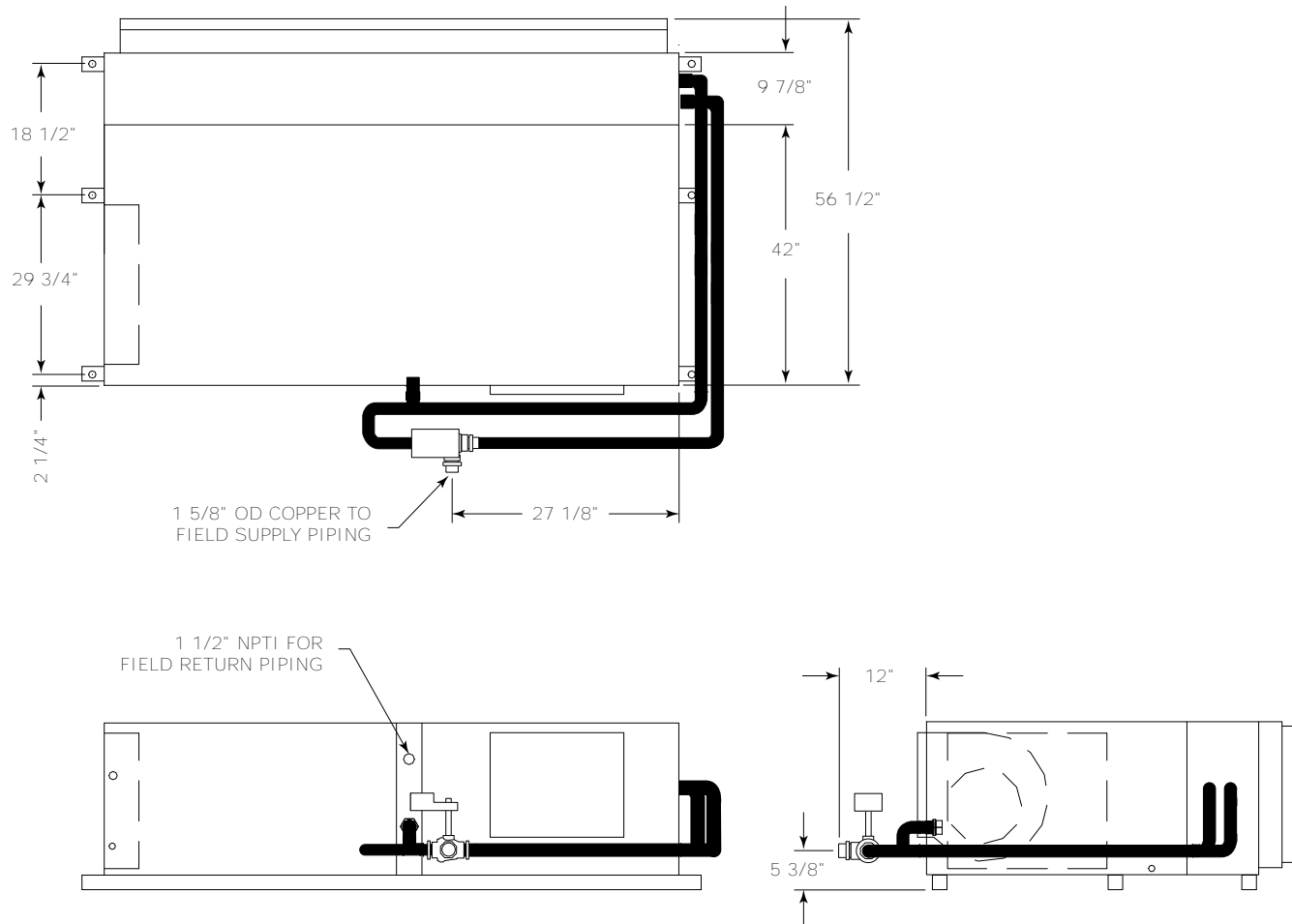


Table 184. Dimensional data GEHK 12.5 to 15 tons (60 Hz), GEHK 10 to 12.5 tons (50 Hz), right return with waterside economizer

GEHK (60 Hz)	GEHK (50 Hz)	Hanging Weight	Shipping Weight
150	120	138 lbs	168 lbs
180	150	144 lbs	174 lbs

³⁸. Field piping required on waterside economizer.

