Product Catalog

Water Source Heat Pump Axiom™ Horizontal/Vertical — EXH/EXV, DXH/DXV

0.5 to 6 Tons – 60 Hz, High Efficiency and Two-Stage High Efficiency

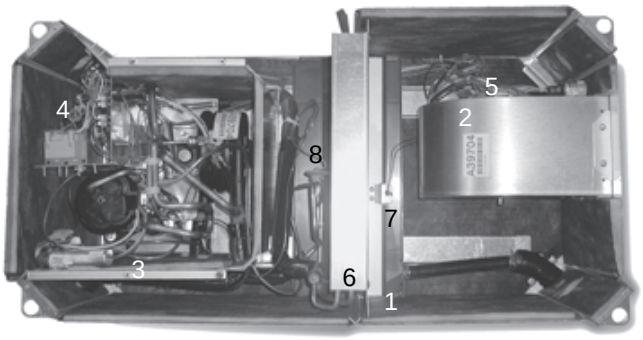
October 2021

WSHP-PRC018N-EN

Introduction

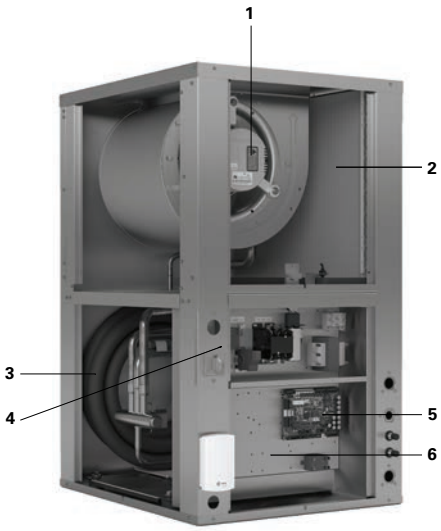
Imagine a full range of comfort utilizing efficiency, sound attenuation, integrated controls, and superior maintenance accessibility.The EXH/EXV and DXH/DXV models are Trane® water source comfort solutions. The horizontal unit is a ceiling hung product that provides a serviceability to maintenance components; 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. EXH/DXH unit



1. Dual-sloped, non-corrosive drain pan
2. Variable-speed ECM motor
3. Insulated enclosure for quiet unit design
4. Integrated controls
5. Orifice ring motor mounting device (standard for ease of motor service)
6. Internal air-to-refrigerant coil (horizontal design)
7. 24V condensate overflow switch
8. TXV

Figure 2. EXV/DXV unit



Callout Number in Figure	Description
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 UC400B controls
6	Drop down control box removable for access to internal unit components

Copyright

Trademarks

Revision History

- Updated Models EXVG009-030, Models EXVG036-070, and Models DXVG024–070 tables in the General Data chapter.
- Updated Dimensional data right return/top supply (EXVG/DXVG) graphic in the Dimensional Data chapter.
- Updated Dimensional data left return/top supply (EXVG/DXVG) and Dimensional data right return/top supply (EXVG/DXVG) tables in the Dimensional Data chapter.
- Running edits included.

Table of Contents

Features and Benefits

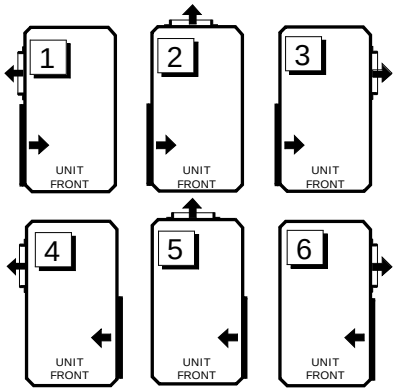
Airflow Combinations

EXH/DXH (0.5 to 6 Tons)

Note: *The DXH/DXV models are only available in 2 to 6 tons.*

The EX/DXH model configuration may be built to order or modified on-site to meet unique installation requirements.

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

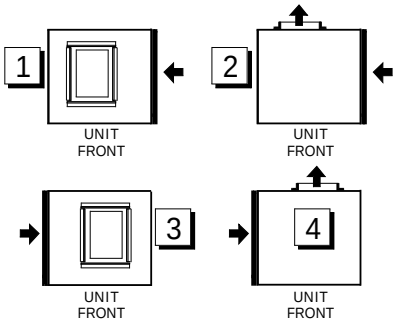


Note: *For configuration #6, it is recommended to order a bottom access filter rack with right return/right supply combination due to a potential problem with return air filter removal.*

EXV/DXV (0.75 to 6 Tons)

The EX/DXV 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



Air-Side Filter

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 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 6 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 coil is placed internal of the unit design for the horizontal model to provide an optional dual filtration application. With dual filtration to the unit, maintenance to the filter is significantly less than with a single filtration system. This design also offers maximum flexibility of the supply and return air configurations.
The maximum working pressure for the coils is 650 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. A factory-mounted orifice ring is provided for ease of motor serviceability.

In addition, air-side panels are interchangeable with one another for ease of field convertibility of the supply-air on the EXH/DXH model.

Blower Motor

The motor is an ECM variable speed motor with electronic protection. The ECM motor is programmed to provide soft starting and a constant CFM over a range of static pressure. A means to adjust the air flow is provided with a control board. Fan speed reduces down to provide 50% of the selected profile setting when the zone set point temperature is satisfied or when the unit runs in fan only mode. The motor contains a quick disconnect plug and permanently lubricated bearing. The fans are placed in a draw-through 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.

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.

Hot gas reheat is not available for both EX/DX units with the boilerless electric heat option. For both EX and DX units, supplemental or emergency heat applications are not available with the boilerless electric heat option.

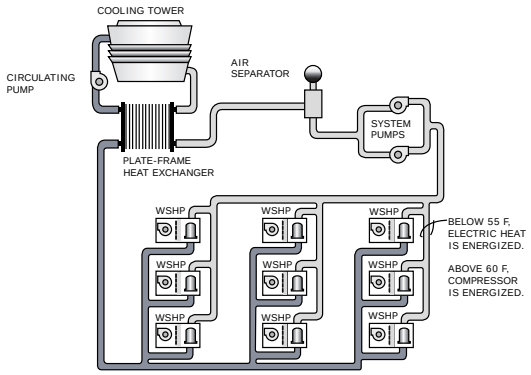
How it Works

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.*

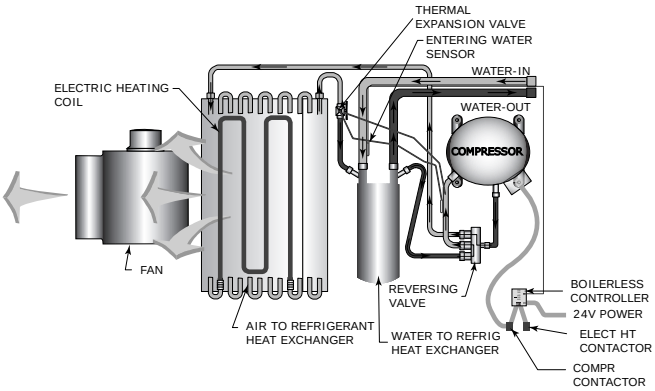
Boilerless Control, Electric Heat System

With the internal boilerless electric heat option, the heat pump encompasses an internal nichrome open wire heating element (factory mounted and wired). It is comprised of a single stage 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.



Factory Mounted and Wired Boilerless Control, Electric Heat

A boilerless controls option for field installed electric heat is also available. In this application, the heater shall be placed external to the equipment. 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.



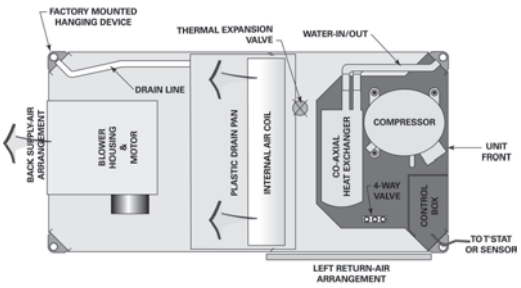
Cabinet Description

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.

The cabinet front allows service access for the controls and refrigeration circuitry. In addition, water-in/out connection, drain connection and high/low voltage hook-up is accomplished at the 45° chamfered corners on the front-side of the equipment.

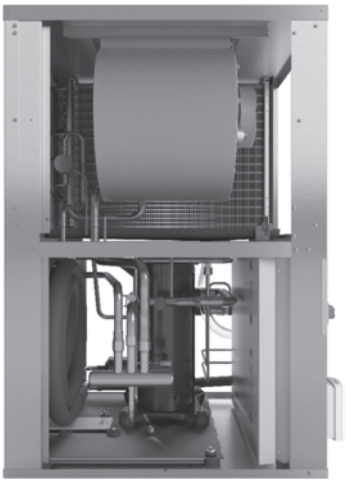
EXH/DXH Cabinet

There are six product variations of return-air and supply-air combinations which may be order-specific or job-site modified.



EXV/DXV Cabinet

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 6 tons units.
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 6 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.

Dual Filtration

Flexibility of the EX/DXH allows for dual filtration in a free return application. With the field installed dual filtration accessory, filter maintenance of the unit is significantly less.
The accessory package includes both the bottom and top filter rack, and one, 1-inch or 2-inch filter.
"Table 1, p. 12," provides dual filtration accessory numbers appropriate to unit size.

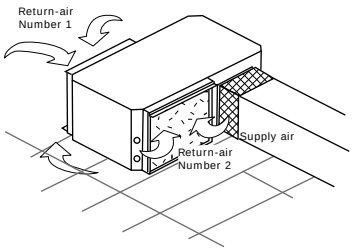


Table 1. Dual filter accessory kit numbers - 0.5 to 6 tons

Unit size	1 in. filter kit part no.	2 in. filter kit part no.
EXHF006-015	4474 0630 0100	4474 0634 0100
EXHF018-024, DXHF024	4474 6535 0100	4474 6536 0100
EXHF030-036, DXHF036	4474 5974 0100	4474 5976 0100
EXHF042-070, DXHF048-070	4474 6609 0100	4474 6610 0100

Ducted Filter Rack

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 top, bottom or side access configurations.

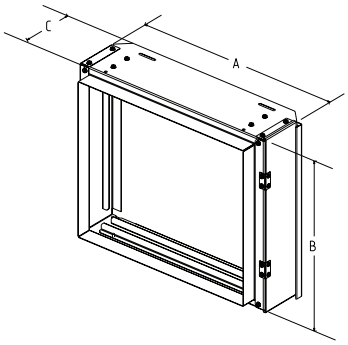


Table 2. Ducted filter opening size - 0.5 to 6 tons

Unit Size	A (in.)	B (in.)	C (in.)
EXHF006-015	21.1	15.4	5.4
EXHF018-024, DXHF024	24.5	18.4	5.6
EXHF030-036, DXHF036	26.4	19.4	5.5
EXHF042-070, DXHF048-070	30.7	21.4	5.5
EXVG009-012	19.0	16.25	6.6
EXVG015	20.5	17.25	6.6
EXVG018-024, DXVG024	23.5	18.25	6.6
EXVG030-036, DXVG036	30.0	20.25	6.6
EXVG042-048, DXVG048	30.0	27.0	6.6
EXVG060–070, DXVG060–070	30.0	32.75	6.6

Note: *All dimensions in inches. EXVG/DXVG dimensions are for accessory 2 or 4" Filter Rack.*

Ducted Panel - Return Air

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 1.5 in. 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.

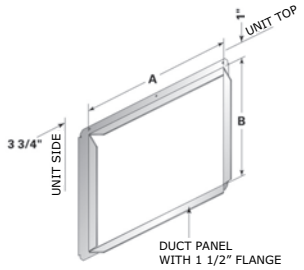


Table 3. Ducted panel - return air (EXHF/DXHF)

Unit size (60 Hz)	A (in.)	B (in.)	Duct Collar Part Number
006–015	17.5	13	447411330100
018–024	20.5	16	447456280100
030–036	22.5	17	447411350100
042–070	26.5	19	447411360100

Table 4. Ducted panel - return air (EXVG/DXVG)

Unit size (60 Hz)	A (in.)	B (in.)	Duct Collar Part Number
EXVG09–012	18.50	16.50	WSHPPND00002
EXVG015	20.00	17.50	WSHPPND00003
EXVG018–024, DXVG024	23.00	18.50	WSHPPND00004
EXVG030–036, DXVG036	29.50	20.50	WSHPPND00005
EXVG042–048, DXVG048	29.50	27.25	WSHPPND00006
EXVG060–070, DXVG070	29.50	33.25	WSHPPND00007

Expansion Valve

The refrigerant flow metering is made through the thermal expansion valve (TXV).
For EXH/V models, it allows the unit to operate with an entering fluid temperature from 25°F to 110°F on 0.5 to 1.25 ton models and 25°F to 120°F on 1.5 to 6 ton models, and entering air temperatures from 55°F to 85°F.
For DXH/V models, it allows the unit to operate with an entering fluid temperature from 25°F to 85°F in the heating mode and 45°F to 120°F in the cooling mode 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

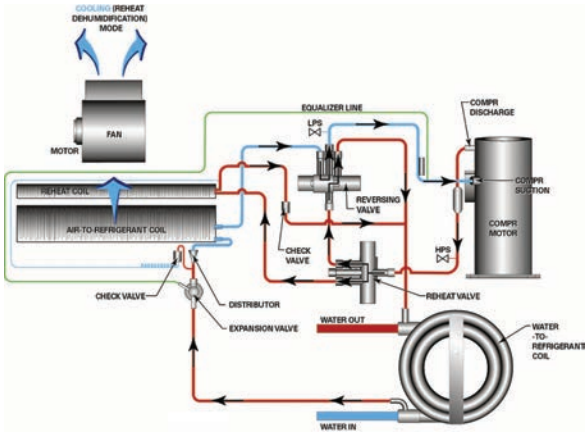
The hanging bracket resides in the chamfered corner of the horizontal 0.5 to 6 ton equipment. This partially-concealed bracket design eliminates added height, width, or length to the product. The brackets are factory mounted to shorten job installation requirements.
The structural integrity of the design 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.
This isolation device helps prevent sound vibration from reaching the structural support members of the building during compressor start and stop.

Hot Gas Reheat (EXH/V Models Only)

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.
Trane places an air separation space between the air-to-refrigerant coil, and the reheat coil to allow for maximum moisture removal.
For 0.5 to 6 ton horizontal units with UC400, a switching relay has been provided for the reheat application to adjust the blower motor from normal operation to low speed when hot gas reheat is energized.



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.

Motorized Water Valve

The 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 water consumption. The two-position motorized valve is fast opening to prevent compressor trip-out, and slow closing to prevent water hammer.

Pump Module

The pump module and hose kit make a complete self-contained pumping package for distributed pumping systems. These kits contain all the necessary components for the installation, operation and maintenance of the water circuit of a closed loop geothermal application. Standard pump module features include insulated Grundfos pumps, insulated cabinet or cast iron pump, and 3-way brass valves. Literature number WSHPC-IN-5 will provide electrical and dimensional requirements for the PMCA products.

Pump Module Hose Kit

The pump module hose kit consists of two brass, 3/4 in. or 1 in., male pipe thread (MPT)-by-barb fittings; two brass 90° 1-inch, MPT-by-barb elbows with pressure/temperature ports; and 10 ft of rubber hose with 4 hose clamps. The pump module hose kit is available separately from the pump module.

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.

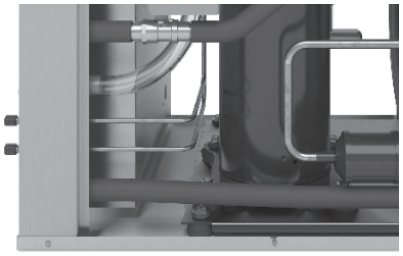
The unit's copper refrigeration system is designed to be free from contaminants and conditions such as drilling fragments, dirt, or oil. This excludes the possibility of these contaminants from damaging the compressor motor.

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

The Schrader/CoreMax® connections for the low and high side of the refrigeration system are located directly beside the control box at the front, service access panel.
EXVG/DXVG Schrader/Coremax connections shown.
EXHF/DXHF connections will be located on the suction and discharge lines with access from unit front.



Sound Attenuation Package

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 5. Sound package

Standard Sound Attenuation Package	Deluxe Sound Attenuation Package (Option)
18-gauge compressor enclosure (EXH/DXH only)	16-gauge compressor enclosure
20-gauge single wall front panel	16-gauge single wall front panel
lined compressor enclosure with 1/2-inch cabinet insulation	lined compressor enclosure with 1/2-inch cabinet insulation
14-gauge compressor/water-to-refrigerant heat exchanger pan with second stage of vibration isolation	14-gauge compressor/water-to-refrigerant heat exchanger pan with second stage of vibration isolation
compressor double vibration isolation	compressor double vibration isolation
water-to-refrigerant heat exchanger vibration isolation	water-to-refrigerant heat exchanger vibration isolation
lengthwise unit base stiffeners (EXH/DXH only)	lengthwise unit base stiffeners
	3/32-inch foam gasket sealant placed around the perimeter

Water Connections

The water-in/water-out connections to the co-axial water coil are located on the right-hand corner of the unit. The fittings are mounted flush to the wall to help limit shipping damage.
The water connection devices are constructed of copper material and include a National Female Pipe Thread (NFPT) junction. The connections are attached to the unit's corner to alleviate the need for a back-up wrench during installation.

Waterside Economizer (Option)

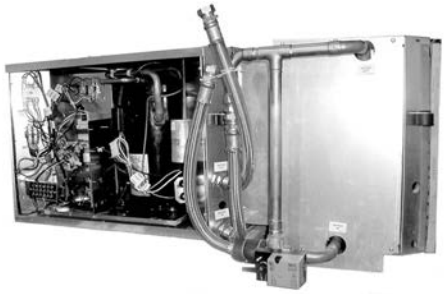
The beauty of the waterside economizer is its ability to take advantage of any loop condition that results in cool water temperatures. A prime example would be during fall, winter and spring when cooling towers have more capacity than required and could be controlled to lower temperatures for economizer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

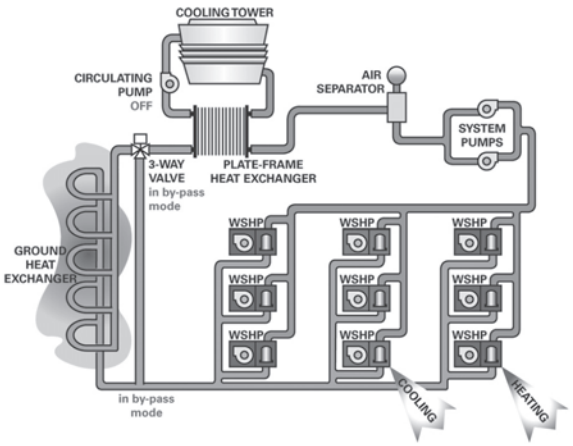
The waterside economizer is available on all 0.5 to 6 ton models.

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



Waterside Economizer System

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.



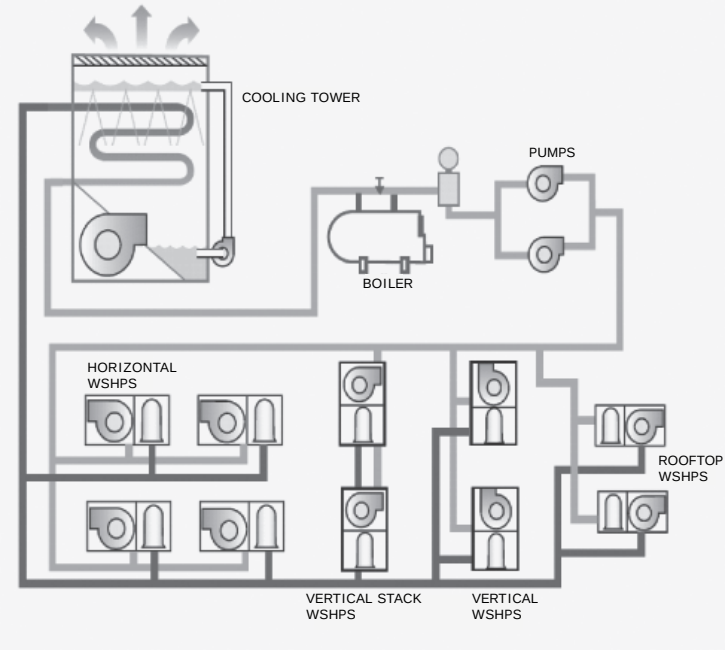
Application Considerations

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 3. 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.

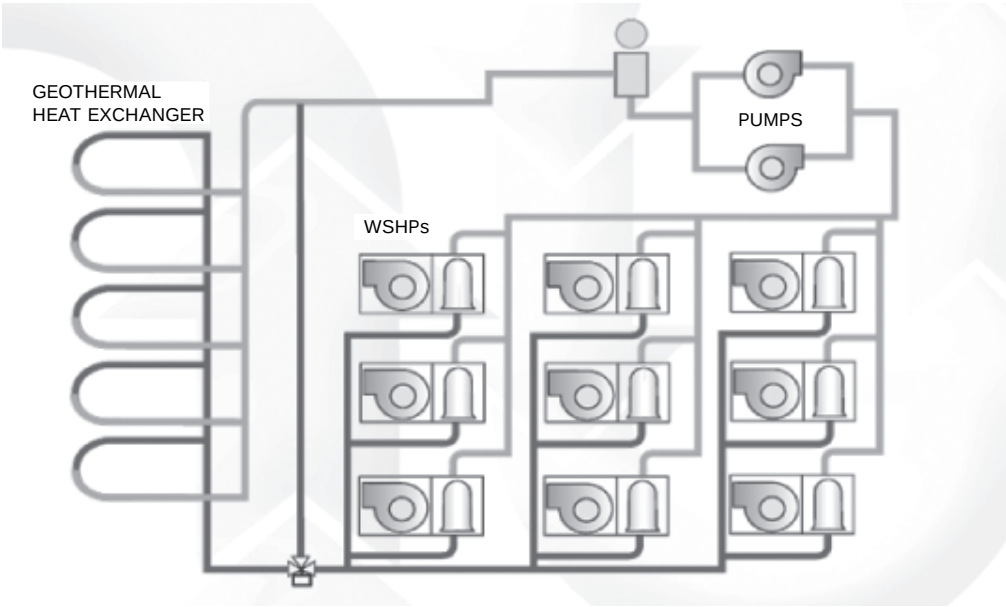
Heat rejected by the units operating in cooling mode is used to offset the heat absorbed by the units in heating mode. In this manner, a WSHP system provides a form of heat recovery and an opportunity to save energy by reducing the need to operate the boiler or cooling tower. For example, if the water 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 4. 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 5. Hybrid system

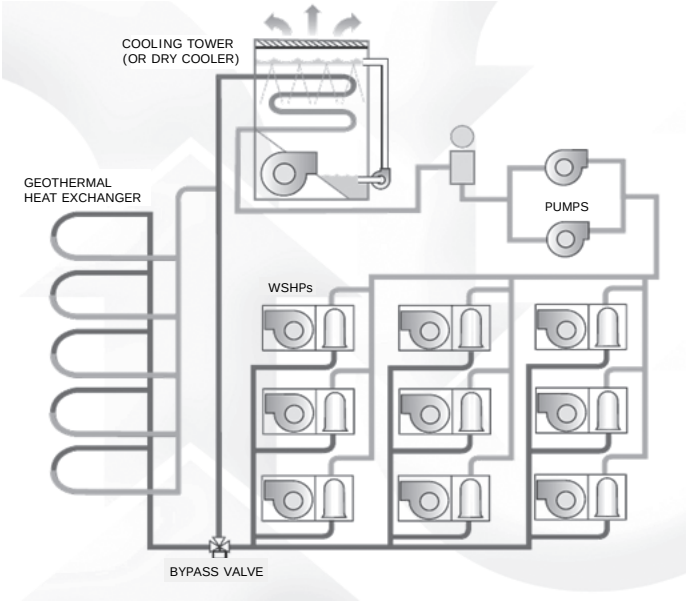
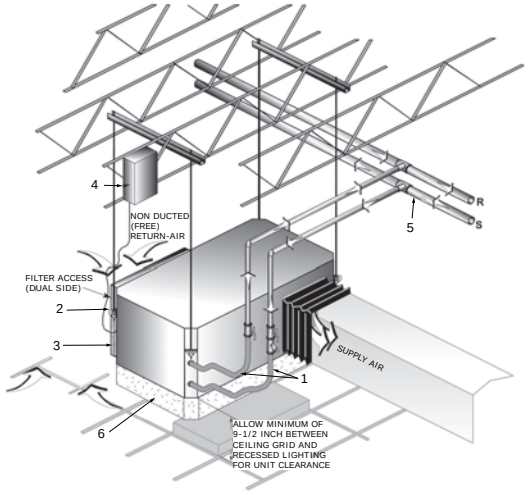


Figure 6. Central pumping system

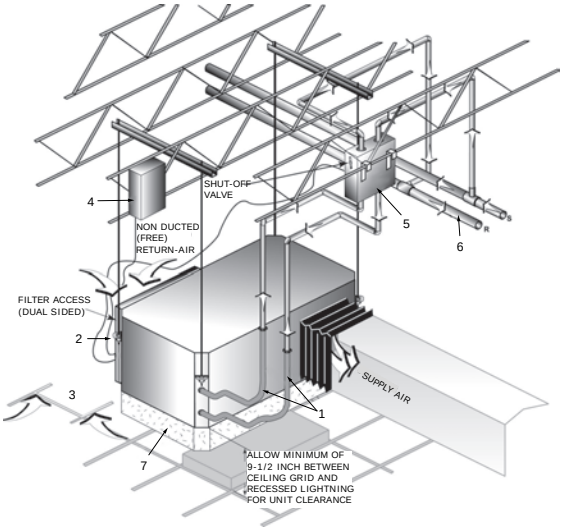


Units that employ a central pumping system contain single or dual pumps to fulfill pumping requirements for the entire building system.
The central system's supply and return lines should be sized to handle the required flow with a minimum pressure drop.
The water-source heat pump (EX/DXH) may include 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 chamfered 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 7. Distributed pumping system

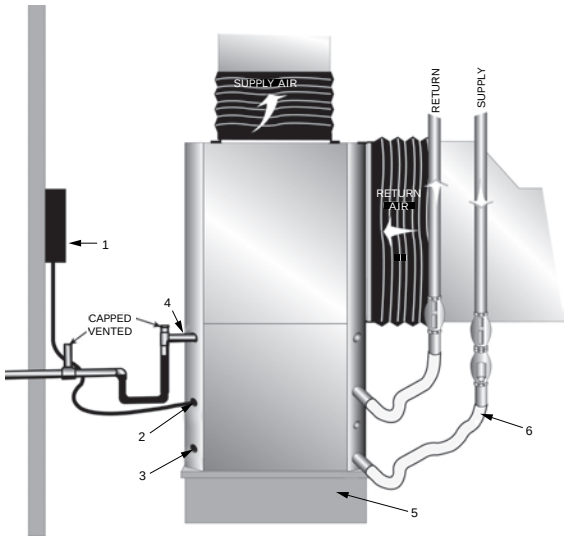


A distributed pumping system contains either a single or dual pump module, specifically sized for each water-source heat pump, then connected directly to the units supply and return lines. The distributed system's supply and return lines should be sized to handle the required flow with a minimum pressure 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) .5-inch low voltage connections are located on the left chamfered 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.
- Trane's self-contained 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. Each pump module is fully assembled for connection to water and electrical points. The kit contains all of the necessary components for the installation, operation and maintenance of a closed loop application. See WSHPC-IN-5 (72-9006-03) for electrical and dimensional requirements
- 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 8. Installation of the 0.75 to 6 tons vertical



Whether securing the 0.5 to 6 tons 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. Refer to the Axiom™ Installation and Operations manual for negative pressure trapping guidelines.

  Note: *Condensate connection for EXV/DXV 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.

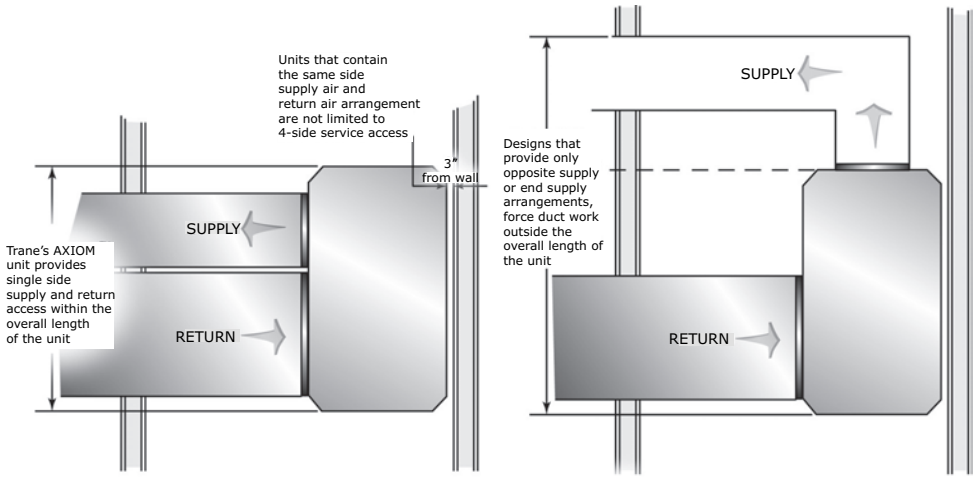
Installation Made Easy

Installing a horizontal unit inside a corridor to enhance sound attenuation provides value to duct design. Trane takes this fact one step further.

The horizontal design offers same side return-air/supply-air access to the unit. This access is contained within the overall dimension of the units length. The unit can be installed closely against a corridor wall without requiring extra space for the duct.

Most horizontal unit designs provide an opposite supply air from the return air arrangement, or an end supply arrangement option. See the end-supply example. An end-supply design increases the overall unit length of the system to accommodate a 90° duct turn. This not only requires added space, but also adds cost in both materials and installation.

Additional value to the design is acquired through the same side supply/return-air design. This design eliminates a requirement for a four-sided service access. When installing the same side return/supply-air access, a small clearance of 3-inch minimum is all that is required between the unit and the wall.

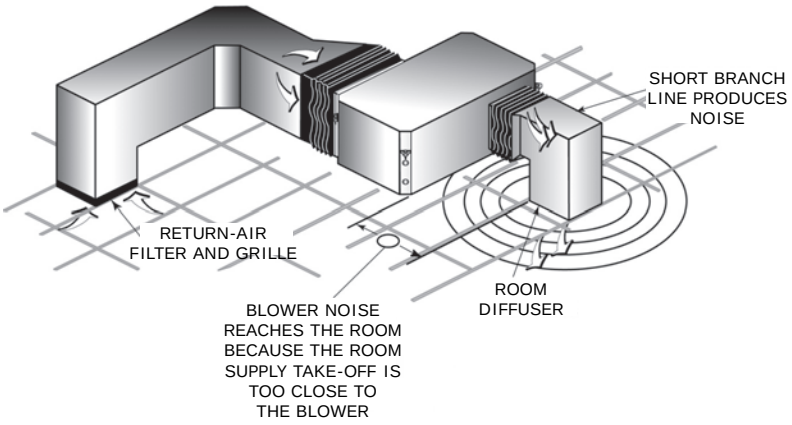


Duct Design for Noise Control

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

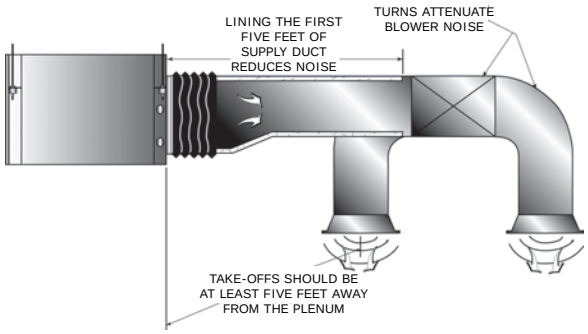
The figure below shows a supply air duct that is placed too close to the blower to provide substantial noise attenuation. It also, represents the effects on sound that a short supply branch connected to the discharge may produce. Avoid these forms of connections when designing ductwork where noise attenuation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



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

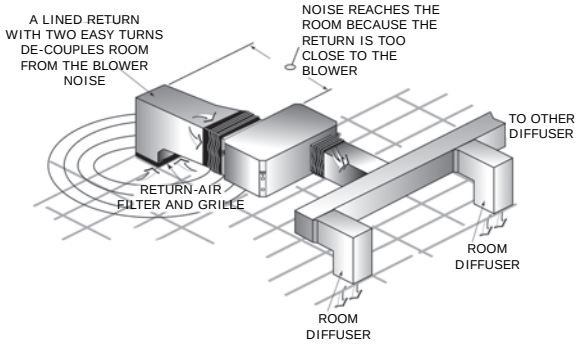
- Design the duct run with two 90° turns
- Line the first 5 feet of the supply trunk
- Line elbows and transition pieces, as well as a short distance upstream and downstream of the fittings
- Use flexible connections to isolate vibrations
- Provide multiple discharges
- Keep duct velocity low

Figure 9. Desired supply air ducting



See Figure 9, p. 26 for a positive representation of supply duct work design for noise attenuation on units over 1.5 tons.

Figure 10. Improper return-air ducting



Sound control applies to the return side of the duct design as well as the supply side. Figure 10, p. 26 demonstrates a poor installation. Note that the return air opening is close to the cabinet of the unit.

Figure 11. Proper return-air ducting

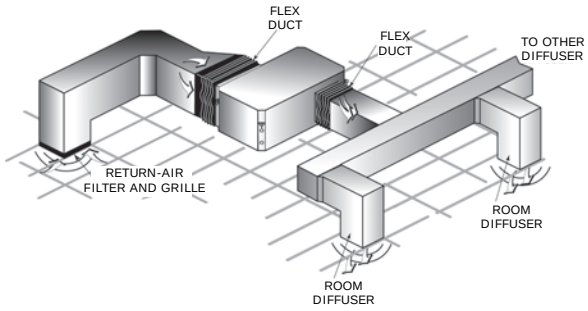


Figure 11, p. 26 graphic represents proper installation of return-air duct. This includes:

- 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 110°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, refer to the Hose Kit Accessories product catalog, WSHP-PRC025*-EN.

Model Number Description

Digits 1–3 — Unit Configuration

EXH = High Efficiency Horizontal
DXH = Two-stage High Efficiency Horizontal

Digit 4 — Development Sequence

F

Digits 5–7 — Nominal Capacity

006 = 0.5 Tons (EX only)
009 = 0.75 Tons (EX only)
012 = 1 Tons (EX only)
015 = 1.25 Tons (EX only)
018 = 1.5 Tons (EX only)
024 = 2 Tons
030 = 2.5 Tons (EX only)
036 = 3 Tons
042 = 3.5 Tons (EX only)
048 = 4 Tons
060 = 5 Tons
070 = 6 Tons

Digit 8 — Voltage (Volts/Hz/Phase)

1 = 208/60/1
2 = 230/60/1
3 = 208/60/3
4 = 460/60/3
7 = 265/60/1
8 = 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 — Current Design Sequence

Digit 11 — Refrigeration Circuit

0 = Heating and Cooling Circuit
2 = Heating and Cooling Circuit with Hot Gas Reheat (EX only)
3 = Heating and Cooling Circuit with Waterside Economizer (Horizontal only)

Digit 12 — Blower Configuration

3 = ECM Motor

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
L = Left Supply-Air Arrangement
R = Right Supply-Air Arrangement
T = Top 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
B = Tracer® ZN524 Controls
F = UC400
G = UC400 w/Wireless Comm

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 = Standard Fiberglass Insulation
2 = Foil Faced Insulation in Airstream

Digit 22 — Electric Heat

0 = No Electric Heat
1 = Internal Boilerless Electric Heat
4 = External Boilerless Electric Heat

Digit 23 — ON/OFF Switch

0 = No **"ON"/"OFF"** Switch
1 = **"ON"/"OFF"** Switch (Not available with boilerless electric heat option)

Digit 24 — Filter Type

1 = 1" Throwaway Filter
2 = 2" Throwaway Filter
4 = 2″ MERV 8
5 = 2″ MERV 13

Digit 25 — Acoustic Arrangement

0 = Enhanced Sound Attenuation
1 = Deluxe Sound Attenuation

Digits 26–34 — Does Not Apply to EXH/V, DXH/V

00000000000 = Digits 26-34 are not applicable to the EXH/V or DXH/V products

Digit 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.

EXV/DXV Models

Digits 1–3 — Unit Configuration

EXV = High Efficiency Vertical
DXV = Two-stage High Efficiency Vertical

Digit 4 — Development Sequence

G

Digits 5–7 — Nominal Size (MBH)

009 = 9.0 MBH (EX only)
012 = 12.0 MBH (EX only)
015 = 15.0 MBH (EX only)
018 = 18.0 MBH (EX only)
024 = 24.0 MBH
030 = 30.0 MBH (EX only)
036 = 36.0 MBH
042 = 42.0 MBH (EX only)
048 = 48.0 MBH
060 = 60.0 MBH
070 = 70.0 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[2]

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

Digit 16 — Return-Air Arrangement

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

Digit 17 — Control Types

B = Tracer® ZN524 Controls
D = Deluxe 24V Controls
H = UC400/B
J = UC400B w/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 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

00000000000 = Digits 26-36 are not applicable to the EXV or DXV products

Digit 37 — Ducted Filter Rack

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

Digit 38 — Isolation Valve

0 = No Isolation Valve
1 = Factory Mounted Isolation Valve

Digit 39 — Power Connection

1 = Single Point
2 = Dual Point (Electric Heat Power Separate from Unit)

Digit 40 — Drain Pan

A = Polymer Drain Pan
B = Stainless Steel Drain Pan

Model Number Note:
Notes:

1. Back Supply, Electric Heat and Deluxe Sound options to be available at later product release.
2. 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 EXHF006–024

Model EXH	006	009	012	015	018	024
Unit Size depth x length x height (in.)	20 x 40 x 15	20 x 40 x 15	20 x 40 x 15	20 x 40 x 15	23 x 46 x 18	23 x 46 x 18
Compressor type	Rotary	Rotary	Rotary	Rotary	Rotary	Scroll
Net weight (lbs.)	165	165	173	173	264	269
Ship weight (lbs.)	195	195	203	203	284	301
Filter size actual (in.)	14 5/8 x 20 1/4	14 5/8 x 20 1/4	14 5/8 x 20 1/4	14 5/8 x 20 1/4	17 7/8 x 23 7/8	17 7/8 x 23 7/8
Water in/out size (FPT)	1/2	1/2	1/2	1/2	3/4	3/4
Condensate size (NPTI)	3/4	3/4	3/4	3/4	3/4	3/4
Blower wheel Size (in.)	9 x 4	9 x 4	9 x 6	9 x 6	10 x 6	10 x 6

Table 7. Models EXHF030-070

Model EXH	030	036	042	048	060	070
Unit Size depth x length x height (in.)	25 x 50 x 19	25 x 50 x 19	33 x 58 x 21	33 x 58 x 21	33 x 58 x 21	39 x 58 x 21
Compressor type	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
Net weight (lbs.)	299	313	431	424	444	484
Ship weight (lbs.)	329	343	461	454	474	514
Filter size actual (in.)	18 5/8 x 25 3/8	18 5/8 x 25 3/8	20 5/8 x 29 3/4	20 5/8 x 29 3/4	20 5/8 x 29 3/4	20 5/8 x 29 3/4
Water in/out size (FPT)	3/4	3/4	1	1	1	1
Condensate size (NPTI)	3/4	3/4	3/4	3/4	3/4	3/4
Blower wheel Size (in.)	11 x 8	11 x 8	12 x 11	12 x 11	12 x 11	12 x 11

Table 8. Models DXHF024-070

Model DXH	024	036	048	060	070
Unit Size depth x length x height (in.)	23 x 46 x 18	25 x 50 x 19	33 x 58 x 21	33 x 58 x 21	39 x 58 x 21
Compressor type	Two-Stage Scroll	Two-Stage Scroll	Two-Stage Scroll	Two-Stage Scroll	Two-Stage Scroll
Net weight (lbs.)	269	313	424	444	484
Ship weight (lbs.)	301	343	454	474	514
Filter size actual (in.)	18 x 24	18 3/4 x 25 1/2	20 3/4 x 29 7/8	20 3/4 x 29 7/8	20 3/4 x 29 7/8
Water in/out size (FPT)	3/4	3/4	1	1	1
Condensate size (NPTI)	3/4	3/4	3/4	3/4	3/4
Blower wheel Size (in.)	10 x 6	11 x 8	12 x 11	12 x 11	12 x 11

Table 9. Models EXVG009-030

Model EXVG	009	012	015	018	024	030
Unit Size width x depth x height (in.)	21.5 x 21.5 x 34	21.5 x 21.5 x 34	21.5 x 23 x 36	21.5 x 26 x 38	21.5 x 26 x 38	24 x 32.5 x 42
Compressor type	Rotary	Rotary	Rotary	Rotary	Scroll	Scroll
Net weight (lbs.)	152	152	188	222	236	280
Ship weight (lbs.)	207	207	246	282	296	343
Filter size nominal (in.)	16 X 19	16 X 19	17 X 20	18 X 23	18 X 23	20 X 30
Water in/out size (FPT)	0.5	0.5	0.75	0.75	0.75	1

Table 9. Models EXVG009-030 (continued)

Model EXVG	009	012	015	018	024	030
Condensate size (NPTI)	0.75	0.75	0.75	0.75	0.75	0.75
Blower wheel Size (in.)	9 x 8	9 x 8	10 x 8	10 x 9	10 x 9	11 x 11

Table 10. Models EXVG036-070

Model EXVG	036	042	048	060	070
Unit Size width x depth x height (in.)	24 x 32.5 x 42	25.4 x 32.5 x 49	25.4 x 32.5 x 49	25.4 x 32.5 x 55	25.4 x 32.5 x 55
Compressor type	Scroll	Scroll	Scroll	Scroll	Scroll
Net weight (lbs.)	281	329	345	367	432
Ship weight (lbs.)	344	394	410	436	501
Filter size nominal (in.)	20 X 30	27 X 30	27 X 30	30 X 33	30 X 33
Water in/out size (FPT)	1	1	1	1	1
Condensate size (NPTI)	0.75	0.75	0.75	0.75	0.75
Blower wheel Size (in.)	11 x 11	11 x 11	11 x 11	11 x 11	11 x 11

Table 11. Models DXVG024–070

Model DXVG	024	036	048	060	070
Unit Size width x depth x height (in.)	21.5 x 26 x 38	24 x 32.5 x 42	25.4 x 32.5 x 49	25.4 x 32.5 x 55	25.4 x 32.5 x 55
Compressor type	Two-Stage Scroll	Two-Stage Scroll	Two-Stage Scroll	Two-Stage Scroll	Two-Stage Scroll
Net weight (lbs.)	236	279	354	371	437
Ship weight (lbs.)	296	342	419	440	506
Filter size nominal (in.)	18 x 23	23 x 30	27 x 30	30 x 33	30 x 33
Water in/out size (FPT)	0.75	1	1	1	1
Condensate size (NPTI)	0.75	0.75	0.75	0.75	0.75
Blower wheel Size (in.)	10 x 9	11 x 11	11 x 11	11 x 11	11 x 11

Table 12. Models EXHF006-018 air-to-refrigerant coil

Model EXH	006	009	012	015	018
Working pressure (psig)	650	650	650	650	650
Tubes high	14	14	14	14	17
Tubes deep	3	3	3	3	3
No. of circuits	1	1	2	2	2
Finned vol. (h,w,d)	14 x 16 x 2.6	14 x 16 x 2.6	14 x 16 x 2.6	14 x 16 x 2.6	16 x 19 x 2.6
Coil surface area (Sq. Ft.)	1.56	1.56	1.56	1.56	2.11
Fins per inch	12	12	12	12	12
Tube Material	Copper	Copper	Copper	Copper	Copper
Tube OD (in.)	3/8	3/8	3/8	3/8	43532
Wall thickness	0.014	0.014	0.014	0.014	0.014
Return bends	Copper	Copper	Copper	Copper	Copper

Table 13. Models EXHF024-070 air-to-refrigerant coil

Model EXH	024	030	036	042-060	070
Working pressure (psig)	650	650	650	650	650
Tubes high	17	18	18	20	20
Tubes deep	4	4	4	4	4
No. of circuits	4	4	4	5	8
Finned vol. (h,w,d)	16 x 19 x 2.6	18 x 21 x 2.6	18 x 21 x 2.6	20 x 29 x 3.46	20 x 35 x 3.46
Coil surface area (Sq. Ft.)	2.11	2.63	2.63	4.03	4.86
Fins per inch	12	12	12	12	12
Tube Material	Copper	Copper	Copper	Copper	Copper
Tube OD (in.)	43532	43532	43532	43532	43532
Wall thickness	0.014	0.014	0.014	0.014	0.014
Return bends	Copper	Copper	Copper	Copper	Copper

Table 14. Models DXHF024-070 air-to-refrigerant coil

Model DXH	024	030	036	042-060	070
Working pressure (psig)	650	650	650	650	650
Tubes high	17	18	20	20	20
Tubes deep	4	4	4	4	4
No. of circuits	4	4	5	5	8
Finned vol. (h,w,d)	16 x 19 x 2.6	18 x 21 x 2.6	20 x 29 x 3.46	20 x 29 x 3.46	20 x 35 x 3.46
Coil surface area (Sq. Ft.)	2.11	2.63	4.03	4.03	4.86
Fins per inch	12	12	12	12	12
Tube Material	Copper	Copper	Copper	Copper	Copper
Tube OD (in.)	43532	43532	43532	43532	43532
Wall thickness	0.014	0.014	0.014	0.014	0.014
Return bends	Copper	Copper	Copper	Copper	Copper

Table 15. Models EXVG009-070 air-to-refrigerant coil

Model EXVG	009-012	015	018-024	030-036	042-048	060-070
Working Pressure (psig)	650	650	650	650	650	650
Tubes High	16	17	20	20	27	33
Tubes Deep	3	3	3	3	3	3
No. of Circuits	1	2	3	5	5	6
Finned vol. (h,w,d)	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	27 x 28.25 x 2.6	33 x 28.25 x 2.6
Coil Surface Area (Sq. Ft.)	1.92	2.21	3.02	3.92	5.3	6.47
Fins per Inch	14	14	14	14	14	14
Tube Material	Copper	Copper	Copper	Copper	Copper	Copper
Tube OD (in.)	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
Return Bends	Copper	Copper	Copper	Copper	Copper	Copper

Table 16. Models DXVG024-070 air-to-refrigerant coil

Model DXVG	024	036	048	060	070
Working Pressure (psig)	650	650	650	650	650
Tubes High	20	20	27	33	33

Table 16. Models DXVG024-070 air-to-refrigerant coil (continued)

Model DXVG	024	036	048	060	070
Tubes Deep	3	3	3	3	3
No. of Circuits	3	5	5	6	6
Finned vol. (h,w,d)	18 x 21.75 x 2.6	20 x 28.25 x 2.6	27 x 28.25 x 2.6	33 x 28.25 x 2.6	33 x 28.25 x 2.6
Coil Surface Area (Sq. Ft.)	3.02	3.92	5.3	6.47	6.47
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

Performance Data

Table 17. ANSI/AHRI/ASHRAE/ISO13256-1 WLHP, GWHP and GLHP performance - 0.5 to 6 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
EXHF006	1.8	215	7,400	14.21	8,600	4.68	8,000	19.68	7,400	4.20	7,800	16.48	5,600	3.25
EXHF009	2.1	285	8,800	14.11	10,800	5.15	9,100	18.42	8,900	4.49	9,100	16.00	6,800	3.63
EXHF012	2.8	380	11,500	14.62	14,300	4.98	13,700	25.08	11,700	4.31	12,400	17.73	8,800	3.45
EXHF015	3.5	475	15,100	14.49	18,300	4.58	17,500	23.68	15,200	4.01	15,900	16.95	11,300	3.25
EXHF018	4.2	570	18,800	15.74	23,300	4.87	19,200	21.03	19,100	4.30	19,800	17.71	14,200	3.44
EXHF024	5.6	760	23,800	16.00	27,700	4.80	25,900	23.80	24,100	4.50	24,700	18.00	17,900	3.60
EXHF030	7.0	950	28,300	16.41	34,400	5.38	32,200	24.30	28,000	4.60	29,700	18.70	21,100	3.70
EXHF036	8.4	1140	34,600	17.00	42,700	5.40	39,700	25.80	35,500	4.80	36,400	19.10	26,700	3.78
EXHF042	9.8	1330	42,000	16.80	50,500	5.30	45,800	23.30	42,000	4.70	43,500	18.50	32,500	3.89
EXHF048	11.2	1520	46,700	16.10	59,000	5.30	50,600	22.40	46,900	4.56	47,900	17.70	36,300	3.76
EXHF060	14.0	1700	54,400	13.85	74,300	4.65	61,700	21.02	61,500	4.19	57,400	16.31	48,100	3.52
EXHF070	15.4	2090	65,000	14.42	80,500	4.46	70,700	20.70	65,500	3.95	67,500	16.45	48,300	3.20
EXVG009	2.25	285	7900	16.10	9900	5.6	8800	25.0	8200	4.8	8300	18.8	6100	3.7
EXVG012	3.00	380	11600	16.40	15200	5.8	13700	27.9	12300	5.0	12300	19.5	9300	4.0
EXVG015	3.75	475	15100	16.10	18700	5.3	17000	25.8	15300	4.6	15800	19.0	12100	3.8
EXVG018	4.50	570	18800	17.60	23600	5.7	21100	28.7	18800	4.9	19600	20.6	14600	4.1
EXVG024	6.00	760	24600	17.40	32100	5.7	27400	27.2	25900	5.0	25600	20.3	19500	3.9
EXVG030	7.50	950	31400	17.80	38400	5.8	35000	27.2	31000	5.0	32800	20.7	23600	4.1
EXVG036	9.00	1140	35500	17.60	43100	5.8	39400	26.5	35000	5.0	37100	20.4	27200	4.1
EXVG042	10.50	1330	38400	18.00	48000	6.4	43300	27.5	38500	5.5	40500	21.1	29400	4.3
EXVG048	12.00	1520	45400	17.70	55600	6.1	50400	26.4	44800	5.3	47100	20.3	34600	4.3
EXVG060	15.00	1900	55700	17.50	69000	5.9	60800	25.7	55900	5.1	57700	20.1	42900	4.1
EXVG070	17.50	2215	63800	17.30	82100	5.40	68900	24.90	66900	4.80	66100	19.80	52000	4.10

Note: Rated in accordance ANSI/AHRI/ASHRAE/ISO13256-1. Certified conditions are 80.6°F DB/66.2°F WB EAT in cooling and 68°F DB/59°F WB EAT in heating. Entering liquid temperature in cooling is 86°F for Water Loop, 77°F for Ground Loop (full load), 68°F for Ground Loop (part load), and 59°F for Ground Water. Entering liquid temperature in heating is 68°F for Water Loop, 32°F for Ground Loop (full load), 41°F for Ground Loop (part load), and 50°F for Ground Water.

Table 18. ANSI/AHRI/ASHRAE/ISO13256-1 WLHP, GWHP and GLHP performance - 2 to 6 tons

Model	Load	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
DXHF024	Part	5.6	608	19,600	19.4	23,800	5.9	22,200	32.2	18,900	4.9	21,500	27.7	16,000	4.2
DXHF024	Full	5.6	760	26,200	17.7	31,700	5.4	29,100	26.0	25,600	4.7	27,400	20.4	18,700	3.8
DXHF036	Part	8.4	912	27,700	18.8	34,400	5.7	31,200	31.5	28,200	5.1	30,200	27.2	24,000	4.3
DXHF036	Full	8.4	1140	37,400	16.3	47,500	5.1	41,800	24.1	39,500	4.7	39,100	18.7	29,200	3.8
DXHF048	Part	11.2	1216	38,200	19.2	46,400	5.9	42,800	31.6	37,500	4.9	41,100	26.7	32,700	4.4
DXHF048	Full	11.2	1520	51,200	17.2	62,400	5.4	56,600	24.7	50,800	4.8	53,000	19.5	38,800	3.9
DXHF060	Part	14.0	1360	44,100	17.0	59,700	5.6	50,400	27.2	48,100	4.8	48,800	23.8	41,100	4.2
DXHF060	Full	14.0	1700	59,300	15.1	82,000	5.1	66,800	20.9	67,400	4.6	62,100	17.2	50,800	3.8

Table 18. ANSI/AHRI/ASHRAE/ISO13256-1 WLHP, GWHP and GLHP performance - 2 to 6 tons (continued)

Model	Load	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
DXHF070	Part	15.4	1672	52,500	17.0	67,100	5.2	58,300	27.6	54,600	4.5	56,600	23.7	47,900	4.1
DXHF070	Full	15.4	2090	67,800	15.5	88,300	4.9	74,100	22.1	72,700	4.5	70,400	17.6	56,800	3.8
DXVG024	Full	6.0	760	24700	16.8	32100	5.5	27500	24.4	25700	4.9	25900	19.2	19400	3.9
DXVG024	Part	6.0	608	18500	17.7	24100	5.9	20500	28.3	18900	4.9	20000	24.5	16300	4.3
DXVG036	Full	9.0	1140	33000	17.3	40900	5.9	37100	25.1	32900	5.1	34500	19.7	25500	4.1
DXVG036	Part	9.0	912	24500	18.3	30500	6.3	27600	29.3	24300	5.2	26600	25.2	21100	4.5
DXVG048	Full	12.0	1520	45200	17.9	55200	6.1	50400	26.4	44400	5.3	46600	20.6	34500	4.3
DXVG048	Part	12.0	1216	32800	18.7	40000	6.6	36900	31.2	31900	5.3	35700	26.7	28000	4.7
DXVG060	Full	15.0	1900	52100	17.6	63900	6.0	56600	24.8	51700	5.2	53900	19.9	39800	4.2
DXVG060	Part	15.0	1520	38300	18.7	47300	6.6	42000	29.9	37800	5.4	41000	25.8	32400	4.6
DXVG070	Full	17.5	2215	64400	17.3	82700	5.4	69100	23.8	67400	4.8	66800	19.6	52900	4.0
DXVG070	Part	17.5	1772	47100	18.9	59700	6.0	51100	29.7	48000	5.0	50000	25.6	42000	4.4

Note: Rated in accordance with ANSI/AHRI/ASHRAE/ISO13256-1. Certified conditions are 80.6°F DB/66.2°F WB EAT in cooling and 68°F DB/59° F WB EAT in heating. Entering liquid temperature in cooling is 86°F for Water Loop, 77°F for Ground Loop (full load), 68°F for Ground Loop (part load), and 59°F for Ground Water. Entering liquid temperature in heating is 68°F for Water Loop, 32°F for Ground Loop (full load), 41° F for Ground Loop (part load), and 50°F for Ground Water.

Cooling and Heating Capacities 0.5 tons

Table 19. Cooling capacities 0.5 tons (gross) - EXHF006

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Power kW	EER	Reject Mbtuh	LWT	Feet Head
45	1.1	8.84	6.55	0.74	0.370	23.9	10.10	63.4	1.9
45	1.4	8.91	6.58	0.74	0.357	25.0	10.13	59.5	2.9
45	1.6	8.94	6.59	0.74	0.351	25.5	10.14	57.7	3.7
45	1.7	8.95	6.59	0.74	0.348	25.7	10.14	56.9	4.1
45	1.8	9.06	6.64	0.73	0.351	25.8	10.26	56.4	4.6
45	1.9	9.07	6.64	0.73	0.350	25.9	10.26	55.8	5.0
45	2.0	9.11	6.67	0.73	0.349	26.1	10.30	55.3	5.5
55	1.1	8.52	6.41	0.75	0.402	21.2	9.89	73.0	1.8
55	1.4	8.59	6.44	0.75	0.388	22.1	9.91	69.2	2.8
55	1.6	8.62	6.45	0.75	0.382	22.6	9.92	67.4	3.6
55	1.7	8.63	6.45	0.75	0.379	22.8	9.92	66.7	4.0
55	1.8	8.66	6.47	0.75	0.378	22.9	9.95	66.1	4.4
55	1.9	8.65	6.46	0.75	0.375	23.1	9.93	65.5	4.8
55	2.0	8.69	6.48	0.75	0.374	23.2	9.97	65.0	5.3
68	1.1	8.20	6.28	0.77	0.457	17.9	9.76	85.7	1.8
68	1.4	8.26	6.31	0.76	0.442	18.7	9.77	82.0	2.7
68	1.6	8.29	6.31	0.76	0.435	19.1	9.77	80.2	3.4
68	1.7	8.30	6.32	0.76	0.432	19.2	9.77	79.5	3.8
68	1.8	8.33	6.34	0.76	0.430	19.4	9.80	78.9	4.2
68	1.9	8.32	6.33	0.76	0.427	19.5	9.78	78.3	4.6
68	2.0	8.36	6.35	0.76	0.426	19.6	9.81	77.8	5.0

Table 19. Cooling capacities 0.5 tons (gross) - EXHF006 (continued)

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Power kW	EER	Reject Mbtuh	LWT	Feet Head
75	1.1	8.05	6.22	0.77	0.495	16.3	9.74	92.7	1.7
75	1.4	8.11	6.25	0.77	0.477	17.0	9.74	88.9	2.6
75	1.6	8.14	6.26	0.77	0.469	17.4	9.74	87.2	3.3
75	1.7	8.15	6.26	0.77	0.466	17.5	9.74	86.5	3.7
75	1.8	8.16	6.27	0.77	0.463	17.6	9.74	85.8	4.1
75	1.9	8.17	6.26	0.77	0.461	17.7	9.74	85.3	4.5
75	2.0	8.15	6.26	0.77	0.458	17.8	9.71	84.7	4.9
77	1.1	8.01	6.20	0.77	0.507	15.8	9.74	94.7	1.7
77	1.4	8.06	6.22	0.77	0.489	16.5	9.73	90.9	2.6
77	1.6	8.08	6.23	0.77	0.479	16.9	9.71	89.1	3.3
77	1.7	8.10	6.24	0.77	0.477	17.0	9.73	88.4	3.7
77	1.8	8.11	6.25	0.77	0.474	17.1	9.73	87.8	4.1
77	1.9	8.12	6.25	0.77	0.471	17.2	9.73	87.2	4.5
77	2.0	8.13	6.25	0.77	0.469	17.3	9.73	86.7	4.9
86	1.1	7.81	6.11	0.78	0.562	13.9	9.73	103.7	1.7
86	1.4	7.86	6.14	0.78	0.542	14.5	9.71	99.9	2.5
86	1.6	7.88	6.15	0.78	0.534	14.8	9.70	98.1	3.2
86	1.7	7.89	6.15	0.78	0.530	14.9	9.70	97.4	3.6
86	1.8	7.90	6.16	0.78	0.527	15.0	9.70	96.8	3.9
86	1.9	7.91	6.16	0.78	0.524	15.1	9.70	96.2	4.3
86	2.0	7.91	6.16	0.78	0.522	15.2	9.69	95.7	4.7
95	1.1	7.58	6.03	0.80	0.625	12.1	9.71	112.7	1.7
95	1.4	7.62	6.05	0.79	0.605	12.6	9.68	108.8	2.6
95	1.6	7.64	6.05	0.79	0.596	12.8	9.67	107.1	3.3
95	1.7	7.65	6.05	0.79	0.592	12.9	9.67	106.4	3.7
95	1.8	7.66	6.05	0.79	0.587	13.0	9.66	105.7	4.1
95	1.9	7.66	6.06	0.79	0.584	13.1	9.65	105.2	4.5
95	2.0	7.64	6.05	0.79	0.579	13.2	9.62	104.6	5.0
105	1.1	7.28	5.90	0.81	0.705	10.3	9.69	122.6	1.7
105	1.4	7.31	5.92	0.81	0.683	10.7	9.64	118.8	2.6
105	1.6	7.34	5.93	0.81	0.675	10.9	9.64	117.1	3.3
105	1.7	7.35	5.94	0.81	0.670	11.0	9.64	116.3	3.6
105	1.8	7.35	5.94	0.81	0.667	11.0	9.63	115.7	4.0
105	1.9	7.36	5.94	0.81	0.664	11.1	9.63	115.1	4.4
105	2.0	7.36	5.94	0.81	0.660	11.2	9.61	114.6	4.8
110	1.1	7.11	5.84	0.82	0.758	9.4	9.70	127.6	1.7
110	1.4	7.15	5.85	0.82	0.736	9.7	9.66	123.8	2.5
110	1.6	7.17	5.86	0.82	0.725	9.9	9.64	122.1	3.2
110	1.7	7.16	5.86	0.82	0.716	10.0	9.60	121.3	3.6
110	1.8	7.18	5.86	0.82	0.717	10.0	9.63	120.7	4.0
110	1.9	7.17	5.86	0.82	0.709	10.1	9.59	120.1	4.3

Table 19. Cooling capacities 0.5 tons (gross) - EXHF006 (continued)

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Power kW	EER	Reject Mbtuh	LWT	Feet Head
110	2.0	7.18	5.87	0.82	0.710	10.1	9.60	119.6	4.8

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 is permissible, extrapolation is not. Rated GPM 4.2, Rated CFM 570, Minimum CFM 237, Maximum CFM 172.