Figure 80. GEHK 12.5 to 15 tons (60 Hz), GEHK 10 to 12.5 tons (50 Hz), left return with waterside economizer³⁹

Table 185. Dimensional data GEHK 12.5 to 15 tons (60 Hz), GEHK 10 to 12.5 tons (50 Hz) - left return with waterside economizer

GEHK (60 Hz)	GEHK (50 Hz)	Hanging Weight	Shipping Weight
150 to 180	120 to 150	213 lbs	243 lbs

³⁹. Field piping required on waterside economizer.



Unit Dimensions

Figure 81. GEVK 6 to 10 tons (60 Hz), 6 and 7.5 tons (50 Hz) - waterside economizer

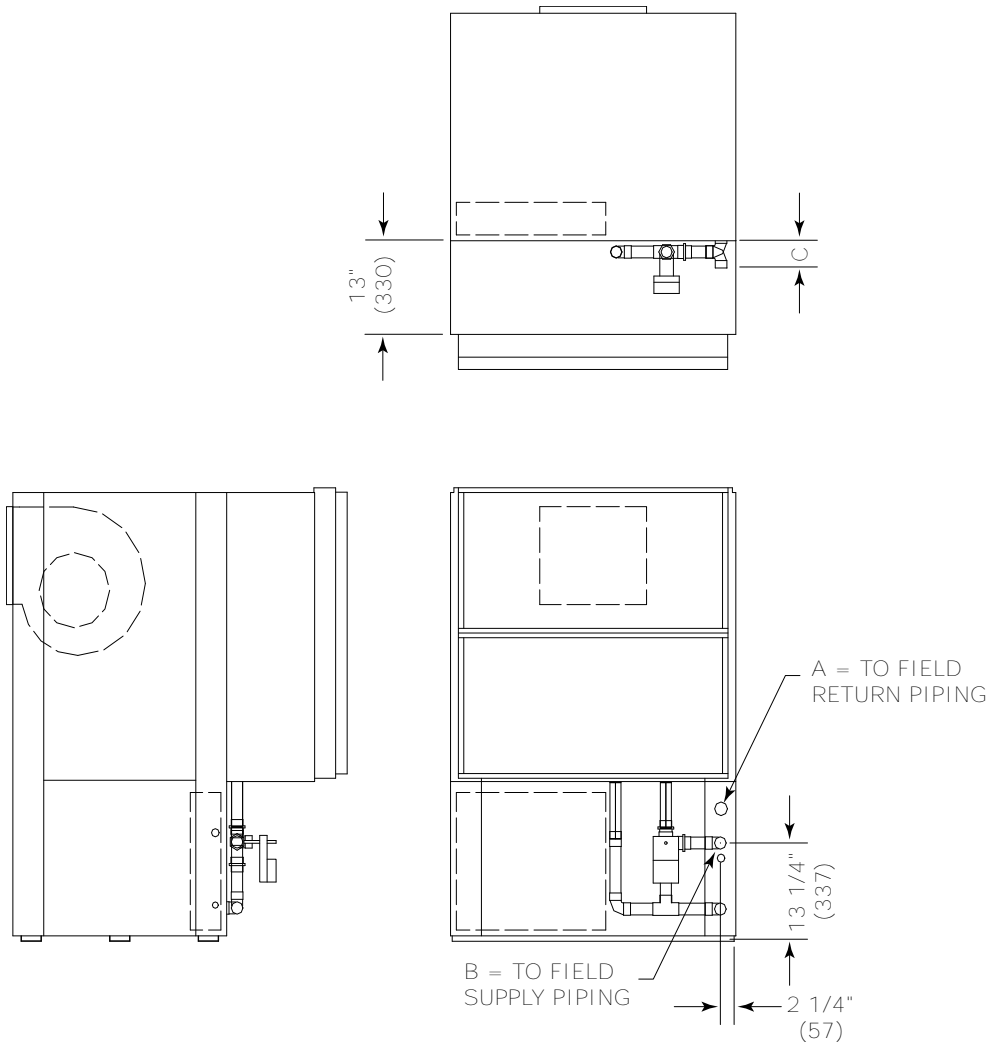
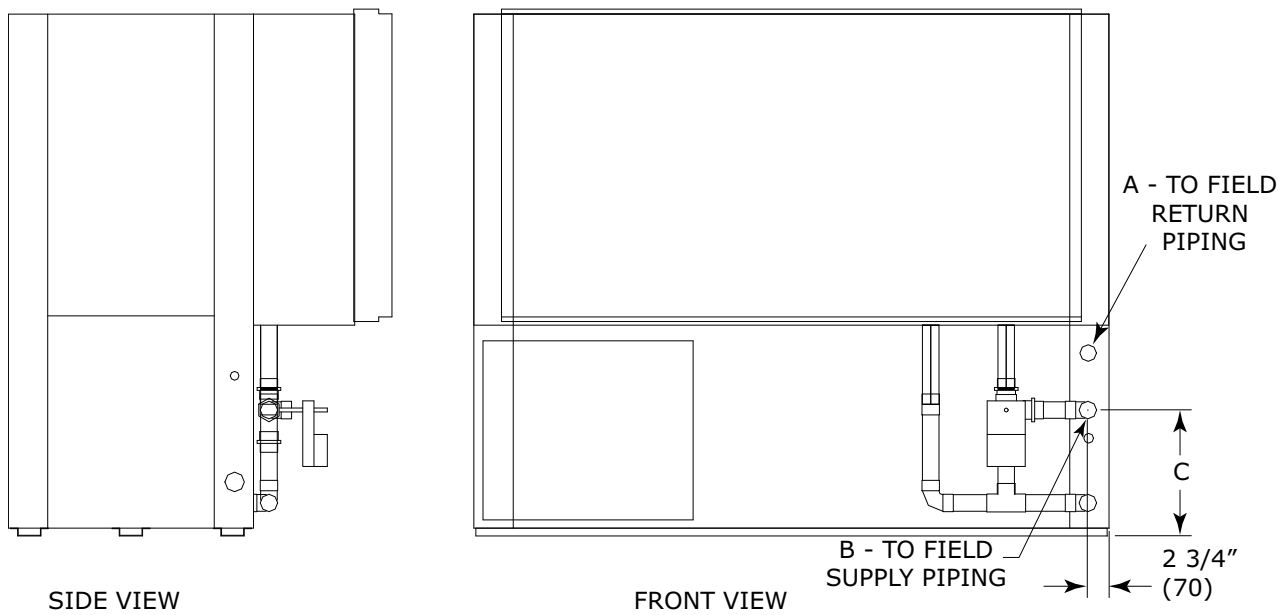
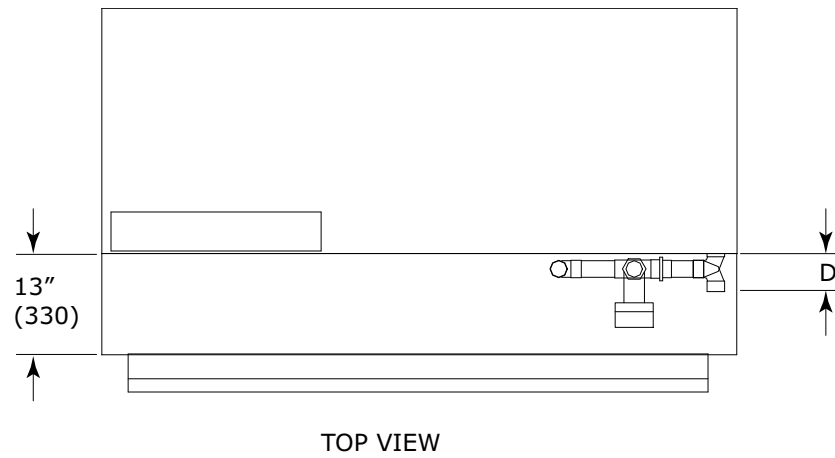


Table 186. Dimensional data GEVK 6 to 10 tons (60 Hz), 6 and 7.5 tons (50 Hz) - waterside economizer

Unit (60 Hz)	Unit (50 Hz)	A	B	C	Hanging Weight	Shipping Weight
72	—	1-1/4	1-3/8	4	148 lbs	178 lbs
90	72	1-1/4	1-1/4	4	168 lbs	198 lbs
120	90	1-1/2	1-5/8	4-3/8	207 lbs	237 lbs

Figure 82. GEVK (12.5 to 25 tons) - waterside economizer

Table 187. Dimensional data GEVK (12.5 to 25 tons) - waterside economizer

GEVK (60 Hz)	GEVK (50 Hz)	A - NPTI	B - I.D.	C	D	Hanging Weight	Shipping Weight
150-180	120-150	1-1/2	1-5/8	15-7/8	4-3/8	275 lbs	305 lbs
240	180	2	2-1/8	16-1/4	4-7/8	310 lbs	340 lbs
300	240	2	2-1/8	16-1/4	4-7/8	395 lbs	425 lbs

Figure 83. Waterside economizer piping diagram (6 to 25 tons)

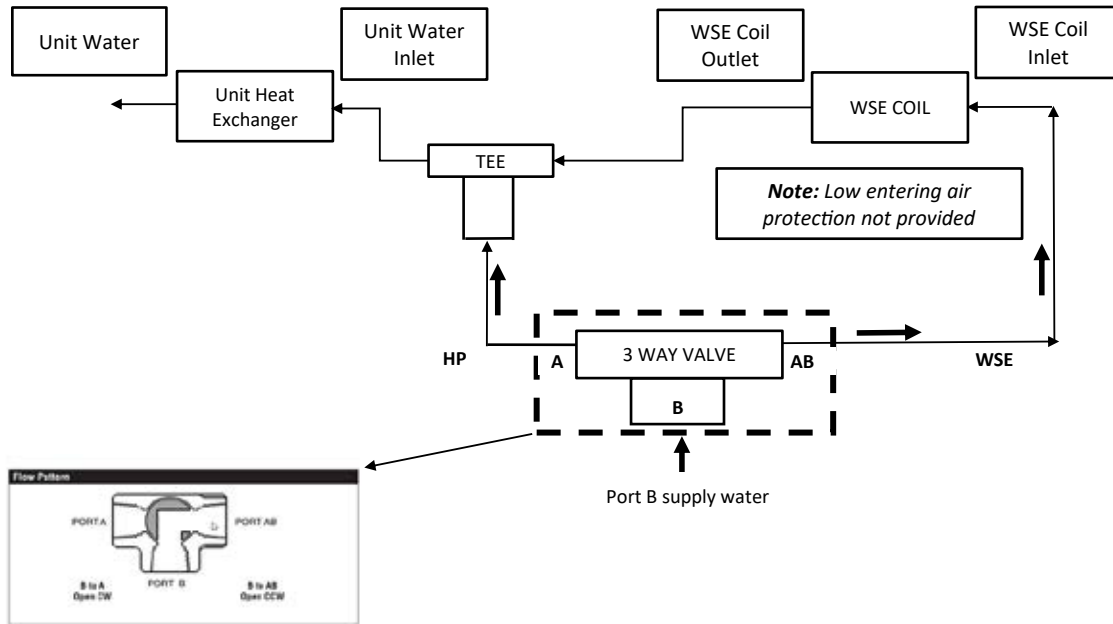
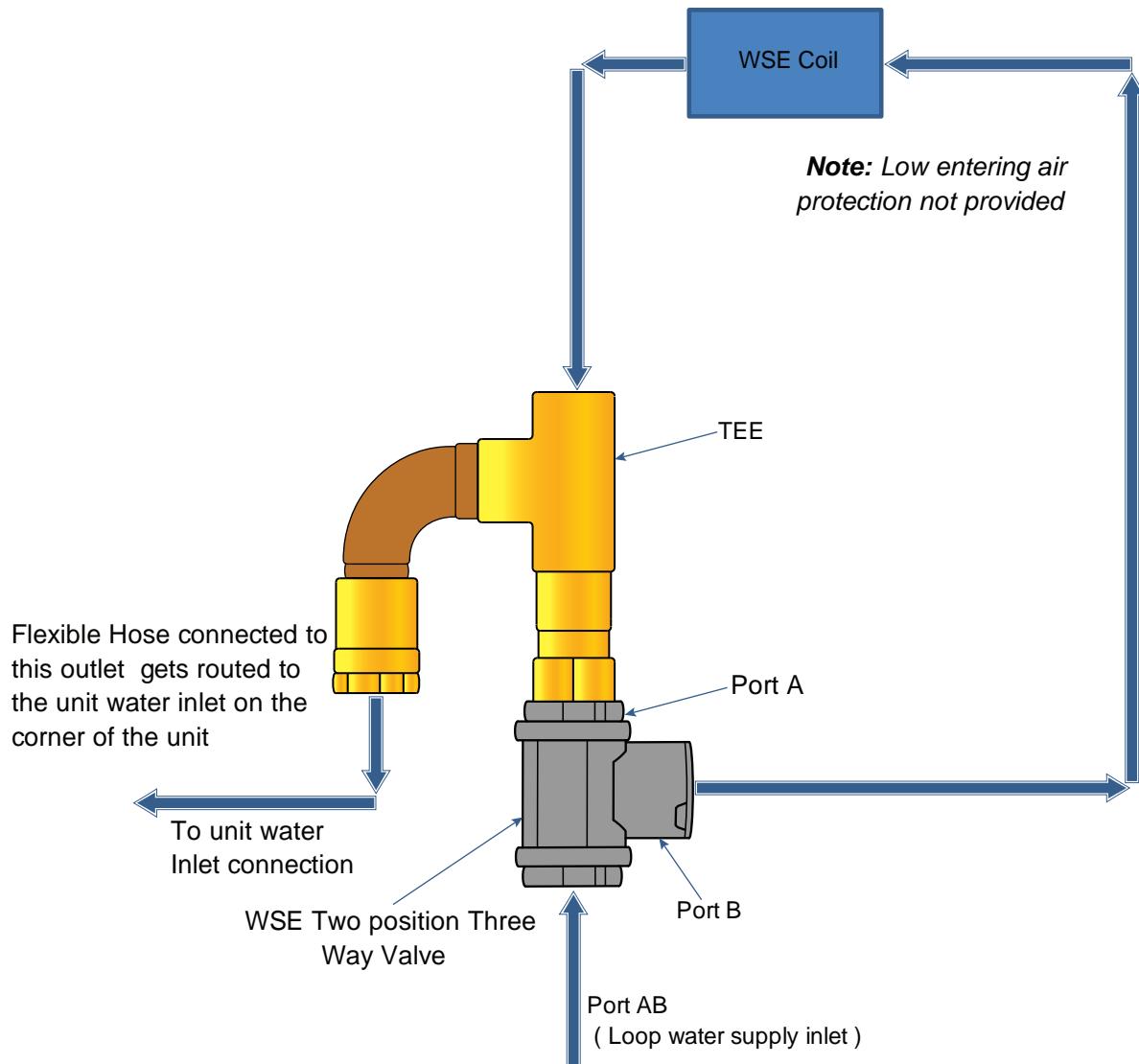