Table 20. Heating capacities 0.5 tons (gross) - EXHF006

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Power kW	COP	LWT	Feet Head
25	1.7	5.44	3.82	0.476	3.3	20.5	4.9
25	1.8	5.47	3.85	0.476	3.4	20.7	5.4
25	1.9	5.49	3.86	0.477	3.4	20.9	5.9
25	2.0	5.52	3.89	0.477	3.4	21.1	6.5
32	1.1	5.79	4.15	0.481	3.5	24.5	2.2
32	1.4	5.95	4.30	0.484	3.6	25.9	3.4
32	1.6	6.02	4.37	0.484	3.6	26.5	4.3
32	1.7	6.06	4.40	0.485	3.7	26.8	4.8
32	1.8	6.10	4.44	0.486	3.7	27.1	5.3
32	1.9	6.13	4.47	0.486	3.7	27.3	5.8
32	2.0	6.15	4.49	0.487	3.7	27.5	6.3
45	1.1	7.03	5.31	0.503	4.1	35.3	1.9
45	1.4	7.23	5.50	0.507	4.2	37.1	2.9
45	1.6	7.33	5.59	0.509	4.2	38.0	3.7
45	1.7	7.38	5.64	0.510	4.2	38.4	4.1
45	1.8	7.41	5.67	0.511	4.2	38.7	4.6
45	1.9	7.45	5.70	0.512	4.3	39.0	5.0
45	2.0	7.46	5.72	0.511	4.3	39.3	5.5
55	1.1	7.95	6.17	0.522	4.5	43.8	1.8
55	1.4	8.21	6.41	0.528	4.6	45.8	2.8
55	1.6	8.29	6.48	0.530	4.6	46.9	3.6
55	1.7	8.34	6.53	0.531	4.6	47.3	4.0
55	1.8	8.39	6.57	0.532	4.6	47.7	4.4
55	1.9	8.42	6.60	0.533	4.6	48.1	4.8
55	2.0	8.46	6.64	0.534	4.6	48.4	5.3
68	1.1	9.16	7.28	0.550	4.9	54.8	1.8
68	1.4	9.40	7.51	0.554	5.0	57.3	2.7
68	1.6	9.57	7.67	0.558	5.0	58.4	3.4
68	1.7	9.57	7.67	0.558	5.0	59.0	3.8
68	1.8	9.65	7.74	0.560	5.0	59.4	4.2
68	1.9	9.69	7.78	0.561	5.1	59.8	4.6
68	2.0	9.76	7.84	0.563	5.1	60.2	5.0
75	1.1	9.78	7.86	0.563	5.1	60.7	1.7
75	1.4	10.06	8.11	0.570	5.2	63.4	2.6
75	1.6	10.24	8.28	0.574	5.2	64.7	3.3
75	1.7	10.27	8.31	0.575	5.2	65.2	3.7
75	1.8	10.30	8.34	0.575	5.2	65.7	4.1

Table 20. Heating capacities 0.5 tons (gross) - EXHF006 (continued)

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Power kW	COP	LWT	Feet Head
75	1.9	10.36	8.39	0.577	5.3	66.2	4.5
75	2.0	10.42	8.44	0.579	5.3	66.6	4.9
77	1.1	9.96	8.02	0.568	5.1	62.4	1.7
77	1.4	10.26	8.30	0.574	5.2	65.1	2.6
77	1.6	10.38	8.41	0.577	5.3	66.5	3.3
77	1.7	10.43	8.46	0.578	5.3	67.0	3.7
77	1.8	10.52	8.54	0.581	5.3	67.5	4.1
77	1.9	10.56	8.57	0.582	5.3	68.0	4.5
77	2.0	10.61	8.62	0.583	5.3	68.4	4.9
86	1.1	10.76	8.75	0.588	5.4	70.1	1.7
86	1.4	11.10	9.07	0.596	5.5	73.0	2.5
86	1.6	11.26	9.21	0.600	5.5	74.5	3.2
86	1.7	11.33	9.27	0.603	5.5	75.1	3.6
86	1.8	11.39	9.33	0.604	5.5	75.6	3.9
86	1.9	11.42	9.36	0.604	5.5	76.1	4.3
86	2.0	11.47	9.41	0.605	5.6	76.6	4.7

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 is permissible, extrapolation is not. Rated GPM 1.8, Rated CFM 215, Minimum CFM 237, Maximum CFM 172.

Table 21. Fan correction factors 0.5 tons - EXHF006

Entering cfm	Cooling Capacity	Sensible Capacity	Cooling Input Watts	Heating Capacity	Heating Input Watts
172	0.956	0.878	1.002	0.982	1.093
194	0.979	0.939	1.000	0.995	1.041
215	1.000	1.000	1.000	1.000	1.000
237	1.018	1.060	1.000	1.012	0.970

Table 22. Correction factors for variation in entering air temperature 0.5 tons, EXHF006

Cooling Entering Air WB°F	Cooling capacity	Cooling Input Watts	Sensible vs. Entering Dry Bulb Multiplier					Heating Entering Air DB°F	Heating capacity	Heating Input Watts
			65.6	70.6	75.6	80.6	85.6			
49.4	0.899	1.045	0.979	1.048	1.121	*	*	53.0	1.031	0.879
56.3	0.898	1.045	0.819	1.013	1.119	*	*	58.0	1.022	0.919
60.3	0.898	1.045	0.627	0.849	1.064	*	*	63.0	1.014	0.960
63.2	0.960	1.015	0.480	0.706	0.928	1.139	*	68.0	1.000	1.000
66.2	1.000	1.000	—	0.553	0.778	1.000	1.209	73.0	0.996	1.049
72.1	1.061	0.975	—	—	0.541	0.695	0.920	78.0	0.987	1.095
77.1	1.139	0.967	—	—	—	0.446	0.658	83.0	0.978	1.143

Note: * = Sensible equals total capacity

Cooling and Heating Capacities 0.75 tons

Table 23. Cooling capacities 0.75 tons (gross) - EXHF009

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Power kW	EER	Reject Mbtuh	LWT	Feet Head
45	1.4	10.61	8.05	0.76	0.430	24.7	12.37	56.2	2.1
45	1.7	10.75	8.10	0.75	0.423	25.4	12.41	55.8	2.9
45	1.9	10.82	8.13	0.75	0.420	25.8	12.44	55.0	3.6
45	2.1	10.87	8.15	0.75	0.416	26.1	11.73	71.8	4.3
45	2.2	10.95	8.17	0.75	0.417	26.3	11.80	68.9	4.6
45	2.3	10.99	8.19	0.75	0.416	26.4	11.85	67.5	5.0
45	2.5	11.03	8.21	0.74	0.414	26.6	11.88	66.3	5.8
55	1.4	10.16	7.87	0.77	0.460	22.1	11.91	65.8	2.0
55	1.7	10.26	7.91	0.77	0.450	22.8	11.95	65.4	2.8
55	1.9	10.33	7.94	0.77	0.446	23.2	11.94	64.6	3.4
55	2.1	10.37	7.95	0.77	0.443	23.4	11.48	84.4	4.1
55	2.2	10.40	7.96	0.77	0.442	23.5	11.51	81.5	4.4
55	2.3	10.44	7.97	0.76	0.441	23.7	11.51	80.1	4.8
55	2.5	10.45	7.98	0.76	0.438	23.9	11.54	79.0	5.6
68	1.4	9.72	7.70	0.79	0.517	18.8	11.55	78.5	1.9
68	1.7	9.79	7.73	0.79	0.505	19.4	11.55	78.0	2.7
68	1.9	9.81	7.74	0.79	0.499	19.7	11.56	77.2	3.3
68	2.1	9.85	7.75	0.79	0.494	19.9	11.40	91.3	3.9
68	2.2	9.87	7.77	0.79	0.492	20.1	11.41	88.4	4.2
68	2.3	9.88	7.76	0.79	0.490	20.2	11.41	87.0	4.6
68	2.5	9.90	7.77	0.78	0.487	20.3	11.41	85.9	5.3
75	1.4	9.49	7.61	0.80	0.559	17.0	11.41	85.4	1.9
75	1.7	9.55	7.64	0.80	0.545	17.5	11.42	84.9	2.6
75	1.9	9.58	7.64	0.80	0.536	17.9	11.42	84.1	3.2
75	2.1	9.60	7.66	0.80	0.531	18.1	11.38	93.3	3.8
75	2.2	9.61	7.66	0.80	0.528	18.2	11.37	90.4	4.1
75	2.3	9.62	7.66	0.80	0.526	18.3	11.39	89.0	4.5
75	2.5	9.64	7.67	0.80	0.523	18.4	11.39	87.8	5.2
77	1.4	9.43	7.59	0.80	0.571	16.5	11.39	87.4	1.9
77	1.7	9.47	7.61	0.80	0.556	17.0	11.39	86.9	2.6
77	1.9	9.51	7.62	0.80	0.550	17.3	11.38	86.1	3.2
77	2.1	9.53	7.63	0.80	0.544	17.5	11.32	102.2	3.8
77	2.2	9.54	7.63	0.80	0.542	17.6	11.29	99.3	4.1
77	2.3	9.55	7.63	0.80	0.540	17.7	11.29	97.9	4.4
77	2.5	9.56	7.64	0.80	0.534	17.9	11.27	96.7	5.1
86	1.4	9.15	7.49	0.82	0.636	14.4	11.26	96.2	1.8
86	1.7	9.18	7.50	0.82	0.619	14.8	11.27	95.8	2.5
86	1.9	9.20	7.50	0.82	0.611	15.1	11.27	95.0	3.1
86	2.1	9.21	7.51	0.82	0.604	15.2	11.34	111.2	3.7
86	2.2	9.21	7.51	0.82	0.601	15.3	11.30	108.3	4.0

Table 23. Cooling capacities 0.75 tons (gross) - EXHF009 (continued)

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Power kW	EER	Reject Mbtuh	LWT	Feet Head
86	2.3	9.23	7.52	0.81	0.599	15.4	11.27	106.9	4.3
86	2.5	9.24	7.52	0.81	0.595	15.5	11.25	105.7	5.0
95	1.4	8.89	7.37	0.83	0.718	12.4	11.25	105.2	1.7
95	1.7	8.91	7.39	0.83	0.700	12.7	11.24	104.8	2.3
95	1.9	8.92	7.39	0.83	0.690	12.9	11.22	104.0	2.9
95	2.1	8.92	7.39	0.83	0.683	13.1	11.51	121.4	3.4
95	2.2	8.93	7.39	0.83	0.680	13.1	11.42	118.4	3.7
95	2.3	8.93	7.40	0.83	0.676	13.2	11.36	117.0	4.0
95	2.5	8.93	7.39	0.83	0.672	13.3	11.35	115.8	4.6
105	1.4	8.64	7.28	0.84	0.841	10.3	11.34	115.3	1.6
105	1.7	8.63	7.28	0.84	0.817	10.6	11.32	114.8	2.3
105	1.9	8.62	7.26	0.84	0.804	10.7	11.29	114.0	2.8
105	2.1	8.63	7.28	0.84	0.796	10.8	11.76	126.8	3.3
105	2.2	8.63	7.28	0.84	0.793	10.9	11.66	123.7	3.6
105	2.3	8.62	7.27	0.84	0.790	10.9	11.53	122.1	3.9
105	2.5	8.62	7.27	0.84	0.783	11.0	11.57	121.0	4.5
110	1.4	8.55	7.24	0.85	0.941	9.1	11.53	120.5	1.6
110	1.7	8.54	7.24	0.85	0.915	9.3	11.48	120.0	2.2
110	1.9	8.50	7.22	0.85	0.888	9.6	11.51	119.2	2.7
110	2.1	8.53	7.24	0.85	0.890	9.6	9.60	121.3	3.3
110	2.2	8.52	7.24	0.85	0.881	9.7	9.63	120.7	3.5
110	2.3	8.50	7.22	0.85	0.873	9.7	9.59	120.1	3.8
110	2.5	8.52	7.23	0.85	0.876	9.7	9.60	119.6	4.4

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 is permissible, extrapolation is not. Rated GPM 2.2, Rated CFM 285, Minimum CFM 314, Maximum CFM 228.

Table 24. Heating capacities 0.75 tons (gross) - EXHF009

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Power kW	COP	LWT	Feet Head
25	2.1	6.23	4.44	0.525	3.5	20.8	5.7
25	2.2	6.25	4.45	0.526	3.5	21.0	6.2
25	2.3	6.27	4.47	0.526	3.5	21.1	6.7
25	2.5	6.32	4.52	0.527	3.5	21.4	7.8
32	1.4	6.65	4.83	0.533	3.7	25.1	2.8
32	1.7	6.81	4.98	0.536	3.7	26.1	3.9
32	1.9	6.89	5.05	0.538	3.8	26.7	4.7
32	2.1	6.95	5.11	0.538	3.8	27.1	5.6
32	2.2	6.99	5.15	0.540	3.8	27.3	6.0
32	2.3	7.02	5.18	0.540	3.8	27.5	6.5
32	2.5	7.06	5.21	0.541	3.8	27.8	7.5
45	1.4	8.13	6.23	0.557	4.3	36.1	2.1
45	1.7	8.31	6.40	0.560	4.3	37.5	2.9
45	1.9	8.41	6.50	0.561	4.4	38.2	3.6

Table 24. Heating capacities 0.75 tons (gross) - EXHF009 (continued)

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Power kW	COP	LWT	Feet Head
45	2.1	8.49	6.57	0.563	4.4	38.7	4.3
45	2.2	8.54	6.62	0.563	4.4	39.0	4.6
45	2.3	8.56	6.64	0.563	4.5	39.2	5.0
45	2.5	8.63	6.70	0.565	4.5	39.6	5.8
55	1.4	9.22	7.26	0.573	4.7	44.6	2.0
55	1.7	9.44	7.47	0.577	4.8	46.2	2.8
55	1.9	9.54	7.57	0.578	4.8	47.0	3.4
55	2.1	9.69	7.71	0.581	4.9	47.7	4.1
55	2.2	9.72	7.73	0.582	4.9	48.0	4.4
55	2.3	9.73	7.75	0.580	4.9	48.3	4.8
55	2.5	9.83	7.84	0.582	4.9	48.7	5.6
68	1.4	10.66	8.64	0.593	5.3	55.7	1.9
68	1.7	10.97	8.93	0.598	5.4	57.5	2.7
68	1.9	11.11	9.06	0.601	5.4	58.5	3.3
68	2.1	11.23	9.17	0.603	5.5	59.3	3.9
68	2.2	11.25	9.19	0.603	5.5	59.6	4.2
68	2.3	11.29	9.23	0.604	5.5	60.0	4.6
68	2.5	11.39	9.32	0.606	5.5	60.5	5.3
75	1.4	11.49	9.41	0.608	5.5	61.6	1.9
75	1.7	11.80	9.71	0.613	5.6	63.6	2.6
75	1.9	11.93	9.83	0.615	5.7	64.7	3.2
75	2.1	12.08	9.97	0.619	5.7	65.5	3.8
75	2.2	12.17	10.05	0.621	5.7	65.9	4.1
75	2.3	12.18	10.06	0.620	5.8	66.3	4.5
75	2.5	12.26	10.14	0.622	5.8	66.9	5.2
77	1.4	11.72	9.63	0.612	5.6	63.2	1.9
77	1.7	12.03	9.92	0.618	5.7	65.3	2.6
77	1.9	12.19	10.07	0.621	5.8	66.4	3.2
77	2.1	12.31	10.18	0.623	5.8	67.3	3.8
77	2.2	12.35	10.22	0.623	5.8	67.7	4.1
77	2.3	12.42	10.29	0.625	5.8	68.1	4.4
77	2.5	12.52	10.38	0.627	5.9	68.7	5.1
86	1.4	12.78	10.62	0.633	5.9	70.8	1.8
86	1.7	13.10	10.92	0.640	6.0	73.2	2.5
86	1.9	13.26	11.07	0.642	6.1	74.3	3.1
86	2.1	13.38	11.18	0.645	6.1	75.4	3.7
86	2.2	13.46	11.25	0.647	6.1	75.8	4.0
86	2.3	13.54	11.32	0.649	6.1	76.2	4.3
86	2.5	13.65	11.42	0.652	6.1	76.9	5.0

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 is permissible, extrapolation is not. Rated GPM 2.2, Rated CFM 285, Minimum CFM 314, Maximum CFM 228.

Table 25. Fan correction factors 0.75 tons - EXHF009

Entering cfm	Cooling Capacity	Sensible Capacity	Cooling Input Watts	Heating Capacity	Heating Input Watts
228	0.960	0.876	1.003	0.984	1.087
257	0.982	0.937	1.002	0.990	1.036
285	1.000	1.000	1.000	1.000	1.000
314	1.017	1.060	1.001	1.003	0.969

Table 26. Correction factors for variation in entering air temperature 0.75 tons, EXHF009

Cooling Entering Air WB°F	Cooling capaci-ty	Cooling Input Watts	Sensible vs. Entering Dry Bulb Multiplier					Heating Entering Air DB°F	Heating capacity	Heating Input Watts
			65.6	70.6	75.6	80.6	85.6			
49.4	0.949	1.020	0.952	1.031	1.103	*	*	53.0	1.030	0.879
56.3	0.948	1.021	0.805	0.951	1.102	*	*	58.0	1.018	0.915
60.3	0.947	1.021	0.605	0.838	1.059	*	*	63.0	1.007	0.956
63.2	0.947	1.019	0.455	0.690	0.923	1.138	*	68.0	1.000	1.000
66.2	1.000	1.000	—	0.534	0.767	1.000	1.221	73.0	0.992	1.046
72.1	1.074	0.969	—	—	0.452	0.686	0.915	78.0	0.983	1.098
77.1	1.127	0.950	—	—	—	0.408	0.644	83.0	0.979	1.153

Note: * = Sensible equals total capacity

Table 27. Cooling capacities 0.75 tons (gross) - EXVG009

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Comp Pwr kW	Reject Mbtuh	LWT	Feet Head
45	1.5	9.8	7.9	0.81	0.28	10.8	59.4	2.1
45	1.8	9.8	7.9	0.81	0.27	10.7	56.9	2.9
45	2.0	9.8	7.9	0.81	0.27	10.7	55.7	3.6
45	2.3	9.8	7.9	0.81	0.26	10.7	54.5	4.4
45	2.4	9.8	7.9	0.81	0.26	10.7	53.9	5.0
45	2.5	9.8	7.9	0.81	0.25	10.7	53.6	5.3
45	2.7	9.9	8.0	0.81	0.25	10.8	53.0	6.1
55	1.5	9.5	7.8	0.82	0.35	10.7	69.3	1.9
55	1.8	9.5	7.8	0.82	0.33	10.6	66.8	2.7
55	2.0	9.5	7.8	0.82	0.33	10.6	65.6	3.3
55	2.3	9.6	7.9	0.82	0.32	10.7	64.5	4.1
55	2.4	9.6	7.9	0.82	0.32	10.7	63.9	4.6
55	2.5	9.6	7.9	0.82	0.32	10.7	63.6	4.9
55	2.7	9.6	7.9	0.82	0.31	10.7	62.9	5.6
68	1.5	9.1	7.6	0.84	0.42	10.5	82.0	1.7
68	1.8	9.1	7.6	0.84	0.40	10.5	79.7	2.4
68	2.0	9.1	7.6	0.84	0.40	10.5	78.5	3.0
68	2.3	9.2	7.7	0.84	0.39	10.5	77.3	3.7
68	2.4	9.2	7.7	0.84	0.39	10.5	76.8	4.2
68	2.5	9.2	7.7	0.84	0.39	10.5	76.4	4.5
68	2.7	9.2	7.7	0.84	0.38	10.5	75.8	5.1
75	1.5	8.8	7.5	0.85	0.45	10.3	88.7	1.7
75	1.8	8.9	7.6	0.85	0.44	10.4	86.6	2.4

Table 27. Cooling capacities 0.75 tons (gross) - EXVG009 (continued)

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Comp Pwr kW	Reject Mbtuh	LWT	Feet Head
75	2.0	8.9	7.6	0.85	0.43	10.4	85.4	2.9
75	2.3	8.9	7.6	0.85	0.42	10.3	84.2	3.6
75	2.4	8.9	7.6	0.85	0.42	10.3	83.6	4.0
75	2.5	8.9	7.6	0.85	0.42	10.3	83.2	4.3
75	2.7	8.9	7.6	0.85	0.42	10.3	82.6	4.9
86	1.5	8.4	7.3	0.87	0.51	10.1	99.5	1.6
86	1.8	8.4	7.3	0.87	0.50	10.1	97.2	2.2
86	2.0	8.4	7.3	0.87	0.49	10.1	96.1	2.7
86	2.3	8.4	7.3	0.87	0.49	10.1	95.0	3.4
86	2.4	8.4	7.3	0.87	0.48	10.0	94.3	3.8
86	2.5	8.4	7.3	0.87	0.48	10.0	94.0	4.1
86	2.7	8.5	7.4	0.87	0.48	10.1	93.5	4.7
95	1.5	7.9	7.1	0.90	0.57	9.9	108.2	1.5
95	1.8	7.9	7.1	0.90	0.56	9.8	105.9	2.2
95	2.0	8.0	7.1	0.89	0.56	9.9	104.9	2.6
95	2.3	8.0	7.1	0.89	0.55	9.9	103.8	3.3
95	2.4	8.0	7.1	0.89	0.55	9.9	103.3	3.7
95	2.5	8.0	7.1	0.89	0.54	9.9	102.9	4.0
95	2.7	8.0	7.1	0.89	0.54	9.8	102.3	4.5
105	1.5	7.4	6.8	0.92	0.66	9.6	117.8	1.5
105	1.8	7.4	6.8	0.92	0.64	9.6	115.7	2.1
105	2.0	7.4	6.8	0.92	0.64	9.6	114.6	2.6
105	2.3	7.4	6.8	0.92	0.63	9.6	113.5	3.2
105	2.4	7.4	6.8	0.92	0.63	9.5	112.9	3.6
105	2.5	7.4	6.8	0.92	0.63	9.5	112.6	3.9
105	2.7	7.5	6.9	0.92	0.62	9.6	112.1	4.4
115	1.5	6.8	6.6	0.97	0.75	9.4	127.5	1.5
115	1.8	6.8	6.6	0.97	0.74	9.3	125.3	2.1
115	2.0	6.8	6.6	0.97	0.73	9.3	124.3	2.5
115	2.3	6.8	6.6	0.97	0.72	9.3	123.3	3.1
115	2.4	6.8	6.6	0.97	0.72	9.3	122.8	3.5
115	2.5	6.8	6.6	0.97	0.72	9.2	122.4	3.8
115	2.7	6.9	6.7	0.97	0.71	9.3	121.9	4.3

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 28. Heating capacities 0.75 tons (gross) - EXVG009

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Comp Pwr kW	LWT	Feet Head
25	1.5	4.7	3.2	0.45	20.7	2.6
25	1.8	4.9	3.4	0.45	21.2	3.7
25	2.0	4.9	3.4	0.45	21.6	4.5

Table 28. Heating capacities 0.75 tons (gross) - EXVG009 (continued)

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Comp Pwr kW	LWT	Feet Head
25	2.3	5.0	3.5	0.45	21.9	5.7
25	2.4	5.1	3.6	0.45	22.0	6.4
25	2.5	5.1	3.6	0.45	22.1	6.8
25	2.7	5.1	3.6	0.45	22.3	7.8
32	1.5	5.1	3.5	0.46	27.3	2.4
32	1.8	5.3	3.7	0.46	27.9	3.4
32	2.0	5.3	3.7	0.46	28.3	4.1
32	2.3	5.4	3.8	0.46	28.6	5.1
32	2.4	5.5	3.9	0.46	28.8	5.8
32	2.5	5.5	3.9	0.46	28.9	6.2
32	2.7	5.5	3.9	0.46	29.1	7.1
45	1.5	7.0	5.4	0.48	37.8	2.1
45	1.8	7.2	5.6	0.48	38.8	2.9
45	2.0	7.2	5.6	0.48	39.4	3.6
45	2.3	7.3	5.7	0.48	39.9	4.4
45	2.4	7.4	5.8	0.48	40.2	5.0
45	2.5	7.4	5.8	0.48	40.4	5.3
45	2.7	7.4	5.8	0.48	40.7	6.1
55	1.5	8.0	6.3	0.49	46.6	1.9
55	1.8	8.2	6.5	0.49	47.8	2.7
55	2.0	8.3	6.6	0.49	48.4	3.3
55	2.3	8.4	6.7	0.49	49.0	4.1
55	2.4	8.4	6.7	0.49	49.4	4.6
55	2.5	8.4	6.7	0.49	49.6	4.9
55	2.7	8.5	6.8	0.49	50.0	5.6
68	1.5	9.1	7.4	0.50	58.1	1.7
68	1.8	9.3	7.6	0.50	59.6	2.4
68	2.0	9.4	7.7	0.50	60.3	3.0
68	2.3	9.5	7.8	0.50	61.1	3.7
68	2.4	9.5	7.8	0.50	61.5	4.2
68	2.5	9.5	7.8	0.50	61.8	4.5
68	2.7	9.6	7.9	0.50	62.1	5.1
75	1.5	9.9	8.2	0.50	64.1	1.7
75	1.8	10.1	8.4	0.50	65.7	2.4
75	2.0	10.2	8.5	0.50	66.5	2.9
75	2.3	10.3	8.6	0.51	67.4	3.6
75	2.4	10.3	8.6	0.51	67.8	4.0
75	2.5	10.3	8.6	0.51	68.1	4.3
75	2.7	10.4	8.7	0.51	68.6	4.9
86	1.5	11.0	9.3	0.51	73.6	1.6
86	1.8	11.2	9.5	0.51	75.4	2.2

Table 28. Heating capacities 0.75 tons (gross) - EXVG009 (continued)

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Comp Pwr kW	LWT	Feet Head
86	2.0	11.2	9.5	0.51	76.5	2.7
86	2.3	11.3	9.6	0.51	77.5	3.4
86	2.4	11.4	9.7	0.51	77.9	3.8
86	2.5	11.4	9.7	0.51	78.2	4.1
86	2.7	11.4	9.7	0.51	78.8	4.7
86	2.1	12.92	10.84	0.609	75.7	3.9
86	2.2	12.97	10.89	0.610	76.1	4.2
86	2.3	13.05	10.96	0.613	76.5	4.6
86	2.5	13.09	11.00	0.612	77.2	5.3

Note: 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 29. Fan correction factors 0.75 tons - EXVG009

Entering cfm	Cooling Capacity	Sensible Capacity	Cooling Input Watts	Heating Capacity	Heating Input Watts
228	0.962	0.871	1.012	0.977	1.097
242	0.973	0.903	1.009	0.983	1.070
257	0.983	0.937	1.005	0.990	1.043
271	0.992	0.969	1.003	0.995	1.021
285	1.000	1.000	1.000	1.000	1.000
314	1.014	1.064	0.995	1.009	0.963
328	1.021	1.095	0.993	1.012	0.947
342	1.026	1.125	0.991	1.016	0.933

Table 30. Correction factors for variation in entering air temperature 0.75 ton EXVG009

Cooling Entering Air WB ºF	Cooling Capaci-ty	Cooling Input Watts	Sensible vs. Entering Dry Bulb Multipliers					Heating Entering Air DB ºF	Heating Capacity	Heating Input Watts
			65.6	70.6	75.6	80.6	85.6			
49.4	0.921	1.017	0.923	0.999	1.064	*	*	53.0	1.049	0.811
56.3	0.921	1.019	0.801	0.945	1.054	*	*	58.0	1.034	0.874
60.3	0.933	1.016	0.649	0.848	0.997	1.114	*	63.0	1.017	0.936
63.2	0.963	1.010	0.499	0.743	0.927	1.069	*	68.0	1.000	1.000
66.2	1.000	1.000	–	0.603	0.827	1.000	1.139	73.0	0.982	1.065
72.1	1.118	0.965	–	–	0.547	0.790	0.985	78.0	0.963	1.131
77.1	1.214	0.920	–	–	–	–	0.785	83.0	0.944	1.198