Figure 84. Waterside economizer coil piping diagram (0.5 to 5 tons)





Mechanical Specifications

General

Equipment shall be completely assembled, piped, internally wired, fully charged with R-454B and test operated at the factory. Filters, thermostat field interface Terminal Plug (TP1), and all safety controls are furnished and factory installed. The system water inlet and outlet connections shall be an inside-thread NPT composed of copper. The equipment shall contain ETL-US-C, and AHRI-ISO 13256-1 listings and labels prior to leaving the factory.

Units meet the efficiency standards of the ASHRAE 90.1- standard.

Units 135,000 BTUH and below are certified to ANSI/AHRI/ASHRAE/ISO 13256-1. Units greater than 135,000 BTUH are outside the scope of the program and are rated in accordance with ANSI/AHRI/ASHRAE/ISO 13256-1.

Service and caution area labels shall also be placed on the unit in their appropriate locations.

All units come standard with a 5-year compressor warranty.

Air-to-Refrigerant Coil

Internally finned, 3/8-inch copper tubes mechanically bonded to a configured aluminum plate fin as standard. Coils are leak tested at the factory to ensure the pressure integrity. The coil shall be leak tested to 450 psig and as working pressure up to 600 psig. The tubes are to be completely evacuated of air and correctly charged with proper volume of refrigerant prior to shipment.

The refrigerant coil distributor assembly shall be of orifice style with round copper distributor tubes. The tubes are sized consistently with the capacity of the coil. Suction header is fabricated from rounded copper pipe.

A thermostatic expansion valve is factory selected and installed for a wide range of control.

DDC Controller (Option)

The Symbio™ 400-B/500 controller shall utilize factory furnished and mounted DDC controls. The DDC control package shall include a 100 VA transformer, high and low pressure switches, condensate overflow and freeze protection. The controller shall provide random start delay, heating/cooling status, occupied/unoccupied mode, fan status and filter maintenance options.

On the GEH/V product line, the discharge air sensor and leaving water sensor are standard for Symbio 400-B/500 controls.

The controller shall be capable of a standalone application, or as applied to a full building automation installation.

With this controller, the unit shall be capable of a hot gas reheat (for dehumidification), boilerless control for electric heat, waterside economizing, and support of variable speed pump control applications.

Deluxe Controls

The deluxe control package has a 100 VA transformer with circuit breaker, low and high pressure switches, condensate overflow and freeze protection. The controller shall include a lockout function, anti-short cycle compressor protection, random start delay, brown-out protection, low pressure time delay, compressor delay on start and an open relay for pump request. Hot gas reheat or electric heat shall also be provided (option). Three LEDs (light emitting diodes) are included for diagnostics of the equipment.

Cabinet

Unit casing shall be constructed of zinc coated, heavy gauge, galvanized steel.

For 6 to 25 ton units, service to the refrigerant and controls shall be provided through a single access panel at the front of the equipment. Access to the refrigerant and controls for the larger units shall be provided through the front and side access panels.

Panels shall be insulated with either 1/2-inch thick dual density bonded glass fiber or 1/2-inch thick foil-faced glass fiber. Foil faced insulation edges are encapsulated to prevent glass fibers from entering the airstream. The glass fiber insulations have a flame spread of 25 or less and a smoke developed classification of 50 or less per ASTM E-84 and UL 723. The dual density insulation has a minimum rated service air velocity of 3600 feet per minute (FPM) and meets the erosion requirements of UL 181.

Access for inspection and cleaning of the unit drain pan, coils and fan section shall be provided. The unit shall be installed for proper access.

Procedures for proper access inspection and cleaning of the unit shall be included in the maintenance manual.

Hanging Rod Grommets

For 0.5 to 5 tons units, six rubber grommets are enclosed with every GEH* unit. These grommets are to be used in conjunction with unit hanging rods to isolate vibration. Rubber grommets are only factory provided on .5 to 5 tons units. Grommets must be ordered separately for 6 to 15 tons GEH units.

Compressor

The unit will contain a high efficiency rotary or scroll compressor. External vibration isolation shall be provided by rubber mounting devices located underneath the mounting base of the compressor. On 0.5 to 5 tons units, a second isolation of the refrigeration assembly shall be supported under the compressor mounting base.

Internal thermal overload protection shall be provided. Protection against excessive discharge pressure is provided by means of a high pressure switch. Protection against a loss of charge is provided by a low pressure safety.

Polymer Drain Pan

The condensate pan shall be constructed of corrosion resistant material and insulated to prevent sweating. The bottom of the drain pan shall be sloped on two planes which pitches the condensate to the drain connection. The drain pan shall be flame rated per UL94–5V-B. A UL508 float switch shall be installed on all units to protect against the overflow of condensate from the drain pan.

Stainless Steel Drain Pan

The stainless steel drain pan and the drain stubout shall be constructed of heavy gauge type 304 stainless steel. The bottom of the drain pan shall be sloped on two planes which pitches the condensate to the drain connection. The stainless steel material shall meet the requirements of ASTM A480/A480M and comply with the chemical composition requirements of ASTM A240. The drain pan shall be insulated to prevent moisture accumulation on the drain pan material. The drain pan insulation material shall be suitable to be used in the airflow and consists of closed cell elastomeric insulation, complying with flammability requirements of UL94-5V.

Economizing Coil

The waterside economizing package shall be an external unit accessory pre-piped and pre-wired ready for turn-key installation to the unit. The economizing coil shall be designed to perform with the WSHP at unit measured flow rate of 80°F DB/67°F WB with 45°F EWT. The working water pressure of the waterside economizer coil is 400 psi.

All hydronic coils are of 3/8-in. copper and aluminum plate fin combination. All coils shall be proof and leak tested. The proof test shall be performed at 1.5 times the maximum operating pressure and the leak test at the maximum operating pressure.

A dual sloped noncorrosive drain pan is easily accessible and cleanable for the hydronic economizing coil.

An electronic two-position, 3-way valve shall provide water flow to the economizing coil during the economizing mode. It is factory set to energize the economizing mode at 55°F, while simultaneously halting mechanical operation of the compressor.

For 0.5 to 5 tons units, hanging brackets with rubber isolation shall be provided for the horizontal version of the economizing coil option. The bracket design shall be the same throughout the equipment.

Electrical

The unit control box shall contain all necessary devices to allow heating and cooling operation to occur from a remote wall thermostat. These devices are as follows:

- 24 Vac energy limiting class II [100 VA (minimum) transformer applicable to all units].
- 24 Vac blower motor relay
- 24 Vac compressor contactor for compressor control
- Field thermostat connections shall be provided for ease of hook-up to terminal locations located in the unit's control box.
- Lockout function controls excessive cycling of the compressor shall be provided to protect the compressor during adverse operating conditions. The device may be reset by interrupting power to the 24 Vac control circuit. Reset may be done either at a remote thermostat or through a momentary main power interruption for units with thermostat controls. For units with DDC controls, the reset can be reset at the zone sensor (with an off switch) or a service tool.
- A high pressure switch shall protect the compressor against operation at refrigerant system pressures exceeding 600 psig.