Note: * = Sensible equals total capacity

Cooling and Heating Capacities 1 ton

Table 31. Cooling capacities 1 tons (gross) - EXHF012

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Power kW	EER	Reject Mbtuh	LWT	Feet Head
45	1.8	13.15	10.16	0.77	0.485	27.1	14.81	61.5	2.0
45	2.2	13.21	10.18	0.77	0.468	28.2	14.81	58.5	2.9
45	2.5	13.24	10.19	0.77	0.459	28.8	14.81	56.8	3.6
45	2.8	13.27	10.20	0.77	0.452	29.4	14.81	55.6	4.4

Table 31. Cooling capacities 1 tons (gross) - EXHF012 (continued)

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Power kW	EER	Reject Mbtuh	LWT	Feet Head
45	2.9	13.28	10.21	0.77	0.449	29.6	14.81	55.2	4.7
45	3.1	13.29	10.21	0.77	0.446	29.8	14.81	54.6	5.3
45	3.4	13.31	10.21	0.77	0.441	30.2	14.82	53.7	6.2
55	1.8	12.88	10.06	0.78	0.553	23.3	14.77	71.4	2.0
55	2.2	12.93	10.08	0.78	0.534	24.2	14.75	68.4	2.8
55	2.5	12.96	10.09	0.78	0.524	24.7	14.75	66.8	3.5
55	2.8	12.98	10.09	0.78	0.516	25.2	14.74	65.5	4.3
55	2.9	12.98	10.10	0.78	0.514	25.3	14.73	65.2	4.5
55	3.1	13.00	10.11	0.78	0.510	25.5	14.74	64.5	5.1
55	3.4	13.01	10.11	0.78	0.505	25.8	14.73	63.7	6.0
68	1.8	12.48	9.92	0.79	0.654	19.1	14.71	84.3	1.9
68	2.2	12.52	9.93	0.79	0.634	19.7	14.68	81.3	2.7
68	2.5	12.54	9.94	0.79	0.620	20.2	14.66	79.7	3.3
68	2.8	12.56	9.95	0.79	0.612	20.5	14.65	78.5	4.1
68	2.9	12.57	9.95	0.79	0.609	20.6	14.65	78.1	4.3
68	3.1	12.58	9.95	0.79	0.605	20.8	14.64	77.4	4.9
68	3.4	12.59	9.96	0.79	0.599	21.0	14.63	76.6	5.7
75	1.8	12.25	9.83	0.80	0.714	17.2	14.69	91.3	1.8
75	2.2	12.28	9.85	0.80	0.692	17.7	14.64	88.3	2.6
75	2.5	12.30	9.85	0.80	0.681	18.1	14.62	86.7	3.3
75	2.8	12.32	9.86	0.80	0.671	18.4	14.61	85.4	4.0
75	2.9	12.32	9.86	0.80	0.669	18.4	14.60	85.1	4.2
75	3.1	12.33	9.86	0.80	0.664	18.6	14.60	84.4	4.8
75	3.4	12.34	9.87	0.80	0.658	18.8	14.59	83.6	5.6
77	1.8	12.18	9.81	0.81	0.733	16.6	14.68	93.3	1.8
77	2.2	12.21	9.82	0.80	0.710	17.2	14.63	90.3	2.6
77	2.5	12.23	9.83	0.80	0.698	17.5	14.61	88.7	3.2
77	2.8	12.24	9.83	0.80	0.689	17.8	14.59	87.4	4.0
77	2.9	12.25	9.83	0.80	0.686	17.9	14.59	87.1	4.2
77	3.1	12.26	9.84	0.80	0.682	18.0	14.59	86.4	4.7
77	3.4	12.27	9.84	0.80	0.676	18.2	14.58	85.6	5.5
86	1.8	11.84	9.69	0.82	0.822	14.4	14.65	102.3	1.8
86	2.2	11.87	9.70	0.82	0.797	14.9	14.59	99.3	2.5
86	2.5	11.89	9.70	0.82	0.784	15.2	14.57	97.7	3.1
86	2.8	11.90	9.71	0.82	0.774	15.4	14.54	96.4	3.8
86	2.9	11.90	9.71	0.82	0.771	15.4	14.53	96.0	4.1
86	3.1	11.91	9.71	0.82	0.766	15.5	14.52	95.4	4.6
86	3.4	11.92	9.71	0.81	0.759	15.7	14.51	94.5	5.4
95	1.8	11.48	9.55	0.83	0.925	12.4	14.64	111.3	1.6
95	2.2	11.50	9.56	0.83	0.899	12.8	14.57	108.2	2.3
95	2.5	11.52	9.56	0.83	0.885	13.0	14.54	106.6	2.9

Table 31. Cooling capacities 1 tons (gross) - EXHF012 (continued)

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Power kW	EER	Reject Mbtuh	LWT	Feet Head
95	2.8	11.52	9.57	0.83	0.874	13.2	14.50	105.4	3.5
95	2.9	11.53	9.57	0.83	0.871	13.2	14.50	105.0	3.7
95	3.1	11.53	9.56	0.83	0.865	13.3	14.48	104.3	4.2
95	3.4	11.54	9.57	0.83	0.858	13.4	14.47	103.5	4.9
105	1.8	11.03	9.38	0.85	1.060	10.4	14.65	121.3	1.6
105	2.2	11.06	9.39	0.85	1.030	10.7	14.58	118.3	2.2
105	2.5	11.06	9.39	0.85	1.013	10.9	14.52	116.6	2.8
105	2.8	11.07	9.40	0.85	1.001	11.1	14.49	115.4	3.4
105	2.9	11.07	9.40	0.85	0.997	11.1	14.47	115.0	3.6
105	3.1	11.07	9.39	0.85	0.991	11.2	14.45	114.3	4.1
105	3.4	11.08	9.40	0.85	0.983	11.3	14.43	113.5	4.8
110	1.8	10.70	9.26	0.87	1.138	9.4	14.58	126.2	1.5
110	2.2	10.75	9.28	0.86	1.107	9.7	14.53	123.2	2.2
110	2.5	10.79	9.29	0.86	1.092	9.9	14.52	121.6	2.7
110	2.8	10.81	9.30	0.86	1.079	10.0	14.49	120.4	3.3
110	2.9	10.82	9.31	0.86	1.075	10.1	14.49	120.0	3.6
110	3.1	10.82	9.30	0.86	1.069	10.1	14.47	119.3	4.0
110	3.4	10.84	9.31	0.86	1.060	10.2	14.46	118.5	4.7

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 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 is permissible, extrapolation is not. Rated GPM 2.2, Rated CFM 285, Minimum CFM 314, Maximum CFM 228.

Table 32. Heating capacities 1 tons (gross) - EXHF012

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Power kW	COP	LWT	Feet Head
25	2.8	8.32	5.82	0.732	3.3	20.8	6.1
25	2.9	8.34	5.84	0.732	3.3	21.0	6.5
25	3.1	8.39	5.89	0.733	3.4	21.2	7.3
25	3.4	8.44	5.94	0.733	3.4	21.5	8.5
32	1.8	8.83	6.31	0.739	3.5	25.0	2.7
32	2.2	9.00	6.47	0.740	3.6	26.1	3.9
32	2.5	9.14	6.60	0.744	3.6	26.7	4.8
32	2.8	9.23	6.68	0.746	3.6	27.2	5.9
32	2.9	9.26	6.71	0.747	3.6	27.4	6.3
32	3.1	9.30	6.75	0.747	3.6	27.6	7.0
32	3.4	9.36	6.81	0.748	3.7	28.0	8.3
45	1.8	10.65	8.03	0.767	4.1	36.1	2.0
45	2.2	10.90	8.27	0.771	4.1	37.5	2.9
45	2.5	11.03	8.39	0.773	4.2	38.3	3.6
45	2.8	11.14	8.50	0.774	4.2	38.9	4.4
45	2.9	11.15	8.51	0.773	4.2	39.1	4.7
45	3.1	11.23	8.58	0.776	4.2	39.5	5.3
45	3.4	11.30	8.65	0.775	4.3	39.9	6.2
55	1.8	12.02	9.33	0.788	4.5	44.6	2.0

Table 32. Heating capacities 1 tons (gross) - EXHF012 (continued)

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Power kW	COP	LWT	Feet Head
55	2.2	12.32	9.61	0.793	4.6	46.3	2.8
55	2.5	12.44	9.74	0.792	4.6	47.2	3.5
55	2.8	12.56	9.85	0.794	4.6	48.0	4.3
55	2.9	12.67	9.95	0.798	4.7	48.1	4.5
55	3.1	12.74	10.01	0.799	4.7	48.5	5.1
55	3.4	12.75	10.03	0.797	4.7	49.1	6.0
68	1.8	13.83	11.05	0.815	5.0	55.7	1.9
68	2.2	14.13	11.33	0.819	5.1	57.7	2.7
68	2.5	14.34	11.53	0.823	5.1	58.8	3.3
68	2.8	14.52	11.70	0.827	5.1	59.6	4.1
68	2.9	14.58	11.75	0.829	5.2	59.9	4.3
68	3.1	14.64	11.82	0.827	5.2	60.4	4.9
68	3.4	14.75	11.92	0.829	5.2	61.0	5.7
75	1.8	14.80	11.97	0.830	5.2	61.7	1.8
75	2.2	15.17	12.32	0.836	5.3	63.8	2.6
75	2.5	15.38	12.52	0.839	5.4	65.0	3.3
75	2.8	15.54	12.67	0.842	5.4	66.0	4.0
75	2.9	15.63	12.75	0.845	5.4	66.2	4.2
75	3.1	15.73	12.84	0.846	5.4	66.7	4.8
75	3.4	15.85	12.95	0.849	5.5	67.4	5.6
77	1.8	15.08	12.23	0.834	5.3	63.4	1.8
77	2.2	15.50	12.62	0.843	5.4	65.5	2.6
77	2.5	15.66	12.78	0.844	5.4	66.8	3.2
77	2.8	15.87	12.97	0.849	5.5	67.7	4.0
77	2.9	15.91	13.01	0.849	5.5	68.0	4.2
77	3.1	16.03	13.12	0.852	5.5	68.5	4.7
77	3.4	16.08	13.18	0.851	5.5	69.2	5.5
86	1.8	16.34	13.42	0.857	5.6	71.1	1.8
86	2.2	16.73	13.78	0.864	5.7	73.5	2.5
86	2.5	16.93	13.97	0.867	5.7	74.8	3.1
86	2.8	17.15	14.17	0.872	5.8	75.9	3.8
86	2.9	17.24	14.25	0.875	5.8	76.2	4.1
86	3.1	17.27	14.29	0.874	5.8	76.8	4.6
86	3.4	17.38	14.39	0.876	5.8	77.5	5.4

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 is permissible, extrapolation is not. Rated GPM 2.2, Rated CFM 285, Minimum CFM 314, Maximum CFM 228.

Table 33. Fan correction factors 1 tons - EXHF012

Entering CFM	Cooling capacity	Sensible capacity	Cooling comp watts	Heating capacity	Heating comp watts
304	0.959	0.874	1.005	0.987	1.094
342	0.981	0.937	1.002	0.996	1.041
380	1.000	1.000	1.000	1.000	1.000
418	1.017	1.062	0.999	1.002	0.964

Table 34. Correction factors for variation in entering air temperature 1 tons, EXHF012

Cooling Entering Air WB°F	Cooling capacity	Cooling Input Watts	Sensible vs. Entering Dry Bub Multiplier					Heating Entering Air DB°F	Heating capacity	Heating Input Watts
			65.6	70.6	75.6	80.6	85.6			
49.4	0.949	1.010	0.983	1.046	1.110	*	*	53.0	1.012	0.851
56.3	0.948	1.010	0.809	1.033	1.109	*	*	58.0	1.006	0.896
60.3	0.948	1.010	0.598	0.838	1.071	*	*	63.0	1.005	0.947
63.2	0.960	1.007	0.442	0.684	0.923	1.150	*	68.0	1.000	1.000
66.2	1.000	1.000	—	0.520	0.761	1.000	1.221	73.0	0.995	1.053
72.1	1.080	0.979	—	—	0.435	0.675	0.912	78.0	0.991	1.111
77.1	1.144	0.966	—	—	—	0.393	0.632	83.0	0.983	1.166

Note: * = Sensible equals total capacity

Table 35. Cooling capacities 1 tons (gross) - EXVG012

EWT	GPM	Gross Mbtuh	Gross Sen Mbtuh	SHR	Comp Pwr kW	Reject Mbtuh	LWT	Feet Head
45	2.0	14.4	11.2	0.78	0.41	15.8	60.8	3.6
45	2.4	14.5	11.3	0.78	0.39	15.8	58.2	5.0
45	2.7	14.5	11.3	0.78	0.38	15.8	56.7	6.2
45	3.0	14.5	11.3	0.78	0.37	15.8	55.5	7.5
45	3.2	14.5	11.3	0.78	0.36	15.7	54.8	8.5
45	3.3	14.6	11.4	0.78	0.36	15.8	54.6	8.9
45	3.6	14.6	11.4	0.78	0.36	15.8	53.8	10.4
55	2.0	14.0	11.0	0.79	0.49	15.7	70.7	3.3
55	2.4	14.0	11.0	0.79	0.47	15.6	68.0	4.6
55	2.7	14.1	11.1	0.79	0.46	15.7	66.6	5.7
55	3.0	14.1	11.1	0.79	0.45	15.6	65.4	6.9
55	3.2	14.1	11.1	0.79	0.45	15.6	64.8	7.8
55	3.3	14.1	11.1	0.79	0.44	15.6	64.5	8.2
55	3.6	14.2	11.2	0.79	0.44	15.7	63.7	9.6
68	2.0	13.2	10.6	0.80	0.59	15.2	83.2	3.0
68	2.4	13.3	10.7	0.80	0.57	15.2	80.7	4.2
68	2.7	13.3	10.7	0.80	0.56	15.2	79.3	5.3
68	3.0	13.3	10.7	0.80	0.55	15.2	78.1	6.4
68	3.2	13.3	10.7	0.80	0.55	15.2	77.5	7.2
68	3.3	13.4	10.8	0.81	0.55	15.3	77.3	7.6
68	3.6	13.4	10.8	0.81	0.54	15.2	76.4	8.8
75	2.0	12.7	10.4	0.82	0.64	14.9	89.9	2.9
75	2.4	12.7	10.4	0.82	0.62	14.8	87.3	4.1
75	2.7	12.8	10.5	0.82	0.61	14.9	86.0	5.1
75	3.0	12.8	10.5	0.82	0.60	14.9	84.9	6.2
75	3.2	12.8	10.5	0.82	0.60	14.8	84.3	7.0
75	3.3	12.8	10.5	0.82	0.60	14.8	84.0	7.4
75	3.6	12.9	10.6	0.82	0.59	14.9	83.3	8.5
86	2.0	11.9	10.0	0.84	0.74	14.4	100.4	2.8
86	2.4	12.0	10.1	0.84	0.72	14.4	98.0	3.9

Table 35. Cooling capacities 1 tons (gross) - EXVG012 (continued)

EWT	GPM	Gross Mbtuh	Gross Sen Mbtuh	SHR	Comp Pwr kW	Reject Mbtuh	LWT	Feet Head
86	2.7	12.0	10.1	0.84	0.71	14.4	96.7	4.9
86	3.0	12.0	10.1	0.84	0.70	14.4	95.6	5.9
86	3.2	12.0	10.1	0.84	0.69	14.4	95.0	6.7
86	3.3	12.1	10.2	0.84	0.69	14.5	94.8	7.0
86	3.6	12.1	10.2	0.84	0.69	14.4	94.0	8.2
95	2.0	11.3	9.8	0.87	0.82	14.1	109.1	2.7
95	2.4	11.4	9.9	0.87	0.80	14.1	106.8	3.8
95	2.7	11.4	9.9	0.87	0.79	14.1	105.4	4.7
95	3.0	11.4	9.9	0.87	0.79	14.1	104.4	5.8
95	3.2	11.4	9.9	0.87	0.78	14.1	103.8	6.5
95	3.3	11.5	9.9	0.86	0.78	14.2	103.6	6.8
95	3.6	11.5	9.9	0.86	0.77	14.1	102.8	7.9
105	2.0	10.6	9.5	0.90	0.93	13.8	118.8	2.6
105	2.4	10.7	9.5	0.89	0.91	13.8	116.5	3.7
105	2.7	10.7	9.5	0.89	0.90	13.8	115.2	4.6
105	3.0	10.8	9.6	0.89	0.90	13.9	114.3	5.6
105	3.2	10.8	9.6	0.89	0.89	13.8	113.6	6.3
105	3.3	10.8	9.6	0.89	0.89	13.8	113.4	6.7
105	3.6	10.8	9.6	0.89	0.88	13.8	112.7	7.7
115	2.0	9.9	9.2	0.93	1.05	13.5	128.5	2.6
115	2.4	9.9	9.2	0.93	1.03	13.4	126.2	3.6
115	2.7	10.0	9.3	0.93	1.02	13.5	125.0	4.5
115	3.0	10.0	9.3	0.93	1.01	13.5	124.0	5.5
115	3.2	10.0	9.3	0.93	1.01	13.4	123.4	6.2
115	3.3	10.0	9.3	0.93	1.01	13.4	123.1	6.5
115	3.6	10.1	9.4	0.93	1.00	13.5	122.5	7.6

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 36. Heating capacities 1 tons (gross) - EXVG012

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Comp Pwr kW	LWT	Feet Head
25	2.0	7.6	5.5	0.63	19.5	4.4
25	2.4	7.7	5.5	0.63	20.4	6.3
25	2.7	7.8	5.6	0.64	20.9	7.8
25	3.0	7.9	5.7	0.64	21.2	9.6
25	3.2	7.9	5.7	0.64	21.4	10.7
25	3.3	8.0	5.8	0.64	21.5	11.3
25	3.6	8.0	5.8	0.64	21.8	13.2
32	2.0	8.5	6.3	0.65	25.7	4.1
32	2.4	8.7	6.5	0.65	26.6	5.7
32	2.7	8.8	6.6	0.65	27.1	7.1

Table 36. Heating capacities 1 tons (gross) - EXVG012 (continued)

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Comp Pwr kW	LWT	Feet Head
32	3.0	8.9	6.7	0.65	27.5	8.6
32	3.2	8.9	6.7	0.66	27.8	9.7
32	3.3	8.9	6.7	0.66	27.9	10.3
32	3.6	9.0	6.8	0.66	28.2	11.9
45	2.0	10.7	8.3	0.69	36.7	3.6
45	2.4	10.9	8.5	0.69	37.9	5.0
45	2.7	11.0	8.6	0.70	38.6	6.2
45	3.0	11.1	8.7	0.70	39.2	7.5
45	3.2	11.2	8.8	0.70	39.5	8.5
45	3.3	11.2	8.8	0.70	39.7	8.9
45	3.6	11.3	8.9	0.70	40.1	10.4
55	2.0	12.4	10.0	0.72	45.0	3.3
55	2.4	12.6	10.1	0.72	46.6	4.6
55	2.7	12.8	10.3	0.72	47.4	5.7
55	3.0	12.9	10.4	0.72	48.1	6.9
55	3.2	13.0	10.5	0.72	48.4	7.8
55	3.3	13.0	10.5	0.72	48.6	8.2
55	3.6	13.1	10.6	0.73	49.1	9.6
68	2.0	14.5	12.0	0.74	56.0	3.0
68	2.4	14.8	12.3	0.75	57.8	4.2
68	2.7	15.0	12.4	0.75	58.8	5.3
68	3.0	15.2	12.6	0.75	59.6	6.4
68	3.2	15.3	12.7	0.75	60.1	7.2
68	3.3	15.3	12.7	0.75	60.3	7.6
68	3.6	15.4	12.8	0.75	60.9	8.8
75	2.0	15.6	13.0	0.76	62.0	2.9
75	2.4	16.0	13.4	0.76	63.8	4.1
75	2.7	16.2	13.6	0.76	64.9	5.1
75	3.0	16.4	13.8	0.76	65.8	6.2
75	3.2	16.5	13.9	0.76	66.3	7.0
75	3.3	16.5	13.9	0.76	66.6	7.4
75	3.6	16.6	14.0	0.77	67.2	8.5
86	2.0	17.2	14.6	0.77	71.4	2.8
86	2.4	17.6	15.0	0.77	73.5	3.9
86	2.7	17.9	15.3	0.78	74.7	4.9
86	3.0	18.1	15.4	0.78	75.7	5.9
86	3.2	18.2	15.5	0.78	76.3	6.7
86	3.3	18.3	15.6	0.78	76.5	7.0
86	3.6	18.4	15.7	0.78	77.3	8.2

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 3;Minimum CFM 304; Rated CFM 380; Maximum CFM 456.

Table 37. Fan correction factors 1 tons - EXVG012

Entering cfm	Cooling Capacity	Sensible Capacity	Cooling Input Watts	Heating Capacity	Heating Input Watts
304	0.963	0.874	1.010	0.973	1.100
323	0.973	0.906	1.007	0.981	1.071
342	0.983	0.937	1.005	0.988	1.045
361	0.992	0.969	1.002	0.994	1.021
380	1.000	1.000	1.000	1.000	1.000
418	1.014	1.062	0.996	1.010	0.963
437	1.020	1.093	0.994	1.014	0.946
456	1.026	1.123	0.993	1.018	0.931

Table 38. Correction factors for variation in entering air temperature 1 ton, EXVG012

Cooling Entering Air WB°F	Cooling capaci-ty	Cooling Input Watts	Sensible vs. Entering Dry Bulb Multiplier					Heating Entering Air DB°F	Heating capacity	Heating Input Watts
			65.6	70.6	75.6	80.6	85.6			
49.4	0.900	1.016	0.940	1.015	1.079	*	*	53.0	1.050	0.831
56.3	0.908	1.019	0.814	0.957	1.064	*	*	58.0	1.034	0.887
60.3	0.923	1.016	0.660	0.856	1.003	1.118	*	63.0	1.017	0.943
63.2	0.959	1.010	0.510	0.750	0.931	1.071	*	68.0	1.000	1.000
66.2	1.000	1.000	–	0.610	0.830	1.000	1.136	73.0	0.982	1.058
72.1	1.112	0.970	–	–	0.551	0.790	0.981	78.0	0.964	1.118
77.1	1.198	0.935	–	–	–	–	0.782	83.0	0.945	1.178

Note: * = Sensible equals total capacity

Cooling and Heating Capacities 1.25 tons

Table 39. Cooling capacities 1.25 tons (gross) - EXHF015

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Power kW	EER	Reject Mbtuh	LWT	Feet Head
45	2.2	16.07	12.30	0.77	0.550	29.2	17.95	61.3	2.8
45	2.8	16.15	12.33	0.76	0.514	31.4	17.90	57.8	4.2
45	3.1	16.17	12.34	0.76	0.500	32.3	17.88	56.5	5.1
45	3.5	16.20	12.35	0.76	0.486	33.3	17.86	55.2	6.3
45	3.6	16.21	12.35	0.76	0.483	33.6	17.86	54.9	6.6
45	3.8	16.21	12.35	0.76	0.476	34.1	17.83	54.4	7.2
45	4.2	16.23	12.36	0.76	0.466	34.8	17.82	53.5	8.6
55	2.2	15.78	12.19	0.77	0.663	23.8	18.04	71.4	2.7
55	2.8	15.85	12.22	0.77	0.628	25.2	17.99	67.9	4.1
55	3.1	15.87	12.23	0.77	0.614	25.8	17.97	66.6	4.9
55	3.5	15.91	12.25	0.77	0.602	26.4	17.96	65.3	6.0
55	3.6	15.92	12.25	0.77	0.599	26.6	17.96	65.0	6.3
55	3.8	15.92	12.25	0.77	0.593	26.8	17.94	64.4	6.9
55	4.2	15.95	12.26	0.77	0.584	27.3	17.94	63.5	8.3
68	2.2	15.30	12.02	0.79	0.810	18.9	18.06	84.4	2.5
68	2.8	15.38	12.05	0.78	0.777	19.8	18.03	80.9	3.9
68	3.1	15.40	12.05	0.78	0.762	20.2	18.00	79.6	4.6

Table 39. Cooling capacities 1.25 tons (gross) - EXHF015 (continued)

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Power kW	EER	Reject Mbtuh	LWT	Feet Head
68	3.5	15.43	12.07	0.78	0.748	20.6	17.98	78.3	5.7
68	3.6	15.44	12.07	0.78	0.746	20.7	17.99	78.0	6.0
68	3.8	15.44	12.08	0.78	0.740	20.9	17.97	77.5	6.6
68	4.2	15.47	12.09	0.78	0.732	21.1	17.97	76.6	7.9
75	2.2	15.02	11.93	0.79	0.891	16.9	18.06	91.4	2.5
75	2.8	15.08	11.94	0.79	0.857	17.6	18.00	87.9	3.8
75	3.1	15.11	11.95	0.79	0.844	17.9	17.99	86.6	4.5
75	3.5	15.13	11.97	0.79	0.832	18.2	17.97	85.3	5.6
75	3.6	15.14	11.97	0.79	0.829	18.3	17.97	85.0	5.9
75	3.8	15.15	11.96	0.79	0.824	18.4	17.96	84.5	6.5
75	4.2	15.16	11.97	0.79	0.815	18.6	17.94	83.5	7.7
77	2.2	14.93	11.88	0.80	0.915	16.3	18.05	93.4	2.5
77	2.8	15.00	11.92	0.79	0.880	17.0	18.00	89.9	3.8
77	3.1	15.02	11.92	0.79	0.868	17.3	17.98	88.6	4.5
77	3.5	15.04	11.92	0.79	0.855	17.6	17.96	87.3	5.6
77	3.6	15.05	11.92	0.79	0.852	17.7	17.96	87.0	5.8
77	3.8	15.06	11.93	0.79	0.847	17.8	17.95	86.4	6.4
77	4.2	15.07	11.94	0.79	0.838	18.0	17.93	85.5	7.7
86	2.2	14.53	11.73	0.81	1.030	14.1	18.05	102.4	2.4
86	2.8	14.58	11.75	0.81	0.991	14.7	17.96	98.8	3.7
86	3.1	14.60	11.76	0.81	0.978	14.9	17.94	97.6	4.4
86	3.5	14.62	11.77	0.81	0.965	15.2	17.91	96.2	5.4
86	3.6	14.63	11.77	0.80	0.962	15.2	17.91	96.0	5.7
86	3.8	14.63	11.77	0.80	0.956	15.3	17.89	95.4	6.2
86	4.2	14.65	11.78	0.80	0.947	15.5	17.88	94.5	7.4
95	2.2	14.11	11.58	0.82	1.152	12.2	18.04	111.4	2.1
95	2.8	14.15	11.58	0.82	1.114	12.7	17.95	107.8	3.2
95	3.1	14.16	11.59	0.82	1.101	12.9	17.92	106.6	3.9
95	3.5	14.17	11.59	0.82	1.087	13.0	17.88	105.2	4.8
95	3.6	14.18	11.59	0.82	1.084	13.1	17.88	104.9	5.0
95	3.8	14.18	11.60	0.82	1.078	13.2	17.86	104.4	5.5
95	4.2	14.19	11.60	0.82	1.069	13.3	17.84	103.5	6.6
105	2.2	13.63	11.39	0.84	1.310	10.4	18.10	121.5	2.1
105	2.8	13.65	11.39	0.83	1.268	10.8	17.98	117.8	3.1
105	3.1	13.65	11.39	0.83	1.253	10.9	17.93	116.6	3.8
105	3.5	13.66	11.40	0.83	1.238	11.0	17.89	115.2	4.7
105	3.6	13.66	11.40	0.83	1.235	11.1	17.88	114.9	4.9
105	3.8	13.67	11.40	0.83	1.229	11.1	17.86	114.4	5.4
105	4.2	13.67	11.40	0.83	1.218	11.2	17.83	113.5	6.4
110	2.2	13.38	11.29	0.84	1.406	9.5	18.18	126.5	2.0
110	2.8	13.39	11.30	0.84	1.361	9.8	18.04	122.9	3.1

Table 39. Cooling capacities 1.25 tons (gross) - EXHF015 (continued)

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Power kW	EER	Reject Mbtuh	LWT	Feet Head
110	3.1	13.39	11.30	0.84	1.345	10.0	17.98	121.6	3.7
110	3.5	13.40	11.30	0.84	1.329	10.1	17.94	120.3	4.6
110	3.6	13.40	11.30	0.84	1.326	10.1	17.93	120.0	4.8
110	3.8	13.40	11.30	0.84	1.319	10.2	17.90	119.4	5.3
110	4.2	13.40	11.30	0.84	1.308	10.2	17.86	118.5	6.3

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 is permissible, extrapolation is not. Rated GPM 3.6, Rated CFM 475, Minimum CFM 523, Maximum CFM 380.