Mechanical Specifications

- Factory installed wire harness shall be available for the Deluxe and Symbio™ 400-B/500 control packages.

Nameplate information shall provide MOP ratings for branch circuit protection from the primary source of power. All units have a SCCR of 5KA at 600V as labeled on the unit nameplate.

Electric Heat (Option)

For 0.5 to 5 tons units, external boilerless electric heat is composed of a control interface for a field or factory provided electric heat. The heater is placed external to the unit by the installer. Power connection to the electric heat is separate from the unit. It shall be composed of a nichrome open wire coil. The design consists of a single stage of electric heat used as a primary heating source when compressor lockout has occurred due to the entering water temperature falling below 55°F with an adjustable range between 25°F to 60°F. The electric heat option is not intended for secondary heat. All power connections to the electric heat shall be made in the control box of the electric heater. See *Electric Heat and 575V Water Source Heat Pump 0.5 to 6 Tons Installation Instructions* (WSHP-SVN011*-EN) for more information.

Boilerless Electric Heat Ready (Option)

External boilerless electric heat ready control option is composed of a control interface for a field provided electric heater. The heater is placed external to the unit by the installer. Power connection to the electric heat is separate from the unit.

Filters

One-inch or two-inch, throwaway filters are standard and factory installed. Two and four-inch MERV 8 or 13 filters are also available as an option. The filters have an average arrestance of 75% and dust holding capacity of 26-grams per square foot.

Hot Gas Reheat (Option)

Dehumidification is provided through a hot gas reheat option. Hot gas reheat is enabled when the space humidity level is above a user-selectable setpoint. When hot gas reheat is enabled, the fan speed is reduced to enhance the dehumidification effect. The coil consists of 3/8-inch copper tubes mechanically expanded into evenly spaced aluminum fins. All coils are leak tested to 450 psig and pressure tested to 600 psig at the factory.

Indoor Fan

0.5 to 5 Tons

The motor is an ECM variable speed motor with overload protection. The ECM motor is programmed to provide soft starting and a constant torque over a range of static pressures and airflows. For the Deluxe Basic control options, an ECM control board is provided that allows easy field adjustment to manually set the fan speed to meet the specific application. For the Symbio™ 400-B/500, Tracer TU must be used to set the fan speed.

The fans is placed in a draw-through configuration and shall be a centrifugal, direct drive type. They are constructed of corrosion resistant galvanized material. Removal of the motor and fan wheel is made possible utilizing the factory provided orifice ring.

6 to 25 Tons

The blower has multiple blower motor/sheave combinations available. Options of the blower motor/fan packages are selected and wired from the factory to match performance criteria suggested in the performance section. The fan(s) is placed in a draw-through configuration. They are constructed of corrosion resistant galvanized material. All 6 to 25 ton units are belt drive.

Single-Zone VAV/Variable Speed Fan Operation (0.5 to 5 Tons)

When configured with a variable speed fan, the Symbio 400-B/500 controller treats all active fan-mode requests (except OFF) as AUTO.

When in AUTO, the controller ramps up the fan between the lowest and highest speeds to meet the space demand or minimum airflow setting of the unit for specific heating/cool modes (whichever is higher). The setpoints below can be adjusted to meet individual specifications.

The following setpoints cannot be configured below the lowest possible speed of the fan:

- AV/20 Supply Fan Speed Ventilation: When configured for continuous operation, this is the speed at which the fan operates when heating and cooling stages are not active.

- AV/19 Supply Fan Speed First Stage Minimum: The lowest speed the fan operates when in the first stage of heating or cooling. The fan ramps up from this point to meet demand.
Note: Capacity must be at 100 percent for 10 minutes before the fan ramps to AV/17 setting.
- AV/17 Supply Fan Speed Maximum Heat Cool Capacity: When electric heat is not active or a single stage of a compressor is active, the fan modulates between AV19 and AV17 to meet demand. When electric heat or the second stage of compressor is active, the fan runs at AV17.
- AV/18 Supply Fan Speed Dehumidification: This is the speed at which the fan operates in the active dehumidification mode.

Single Point Power Connection

Single point power connection allows a convenient location to bring in the power supply to the unit. The one single power source powers the entire unit including the controls, compressor, blower motor, and all installed options.