Table 40. Heating capacities 1.25 tons (gross) - EXHF015

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Power kW	COP	LWT	Feet Head
25	3.5	10.56	7.44	0.913	3.4	20.7	8.7
25	3.6	10.58	7.46	0.914	3.4	20.9	9.2
25	3.8	10.62	7.50	0.915	3.4	21.1	10.1
25	4.2	10.70	7.57	0.916	3.4	21.4	12.0
32	2.2	11.14	7.98	0.926	3.5	24.7	3.8
32	2.8	11.44	8.26	0.933	3.6	26.1	5.7
32	3.1	11.54	8.35	0.935	3.6	26.6	6.9
32	3.5	11.65	8.45	0.937	3.6	27.2	8.5
32	3.6	11.67	8.47	0.937	3.6	27.3	8.9
32	3.8	11.73	8.52	0.940	3.7	27.5	9.8
32	4.2	11.82	8.61	0.940	3.7	27.9	11.6
45	2.2	13.38	10.05	0.975	4.0	35.9	2.8
45	2.8	13.73	10.38	0.982	4.1	37.6	4.2
45	3.1	13.85	10.50	0.983	4.1	38.2	5.1
45	3.5	14.00	10.63	0.987	4.2	38.9	6.3
45	3.6	14.01	10.64	0.986	4.2	39.1	6.6
45	3.8	14.07	10.70	0.987	4.2	39.4	7.2
45	4.2	14.17	10.80	0.988	4.2	39.9	8.6
55	2.2	15.07	11.62	1.010	4.4	44.4	2.7
55	2.8	15.51	12.03	1.019	4.5	46.4	4.1
55	3.1	15.67	12.18	1.023	4.5	47.1	4.9
55	3.5	15.84	12.34	1.026	4.5	47.9	6.0
55	3.6	15.84	12.35	1.024	4.5	48.1	6.3
55	3.8	15.92	12.42	1.026	4.5	48.5	6.9
55	4.2	16.05	12.54	1.029	4.6	49.0	8.3
68	2.2	17.35	13.75	1.056	4.8	55.5	2.5
68	2.8	17.86	14.23	1.064	4.9	57.8	3.9
68	3.1	18.01	14.37	1.066	5.0	58.7	4.6
68	3.5	18.29	14.63	1.073	5.0	59.6	5.7
68	3.6	18.33	14.66	1.074	5.0	59.9	6.0
68	3.8	18.42	14.75	1.076	5.0	60.2	6.6
68	4.2	18.57	14.89	1.078	5.0	60.9	7.9

Table 40. Heating capacities 1.25 tons (gross) - EXHF015 (continued)

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Power kW	COP	LWT	Feet Head
75	2.2	18.60	14.92	1.078	5.1	61.4	2.5
75	2.8	19.11	15.41	1.083	5.2	64.0	3.8
75	3.1	19.37	15.65	1.089	5.2	64.9	4.5
75	3.5	19.60	15.87	1.093	5.3	65.9	5.6
75	3.6	19.65	15.92	1.093	5.3	66.2	5.9
75	3.8	19.74	16.00	1.095	5.3	66.6	6.5
75	4.2	19.93	16.18	1.099	5.3	67.3	7.7
77	2.2	18.94	15.25	1.081	5.1	63.1	2.5
77	2.8	19.52	15.80	1.091	5.2	65.7	3.8
77	3.1	19.77	16.03	1.096	5.3	66.7	4.5
77	3.5	19.96	16.21	1.098	5.3	67.7	5.6
77	3.6	20.02	16.27	1.099	5.3	68.0	5.8
77	3.8	20.13	16.37	1.102	5.4	68.4	6.4
77	4.2	20.32	16.55	1.105	5.4	69.1	7.7
86	2.2	20.55	16.77	1.108	5.4	70.8	2.4
86	2.8	21.18	17.37	1.117	5.6	73.6	3.7
86	3.1	21.39	17.57	1.119	5.6	74.7	4.4
86	3.5	21.64	17.81	1.122	5.7	75.8	5.4
86	3.6	21.66	17.83	1.121	5.7	76.1	5.7
86	3.8	21.79	17.95	1.124	5.7	76.6	6.2
86	4.2	21.93	18.09	1.125	5.7	77.4	7.4

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 is permissible, extrapolation is not. Rated GPM 3.6, Rated CFM 475, Minimum CFM 523, Maximum CFM 380.

Table 41. Fan correction factors 1.25 tons - EXHF015

Entering CFM	Cooling capacity	Sensible capacity	Cooling comp watts	Heating capacity	Heating comp watts
380	0.960	0.878	1.005	0.993	1.100
428	0.981	0.939	1.002	0.998	1.045
475	1.000	1.000	1.000	1.000	1.000
523	1.017	1.059	0.998	1.000	0.963

Table 42. Correction factors for variation in entering air temperature 1.25 tons, EXHF015

Cooling Entering Air WB°F	Cooling capaci-ty	Cooling Input Watts	Sensible vs. Entering Dry Bulb Multiplier					Heating Entering Air DB°F	Heating capacity	Heating Input Watts
			65.6	70.6	75.6	80.6	85.6			
49.4	0.944	1.010	0.990	1.054	1.118	*	*	53.0	1.012	0.842
56.3	0.943	1.012	0.810	1.036	1.117	*	*	58.0	1.006	0.891
60.3	0.943	1.012	0.598	0.839	1.074	*	*	63.0	1.002	0.943
63.2	0.965	1.008	0.439	0.683	0.923	1.156	*	68.0	1.000	1.000
66.2	1.000	1.000	—	0.517	0.759	1.000	1.227	73.0	0.993	1.054
72.1	1.081	0.978	—	—	0.428	0.671	0.911	78.0	0.989	1.110
77.1	1.147	0.950	—	—	—	0.384	0.625	83.0	0.986	1.168

Note: * = Sensible equals total capacity

Table 43. Cooling capacities 1.25 tons (gross) - EXVG015

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Comp Pwr kW	Reject Mbtuh	LWT	Feet Head
45	2.4	19.0	13.5	0.71	0.56	20.9	62.4	4.8
45	3.0	19.1	13.6	0.71	0.53	20.9	58.9	7.0
45	3.4	19.1	13.6	0.71	0.51	20.8	57.2	8.6
45	3.8	19.1	13.6	0.71	0.50	20.8	56.1	10.2
45	3.9	19.1	13.6	0.71	0.50	20.8	55.7	10.9
45	4.1	19.1	13.6	0.71	0.49	20.8	55.1	11.9
45	4.5	19.1	13.6	0.71	0.48	20.8	54.2	14.0
55	2.4	18.4	13.4	0.73	0.67	20.7	72.3	4.5
55	3.0	18.4	13.4	0.73	0.63	20.6	68.7	6.5
55	3.4	18.5	13.4	0.72	0.62	20.6	67.1	8.1
55	3.8	18.5	13.4	0.72	0.61	20.6	66.0	9.5
55	3.9	18.5	13.4	0.72	0.61	20.6	65.6	10.2
55	4.1	18.5	13.4	0.72	0.60	20.6	65.0	11.1
55	4.5	18.5	13.4	0.72	0.59	20.5	64.1	13.1
68	2.4	17.6	13.1	0.74	0.80	20.3	84.9	4.2
68	3.0	17.6	13.1	0.74	0.77	20.2	81.5	6.1
68	3.4	17.6	13.1	0.74	0.75	20.2	79.9	7.5
68	3.8	17.7	13.2	0.75	0.74	20.2	78.8	8.8
68	3.9	17.7	13.2	0.75	0.74	20.2	78.4	9.5
68	4.1	17.7	13.2	0.75	0.74	20.2	77.9	10.3
68	4.5	17.7	13.2	0.75	0.73	20.2	77.0	12.2
75	2.4	17.1	13.0	0.76	0.87	20.1	91.8	4.0
75	3.0	17.1	13.0	0.76	0.84	20.0	88.3	5.9
75	3.4	17.2	13.1	0.76	0.82	20.0	86.8	7.3
75	3.8	17.2	13.1	0.76	0.81	20.0	85.7	8.6
75	3.9	17.2	13.1	0.76	0.81	20.0	85.3	9.2
75	4.1	17.2	13.1	0.76	0.80	19.9	84.7	10.0
75	4.5	17.2	13.1	0.76	0.80	19.9	83.8	11.8
86	2.4	16.3	12.7	0.78	0.99	19.7	102.4	3.9
86	3.0	16.4	12.8	0.78	0.96	19.7	99.1	5.6
86	3.4	16.4	12.8	0.78	0.95	19.6	97.5	6.9
86	3.8	16.4	12.8	0.78	0.94	19.6	96.5	8.2
86	3.9	16.4	12.8	0.78	0.93	19.6	96.1	8.8
86	4.1	16.4	12.8	0.78	0.93	19.6	95.6	9.6
86	4.5	16.4	12.8	0.78	0.92	19.5	94.7	11.3
95	2.4	15.7	12.5	0.80	1.11	19.5	111.3	3.7
95	3.0	15.7	12.5	0.80	1.08	19.4	107.9	5.5
95	3.4	15.7	12.5	0.80	1.07	19.3	106.4	6.7
95	3.8	15.7	12.5	0.80	1.06	19.3	105.3	8.0
95	3.9	15.7	12.5	0.80	1.06	19.3	104.9	8.5
95	4.1	15.7	12.5	0.80	1.05	19.3	104.4	9.3

Table 43. Cooling capacities 1.25 tons (gross) - EXVG015 (continued)

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Comp Pwr kW	Reject Mbtuh	LWT	Feet Head
95	4.5	15.8	12.5	0.79	1.04	19.4	103.6	11.0
105	2.4	14.9	12.1	0.81	1.27	19.2	121.0	3.6
105	3.0	14.9	12.1	0.81	1.23	19.1	117.7	5.3
105	3.4	14.9	12.1	0.81	1.22	19.1	116.2	6.6
105	3.8	15.0	12.1	0.81	1.21	19.1	115.2	7.7
105	3.9	15.0	12.1	0.81	1.21	19.1	114.8	8.3
105	4.1	15.0	12.1	0.81	1.20	19.1	114.3	9.0
105	4.5	15.0	12.1	0.81	1.19	19.1	113.5	10.7
115	2.4	14.1	11.7	0.83	1.43	19.0	130.8	3.6
115	3.0	14.1	11.7	0.83	1.40	18.9	127.6	5.2
115	3.4	14.1	11.7	0.83	1.38	18.8	126.1	6.4
115	3.8	14.1	11.7	0.83	1.37	18.8	125.0	7.6
115	3.9	14.1	11.7	0.83	1.37	18.8	124.6	8.1
115	4.1	14.1	11.7	0.83	1.36	18.8	124.2	8.8
115	4.5	14.1	11.7	0.83	1.36	18.7	123.3	10.4

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 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 44. Heating capacities 1.25 tons (gross) - EXVG015

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Comp Pwr kW	LWT	Feet Head
25	2.4	9.9	7.0	0.85	19.2	5.8
25	3.0	10.1	7.2	0.85	20.2	8.5
25	3.4	10.2	7.3	0.85	20.7	10.5
25	3.8	10.3	7.4	0.85	21.1	12.4
25	3.9	10.3	7.4	0.86	21.2	13.3
25	4.1	10.3	7.4	0.86	21.4	14.5
25	4.5	10.4	7.5	0.86	21.7	17.1
32	2.4	11.1	8.1	0.87	25.3	5.4
32	3.0	11.3	8.3	0.87	26.5	7.9
32	3.4	11.4	8.4	0.88	27.1	9.7
32	3.8	11.5	8.5	0.88	27.5	11.5
32	3.9	11.6	8.6	0.88	27.6	12.3
32	4.1	11.6	8.6	0.88	27.8	13.4
32	4.5	11.7	8.7	0.88	28.1	15.7
45	2.4	13.5	10.4	0.92	36.3	4.8
45	3.0	13.8	10.6	0.93	37.9	7.0
45	3.4	13.9	10.7	0.93	38.7	8.6
45	3.8	14.0	10.8	0.93	39.2	10.2
45	3.9	14.1	10.9	0.93	39.4	10.9
45	4.1	14.1	10.9	0.93	39.7	11.9
45	4.5	14.2	11.0	0.93	40.1	14.0

Table 44. Heating capacities 1.25 tons (gross) - EXVG015 (continued)

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Comp Pwr kW	LWT	Feet Head
55	2.4	15.4	12.1	0.95	44.9	4.5
55	3.0	15.8	12.5	0.96	46.7	6.5
55	3.4	16.0	12.7	0.96	47.5	8.1
55	3.8	16.1	12.8	0.96	48.2	9.5
55	3.9	16.1	12.8	0.96	48.4	10.2
55	4.1	16.2	12.9	0.96	48.7	11.1
55	4.5	16.3	13.0	0.97	49.2	13.1
68	2.4	18.0	14.6	0.99	55.8	4.2
68	3.0	18.4	15.0	0.99	58.0	6.1
68	3.4	18.7	15.3	0.99	59.0	7.5
68	3.8	18.9	15.5	1.00	59.7	8.8
68	3.9	18.9	15.5	1.00	60.1	9.5
68	4.1	19.0	15.6	1.00	60.4	10.3
68	4.5	19.1	15.7	1.00	61.0	12.2
75	2.4	19.4	16.0	1.00	61.7	4.0
75	3.0	19.9	16.5	1.01	64.0	5.9
75	3.4	20.2	16.8	1.01	65.1	7.3
75	3.8	20.4	17.0	1.01	65.9	8.6
75	3.9	20.4	16.9	1.01	66.3	9.2
75	4.1	20.5	17.0	1.01	66.7	10.0
75	4.5	20.7	17.2	1.01	67.4	11.8
86	2.4	21.6	18.1	1.03	70.9	3.9
86	3.0	22.2	18.7	1.03	73.5	5.6
86	3.4	22.5	19.0	1.04	74.8	6.9
86	3.8	22.8	19.3	1.04	75.7	8.2
86	3.9	22.8	19.3	1.04	76.1	8.8
86	4.1	23.0	19.5	1.04	76.5	9.6
86	4.5	23.1	19.6	1.04	77.3	11.3

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 3.75;Minimum CFM 380; Rated CFM 475; Maximum CFM 570.

Table 45. Fan correction factors 1.25 tons - EXVG015

Entering CFM	Cooling capacity	Sensible capacity	Cooling comp watts	Heating capacity	Heating comp watts
380	0.957	0.886	1.010	0.982	1.103
404	0.969	0.915	1.007	0.988	1.073
428	0.980	0.944	1.005	0.992	1.046
451	0.990	0.972	1.002	0.996	1.022
475	1.000	1.000	1.000	1.000	1.000
523	1.017	1.054	0.996	1.006	0.962
546	1.024	1.079	0.994	1.009	0.946
570	1.031	1.106	0.992	1.011	0.929

Table 46. Correction factors for variation in entering air temperature 1.25 tons, EXVG015

Cooling Entering Air WB°F	Cooling capacity	Cooling Input Watts	Sensible vs. Entering Dry Bulb Multiplier					Heating Entering Air DB°F	Heating capacity	Heating Input Watts
			65.6	70.6	75.6	80.6	85.6			
49.4	0.870	1.021	0.959	1.048	1.119	*	*	53.0	1.034	0.819
56.3	0.876	1.022	0.816	0.965	1.083	*	*	58.0	1.023	0.879
60.3	0.901	1.017	0.673	0.861	1.012	1.137	*	63.0	1.012	0.939
63.2	0.949	1.010	0.541	0.758	0.934	1.080	1.208	68.0	1.000	1.000
66.2	1.000	1.000	–	0.629	0.831	1.000	1.146	73.0	0.987	1.062
72.1	1.122	0.971	–	–	0.574	0.788	0.973	78.0	0.974	1.124
77.1	1.222	0.940	–	–	–	–	0.780	83.0	0.961	1.187

Note: * = Sensible equals total capacity

Cooling and Heating Capacities 1.5 tons

Table 47. Cooling capacities 1.5 tons (gross) - EXHF018

EWT	GPM	Gross Mbtuh	Gross Sen Mbtuh	SHR	Comp Pwr kW	Reject Mbtuh	LWT	Feet Head
45	2.9	22.8	17.3	0.76	0.59	24.8	62.1	1.0
45	3.6	22.8	17.3	0.76	0.55	24.7	58.7	1.4
45	4.1	22.9	17.4	0.76	0.53	24.7	57.0	1.8
45	4.5	22.9	17.4	0.76	0.52	24.7	56.0	2.2
45	4.7	23.0	17.5	0.76	0.51	24.8	55.6	2.3
45	5.0	23.0	17.5	0.76	0.51	24.7	54.9	2.6
45	5.4	23.0	17.5	0.76	0.50	24.7	54.1	3.0
55	2.9	22.1	17.0	0.77	0.74	24.6	72.0	0.9
55	3.6	22.2	17.1	0.77	0.70	24.6	68.7	1.3
55	4.1	22.2	17.1	0.77	0.68	24.5	67.0	1.7
55	4.5	22.3	17.2	0.77	0.67	24.6	65.9	2.0
55	4.7	22.3	17.2	0.77	0.67	24.6	65.5	2.2
55	5.0	22.3	17.2	0.77	0.66	24.5	64.8	2.4
55	5.4	22.3	17.2	0.77	0.65	24.5	64.1	2.8
68	2.9	21.0	16.5	0.79	0.91	24.1	84.6	0.8
68	3.6	21.1	16.6	0.79	0.87	24.1	81.4	1.2
68	4.1	21.1	16.6	0.79	0.85	24.0	79.7	1.6
68	4.5	21.2	16.7	0.79	0.84	24.1	78.7	1.8
68	4.7	21.2	16.7	0.79	0.83	24.0	78.2	2.0
68	5.0	21.2	16.7	0.79	0.83	24.0	77.6	2.2
68	5.4	21.3	16.7	0.78	0.82	24.1	76.9	2.5
75	2.9	20.4	16.2	0.79	0.99	23.8	91.4	0.8
75	3.6	20.5	16.3	0.80	0.95	23.8	88.2	1.2
75	4.1	20.6	16.3	0.79	0.93	23.8	86.6	1.5
75	4.5	20.6	16.3	0.79	0.92	23.7	85.5	1.8
75	4.7	20.7	16.4	0.79	0.92	23.8	85.1	1.9
75	5.0	20.7	16.4	0.79	0.91	23.8	84.5	2.2
75	5.4	20.7	16.4	0.79	0.90	23.8	83.8	2.5

Table 47. Cooling capacities 1.5 tons (gross) - EXHF018 (continued)

EWT	GPM	Gross Mbtuh	Gross Sen Mbtuh	SHR	Comp Pwr kW	Reject Mbtuh	LWT	Feet Head
86	2.9	19.7	15.8	0.80	1.13	23.6	102.3	0.8
86	3.6	19.8	15.9	0.80	1.10	23.5	99.1	1.2
86	4.1	19.8	15.9	0.80	1.08	23.5	97.5	1.5
86	4.5	19.8	15.9	0.80	1.07	23.4	96.4	1.7
86	4.7	19.9	16.0	0.80	1.06	23.5	96.0	1.9
86	5.0	19.9	16.0	0.80	1.05	23.5	95.4	2.1
86	5.4	19.9	16.0	0.80	1.05	23.5	94.7	2.4
95	2.9	19.0	15.4	0.81	1.27	23.3	111.1	0.8
95	3.6	19.1	15.5	0.81	1.23	23.3	107.9	1.2
95	4.1	19.1	15.5	0.81	1.21	23.2	106.3	1.5
95	4.5	19.2	15.6	0.81	1.20	23.3	105.4	1.7
95	4.7	19.2	15.6	0.81	1.19	23.3	104.9	1.8
95	5.0	19.2	15.6	0.81	1.19	23.2	104.3	2.0
95	5.4	19.2	15.6	0.81	1.18	23.2	103.6	2.3
105	2.9	18.1	15.0	0.83	1.43	23.0	120.9	0.8
105	3.6	18.2	15.1	0.83	1.39	22.9	117.7	1.1
105	4.1	18.2	15.1	0.83	1.37	22.9	116.2	1.4
105	4.5	18.2	15.1	0.83	1.36	22.8	115.1	1.7
105	4.7	18.3	15.2	0.83	1.36	22.9	114.7	1.8
105	5.0	18.3	15.2	0.83	1.35	22.9	114.2	2.0
105	5.4	18.3	15.2	0.83	1.34	22.9	113.5	2.3
115	2.9	17.0	14.5	0.85	1.60	22.5	130.5	0.8
115	3.6	17.1	14.6	0.85	1.56	22.4	127.4	1.1
115	4.1	17.2	14.7	0.85	1.54	22.5	126.0	1.4
115	4.5	17.2	14.7	0.85	1.53	22.4	125.0	1.6
115	4.7	17.3	14.8	0.86	1.53	22.5	124.6	1.8
115	5.0	17.3	14.8	0.86	1.52	22.5	124.0	2.0
115	5.4	17.3	14.8	0.86	1.51	22.5	123.3	2.2

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 48. Heating capacities 1.5 tons (gross) - EXHF018

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Power kW	COP	LWT	Feet Head
25	4.2	12.72	9.04	1.078	3.5	20.7	7.0
25	4.4	12.82	9.14	1.078	3.5	20.8	7.6
25	4.6	12.82	9.14	1.078	3.5	21.0	8.2
25	5.0	12.92	9.21	1.088	3.5	21.3	9.5
32	2.7	13.52	9.77	1.098	3.6	24.8	3.1
32	3.3	13.82	10.07	1.098	3.7	25.9	4.5
32	3.7	14.02	10.27	1.098	3.7	26.4	5.4
32	4.2	14.12	10.34	1.108	3.7	27.1	6.8

Table 48. Heating capacities 1.5 tons (gross) - EXHF018 (continued)

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Power kW	COP	LWT	Feet Head
32	4.4	14.22	10.44	1.108	3.8	27.3	7.3
32	4.6	14.22	10.44	1.108	3.8	27.5	7.9
32	5.0	14.42	10.64	1.108	3.8	27.7	9.2
45	2.7	17.02	13.03	1.168	4.3	35.3	2.2
45	3.3	17.42	13.40	1.178	4.3	36.9	3.1
45	3.7	17.62	13.60	1.178	4.4	37.6	3.8
45	4.2	17.82	13.77	1.188	4.4	38.4	4.7
45	4.4	17.82	13.77	1.188	4.4	38.7	5.1
45	4.6	17.92	13.87	1.188	4.4	39.0	5.5
45	5.0	18.12	14.07	1.188	4.5	39.4	6.4
55	2.7	19.32	15.20	1.208	4.7	43.7	2.1
55	3.3	19.82	15.66	1.218	4.8	45.5	3.0
55	3.7	20.02	15.83	1.228	4.8	46.4	3.6
55	4.2	20.32	16.13	1.228	4.8	47.3	4.5
55	4.4	20.32	16.13	1.228	4.8	47.7	4.9
55	4.6	20.42	16.23	1.228	4.9	47.9	5.3
55	5.0	20.52	16.29	1.238	4.9	48.5	6.2
68	2.7	22.62	18.22	1.288	5.1	54.5	2.0
68	3.3	23.12	18.69	1.298	5.2	56.7	2.8
68	3.7	23.32	18.92	1.288	5.3	57.8	3.4
68	4.2	23.62	19.19	1.298	5.3	58.9	4.3
68	4.4	23.62	19.19	1.298	5.3	59.3	4.6
68	4.6	23.72	19.29	1.298	5.4	59.6	5.0
68	5.0	23.82	19.39	1.298	5.4	60.2	5.8
75	2.7	24.12	19.66	1.308	5.4	60.4	1.9
75	3.3	24.62	20.16	1.308	5.5	62.8	2.7
75	3.7	24.92	20.46	1.308	5.6	63.9	3.3
75	4.2	25.22	20.72	1.318	5.6	65.1	4.2
75	4.4	25.12	20.66	1.308	5.6	65.6	4.5
75	4.6	25.32	20.86	1.308	5.7	65.9	4.9
75	5.0	25.42	20.96	1.308	5.7	66.6	5.7
77	2.7	26.02	21.52	1.318	5.8	61.1	1.9
77	3.3	26.52	22.02	1.318	5.9	63.7	2.7
77	3.7	26.72	22.22	1.318	5.9	65.0	3.3
77	4.2	26.82	22.36	1.308	6.0	66.4	4.1
77	4.4	26.92	22.46	1.308	6.0	66.8	4.4
77	4.6	26.92	22.49	1.298	6.1	67.2	4.8
77	5.0	27.12	22.69	1.298	6.1	67.9	5.5
86	2.7	26.42	21.92	1.318	5.9	69.8	1.9
86	3.3	26.92	22.42	1.318	6.0	72.4	2.7
86	3.7	27.12	22.62	1.318	6.0	73.8	3.3
86	4.2	27.22	22.76	1.308	6.1	75.2	4.1
86	4.4	27.32	22.86	1.308	6.1	75.6	4.4

Table 48. Heating capacities 1.5 tons (gross) - EXHF018 (continued)

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Power kW	COP	LWT	Feet Head
86	4.6	27.32	22.89	1.298	6.2	76.0	4.8
86	5.0	27.52	23.09	1.298	6.2	76.8	5.5

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 is permissible, extrapolation is not. Rated GPM 3.6, Rated CFM 475, Minimum CFM 523, Maximum CFM 380.

Table 49. Fan correction factors 1.5 tons - EXHF018

Entering CFM	Cooling capacity	Sensible capacity	Cooling comp watts	Heating capacity	Heating comp watts
456	0.964	0.881	1.001	0.985	1.106
513	0.984	0.941	1.000	0.991	1.041
570	1.000	1.000	1.000	1.000	1.000
627	1.012	1.057	1.001	1.003	0.964

Table 50. Correction factors for variation in entering air temperature 1.5 tons, EXHF018

Cooling Entering Air WB°F	Cooling capacity	Cooling Input Watts	Sensible vs. Entering Dry Bulb Multiplier					Heating Entering Air DB°F	Heating capacity	Heating Input Watts
			65.6	70.6	75.6	80.6	85.6			
49.4	0.915	1.022	0.968	1.035	1.104	*	*	53.0	1.017	0.843
56.3	0.914	1.022	0.806	1.010	1.103	*	*	58.0	1.012	0.894
60.3	0.914	1.023	0.619	0.841	1.052	*	*	63.0	1.004	0.944
63.2	0.941	1.020	0.477	0.702	0.925	1.130	*	68.0	1.000	1.000
66.2	1.000	1.000	—	0.554	0.775	1.000	1.201	73.0	0.993	1.058
72.1	1.066	0.967	—	—	0.471	0.696	0.917	78.0	0.981	1.115
77.1	1.117	0.944	—	—	—	0.431	0.654	83.0	0.973	1.173

Note: * = Sensible equals total capacity

Table 51. Cooling capacities 1.5 tons (gross) - EXVG018

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Comp Pwr kW	Reject Mbtuh	LWT	Feet Head
45	2.9	22.8	17.3	0.76	0.59	24.8	62.1	1.0
45	3.6	22.8	17.3	0.76	0.55	24.7	58.7	1.6
45	4.1	22.9	17.4	0.76	0.53	24.7	57.0	2.0
45	4.5	22.9	17.4	0.76	0.52	24.7	56.0	2.3
45	4.7	23.0	17.5	0.76	0.51	24.8	55.6	2.5
45	5.0	23.0	17.5	0.76	0.51	24.7	54.9	2.8
45	5.4	23.0	17.5	0.76	0.50	24.7	54.1	3.2
55	2.9	22.1	17.0	0.77	0.74	24.6	72.0	1.0
55	3.6	22.2	17.1	0.77	0.70	24.6	68.7	1.4
55	4.1	22.2	17.1	0.77	0.68	24.5	67.0	1.8
55	4.5	22.3	17.2	0.77	0.67	24.6	65.9	2.1
55	4.7	22.3	17.2	0.77	0.67	24.6	65.5	2.3
55	5.0	22.3	17.2	0.77	0.66	24.5	64.8	2.6
55	5.4	22.3	17.2	0.77	0.65	24.5	64.1	3.0
68	2.9	21.0	16.5	0.79	0.91	24.1	84.6	0.9
68	3.6	21.1	16.6	0.79	0.87	24.1	81.4	1.3

Table 51. Cooling capacities 1.5 tons (gross) - EXVG018 (continued)

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Comp Pwr kW	Reject Mbtuh	LWT	Feet Head
68	4.1	21.1	16.6	0.79	0.85	24.0	79.7	1.7
68	4.5	21.2	16.7	0.79	0.84	24.1	78.7	2.0
68	4.7	21.2	16.7	0.79	0.83	24.0	78.2	2.2
68	5.0	21.2	16.7	0.79	0.83	24.0	77.6	2.4
68	5.4	21.3	16.7	0.78	0.82	24.1	76.9	2.8
75	2.9	20.4	16.2	0.79	0.99	23.8	91.4	0.9
75	3.6	20.5	16.3	0.80	0.95	23.8	88.2	1.3
75	4.1	20.6	16.3	0.79	0.93	23.8	86.6	1.6
75	4.5	20.6	16.3	0.79	0.92	23.7	85.5	1.9
75	4.7	20.7	16.4	0.79	0.92	23.8	85.1	2.1
75	5.0	20.7	16.4	0.79	0.91	23.8	84.5	2.3
75	5.4	20.7	16.4	0.79	0.90	23.8	83.8	2.7
86	2.9	19.7	15.8	0.80	1.13	23.6	102.3	0.9
86	3.6	19.8	15.9	0.80	1.10	23.5	99.1	1.3
86	4.1	19.8	15.9	0.80	1.08	23.5	97.5	1.6
86	4.5	19.8	15.9	0.80	1.07	23.4	96.4	1.9
86	4.7	19.9	16.0	0.80	1.06	23.5	96.0	2.0
86	5.0	19.9	16.0	0.80	1.05	23.5	95.4	2.2
86	5.4	19.9	16.0	0.80	1.05	23.5	94.7	2.6
95	2.9	19.0	15.4	0.81	1.27	23.3	111.1	0.9
95	3.6	19.1	15.5	0.81	1.23	23.3	107.9	1.3
95	4.1	19.1	15.5	0.81	1.21	23.2	106.3	1.6
95	4.5	19.2	15.6	0.81	1.20	23.3	105.4	1.8
95	4.7	19.2	15.6	0.81	1.19	23.3	104.9	2.0
95	5.0	19.2	15.6	0.81	1.19	23.2	104.3	2.2
95	5.4	19.2	15.6	0.81	1.18	23.2	103.6	2.5
105	2.9	18.1	15.0	0.83	1.43	23.0	120.9	0.9
105	3.6	18.2	15.1	0.83	1.39	22.9	117.7	1.2
105	4.1	18.2	15.1	0.83	1.37	22.9	116.2	1.5
105	4.5	18.2	15.1	0.83	1.36	22.8	115.1	1.8
105	4.7	18.3	15.2	0.83	1.36	22.9	114.7	1.9
105	5.0	18.3	15.2	0.83	1.35	22.9	114.2	2.2
105	5.4	18.3	15.2	0.83	1.34	22.9	113.5	2.5
115	2.9	17.0	14.5	0.85	1.60	22.5	130.5	0.8
115	3.6	17.1	14.6	0.85	1.56	22.4	127.4	1.2
115	4.1	17.2	14.7	0.85	1.54	22.5	126.0	1.5
115	4.5	17.2	14.7	0.85	1.53	22.4	125.0	1.8
115	4.7	17.3	14.8	0.86	1.53	22.5	124.6	1.9
115	5.0	17.3	14.8	0.86	1.52	22.5	124.0	2.1

Table 51. Cooling capacities 1.5 tons (gross) - EXVG018 (continued)

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Comp Pwr kW	Reject Mbtuh	LWT	Feet Head
115	5.4	17.3	14.8	0.86	1.51	22.5	123.3	2.4

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 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 52. Heating capacities 1.5 tons (gross) - EXVG018

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Comp Pwr kW	LWT	Feet Head
25	2.9	11.7	8.3	1.00	19.3	1.4
25	3.6	12.0	8.6	1.00	20.2	2.0
25	4.1	12.1	8.7	1.00	20.8	2.5
25	4.5	12.2	8.8	1.01	21.1	2.9
25	4.7	12.2	8.8	1.01	21.3	3.1
25	5.0	12.3	8.9	1.01	21.4	3.5
25	5.4	12.4	9.0	1.01	21.7	4.0
32	2.9	13.0	9.5	1.02	25.4	1.2
32	3.6	13.3	9.8	1.02	26.6	1.8
32	4.1	13.5	10.0	1.03	27.1	2.3
32	4.5	13.5	10.0	1.03	27.6	2.7
32	4.7	13.6	10.1	1.03	27.7	2.9
32	5.0	13.6	10.1	1.03	28.0	3.2
32	5.4	13.7	10.2	1.03	28.2	3.7
45	2.9	16.1	12.4	1.07	36.4	1.0
45	3.6	16.5	12.8	1.08	37.9	1.6
45	4.1	16.6	12.9	1.08	38.7	2.0
45	4.5	16.8	13.1	1.08	39.2	2.3
45	4.7	16.8	13.1	1.08	39.4	2.5
45	5.0	16.9	13.2	1.08	39.7	2.8
45	5.4	17.0	13.3	1.09	40.1	3.2
55	2.9	18.6	14.8	1.12	44.8	1.0
55	3.6	19.0	15.2	1.13	46.6	1.4
55	4.1	19.3	15.4	1.13	47.5	1.8
55	4.5	19.4	15.5	1.13	48.1	2.1
55	4.7	19.5	15.6	1.13	48.4	2.3
55	5.0	19.6	15.7	1.13	48.7	2.6
55	5.4	19.7	15.8	1.13	49.1	3.0
68	2.9	21.8	17.8	1.18	55.7	0.9
68	3.6	22.3	18.3	1.19	57.8	1.3
68	4.1	22.6	18.5	1.19	59.0	1.7
68	4.5	22.8	18.7	1.19	59.7	2.0
68	4.7	22.9	18.8	1.19	60.0	2.2
68	5.0	23.1	19.0	1.19	60.4	2.4
68	5.4	23.2	19.1	1.20	60.9	2.8

Table 52. Heating capacities 1.5 tons (gross) - EXVG018 (continued)

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Comp Pwr kW	LWT	Feet Head
75	2.9	23.4	19.3	1.21	61.7	0.9
75	3.6	24.1	20.0	1.21	63.9	1.3
75	4.1	24.4	20.2	1.22	65.1	1.6
75	4.5	24.6	20.4	1.22	65.9	1.9
75	4.7	24.7	20.5	1.22	66.3	2.1
75	5.0	24.9	20.7	1.22	66.7	2.3
75	5.4	25.0	20.8	1.23	67.3	2.7
86	2.9	26.0	21.8	1.24	71.0	0.9
86	3.6	26.7	22.5	1.24	73.5	1.3
86	4.1	27.1	22.8	1.25	74.9	1.6
86	4.5	27.4	23.1	1.25	75.7	1.9
86	4.7	27.5	23.2	1.25	76.1	2.0
86	5.0	27.7	23.4	1.26	76.6	2.2
86	5.4	27.8	23.5	1.26	77.3	2.6

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 4.5;Minimum CFM 456; Rated CFM 570; Maximum CFM 684.