Electric Heat Power Connection (Separate from Unit)

A separate power source is required to power all the electric heater options in the 0.5 to 5 ton units while the heat pump has its own separate power connection.

Refrigerant Circuits

The refrigerant circuit shall contain a thermal expansion device. Service pressure ports shall be factory supplied on the high and low pressure sides for easy refrigerant pressure or temperature testing. Filter driers are standard.

Unit Mounted Disconnect (0.5 to 5T Vertical/Horizontal Option)

Disconnect Switch is unit-mounted and easily accessed from the front of the unit. The disconnect switch can be locked in the off position with one padlock. The disconnect switch is UL508 listed.

Refrigerant Tubing

The refrigerant tubing shall be of 99% pure copper. This system shall be free from contaminants and conditions such as drilling fragments, dirt and oil. All water lines that are located in the indoor air stream shall be insulated with 3/8-inch thick elastomeric insulation. The refrigerant lines that are located in the indoor air stream that are not directly over the drain pan area shall be insulated with 3/8-inch thick elastomeric insulation.

Reversing Valve

The reversing valve is a pilot operating sliding piston type with replaceable encapsulated magnetic coil. This valve is energized in cooling.

Sound Attenuation

Sound attenuation shall be applied as a standard feature in the product design. For 0.5 to 5 ton units, the sound reduction package shall include vibration isolation to the compressor and water-to-refrigerant coil, unit base stiffeners, and a second stage of vibration isolation to the compressor and water-to-refrigerant base pan. The unit is tested and rated in accordance with AHRI 260.

Water-to-Refrigerant Heat Exchanger

The water-to-refrigerant heat exchanger shall be of a high quality co-axial coil for maximum heat transfer. The copper or optional cupro-nickel coil shall be deeply fluted to enhance heat transfer and minimize fouling and scaling. The coil has a working pressure of 400 psig on the water side and 600 psig on the refrigerant side. The factory shall provide rubber isolation to the heat exchanging device to enhance sound attenuation.



Water-to-Refrigerant Heat Exchanger and Suction Lines - Insulated Option

The water-to-refrigerant heat exchanger(s), water lines, and refrigerant suction lines shall be insulated to prevent condensation at low temperatures below 60° F. This can be added to the existing water-to refrigerant heat exchanger spec when the insulated option is selected. This would be both for the copper or optional cupro-nickel coil.

Factory Mounted Isolation Valve (Option)

The two-position valve is factory installed and wired and will open on a call for heating or cooling and close when there is no call for heating or cooling. The isolation valve has a working pressure of 360 psig for the 1/2-inch and 3/4-inch valves. The 1-inch valve has a working pressure of 600 psig.

Supply and Return Hoses

One-half inch to 1-1/4-inch hose assemblies are fire retardant coated stainless steel outer braid and a thermoplastic rubber tube with a UL94-VO rating. 1-1/2-inch to 2-1/2-inch hose assemblies are a thermoplastic rubber tube. Each assembly has a rigid outside-thread NPT on one end and a JIC swivel coupling with a JIC to outside-thread NPT adapter on the other end. Working pressure is 300 PSI for 1/2-inch to 1-1/4-inch, 200 PSI for 1-1/2-inch, and 150 PSI for 2-inch to 2-1/2-inch with a minimum burst pressure four times the working pressure. Temperature range for the hose is -40° F[C] to +190° F. All outside-thread pipe threads are shipped with thread sealant already applied, capped, and ready for installation.

Ball Valves

Each ball valve kit consists of two equally sized ball valves. During system balancing, ball valves may be opened or closed to allow more or less water to enter the heat pump. Valves can be used as shut-off for servicing.

Return Air Duct Panel (Accessory)

Return Air Duct Panel is a top and bottom flange to allow connection of return air duct and is field installed. The return air flange does not allow for a fully sealed application. It is adjustable for 1-inch or 2-inch filters.

Two-inch or Four-inch Ducted Filter Rack (Accessory)

The ducted filter rack is field mounted for the use of 2- or 4-inch filters and provides easy access to the filters from the side of the filter rack through a door that does not require a tool. Duct collars are built into the filter rack to provide an easy means to connect the duct work to the unit.

Leak Detection Sensors

Unit shall be furnished with a leak detection system from the factory when a circuit refrigerant charge exceeds 3.91 lbs. The leak detection system shall consist of one or more refrigerant detection sensors. When the system detects a leak, the unit controller shall initiate mitigation actions.



Notes



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