Table 53. Fan correction factors 1.5 tons - EXVG018

Entering cfm	Cooling Capacity	Sensible Capacity	Cooling Input Watts	Heating Capacity	Heating Input Watts
456	0.958	0.875	1.009	0.980	1.108
485	0.970	0.907	1.006	0.986	1.076
513	0.981	0.938	1.004	0.991	1.048
542	0.991	0.970	1.002	0.996	1.022
570	1.000	1.000	1.000	1.000	1.000
627	1.017	1.061	0.996	1.007	0.960
656	1.025	1.091	0.994	1.010	0.942
684	1.032	1.120	0.993	1.012	0.927

Table 54. Correction factors for variation in entering air temperature 1.5 tons, EXVG018

Cooling Entering Air WB°F	Cooling capaci-ty	Cooling Input Watts	Sensible vs. Entering Dry Bulb Multiplier					Heating Entering Air DB°F	Heating capacity	Heating Input Watts
			65.6	70.6	75.6	80.6	85.6			
49.4	0.872	1.015	0.949	1.032	1.090	*	*	53.0	1.038	0.819
56.3	0.878	1.018	0.805	0.955	1.073	*	*	58.0	1.026	0.879
60.3	0.900	1.015	0.658	0.851	1.006	1.133	*	63.0	1.013	0.939
63.2	0.948	1.009	0.523	0.746	0.928	1.079	*	68.0	1.000	1.000
66.2	1.000	1.000	–	0.614	0.825	1.000	1.147	73.0	0.986	1.062
72.1	1.115	0.975	–	–	0.562	0.784	0.973	78.0	0.972	1.125
77.1	1.221	0.946	–	–	–	–	0.775	83.0	0.958	1.188

Note: * = Sensible equals total capacity

Cooling and Heating Capacities 2 tons

Table 55. Cooling capacities 2 tons (gross) - EXHF024

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Power kW	EER	Reject Mbtuh	LWT	Feet Head
45	3.6	27.17	20.17	0.74	0.774	35.1	29.81	61.6	3.3
45	4.4	27.57	20.27	0.74	0.734	37.6	30.08	58.7	4.7
45	5.0	27.47	20.17	0.73	0.704	39.0	29.87	56.9	5.9
45	5.6	27.67	20.27	0.73	0.684	40.5	30.00	55.7	7.3
45	5.8	27.77	20.37	0.73	0.684	40.6	30.10	55.4	7.7
45	6.1	27.77	20.47	0.74	0.674	41.2	30.07	54.9	8.4
45	6.6	27.87	20.37	0.73	0.664	42.0	30.14	54.1	9.7
55	3.6	26.17	19.67	0.75	0.924	28.3	29.32	71.3	3.2
55	4.4	26.47	19.77	0.75	0.894	29.6	29.52	68.4	4.6
55	5.0	26.67	19.87	0.75	0.874	30.5	29.65	66.9	5.7
55	5.6	26.77	19.97	0.75	0.854	31.3	29.68	65.6	7.0
55	5.8	26.67	19.87	0.75	0.844	31.6	29.55	65.2	7.4
55	6.1	26.77	19.97	0.75	0.834	32.1	29.62	64.7	8.1
55	6.6	26.87	19.97	0.74	0.824	32.6	29.68	64.0	9.3
68	3.6	25.47	19.47	0.76	1.134	22.5	29.34	84.3	3.0
68	4.4	25.57	19.57	0.77	1.094	23.4	29.30	81.3	4.3
68	5.0	25.77	19.67	0.76	1.074	24.0	29.44	79.8	5.4
68	5.6	25.77	19.67	0.76	1.064	24.2	29.40	78.5	6.6
68	5.8	25.87	19.67	0.76	1.054	24.5	29.47	78.2	7.0
68	6.1	25.87	19.67	0.76	1.044	24.8	29.43	77.6	7.6
68	6.6	25.97	19.67	0.76	1.034	25.1	29.50	76.9	8.8
75	3.6	25.27	19.37	0.77	1.174	21.5	29.28	91.3	2.9
75	4.4	25.37	19.47	0.77	1.134	22.4	29.24	88.3	4.2
75	5.0	25.57	19.57	0.77	1.114	23.0	29.37	86.7	5.2
75	5.6	25.57	19.57	0.77	1.094	23.4	29.30	85.5	6.4
75	5.8	25.67	19.57	0.76	1.084	23.7	29.37	85.1	6.8
75	6.1	25.67	19.57	0.76	1.084	23.7	29.37	84.6	7.4
75	6.6	25.77	19.57	0.76	1.074	24.0	29.44	83.9	8.5
77	3.6	24.57	19.17	0.78	1.294	19.0	28.99	93.1	2.8
77	4.4	24.67	19.17	0.78	1.254	19.7	28.95	90.2	4.0
77	5.0	24.77	19.27	0.78	1.234	20.1	28.98	88.6	5.0
77	5.6	24.87	19.27	0.77	1.214	20.5	29.01	87.4	6.2
77	5.8	24.87	19.27	0.77	1.204	20.7	28.98	87.0	6.6
77	6.1	24.97	19.27	0.77	1.204	20.7	29.08	86.5	7.2
77	6.6	25.07	19.37	0.77	1.194	21.0	29.15	85.8	8.3
86	3.6	23.57	18.67	0.79	1.464	16.1	28.57	101.9	2.8
86	4.4	23.67	18.77	0.79	1.424	16.6	28.53	99.0	4.0
86	5.0	23.77	18.77	0.79	1.404	16.9	28.56	97.4	5.0
86	5.6	23.87	18.87	0.79	1.384	17.2	28.59	96.2	6.1
86	5.8	23.87	18.87	0.79	1.374	17.4	28.56	95.8	6.5

Table 55. Cooling capacities 2 tons (gross) - EXHF024 (continued)

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Power kW	EER	Reject Mbtuh	LWT	Feet Head
86	6.1	23.97	18.87	0.79	1.374	17.4	28.66	95.4	7.1
86	6.6	23.97	18.87	0.79	1.354	17.7	28.59	94.7	8.2
95	3.6	22.47	18.17	0.81	1.654	13.6	28.12	110.6	2.7
95	4.4	22.77	18.27	0.80	1.604	14.2	28.24	107.8	3.9
95	5.0	22.77	18.27	0.80	1.584	14.4	28.18	106.3	4.9
95	5.6	22.87	18.37	0.80	1.564	14.6	28.21	105.1	6.0
95	5.8	22.87	18.37	0.80	1.564	14.6	28.21	104.7	6.3
95	6.1	22.87	18.37	0.80	1.554	14.7	28.17	104.2	6.9
95	6.6	22.97	18.37	0.80	1.544	14.9	28.24	103.6	8.0
105	3.6	21.27	17.67	0.83	1.874	11.4	27.67	120.4	2.7
105	4.4	21.47	17.77	0.83	1.834	11.7	27.73	117.6	3.8
105	5.0	21.47	17.77	0.83	1.804	11.9	27.63	116.1	4.8
105	5.6	21.57	17.77	0.82	1.784	12.1	27.66	114.9	5.8
105	5.8	21.57	17.77	0.82	1.784	12.1	27.66	114.5	6.2
105	6.1	21.57	17.77	0.82	1.774	12.2	27.62	114.1	6.7
105	6.6	21.67	17.87	0.82	1.764	12.3	27.69	113.4	7.8
115	3.6	19.87	17.07	0.86	2.144	9.3	27.19	130.1	2.6
115	4.4	20.07	17.07	0.85	2.094	9.6	27.22	127.4	3.7
115	5.0	20.17	17.17	0.85	2.064	9.8	27.21	125.9	4.6
115	5.6	20.17	17.17	0.85	2.044	9.9	27.15	124.7	5.7
115	5.8	20.17	17.17	0.85	2.034	9.9	27.11	124.3	6.0
115	6.1	20.27	17.17	0.85	2.024	10.0	27.18	123.9	6.6
115	6.6	20.27	17.17	0.85	2.014	10.1	27.14	123.2	7.5
120	3.6	19.17	16.77	0.87	2.284	8.4	26.97	135.0	2.6
120	4.4	19.27	16.77	0.87	2.234	8.6	26.89	132.2	3.6
120	5.0	19.37	16.77	0.87	2.204	8.8	26.89	130.8	4.6
120	5.6	19.47	16.87	0.87	2.184	8.9	26.92	129.6	5.6
120	5.8	19.47	16.87	0.87	2.184	8.9	26.92	129.3	5.9
120	6.1	19.47	16.87	0.87	2.164	9.0	26.86	128.8	6.5
120	6.6	19.47	16.87	0.87	2.154	9.0	26.82	128.1	7.5

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 is permissible, extrapolation is not. Rated GPM 4.4, Rated CFM 570, Minimum CFM 627, Maximum CFM 456.

Table 56. Heating capacities 2 tons (gross) - EXHF024

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Power kW	COP	LWT	Feet Head
25	5.6	15.87	11.11	1.395	3.3	21.0	11.2
25	5.8	15.87	11.11	1.395	3.3	21.2	11.9
25	6.1	15.97	11.21	1.395	3.4	21.3	13.0
25	6.6	16.07	11.31	1.395	3.4	21.6	14.9
32	3.6	16.97	12.17	1.405	3.5	25.2	5.0
32	4.4	17.37	12.57	1.405	3.6	26.3	7.1

Table 56. Heating capacities 2 tons (gross) - EXHF024 (continued)

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Power kW	COP	LWT	Feet Head
32	5.0	17.57	12.74	1.415	3.6	26.9	8.9
32	5.6	17.77	12.94	1.415	3.7	27.4	10.8
32	5.8	17.87	13.04	1.415	3.7	27.5	11.5
32	6.1	17.87	13.04	1.415	3.7	27.7	12.6
32	6.6	17.97	13.14	1.415	3.7	28.0	14.4
45	3.6	21.07	16.07	1.465	4.2	36.1	3.3
45	4.4	21.57	16.57	1.465	4.3	37.5	4.7
45	5.0	21.87	16.84	1.475	4.3	38.3	5.9
45	5.6	22.07	17.04	1.475	4.4	38.9	7.3
45	5.8	22.07	17.04	1.475	4.4	39.1	7.7
45	6.1	22.17	17.14	1.475	4.4	39.4	8.4
45	6.6	22.27	17.24	1.475	4.4	39.8	9.7
55	3.6	23.97	18.87	1.495	4.7	44.5	3.2
55	4.4	24.47	19.33	1.505	4.8	46.2	4.6
55	5.0	24.87	19.73	1.505	4.8	47.1	5.7
55	5.6	25.17	20.00	1.515	4.9	47.9	7.0
55	5.8	25.17	19.97	1.525	4.8	48.1	7.4
55	6.1	25.37	20.17	1.525	4.9	48.4	8.1
55	6.6	25.47	20.27	1.525	4.9	48.9	9.3
68	3.6	28.47	22.99	1.605	5.2	55.2	3.0
68	4.4	29.17	23.66	1.615	5.3	57.2	4.3
68	5.0	29.57	24.02	1.625	5.3	58.4	5.4
68	5.6	29.87	24.29	1.635	5.4	59.3	6.6
68	5.8	29.97	24.39	1.635	5.4	59.6	7.0
68	6.1	30.17	24.59	1.635	5.4	59.9	7.6
68	6.6	30.17	24.59	1.635	5.4	60.5	8.8
75	3.6	30.67	25.02	1.655	5.4	61.1	2.9
75	4.4	31.37	25.69	1.665	5.5	63.3	4.2
75	5.0	31.87	26.15	1.675	5.6	64.5	5.2
75	5.6	32.27	26.52	1.685	5.6	65.5	6.4
75	5.8	32.27	26.52	1.685	5.6	65.9	6.8
75	6.1	32.47	26.68	1.695	5.6	66.3	7.4
75	6.6	32.57	26.78	1.695	5.6	66.9	8.5
77	3.6	33.57	27.72	1.715	5.7	61.6	2.8
77	4.4	34.27	28.35	1.735	5.8	64.1	4.0
77	5.0	34.77	28.81	1.745	5.8	65.5	5.0
77	5.6	35.17	29.18	1.755	5.9	66.6	6.2
77	5.8	35.17	29.18	1.755	5.9	66.9	6.6
77	6.1	35.27	29.25	1.765	5.9	67.4	7.2
77	6.6	35.47	29.45	1.765	5.9	68.1	8.3
86	3.6	34.17	28.28	1.725	5.8	70.3	2.8
86	4.4	34.97	29.01	1.745	5.9	72.8	4.0
86	5.0	35.37	29.38	1.755	5.9	74.2	5.0

Table 56. Heating capacities 2 tons (gross) - EXHF024 (continued)

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Power kW	COP	LWT	Feet Head
86	5.6	35.77	29.75	1.765	5.9	75.4	6.1
86	5.8	35.77	29.71	1.775	5.9	75.8	6.5
86	6.1	35.87	29.81	1.775	5.9	76.2	7.1
86	6.6	36.07	30.01	1.775	6.0	76.9	8.2

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 is permissible, extrapolation is not. Rated GPM 3.6, Rated CFM 475, Minimum CFM 523, Maximum CFM 380.

Table 57. Fan Correction 2 tons — EXHF024

Entering CFM	Cooling capacity	Sensible capacity	Cooling comp watts	Heating capacity	Heating comp watts
608	0.960	0.885	1.001	0.974	1.085
684	0.981	0.942	1.000	0.989	1.036
760	1.000	1.000	1.000	1.000	1.000
836	1.017	1.057	0.999	1.005	0.967

Table 58. Correction factors for variation in entering air temperature 2 tons, EXHF024

Cooling Entering Air WB°F	Cooling capaci-ty	Cooling Input Watts	Sensible vs. Entering Dry Bulb Multiplier					Heating Entering Air DB°F	Heating capacity	Heating Input Watts
			65.6	70.6	75.6	80.6	85.6			
49.4	0.931	1.010	0.997	1.066	1.133	*	*	53.0	1.034	0.842
56.3	0.930	1.010	0.805	1.016	1.133	*	*	58.0	1.025	0.896
60.3	0.929	1.010	0.611	0.838	1.057	*	*	63.0	1.013	0.947
63.2	0.957	1.012	0.459	0.696	0.923	1.135	*	68.0	1.000	1.000
66.2	1.000	1.000	—	0.535	0.771	1.000	1.206	73.0	0.989	1.055
72.1	1.083	0.985	—	—	0.456	0.682	0.915	78.0	0.971	1.112
77.1	1.166	0.984	—	—	—	0.425	0.665	83.0	0.960	1.172

Note: * = Sensible equals total capacity

Table 59. Cooling capacities 2 tons (gross) - EXVG024

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Comp Pwr kW	Reject Mbtuh	LWT	Feet Head
45	3.9	28.8	21.1	0.73	0.91	31.9	61.4	1.7
45	4.8	28.8	21.1	0.73	0.89	31.8	58.3	2.5
45	5.4	28.8	21.1	0.73	0.89	31.8	56.8	3.1
45	6.0	28.8	21.1	0.73	0.88	31.8	55.6	3.7
45	6.3	28.8	21.1	0.73	0.88	31.8	55.1	4.1
45	6.6	28.8	21.1	0.73	0.88	31.8	54.6	4.4
45	7.2	28.8	21.1	0.73	0.88	31.8	53.8	5.2
55	3.9	28.2	20.7	0.73	0.99	31.6	71.2	1.6
55	4.8	28.2	20.7	0.73	0.96	31.5	68.1	2.3
55	5.4	28.2	20.7	0.73	0.95	31.4	66.6	2.9
55	6.0	28.2	20.7	0.73	0.94	31.4	65.5	3.5
55	6.3	28.3	20.7	0.73	0.94	31.5	65.0	3.8
55	6.6	28.3	20.7	0.73	0.94	31.5	64.5	4.1
55	7.2	28.3	20.7	0.73	0.93	31.5	63.8	4.8

Table 59. Cooling capacities 2 tons (gross) - EXVG024 (continued)

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Comp Pwr kW	Reject Mbtuh	LWT	Feet Head
68	3.9	27.2	20.4	0.75	1.15	31.1	83.9	1.5
68	4.8	27.2	20.4	0.75	1.12	31.0	80.9	2.2
68	5.4	27.3	20.4	0.75	1.10	31.1	79.5	2.7
68	6.0	27.3	20.4	0.75	1.09	31.0	78.3	3.2
68	6.3	27.3	20.4	0.75	1.08	31.0	77.8	3.5
68	6.6	27.3	20.4	0.75	1.08	31.0	77.4	3.8
68	7.2	27.3	20.4	0.75	1.07	30.9	76.6	4.5
75	3.9	26.5	20.2	0.76	1.26	30.8	90.8	1.5
75	4.8	26.6	20.2	0.76	1.22	30.8	87.8	2.1
75	5.4	26.6	20.2	0.76	1.21	30.7	86.4	2.6
75	6.0	26.7	20.3	0.76	1.19	30.8	85.3	3.1
75	6.3	26.7	20.3	0.76	1.19	30.7	84.7	3.4
75	6.6	26.7	20.3	0.76	1.18	30.7	84.3	3.7
75	7.2	26.7	20.3	0.76	1.17	30.7	83.5	4.3
86	3.9	25.4	19.8	0.78	1.46	30.4	101.6	1.5
86	4.8	25.5	19.9	0.78	1.42	30.3	98.6	2.1
86	5.4	25.5	19.9	0.78	1.40	30.3	97.2	2.5
86	6.0	25.5	19.9	0.78	1.38	30.2	96.1	3.0
86	6.3	25.6	20.0	0.78	1.38	30.3	95.6	3.3
86	6.6	25.6	20.0	0.78	1.37	30.3	95.2	3.6
86	7.2	25.6	20.0	0.78	1.36	30.2	94.4	4.2
95	3.9	24.3	19.4	0.80	1.64	29.9	110.3	1.5
95	4.8	24.4	19.5	0.80	1.60	29.8	107.4	2.0
95	5.4	24.5	19.5	0.80	1.58	29.9	106.1	2.5
95	6.0	24.5	19.5	0.80	1.56	29.8	104.9	3.0
95	6.3	24.5	19.5	0.80	1.55	29.8	104.5	3.2
95	6.6	24.6	19.6	0.80	1.55	29.9	104.1	3.5
95	7.2	24.6	19.6	0.80	1.53	29.8	103.3	4.1
105	3.9	23.0	18.8	0.82	1.85	29.3	120.0	1.4
105	4.8	23.1	18.9	0.82	1.81	29.3	117.2	2.0
105	5.4	23.2	19.0	0.82	1.79	29.3	115.9	2.4
105	6.0	23.3	19.0	0.82	1.77	29.3	114.8	2.9
105	6.3	23.3	19.0	0.82	1.77	29.3	114.3	3.2
105	6.6	23.3	19.0	0.82	1.76	29.3	113.9	3.4
105	7.2	23.3	19.0	0.82	1.75	29.3	113.1	4.0
115	3.9	21.6	18.1	0.84	2.07	28.7	129.7	1.3
115	4.8	21.8	18.3	0.84	2.03	28.7	127.0	1.9
115	5.4	21.8	18.3	0.84	2.01	28.7	125.6	2.3
115	6.0	21.9	18.4	0.84	1.99	28.7	124.6	2.8
115	6.3	21.9	18.4	0.84	1.99	28.7	124.1	3.0
115	6.6	21.9	18.4	0.84	1.98	28.7	123.7	3.3

Table 59. Cooling capacities 2 tons (gross) - EXVG024 (continued)

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Comp Pwr kW	Reject Mbtuh	LWT	Feet Head
115	7.2	21.9	18.4	0.84	1.97	28.6	122.9	3.8

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 6; Minimum CFM 608; Rated CFM 760; Maximum CFM 912.

Table 60. Heating capacities 2 tons (gross) - EXVG024

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Comp Pwr kW	LWT	Feet Head
25	3.9	15.3	10.7	1.35	19.5	2.2
25	4.8	16.0	11.4	1.36	20.3	3.1
25	5.4	16.3	11.7	1.36	20.7	3.8
25	6.0	16.6	11.9	1.36	21.0	4.6
25	6.3	16.7	12.0	1.36	21.2	5.0
25	6.6	16.8	12.1	1.36	21.3	5.4
25	7.2	17.0	12.3	1.36	21.6	6.2
32	3.9	17.0	12.3	1.38	25.7	2.0
32	4.8	17.6	12.9	1.39	26.6	2.9
32	5.4	17.9	13.2	1.39	27.1	3.5
32	6.0	18.2	13.5	1.39	27.5	4.2
32	6.3	18.3	13.5	1.39	27.7	4.6
32	6.6	18.4	13.6	1.39	27.9	5.0
32	7.2	18.6	13.8	1.39	28.2	5.8
45	3.9	22.3	17.4	1.43	36.1	1.7
45	4.8	22.9	18.0	1.44	37.5	2.5
45	5.4	23.3	18.4	1.45	38.2	3.1
45	6.0	23.5	18.5	1.45	38.8	3.7
45	6.3	23.6	18.6	1.46	39.1	4.1
45	6.6	23.7	18.7	1.46	39.3	4.4
45	7.2	23.9	18.9	1.46	39.8	5.2
55	3.9	25.8	20.7	1.49	44.4	1.6
55	4.8	26.4	21.3	1.50	46.1	2.3
55	5.4	26.7	21.6	1.51	47.0	2.9
55	6.0	27.0	21.8	1.51	47.7	3.5
55	6.3	27.1	21.9	1.52	48.0	3.8
55	6.6	27.2	22.0	1.52	48.3	4.1
55	7.2	27.4	22.2	1.52	48.8	4.8
68	3.9	29.9	24.6	1.57	55.4	1.5
68	4.8	30.5	25.1	1.58	57.5	2.2
68	5.4	30.9	25.5	1.59	58.6	2.7
68	6.0	31.1	25.6	1.60	59.5	3.2
68	6.3	31.2	25.7	1.60	59.8	3.5
68	6.6	31.4	25.9	1.61	60.2	3.8
68	7.2	31.5	26.0	1.61	60.8	4.5

Table 60. Heating capacities 2 tons (gross) - EXVG024 (continued)

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Comp Pwr kW	LWT	Feet Head
75	3.9	32.4	26.9	1.62	61.2	1.5
75	4.8	33.1	27.5	1.64	63.5	2.1
75	5.4	33.4	27.8	1.65	64.7	2.6
75	6.0	33.6	28.0	1.65	65.7	3.1
75	6.3	33.8	28.1	1.66	66.1	3.4
75	6.6	33.9	28.2	1.66	66.5	3.7
75	7.2	34.0	28.3	1.67	67.1	4.3
86	3.9	35.7	29.9	1.70	70.7	1.5
86	4.8	36.4	30.5	1.72	73.3	2.1
86	5.4	36.7	30.8	1.74	74.6	2.5
86	6.0	37.0	31.0	1.75	75.7	3.0
86	6.3	37.1	31.1	1.75	76.1	3.3
86	6.6	37.2	31.2	1.76	76.5	3.6
86	7.2	37.4	31.4	1.76	77.3	4.2

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 6;Minimum CFM 608; Rated CFM 760; Maximum CFM 912.

Table 61. Fan Correction 2 tons EXVG024

Entering cfm	Cooling Capacity	Sensible Capacity	Cooling Input Watts	Heating Capacity	Heating Input Watts
608	0.960	0.889	0.998	0.979	1.099
646	0.971	0.918	0.999	0.986	1.071
684	0.982	0.946	0.999	0.991	1.045
722	0.991	0.973	1.000	0.996	1.021
760	1.000	1.000	1.000	1.000	1.000
836	1.015	1.052	1.001	1.007	0.964
874	1.022	1.078	1.001	1.010	0.948
912	1.028	1.103	1.002	1.012	0.933

Table 62. Correction factors for variation in entering air temperature 2 ton, EXVG024

Cooling Entering Air WB°F	Cooling capacity	Cooling Input Watts	Sensible vs. Entering Dry Bulb Multiplier					Heating Entering Air DB°F	Heating capacity	Heating Input Watts
			65.6	70.6	75.6	80.6	85.6			
49.4	0.870	0.996	0.961	1.050	1.121	*	*	53.0	1.037	0.837
56.3	0.882	0.996	0.816	0.965	1.085	*	*	58.0	1.026	0.891
60.3	0.903	0.997	0.668	0.857	1.012	1.140	*	63.0	1.014	0.944
63.2	0.950	0.998	0.533	0.752	0.932	1.082	1.209	68.0	1.000	1.000
66.2	1.000	1.000	–	0.621	0.827	1.000	1.147	73.0	0.985	1.057
72.1	1.109	1.008	–	–	0.568	0.784	0.969	78.0	0.969	1.115
77.1	1.208	1.018	–	–	–	–	0.773	83.0	0.953	1.174

Note: * = Sensible equals total capacity

Table 63. Cooling capacities 2 tons (gross) - DXHF024

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Power kW	Reject Mbtuh	LWT	Feet Head
45	3.6	31.8	20.7	0.65	0.91	34.9	64.4	3.7
45	4.5	31.9	20.8	0.65	0.86	34.8	60.5	5.4
45	5.0	31.9	20.8	0.65	0.84	34.8	58.9	6.5
45	5.6	32.0	20.8	0.65	0.83	34.8	57.4	8.0
45	5.9	32.0	20.8	0.65	0.82	34.8	56.8	8.8
45	6.2	32.0	20.8	0.65	0.81	34.8	56.2	9.6
45	6.7	32.0	20.8	0.65	0.80	34.7	55.4	11.0
55	3.6	30.9	20.5	0.66	1.06	34.5	74.2	3.3
55	4.5	31.0	20.6	0.66	1.02	34.5	70.3	4.9
55	5.0	31.0	20.6	0.66	0.99	34.4	68.8	5.8
55	5.6	31.1	20.7	0.67	0.98	34.4	67.3	7.1
55	5.9	31.1	20.7	0.67	0.97	34.4	66.7	7.8
55	6.2	31.1	20.7	0.67	0.96	34.4	66.1	8.6
55	6.7	31.1	20.7	0.67	0.95	34.3	65.2	9.8
65	3.6	30.0	20.4	0.68	1.19	34.1	83.9	3.0
65	4.5	30.1	20.5	0.68	1.15	34.0	80.1	4.5
65	5.0	30.2	20.6	0.68	1.13	34.0	78.6	5.4
65	5.6	30.2	20.6	0.68	1.11	34.0	77.1	6.6
65	5.9	30.2	20.6	0.68	1.10	34.0	76.5	7.2
65	6.2	30.2	20.6	0.68	1.09	33.9	75.9	7.9
65	6.7	30.3	20.6	0.68	1.08	34.0	75.1	9.1
75	3.6	28.9	20.1	0.70	1.33	33.4	93.6	2.9
75	4.5	29.0	20.1	0.69	1.28	33.4	89.8	4.2
75	5.0	29.1	20.2	0.69	1.26	33.4	88.4	5.1
75	5.6	29.1	20.2	0.69	1.24	33.3	86.9	6.2
75	5.9	29.1	20.2	0.69	1.24	33.3	86.3	6.8
75	6.2	29.1	20.2	0.69	1.23	33.3	85.7	7.5
75	6.7	29.2	20.3	0.70	1.22	33.4	85.0	8.6
85	3.6	27.6	19.5	0.71	1.47	32.6	103.1	2.7
85	4.5	27.7	19.6	0.71	1.43	32.6	99.5	4.1
85	5.0	27.7	19.6	0.71	1.41	32.5	98.0	4.9
85	5.6	27.7	19.6	0.71	1.39	32.4	96.6	6.0
85	5.9	27.8	19.7	0.71	1.38	32.5	96.0	6.6
85	6.2	27.8	19.7	0.71	1.38	32.5	95.5	7.2
85	6.7	27.8	19.7	0.71	1.37	32.5	94.7	8.2
95	3.6	26.1	18.9	0.72	1.64	31.7	112.6	2.7
95	4.5	26.2	19.0	0.73	1.60	31.6	109.0	4.0
95	5.0	26.2	19.0	0.73	1.57	31.6	107.6	4.8
95	5.6	26.3	19.0	0.72	1.56	31.6	106.3	5.8
95	5.9	26.3	19.0	0.72	1.55	31.6	105.7	6.4
95	6.2	26.3	19.0	0.72	1.54	31.6	105.2	7.0
95	6.7	26.3	19.0	0.72	1.53	31.5	104.4	8.0
105	3.6	24.6	18.4	0.75	1.83	30.8	122.1	2.6

Table 63. Cooling capacities 2 tons (gross) - DXHF024 (continued)

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Power kW	Reject Mbtuh	LWT	Feet Head
105	4.5	24.7	18.4	0.74	1.78	30.8	118.7	3.9
105	5.0	24.8	18.5	0.75	1.76	30.8	117.3	4.7
105	5.6	24.8	18.5	0.75	1.74	30.7	116.0	5.8
105	5.9	24.8	18.5	0.75	1.74	30.7	115.4	6.3
105	6.2	24.8	18.5	0.75	1.73	30.7	114.9	6.9
105	6.7	24.8	18.5	0.75	1.72	30.7	114.2	7.9
115	3.6	23.1	17.8	0.77	2.04	30.1	131.7	2.6
115	4.5	23.2	17.9	0.77	1.99	30.0	128.3	3.9
115	5.0	23.3	18.0	0.77	1.97	30.0	127.0	4.7
115	5.6	23.3	18.0	0.77	1.96	30.0	125.7	5.7
115	5.9	23.3	18.0	0.77	1.95	30.0	125.2	6.3
115	6.2	23.3	18.0	0.77	1.94	29.9	124.6	6.8
115	6.7	23.4	18.0	0.77	1.93	30.0	124.0	7.8
120	3.6	22.3	17.5	0.78	2.16	29.7	136.5	2.6
120	4.5	22.4	17.6	0.79	2.12	29.6	133.2	3.9
120	5.0	22.4	17.6	0.79	2.10	29.6	131.8	4.7
120	5.6	22.4	17.6	0.79	2.08	29.5	130.5	5.7
120	5.9	22.5	17.7	0.79	2.07	29.6	130.0	6.3
120	6.2	22.5	17.7	0.79	2.07	29.5	129.5	6.8
120	6.7	22.5	17.7	0.79	2.05	29.5	128.8	7.8

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 is permissible, extrapolation is not. Rated GPM 4.4, Rated CFM 570, Minimum CFM 627, Maximum CFM 456.

Table 64. Heating capacities 2 tons (gross) - DXHF024

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Power kW	LWT	Feet Head
25	5.0	14.9	10.6	1.27	20.8	9.5
25	5.6	15.0	10.7	1.27	21.2	11.6
25	5.9	15.0	10.7	1.27	21.4	12.7
25	6.2	15.0	10.7	1.27	21.5	13.8
25	6.7	14.9	10.6	1.27	21.8	15.8
35	3.6	18.9	14.2	1.36	27.1	4.3
35	4.5	19.3	14.6	1.37	28.5	6.3
35	5.0	19.5	14.8	1.38	29.1	7.6
35	5.6	19.6	14.9	1.38	29.7	9.3
35	5.9	19.7	15.0	1.38	29.9	10.2
35	6.2	19.7	15.0	1.38	30.2	11.1
35	6.7	19.8	15.1	1.38	30.5	12.8
45	3.6	22.7	17.7	1.46	35.2	3.7
45	4.5	23.3	18.3	1.47	36.9	5.4
45	5.0	23.6	18.6	1.48	37.6	6.5
45	5.6	23.8	18.7	1.48	38.3	8.0
45	5.9	23.9	18.8	1.48	38.6	8.8
45	6.2	24.0	18.9	1.49	38.9	9.6

Table 64. Heating capacities 2 tons (gross) - DXHF024 (continued)

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Power kW	LWT	Feet Head
45	6.7	24.1	19.0	1.49	39.3	11.0
55	3.6	26.2	20.9	1.54	43.4	3.3
55	4.5	26.9	21.6	1.56	45.4	4.9
55	5.0	27.3	21.9	1.57	46.2	5.8
55	5.6	27.6	22.2	1.58	47.1	7.1
55	5.9	27.7	22.3	1.58	47.4	7.8
55	6.2	27.9	22.5	1.58	47.7	8.6
55	6.7	28.0	22.6	1.59	48.3	9.8
65	3.6	29.5	24.0	1.62	51.7	3.0
65	4.5	30.3	24.7	1.65	54.0	4.5
65	5.0	30.8	25.1	1.66	55.0	5.4
65	5.6	31.2	25.5	1.67	55.9	6.6
65	5.9	31.3	25.6	1.67	56.3	7.2
65	6.2	31.5	25.8	1.67	56.7	7.9
65	6.7	31.7	26.0	1.68	57.2	9.1
75	3.6	32.7	26.9	1.71	60.1	2.9
75	4.5	33.6	27.7	1.73	62.7	4.2
75	5.0	34.2	28.2	1.74	63.7	5.1
75	5.6	34.6	28.6	1.75	64.8	6.2
75	5.9	34.7	28.7	1.76	65.3	6.8
75	6.2	34.9	28.9	1.76	65.7	7.5
75	6.7	35.2	29.2	1.77	66.3	8.6
85	3.6	35.9	29.8	1.79	68.4	2.7
85	4.5	36.9	30.7	1.82	71.4	4.1
85	5.0	37.5	31.2	1.83	72.5	4.9
85	5.6	37.9	31.6	1.84	73.7	6.0
85	5.9	38.1	31.8	1.85	74.2	6.6
85	6.2	38.3	32.0	1.85	74.7	7.2
85	6.7	38.6	32.3	1.86	75.4	8.2

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 is permissible, extrapolation is not. Rated GPM 3.6, Rated CFM 475, Minimum CFM 523, Maximum CFM 380.

Table 65. Fan Correction 2 tons DXHF024

Entering CFM	Cooling capacity	Sensible capacity	Cooling comp watts	Heating capacity	Heating comp watts
608	0.954	0.887	0.997	0.973	1.099
684	0.979	0.945	0.999	0.989	1.044
760	1.000	1.000	1.000	1.000	1.000
836	1.018	1.056	1.001	1.009	0.965

Table 66. Correction factors for variation in entering air temperature 2 tons, DXHF024

Cooling Entering Air WB°F	Cooling capacity	Cooling Input Watts	Sensible vs. Entering Dry Bulb Multiplier						Heating Entering Air DB°F	Heating capacity	Heating Input Watts
			65.0	70.0	75.0	80.0	85.0	90.0			
50.0	0.912	0.990	1.024	1.118	*	*	*	*	55.0	1.058	0.868
55.0	0.897	0.988	0.899	1.057	1.177	*	*	*	58.0	1.046	0.893
60.0	0.920	0.991	0.664	0.897	1.077	1.222	*	*	61.0	1.035	0.919
65.0	0.973	0.997	0.327	0.638	0.882	1.080	1.244	*	64.0	1.023	0.946
67.0	1.000	1.000	–	0.511	0.781	1.000	1.182	*	67.0	1.012	0.972
70.0	1.046	1.004	–	0.298	0.607	0.858	1.068	1.246	70.0	1.000	1.000
75.0	1.134	1.012	–	–	0.268	0.573	0.827	1.044	73.0	0.989	1.028
78.0	1.189	1.016	–	–	–	0.378	0.658	0.898	76.0	0.977	1.057

Note: * = Sensible equals total capacity

Table 67. Cooling capacities 2 tons (gross) - DXVG024

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Comp Pwr kW	Reject Mbtuh	LWT	Feet Head
45	3.9	27.9	22.1	0.79	0.93	31.1	60.9	1.7
45	4.8	28.0	22.2	0.79	0.89	31.0	57.9	2.5
45	5.4	28.0	22.2	0.79	0.87	31.0	56.5	3.1
45	6.0	28.1	22.2	0.79	0.85	31.0	55.3	3.7
45	6.3	28.1	22.2	0.79	0.85	31.0	54.8	4.0
45	6.6	28.1	22.2	0.79	0.84	31.0	54.4	4.3
45	7.2	28.1	22.2	0.79	0.83	30.9	53.6	5.0
55	3.9	27.2	21.7	0.80	1.07	30.9	70.8	1.7
55	4.8	27.3	21.8	0.80	1.04	30.8	67.8	2.4
55	5.4	27.3	21.8	0.80	1.02	30.8	66.4	2.9
55	6.0	27.3	21.8	0.80	1.01	30.7	65.2	3.5
55	6.3	27.4	21.9	0.80	1.00	30.8	64.8	3.8
55	6.6	27.4	21.9	0.80	0.99	30.8	64.3	4.1
55	7.2	27.4	21.9	0.80	0.98	30.8	63.6	4.8
68	3.9	26.3	21.2	0.81	1.25	30.6	83.7	1.6
68	4.8	26.4	21.3	0.81	1.22	30.6	80.8	2.2
68	5.4	26.5	21.4	0.81	1.20	30.6	79.3	2.7
68	6.0	26.5	21.4	0.81	1.19	30.6	78.2	3.3
68	6.3	26.5	21.4	0.81	1.18	30.5	77.7	3.6
68	6.6	26.5	21.4	0.81	1.18	30.5	77.2	3.9
68	7.2	26.5	21.4	0.81	1.17	30.5	76.5	4.5
75	3.9	25.9	21.0	0.81	1.35	30.5	90.6	1.5
75	4.8	26.0	21.1	0.81	1.32	30.5	87.7	2.2
75	5.4	26.0	21.1	0.81	1.30	30.4	86.3	2.7
75	6.0	26.1	21.2	0.81	1.29	30.5	85.2	3.2
75	6.3	26.1	21.2	0.81	1.28	30.5	84.7	3.5
75	6.6	26.1	21.2	0.81	1.28	30.5	84.2	3.8
75	7.2	26.1	21.2	0.81	1.27	30.4	83.4	4.4
86	3.9	25.0	20.7	0.83	1.51	30.2	101.5	1.4

Table 67. Cooling capacities 2 tons (gross) - DXVG024 (continued)

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Comp Pwr kW	Reject Mbtuh	LWT	Feet Head
86	4.8	25.1	20.7	0.82	1.48	30.1	98.5	2.0
86	5.4	25.2	20.8	0.83	1.46	30.2	97.2	2.5
86	6.0	25.2	20.8	0.83	1.45	30.1	96.0	3.0
86	6.3	25.2	20.8	0.83	1.44	30.1	95.6	3.3
86	6.6	25.2	20.8	0.83	1.44	30.1	95.1	3.6
86	7.2	25.3	20.9	0.83	1.43	30.2	94.4	4.2
95	3.9	24.1	20.3	0.84	1.66	29.8	110.3	1.3
95	4.8	24.2	20.4	0.84	1.63	29.7	107.4	1.9
95	5.4	24.3	20.4	0.84	1.61	29.8	106.0	2.4
95	6.0	24.3	20.4	0.84	1.59	29.7	104.9	2.9
95	6.3	24.3	20.4	0.84	1.59	29.7	104.4	3.2
95	6.6	24.3	20.4	0.84	1.58	29.7	104.0	3.4
95	7.2	24.3	20.4	0.84	1.57	29.7	103.3	4.0
105	3.9	22.9	19.7	0.86	1.85	29.2	120.0	1.3
105	4.8	23.0	19.8	0.86	1.81	29.2	117.2	1.9
105	5.4	23.1	19.9	0.86	1.79	29.2	115.8	2.3
105	6.0	23.1	19.9	0.86	1.78	29.2	114.7	2.8
105	6.3	23.1	19.9	0.86	1.77	29.1	114.2	3.0
105	6.6	23.1	19.9	0.86	1.77	29.1	113.8	3.3
105	7.2	23.1	19.9	0.86	1.76	29.1	113.1	3.8
115	3.9	21.6	19.1	0.88	2.08	28.7	129.7	1.3
115	4.8	21.7	19.2	0.88	2.03	28.6	126.9	1.8
115	5.4	21.7	19.2	0.88	2.01	28.6	125.6	2.2
115	6.0	21.8	19.3	0.89	2.00	28.6	124.5	2.7
115	6.3	21.8	19.3	0.89	1.99	28.6	124.1	2.9
115	6.6	21.8	19.3	0.89	1.98	28.6	123.7	3.2
115	7.2	21.8	19.3	0.89	1.97	28.5	122.9	3.7

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 6; Minimum CFM 608; Rated CFM 760; Maximum CFM 912.

Table 68. Heating capacities 2 tons (gross) - DXVG024

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Comp Pwr kW	LWT	Feet Head
25	3.9	16.5	11.9	1.34	18.9	1.8
25	4.8	16.8	12.2	1.35	19.9	2.7
25	5.4	17.0	12.4	1.36	20.4	3.3
25	6.0	17.1	12.5	1.36	20.8	3.9
25	6.3	17.2	12.5	1.36	21.0	4.3
25	6.6	17.3	12.6	1.37	21.2	4.6
25	7.2	17.4	12.7	1.37	21.5	5.4
32	3.9	18.5	13.8	1.39	24.9	1.8
32	4.8	18.9	14.1	1.40	26.1	2.6

Table 68. Heating capacities 2 tons (gross) - DXVG024 (continued)

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Comp Pwr kW	LWT	Feet Head
32	5.4	19.1	14.3	1.41	26.7	3.2
32	6.0	19.3	14.5	1.41	27.2	3.8
32	6.3	19.4	14.6	1.41	27.4	4.2
32	6.6	19.4	14.6	1.42	27.6	4.5
32	7.2	19.6	14.8	1.42	27.9	5.3
45	3.9	22.5	17.5	1.45	36.0	1.7
45	4.8	23.0	18.0	1.46	37.5	2.5
45	5.4	23.3	18.3	1.47	38.2	3.1
45	6.0	23.5	18.5	1.48	38.8	3.7
45	6.3	23.6	18.6	1.48	39.1	4.0
45	6.6	23.7	18.7	1.48	39.3	4.3
45	7.2	23.9	18.8	1.48	39.8	5.0
55	3.9	25.6	20.4	1.52	44.5	1.7
55	4.8	26.2	21.0	1.53	46.3	2.4
55	5.4	26.6	21.4	1.54	47.1	2.9
55	6.0	26.8	21.5	1.54	47.8	3.5
55	6.3	26.9	21.6	1.55	48.1	3.8
55	6.6	27.0	21.7	1.55	48.4	4.1
55	7.2	27.2	21.9	1.55	48.9	4.8
68	3.9	29.7	24.2	1.62	55.6	1.6
68	4.8	30.4	24.8	1.63	57.7	2.2
68	5.4	30.8	25.2	1.64	58.7	2.7
68	6.0	31.1	25.5	1.64	59.5	3.3
68	6.3	31.2	25.6	1.64	59.9	3.6
68	6.6	31.3	25.7	1.64	60.2	3.9
68	7.2	31.6	26.0	1.65	60.8	4.5
75	3.9	31.8	26.1	1.66	61.6	1.5
75	4.8	32.6	26.9	1.67	63.8	2.2
75	5.4	33.0	27.3	1.68	64.9	2.7
75	6.0	33.3	27.6	1.69	65.8	3.2
75	6.3	33.5	27.7	1.69	66.2	3.5
75	6.6	33.6	27.8	1.69	66.6	3.8
75	7.2	33.8	28.0	1.69	67.2	4.4
86	3.9	35.0	29.1	1.73	71.1	1.4
86	4.8	35.9	30.0	1.74	73.5	2.0
86	5.4	36.3	30.3	1.75	74.8	2.5
86	6.0	36.7	30.7	1.75	75.8	3.0
86	6.3	36.8	30.8	1.75	76.2	3.3
86	6.6	37.0	31.0	1.76	76.6	3.6

Table 68. Heating capacities 2 tons (gross) - DXVG024 (continued)

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Comp Pwr kW	LWT	Feet Head
86	7.2	37.2	31.2	1.76	77.3	4.2

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 6;Minimum CFM 608; Rated CFM 760; Maximum CFM 912.

Table 69. Fan Correction 2 tons DXV024

Entering cfm	Cooling Capacity	Sensible Capacity	Cooling Input Watts	Heating Capacity	Heating Input Watts
608	0.960	0.877	0.998	0.980	1.089
646	0.971	0.909	0.998	0.986	1.062
684	0.981	0.940	0.999	0.991	1.039
722	0.991	0.970	0.999	0.996	1.018
760	1.000	1.000	1.000	1.000	1.000
836	1.015	1.061	1.001	1.007	0.969
874	1.023	1.091	1.001	1.010	0.956
912	1.029	1.121	1.002	1.013	0.944

Table 70. Correction factors for variation in entering air temperature 2 tons, DXV024

Cooling Entering Air WB°F	Cooling capacity	Cooling Input Watts	Sensible vs. Entering Dry Bulb Multiplier					Heating Entering Air DB°F	Heating capacity	Heating Input Watts
			65.0	70.0	75.0	80.0	85.0			
49.4	0.892	0.996	0.942	1.019	1.076	*	*	53.0	1.042	0.864
56.3	0.904	0.994	0.811	0.956	1.066	*	*	58.0	1.028	0.907
60.3	0.913	0.996	0.660	0.855	1.006	1.125	*	63.0	1.014	0.952
63.2	0.956	0.998	0.515	0.748	0.931	1.076	*	68.0	1.000	1.000
66.2	1.000	1.000	–	0.610	0.826	1.000	1.142	73.0	0.985	1.051
72.1	1.112	1.006	–	–	0.553	0.783	0.972	78.0	0.970	1.105
77.1	1.206	1.012	–	–	–	–	0.772	83.0	0.956	1.163

Note: * = Sensible equals total capacity

Cooling and Heating Capacities 2.5 tons

Table 71. Cooling capacities 2.5 tons (gross) - EXHF030

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Power kW	EER	Reject Mbtuh	LWT	Feet Head
45	4.5	35.26	27.16	0.77	1.001	35.2	38.68	62.2	4.8
45	5.5	35.36	27.16	0.77	0.971	36.4	38.67	59.1	6.9
45	6.2	35.86	27.46	0.77	0.941	38.1	39.07	57.6	8.5
45	7.0	35.96	27.46	0.76	0.921	39.0	39.10	56.2	10.6
45	7.3	35.46	27.06	0.76	0.931	38.1	38.64	55.6	11.4
45	7.6	36.16	27.56	0.76	0.911	39.7	39.27	55.3	12.2
45	8.3	36.26	27.56	0.76	0.901	40.2	39.34	54.5	14.3
55	4.5	34.06	26.66	0.78	1.141	29.9	37.95	71.9	4.7
55	5.5	34.36	26.86	0.78	1.101	31.2	38.12	68.9	6.6
55	6.2	34.46	26.76	0.78	1.081	31.9	38.15	67.3	8.2
55	7.0	34.66	26.86	0.77	1.061	32.7	38.28	65.9	10.2
55	7.3	34.66	26.96	0.78	1.061	32.7	38.28	65.5	11.0

Table 71. Cooling capacities 2.5 tons (gross) - EXHF030 (continued)

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Power kW	EER	Reject Mbtuh	LWT	Feet Head
55	7.6	34.76	26.96	0.78	1.051	33.1	38.35	65.1	11.8
55	8.3	34.76	26.96	0.78	1.041	33.4	38.31	64.2	13.8
68	4.5	32.76	26.26	0.80	1.351	24.2	37.37	84.6	4.5
68	5.5	32.96	26.26	0.80	1.311	25.1	37.43	81.6	6.4
68	6.2	33.06	26.26	0.79	1.291	25.6	37.47	80.1	7.9
68	7.0	33.26	26.36	0.79	1.271	26.2	37.60	78.7	9.8
68	7.3	33.26	26.46	0.80	1.261	26.4	37.56	78.3	10.5
68	7.6	33.26	26.36	0.79	1.261	26.4	37.56	77.9	11.3
68	8.3	33.36	26.36	0.79	1.251	26.7	37.63	77.1	13.2
75	4.5	32.46	26.16	0.81	1.391	23.3	37.21	91.5	4.3
75	5.5	32.76	26.16	0.80	1.351	24.2	37.37	88.6	6.2
75	6.2	32.86	26.16	0.80	1.331	24.7	37.40	87.1	7.7
75	7.0	33.06	26.26	0.79	1.311	25.2	37.53	85.7	9.5
75	7.3	33.06	26.26	0.79	1.301	25.4	37.50	85.3	10.2
75	7.6	33.06	26.26	0.79	1.301	25.4	37.50	84.9	11.0
75	8.3	33.16	26.26	0.79	1.291	25.7	37.57	84.1	12.8
77	4.5	31.56	25.66	0.81	1.521	20.7	36.75	93.3	4.2
77	5.5	31.86	25.76	0.81	1.471	21.7	36.88	90.4	6.0
77	6.2	31.96	25.76	0.81	1.451	22.0	36.91	88.9	7.5
77	7.0	32.16	25.96	0.81	1.431	22.5	37.04	87.6	9.3
77	7.3	32.16	25.76	0.80	1.431	22.5	37.04	87.1	10.0
77	7.6	32.16	25.86	0.80	1.421	22.6	37.01	86.7	10.8
77	8.3	32.26	26.06	0.81	1.411	22.9	37.08	85.9	12.6
86	4.5	30.46	25.16	0.83	1.701	17.9	36.27	102.1	4.2
86	5.5	30.76	25.26	0.82	1.651	18.6	36.39	99.2	6.0
86	6.2	30.76	25.36	0.82	1.621	19.0	36.29	97.7	7.4
86	7.0	30.86	25.36	0.82	1.601	19.3	36.32	96.4	9.2
86	7.3	30.96	25.36	0.82	1.601	19.3	36.42	96.0	9.9
86	7.6	30.96	25.46	0.82	1.591	19.5	36.39	95.6	10.7
86	8.3	31.06	25.36	0.82	1.581	19.6	36.46	94.8	12.5
95	4.5	29.26	24.86	0.85	1.911	15.3	35.78	110.9	4.1
95	5.5	29.36	24.76	0.84	1.861	15.8	35.71	108.0	5.9
95	6.2	29.46	24.76	0.84	1.831	16.1	35.71	106.5	7.3
95	7.0	29.56	24.66	0.83	1.811	16.3	35.74	105.2	9.0
95	7.3	29.66	24.66	0.83	1.801	16.5	35.81	104.8	9.7
95	7.6	29.66	24.76	0.83	1.791	16.6	35.77	104.4	10.4
95	8.3	29.66	24.86	0.84	1.781	16.7	35.74	103.6	12.1
105	4.5	27.56	23.96	0.87	2.171	12.7	34.97	120.5	4.0
105	5.5	27.76	24.06	0.87	2.111	13.2	34.96	117.7	5.7
105	6.2	27.96	24.26	0.87	2.091	13.4	35.10	116.3	7.1
105	7.0	27.96	24.16	0.86	2.061	13.6	34.99	115.0	8.7
105	7.3	27.96	24.16	0.86	2.051	13.6	34.96	114.6	9.4
105	7.6	28.06	24.26	0.86	2.051	13.7	35.06	114.2	10.1

Table 71. Cooling capacities 2.5 tons (gross) - EXHF030 (continued)

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Power kW	EER	Reject Mbtuh	LWT	Feet Head
105	8.3	28.06	24.16	0.86	2.031	13.8	34.99	113.4	11.8
115	4.5	25.66	23.06	0.90	2.481	10.3	34.13	130.2	3.9
115	5.5	25.86	23.16	0.90	2.421	10.7	34.12	127.4	5.6
115	6.2	26.06	23.26	0.89	2.391	10.9	34.22	126.0	6.9
115	7.0	26.16	23.36	0.89	2.361	11.1	34.22	124.8	8.5
115	7.3	26.16	23.26	0.89	2.351	11.1	34.18	124.4	9.2
115	7.6	26.16	23.26	0.89	2.341	11.2	34.15	124.0	9.8
115	8.3	26.26	23.36	0.89	2.331	11.3	34.22	123.2	11.5
120	4.5	24.66	22.56	0.91	2.641	9.3	33.67	135.0	3.9
120	5.5	24.96	22.76	0.91	2.581	9.7	33.77	132.3	5.5
120	6.2	24.86	22.66	0.91	2.551	9.7	33.57	130.8	6.8
120	7.0	25.06	22.76	0.91	2.521	9.9	33.66	129.6	8.4
120	7.3	25.16	22.76	0.90	2.521	10.0	33.76	129.2	9.1
120	7.6	25.16	22.86	0.91	2.511	10.0	33.73	128.9	9.7
120	8.3	25.26	22.86	0.90	2.491	10.1	33.76	128.1	11.4

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 is permissible, extrapolation is not. Rated GPM 4.4, Rated CFM 570, Minimum CFM 627, Maximum CFM 456.

Table 72. Heating capacities 2.5 tons (gross) - EXHF030

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Power kW	COP	LWT	Feet Head
25	7.0	19.65	14.45	1.523	3.8	20.9	16.0
25	7.3	19.75	14.55	1.523	3.8	21.0	17.2
25	7.6	19.85	14.62	1.533	3.8	21.2	18.5
25	8.3	19.95	14.75	1.523	3.8	21.4	21.5
32	4.5	21.05	15.82	1.533	4.0	25.0	7.2
32	5.5	21.55	16.25	1.553	4.1	26.1	10.2
32	6.2	21.85	16.55	1.553	4.1	26.7	12.6
32	7.0	22.05	16.75	1.553	4.2	27.2	15.5
32	7.3	22.15	16.85	1.553	4.2	27.4	16.7
32	7.6	22.25	16.95	1.553	4.2	27.5	17.9
32	8.3	22.35	17.05	1.553	4.2	27.9	20.9
45	4.5	26.05	20.51	1.623	4.7	35.9	4.8
45	5.5	26.65	21.08	1.633	4.8	37.3	6.9
45	6.2	26.95	21.34	1.643	4.8	38.1	8.5
45	7.0	27.25	21.64	1.643	4.9	38.8	10.6
45	7.3	27.35	21.74	1.643	4.9	39.0	11.4
45	7.6	27.45	21.84	1.643	4.9	39.3	12.2
45	8.3	27.65	22.01	1.653	4.9	39.7	14.3
55	4.5	29.55	23.84	1.673	5.2	44.4	4.7
55	5.5	30.25	24.51	1.683	5.3	46.1	6.6
55	6.2	30.65	24.87	1.693	5.3	47.0	8.2
55	7.0	31.05	25.24	1.703	5.3	47.8	10.2
55	7.3	31.25	25.44	1.703	5.4	48.0	11.0

Table 72. Heating capacities 2.5 tons (gross) - EXHF030 (continued)

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Power kW	COP	LWT	Feet Head
55	7.6	31.35	25.54	1.703	5.4	48.3	11.8
55	8.3	31.45	25.64	1.703	5.4	48.8	13.8
68	4.5	34.95	28.90	1.773	5.8	55.2	4.5
68	5.5	35.85	29.76	1.783	5.9	57.2	6.4
68	6.2	36.45	30.33	1.793	6.0	58.2	7.9
68	7.0	36.85	30.73	1.793	6.0	59.2	9.8
68	7.3	36.95	30.83	1.793	6.0	59.6	10.5
68	7.6	37.15	31.00	1.803	6.0	59.8	11.3
68	8.3	37.35	31.23	1.793	6.1	60.5	13.2
75	4.5	37.65	31.50	1.803	6.1	61.0	4.3
75	5.5	38.75	32.56	1.813	6.3	63.2	6.2
75	6.2	39.15	32.96	1.813	6.3	64.4	7.7
75	7.0	39.65	33.43	1.823	6.4	65.4	9.5
75	7.3	39.85	33.63	1.823	6.4	65.8	10.2
75	7.6	39.95	33.73	1.823	6.4	66.1	11.0
75	8.3	40.25	34.03	1.823	6.5	66.8	12.8
77	4.5	41.05	34.79	1.833	6.6	61.5	4.2
77	5.5	42.15	35.86	1.843	6.7	64.0	6.0
77	6.2	42.75	36.46	1.843	6.8	65.2	7.5
77	7.0	43.25	36.93	1.853	6.8	66.4	9.3
77	7.3	43.45	37.13	1.853	6.9	66.8	10.0
77	7.6	43.55	37.23	1.853	6.9	67.2	10.8
77	8.3	43.85	37.53	1.853	6.9	68.0	12.6
86	4.5	41.85	35.56	1.843	6.7	70.2	4.2
86	5.5	42.95	36.63	1.853	6.8	72.7	6.0
86	6.2	43.55	37.23	1.853	6.9	74.0	7.4
86	7.0	44.05	37.69	1.863	6.9	75.2	9.2
86	7.3	44.25	37.89	1.863	7.0	75.6	9.9
86	7.6	44.35	37.99	1.863	7.0	76.0	10.7
86	8.3	44.65	38.29	1.863	7.0	76.8	12.5

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 is permissible, extrapolation is not. Rated GPM 3.6, Rated CFM 475, Minimum CFM 523, Maximum CFM 380.

Table 73. Fan Correction 2.5 tons EXHF030

Entering CFM	Cooling capacity	Sensible capacity	Cooling comp watts	Heating capacity	Heating comp watts
760	0.960	0.879	1.004	0.980	1.083
855	0.982	0.938	1.002	0.995	1.038
950	1.000	1.000	1.000	1.000	1.000
1045	1.016	1.066	0.999	1.007	0.969

Table 74. Correction factors for variation in entering air temperature 2.5 tons, EXHF030

Cooling Entering Air WB°F	Cooling capacity	Cooling Input Watts	Sensible vs. Entering Dry Bulb Multiplier					Heating Entering Air DB°F	Heating capacity	Heating Input Watts
			65.6	70.6	75.6	80.6	85.6			
49.4	0.943	1.010	0.963	1.032	1.101	*	*	53.0	1.034	0.857
56.3	0.942	1.010	0.804	1.006	1.106	*	*	58.0	1.028	0.905
60.3	0.941	1.010	0.603	0.837	1.059	*	*	63.0	1.016	0.951
63.2	0.952	1.008	0.467	0.698	0.922	1.127	*	68.0	1.000	1.000
66.2	1.000	1.000	—	0.543	0.777	1.000	1.202	73.0	0.992	1.054
72.1	1.081	0.971	—	—	0.477	0.698	0.928	78.0	0.973	1.102
77.1	1.163	0.954	—	—	—	0.454	0.679	83.0	0.961	1.160

Note: * = Sensible equals total capacity

Table 75. Cooling capacities 2.5 tons (gross) - EXVG030

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Comp Pwr kW	Reject Mbtuh	LWT	Feet Head
45	4.9	36.2	28.1	0.78	1.17	40.2	61.4	2.5
45	6.0	36.2	28.1	0.78	1.16	40.2	58.4	3.6
45	6.8	36.3	28.2	0.78	1.16	40.2	56.8	4.5
45	7.5	36.3	28.2	0.78	1.15	40.2	55.7	5.3
45	7.9	36.3	28.2	0.78	1.15	40.2	55.2	5.8
45	8.3	36.4	28.3	0.78	1.15	40.3	54.7	6.3
45	9.0	36.4	28.3	0.78	1.15	40.3	54.0	7.3
55	4.9	35.9	27.8	0.77	1.26	40.2	71.4	2.3
55	6.0	36.0	27.9	0.77	1.23	40.2	68.4	3.3
55	6.8	36.0	27.9	0.77	1.22	40.2	66.8	4.1
55	7.5	36.1	28.0	0.78	1.21	40.2	65.7	4.9
55	7.9	36.1	28.0	0.78	1.21	40.2	65.2	5.3
55	8.3	36.1	28.0	0.78	1.20	40.2	64.7	5.8
55	9.0	36.1	28.0	0.78	1.20	40.2	63.9	6.7
68	4.9	34.9	27.4	0.79	1.44	39.8	84.2	2.1
68	6.0	34.9	27.4	0.79	1.40	39.7	81.2	3.0
68	6.8	35.0	27.5	0.79	1.38	39.7	79.7	3.8
68	7.5	35.0	27.5	0.79	1.37	39.7	78.6	4.5
68	7.9	35.0	27.5	0.79	1.36	39.7	78.1	4.9
68	8.3	35.0	27.5	0.79	1.36	39.6	77.5	5.4
68	9.0	35.1	27.5	0.78	1.35	39.7	76.8	6.2
75	4.9	34.0	27.1	0.80	1.57	39.4	91.1	2.0
75	6.0	34.0	27.1	0.80	1.53	39.2	88.1	2.9
75	6.8	34.1	27.1	0.79	1.51	39.2	86.5	3.6
75	7.5	34.1	27.1	0.79	1.49	39.2	85.5	4.3
75	7.9	34.1	27.1	0.79	1.48	39.2	84.9	4.7
75	8.3	34.1	27.1	0.79	1.48	39.1	84.4	5.2
75	9.0	34.2	27.2	0.80	1.47	39.2	83.7	6.0
86	4.9	32.4	26.4	0.81	1.81	38.6	101.8	2.0
86	6.0	32.5	26.5	0.82	1.76	38.5	98.8	2.8

Table 75. Cooling capacities 2.5 tons (gross) - EXVG030 (continued)

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Comp Pwr kW	Reject Mbtuh	LWT	Feet Head
86	6.8	32.5	26.5	0.82	1.74	38.4	97.3	3.5
86	7.5	32.5	26.5	0.82	1.72	38.4	96.2	4.1
86	7.9	32.6	26.6	0.82	1.71	38.4	95.7	4.5
86	8.3	32.6	26.6	0.82	1.70	38.4	95.3	4.9
86	9.0	32.6	26.6	0.82	1.69	38.4	94.5	5.7
95	4.9	31.1	25.9	0.83	2.04	38.0	110.5	1.9
95	6.0	31.2	26.0	0.83	1.98	38.0	107.7	2.7
95	6.8	31.2	26.0	0.83	1.95	37.9	106.1	3.3
95	7.5	31.3	26.1	0.83	1.93	37.9	105.1	4.0
95	7.9	31.3	26.1	0.83	1.92	37.9	104.6	4.4
95	8.3	31.3	26.1	0.83	1.92	37.8	104.1	4.7
95	9.0	31.3	26.1	0.83	1.90	37.8	103.4	5.5
105	4.9	29.6	25.2	0.85	2.30	37.4	120.3	1.8
105	6.0	29.7	25.3	0.85	2.24	37.4	117.5	2.6
105	6.8	29.7	25.3	0.85	2.22	37.3	116.0	3.2
105	7.5	29.7	25.3	0.85	2.20	37.2	114.9	3.8
105	7.9	29.8	25.4	0.85	2.19	37.3	114.4	4.2
105	8.3	29.8	25.4	0.85	2.18	37.2	114.0	4.6
105	9.0	29.8	25.4	0.85	2.16	37.2	113.3	5.3
115	4.9	27.8	24.4	0.88	2.57	36.6	129.9	1.8
115	6.0	27.9	24.5	0.88	2.52	36.5	127.2	2.5
115	6.8	27.9	24.5	0.88	2.49	36.4	125.7	3.2
115	7.5	28.0	24.6	0.88	2.47	36.4	124.7	3.7
115	7.9	28.0	24.6	0.88	2.46	36.4	124.2	4.1
115	8.3	28.0	24.6	0.88	2.45	36.4	123.8	4.5
115	9.0	28.0	24.6	0.88	2.44	36.3	123.1	5.1

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 7.5; Minimum CFM 760; Rated CFM 950; Maximum CFM 1140.

Table 76. Heating capacities 2.5 tons (gross) - EXVG030

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Comp Pwr kW	LWT	Feet Head
25	4.9	20.0	14.8	1.53	19.0	3.1
25	6.0	20.3	15.0	1.55	20.0	4.4
25	6.8	20.5	15.2	1.56	20.5	5.4
25	7.5	20.7	15.4	1.56	20.9	6.5
25	7.9	20.8	15.5	1.57	21.1	7.1
25	8.3	20.8	15.4	1.57	21.3	7.7
25	9.0	20.9	15.5	1.57	21.6	8.9
32	4.9	22.4	17.1	1.56	25.0	2.9
32	6.0	22.8	17.4	1.58	26.2	4.1
32	6.8	23.1	17.7	1.59	26.8	5.1

Table 76. Heating capacities 2.5 tons (gross) - EXVG030 (continued)

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Comp Pwr kW	LWT	Feet Head
32	7.5	23.3	17.9	1.60	27.2	6.0
32	7.9	23.4	17.9	1.60	27.5	6.6
32	8.3	23.5	18.0	1.60	27.7	7.2
32	9.0	23.6	18.1	1.61	28.0	8.3
45	4.9	27.2	21.4	1.69	36.3	2.5
45	6.0	27.8	22.0	1.70	37.7	3.6
45	6.8	28.2	22.4	1.71	38.4	4.5
45	7.5	28.4	22.5	1.72	39.0	5.3
45	7.9	28.6	22.7	1.72	39.3	5.8
45	8.3	28.7	22.8	1.72	39.5	6.3
45	9.0	28.8	22.9	1.73	39.9	7.3
55	4.9	31.1	25.0	1.78	44.8	2.3
55	6.0	31.9	25.8	1.79	46.4	3.3
55	6.8	32.3	26.2	1.80	47.3	4.1
55	7.5	32.6	26.4	1.81	48.0	4.9
55	7.9	32.7	26.5	1.81	48.3	5.3
55	8.3	32.9	26.7	1.81	48.6	5.8
55	9.0	33.1	26.9	1.82	49.0	6.7
68	4.9	36.3	29.9	1.87	55.8	2.1
68	6.0	37.2	30.8	1.88	57.7	3.0
68	6.8	37.7	31.2	1.89	58.8	3.8
68	7.5	38.0	31.5	1.90	59.6	4.5
68	7.9	38.2	31.7	1.90	60.0	4.9
68	8.3	38.4	31.9	1.90	60.3	5.4
68	9.0	38.6	32.1	1.91	60.9	6.2
75	4.9	39.0	32.5	1.92	61.7	2.0
75	6.0	40.0	33.4	1.93	63.9	2.9
75	6.8	40.5	33.9	1.94	65.0	3.6
75	7.5	40.9	34.3	1.95	65.9	4.3
75	7.9	41.1	34.4	1.95	66.3	4.7
75	8.3	41.3	34.6	1.95	66.7	5.2
75	9.0	41.5	34.8	1.96	67.3	6.0
86	4.9	43.1	36.1	2.06	71.3	2.0
86	6.0	44.2	37.1	2.07	73.6	2.8
86	6.8	44.8	37.7	2.08	74.9	3.5
86	7.5	45.2	38.1	2.09	75.8	4.1
86	7.9	45.4	38.3	2.09	76.3	4.5
86	8.3	45.6	38.5	2.09	76.7	4.9
86	9.0	45.9	38.7	2.10	77.4	5.7

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 77. Fan Correction 2.5 EXVG030

Entering cfm	Cooling Capacity	Sensible Capacity	Cooling Input Watts	Heating Capacity	Heating Input Watts
760	0.960	0.879	0.997	0.978	1.094
808	0.971	0.910	0.998	0.985	1.066
855	0.982	0.940	0.999	0.990	1.042
903	0.992	0.970	0.999	0.996	1.020
950	1.000	1.000	1.000	1.000	1.000
1045	1.015	1.059	1.001	1.007	0.966
1093	1.022	1.089	1.002	1.010	0.951
1140	1.028	1.119	1.002	1.013	0.938

Table 78. Correction factors for variation in entering air temperature 2.5 tons, EXVG030

Cooling Entering Air WB°F	Cooling capacity	Cooling Input Watts	Sensible vs. Entering Dry Bulb Multiplier					Heating Entering Air DB°F	Heating capacity	Heating Input Watts
			65.6	70.6	75.6	80.6	85.6			
49.4	0.893	0.994	0.951	1.030	1.088	*	*	53.0	1.035	0.846
56.3	0.906	0.994	0.813	0.958	1.071	*	*	58.0	1.025	0.895
60.3	0.917	0.995	0.667	0.856	1.004	1.123	*	63.0	1.013	0.946
63.2	0.949	0.997	0.531	0.753	0.930	1.073	*	68.0	1.000	1.000
66.2	1.000	1.000	–	0.624	0.831	1.000	1.139	73.0	0.985	1.056
72.1	1.109	1.011	–	–	0.570	0.794	0.980	78.0	0.969	1.115
77.1	1.207	1.025	–	–	–	–	0.787	83.0	0.952	1.174

Note: * = Sensible equals total capacity

Cooling and Heating Capacities 3 tons

Table 79. Cooling capacities 3 tons (gross) - EXHF036

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Power kW	EER	Reject Mbtuh	LWT	Feet Head
45	5.4	41.39	31.39	0.76	1.103	37.5	45.15	61.7	2.9
45	6.6	41.69	31.59	0.76	1.043	40.0	45.25	58.7	4.1
45	7.5	41.79	31.59	0.76	1.013	41.3	45.25	57.1	5.1
45	8.4	41.89	31.59	0.75	0.993	42.2	45.28	55.8	6.3
45	8.7	41.89	31.69	0.76	0.983	42.6	45.24	55.4	6.7
45	9.1	41.99	31.59	0.75	0.983	42.7	45.34	55.0	7.2
45	10.0	42.09	31.59	0.75	0.963	43.7	45.38	54.1	8.6
55	5.4	40.09	30.89	0.77	1.313	30.5	44.57	71.5	2.8
55	6.6	40.29	30.89	0.77	1.263	31.9	44.60	68.5	3.9
55	7.5	40.39	30.89	0.76	1.233	32.8	44.60	66.9	4.9
55	8.4	40.49	31.09	0.77	1.213	33.4	44.63	65.6	6.0
55	8.7	40.59	31.09	0.77	1.203	33.7	44.70	65.3	6.4
55	9.1	40.59	31.09	0.77	1.193	34.0	44.66	64.8	7.0
55	10.0	40.69	31.19	0.77	1.183	34.4	44.73	63.9	8.2
68	5.4	38.09	29.99	0.79	1.583	24.1	43.49	84.1	2.6
68	6.6	38.29	30.09	0.79	1.523	25.1	43.49	81.2	3.8
68	7.5	38.39	30.19	0.79	1.493	25.7	43.49	79.6	4.7
68	8.4	38.49	30.19	0.78	1.473	26.1	43.52	78.4	5.8

Table 79. Cooling capacities 3 tons (gross) - EXHF036 (continued)

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Power kW	EER	Reject Mbtuh	LWT	Feet Head
68	8.7	38.49	30.19	0.78	1.473	26.1	43.52	78.0	6.2
68	9.1	38.59	30.19	0.78	1.463	26.4	43.58	77.6	6.7
68	10.0	38.59	30.29	0.78	1.443	26.7	43.51	76.7	7.9
75	5.4	37.79	29.89	0.79	1.623	23.3	43.33	91.0	2.6
75	6.6	37.99	29.99	0.79	1.563	24.3	43.32	88.1	3.7
75	7.5	38.09	30.09	0.79	1.543	24.7	43.36	86.6	4.6
75	8.4	38.19	30.09	0.79	1.513	25.2	43.35	85.3	5.6
75	8.7	38.19	30.09	0.79	1.513	25.2	43.35	85.0	6.0
75	9.1	38.29	30.09	0.79	1.503	25.5	43.42	84.5	6.5
75	10.0	38.29	30.19	0.79	1.493	25.6	43.39	83.7	7.6
77	5.4	36.69	29.39	0.80	1.773	20.7	42.74	92.8	2.5
77	6.6	36.89	29.49	0.80	1.723	21.4	42.77	90.0	3.6
77	7.5	36.99	29.59	0.80	1.703	21.7	42.80	88.4	4.5
77	8.4	37.19	29.69	0.80	1.673	22.2	42.90	87.2	5.5
77	8.7	37.19	29.69	0.80	1.673	22.2	42.90	86.9	5.9
77	9.1	37.19	29.69	0.80	1.663	22.4	42.87	86.4	6.3
77	10.0	37.29	29.69	0.80	1.653	22.6	42.93	85.6	7.5
86	5.4	35.19	28.79	0.82	1.983	17.7	41.96	101.5	2.5
86	6.6	35.39	28.89	0.82	1.923	18.4	41.95	98.7	3.6
86	7.5	35.49	28.99	0.82	1.903	18.6	41.98	97.2	4.5
86	8.4	35.59	28.99	0.81	1.873	19.0	41.98	96.0	5.5
86	8.7	35.59	28.99	0.81	1.873	19.0	41.98	95.7	5.9
86	9.1	35.59	28.99	0.81	1.863	19.1	41.95	95.2	6.3
86	10.0	35.69	28.99	0.81	1.853	19.3	42.01	94.4	7.5
95	5.4	33.59	28.19	0.84	2.223	15.1	41.18	110.3	2.5
95	6.6	33.79	28.19	0.83	2.163	15.6	41.17	107.5	3.5
95	7.5	33.89	28.19	0.83	2.143	15.8	41.20	106.0	4.4
95	8.4	33.99	28.29	0.83	2.113	16.1	41.20	104.8	5.4
95	8.7	33.99	28.29	0.83	2.113	16.1	41.20	104.5	5.7
95	9.1	34.09	28.29	0.83	2.103	16.2	41.27	104.1	6.2
95	10.0	34.09	28.29	0.83	2.083	16.4	41.20	103.2	7.3
105	5.4	31.79	27.39	0.86	2.523	12.6	40.40	120.0	2.4
105	6.6	31.99	27.49	0.86	2.463	13.0	40.40	117.2	3.4
105	7.5	32.09	27.49	0.86	2.433	13.2	40.39	115.8	4.3
105	8.4	32.19	27.49	0.85	2.403	13.4	40.39	114.6	5.2
105	8.7	32.19	27.49	0.85	2.393	13.5	40.36	114.3	5.6
105	9.1	32.19	27.59	0.86	2.383	13.5	40.32	113.9	6.0
105	10.0	32.29	27.59	0.85	2.373	13.6	40.39	113.1	7.1
115	5.4	29.69	26.49	0.89	2.863	10.4	39.46	129.6	2.3
115	6.6	29.89	26.59	0.89	2.793	10.7	39.42	126.9	3.3
115	7.5	29.99	26.59	0.89	2.763	10.9	39.42	125.5	4.2
115	8.4	30.09	26.59	0.88	2.733	11.0	39.42	124.4	5.1
115	8.7	30.09	26.69	0.89	2.733	11.0	39.42	124.1	5.4

Table 79. Cooling capacities 3 tons (gross) - EXHF036 (continued)

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Power kW	EER	Reject Mbtuh	LWT	Feet Head
115	9.1	30.19	26.69	0.88	2.723	11.1	39.48	123.7	5.9
115	10.0	30.19	26.69	0.88	2.703	11.2	39.42	122.9	6.9
120	5.4	28.59	25.99	0.91	3.053	9.4	39.01	134.4	2.3
120	6.6	28.89	26.09	0.90	2.983	9.7	39.07	131.8	3.3
120	7.5	28.99	26.09	0.90	2.953	9.8	39.07	130.4	4.1
120	8.4	28.99	26.19	0.90	2.923	9.9	38.97	129.3	5.0
120	8.7	29.09	26.19	0.90	2.913	10.0	39.03	129.0	5.3
120	9.1	29.09	26.19	0.90	2.903	10.0	39.00	128.6	5.8
120	10.0	29.09	26.19	0.90	2.883	10.1	38.93	127.8	6.8

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 is permissible, extrapolation is not. Rated GPM 4.4, Rated CFM 570, Minimum CFM 627, Maximum CFM 456.

Table 80. Heating capacities 3 tons (gross) - EXHF036

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Power kW	COP	LWT	Feet Head
25	8.4	24.80	18.22	1.928	3.8	20.7	8.7
25	8.7	24.90	18.32	1.928	3.8	20.8	9.3
25	9.1	25.00	18.42	1.928	3.8	21.0	10.0
25	10.0	25.10	18.52	1.928	3.8	21.3	11.8
32	5.4	26.40	19.79	1.938	4.0	24.7	3.9
32	6.6	27.00	20.35	1.948	4.1	25.8	5.6
32	7.5	27.30	20.62	1.958	4.1	26.5	7.0
32	8.4	27.50	20.82	1.958	4.1	27.0	8.5
32	8.7	27.60	20.92	1.958	4.1	27.2	9.0
32	9.1	27.70	21.02	1.958	4.1	27.4	9.7
32	10.0	27.80	21.12	1.958	4.2	27.8	11.5
45	5.4	32.70	25.68	2.058	4.7	35.5	2.9
45	6.6	33.50	26.41	2.078	4.7	37.0	4.1
45	7.5	33.70	26.61	2.078	4.8	37.9	5.1
45	8.4	34.10	27.01	2.078	4.8	38.6	6.3
45	8.7	34.20	27.11	2.078	4.8	38.8	6.7
45	9.1	34.30	27.17	2.088	4.8	39.0	7.2
45	10.0	34.50	27.37	2.088	4.8	39.5	8.6
55	5.4	37.10	29.84	2.128	5.1	43.9	2.8
55	6.6	38.00	30.67	2.148	5.2	45.7	3.9
55	7.5	38.20	30.87	2.148	5.2	46.8	4.9
55	8.4	38.70	31.33	2.158	5.3	47.5	6.0
55	8.7	38.90	31.50	2.168	5.3	47.8	6.4
55	9.1	38.90	31.50	2.168	5.3	48.1	7.0
55	10.0	39.20	31.80	2.168	5.3	48.6	8.2
68	5.4	43.20	35.56	2.238	5.7	54.8	2.6
68	6.6	44.30	36.59	2.258	5.7	56.9	3.8
68	7.5	44.90	37.16	2.268	5.8	58.1	4.7
68	8.4	45.30	37.53	2.278	5.8	59.1	5.8

Table 80. Heating capacities 3 tons (gross) - EXHF036 (continued)

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Power kW	COP	LWT	Feet Head
68	8.7	45.30	37.53	2.278	5.8	59.4	6.2
68	9.1	45.40	37.63	2.278	5.8	59.7	6.7
68	10.0	45.60	37.83	2.278	5.9	60.4	7.9
75	5.4	46.50	38.62	2.308	5.9	60.7	2.6
75	6.6	47.70	39.75	2.328	6.0	63.0	3.7
75	7.5	48.40	40.42	2.338	6.1	64.2	4.6
75	8.4	48.60	40.62	2.338	6.1	65.3	5.6
75	8.7	48.70	40.72	2.338	6.1	65.6	6.0
75	9.1	49.10	41.09	2.348	6.1	66.0	6.5
75	10.0	49.40	41.35	2.358	6.1	66.7	7.6
77	5.4	51.00	42.78	2.408	6.2	61.2	2.5
77	6.6	52.30	43.98	2.438	6.3	63.7	3.6
77	7.5	52.90	44.54	2.448	6.3	65.1	4.5
77	8.4	53.30	44.94	2.448	6.4	66.3	5.5
77	8.7	53.50	45.11	2.458	6.4	66.6	5.9
77	9.1	53.80	45.41	2.458	6.4	67.0	6.3
77	10.0	54.10	45.68	2.468	6.4	67.9	7.5
86	5.4	52.00	43.71	2.428	6.3	69.8	2.5
86	6.6	53.30	44.91	2.458	6.4	72.4	3.6
86	7.5	53.90	45.48	2.468	6.4	73.9	4.5
86	8.4	54.40	45.94	2.478	6.4	75.1	5.5
86	8.7	54.60	46.11	2.488	6.4	75.4	5.9
86	9.1	54.80	46.31	2.488	6.5	75.8	6.3
86	10.0	55.10	46.57	2.498	6.5	76.7	7.5

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 is permissible, extrapolation is not. Rated GPM 3.6, Rated CFM 475, Minimum CFM 523, Maximum CFM 380.

Table 81. Fan correction 3 tons EXHF036

Entering CFM	Cooling capacity	Sensible capacity	Cooling comp watts	Heating capacity	Heating comp watts
912	0.959	0.875	1.001	0.982	1.085
1026	0.982	0.940	1.000	0.990	1.036
1140	1.000	1.000	1.000	1.000	1.000
1254	1.016	1.056	1.000	1.000	0.967

Table 82. Correction factors for variation in entering air temperature 3 tons, EXHF036

Cooling Entering Air WB°F	Cooling capacity	Cooling Input Watts	Sensible vs. Entering Dry Bulb Multiplier					Heating Entering Air DB°F	Heating capacity	Heating Input Watts
			65.6	70.6	75.6	80.6	85.6			
49.4	0.942	1.002	0.969	1.034	1.100	*	*	53.0	1.030	0.854
56.3	0.942	1.002	0.803	1.016	1.099	*	*	58.0	1.019	0.899
60.3	0.941	1.002	0.605	0.836	1.058	*	*	63.0	1.007	0.946
63.2	0.957	1.001	0.459	0.691	0.920	1.135	*	68.0	1.000	1.000
66.2	1.000	1.000	—	0.538	0.769	1.000	1.207	73.0	0.982	1.047
72.1	1.093	0.993	—	—	0.462	0.694	0.922	78.0	0.974	1.105

Table 82. Correction factors for variation in entering air temperature 3 tons, EXHF036 (continued)

Cooling Entering Air WB°F	Cooling capacity	Cooling Input Watts	Sensible vs. Entering Dry Bulb Multiplier					Heating Entering Air DB°F	Heating capacity	Heating Input Watts
			65.6	70.6	75.6	80.6	85.6			
77.1	1.174	0.990	—	—	—	0.425	0.655	83.0	0.958	1.157

Note: * = Sensible equals total capacity

Table 83. Cooling capacities 3 tons (gross) - EXVG036

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Comp Pwr kW	Reject Mbtuh	LWT	Feet Head
45	5.9	41.4	32.9	0.79	1.32	45.9	60.6	3.3
45	7.2	41.4	32.9	0.79	1.31	45.9	57.8	4.7
45	8.1	41.5	33.0	0.80	1.30	45.9	56.3	5.8
45	9.0	41.5	33.0	0.80	1.30	45.9	55.2	7.0
45	9.5	41.5	33.0	0.80	1.30	45.9	54.7	7.7
45	9.9	41.5	33.0	0.80	1.30	45.9	54.3	8.3
45	10.8	41.6	33.1	0.80	1.30	46.0	53.5	9.7
55	5.9	40.7	32.4	0.80	1.42	45.5	70.4	3.0
55	7.2	40.8	32.5	0.80	1.39	45.5	67.6	4.3
55	8.1	40.8	32.5	0.80	1.37	45.5	66.2	5.4
55	9.0	40.9	32.6	0.80	1.36	45.6	65.1	6.5
55	9.5	40.9	32.6	0.80	1.36	45.5	64.6	7.2
55	9.9	40.9	32.6	0.80	1.36	45.5	64.2	7.7
55	10.8	40.9	32.6	0.80	1.35	45.5	63.4	9.0
68	5.9	39.3	31.8	0.81	1.62	44.8	83.2	2.9
68	7.2	39.4	31.8	0.81	1.58	44.8	80.4	4.1
68	8.1	39.4	31.8	0.81	1.56	44.7	79.0	5.0
68	9.0	39.5	31.9	0.81	1.55	44.8	78.0	6.1
68	9.5	39.5	31.9	0.81	1.54	44.8	77.4	6.7
68	9.9	39.5	31.9	0.81	1.53	44.7	77.0	7.2
68	10.8	39.5	31.9	0.81	1.52	44.7	76.3	8.4
75	5.9	38.3	31.4	0.82	1.77	44.3	90.0	2.9
75	7.2	38.4	31.4	0.82	1.72	44.3	87.3	4.0
75	8.1	38.4	31.4	0.82	1.70	44.2	85.9	4.9
75	9.0	38.5	31.5	0.82	1.68	44.2	84.8	5.9
75	9.5	38.5	31.5	0.82	1.67	44.2	84.3	6.5
75	9.9	38.5	31.5	0.82	1.67	44.2	83.9	7.0
75	10.8	38.5	31.5	0.82	1.66	44.2	83.2	8.2
86	5.9	36.6	30.7	0.84	2.03	43.5	100.7	2.9
86	7.2	36.7	30.8	0.84	1.98	43.5	98.1	4.0
86	8.1	36.7	30.8	0.84	1.95	43.4	96.7	4.8
86	9.0	36.8	30.8	0.84	1.93	43.4	95.6	5.8
86	9.5	36.8	30.8	0.84	1.93	43.4	95.1	6.3
86	9.9	36.8	30.8	0.84	1.92	43.3	94.7	6.8
86	10.8	36.8	30.8	0.84	1.91	43.3	94.0	7.9
95	5.9	35.2	30.1	0.86	2.27	42.9	109.5	2.9

Table 83. Cooling capacities 3 tons (gross) - EXVG036 (continued)

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Comp Pwr kW	Reject Mbtuh	LWT	Feet Head
95	7.2	35.3	30.1	0.85	2.22	42.9	106.9	3.9
95	8.1	35.3	30.1	0.85	2.19	42.8	105.6	4.8
95	9.0	35.3	30.1	0.85	2.17	42.7	104.5	5.7
95	9.5	35.4	30.2	0.85	2.16	42.8	104.0	6.3
95	9.9	35.4	30.2	0.85	2.15	42.7	103.6	6.7
95	10.8	35.4	30.2	0.85	2.14	42.7	102.9	7.8
105	5.9	33.4	29.3	0.88	2.55	42.1	119.3	2.8
105	7.2	33.5	29.3	0.87	2.50	42.0	116.7	3.9
105	8.1	33.6	29.4	0.87	2.47	42.0	115.4	4.7
105	9.0	33.6	29.4	0.87	2.45	42.0	114.3	5.6
105	9.5	33.6	29.4	0.87	2.44	41.9	113.8	6.2
105	9.9	33.6	29.4	0.87	2.43	41.9	113.5	6.6
105	10.8	33.7	29.5	0.88	2.42	42.0	112.8	7.7
115	5.9	31.5	28.5	0.90	2.86	41.2	129.0	2.7
115	7.2	31.5	28.5	0.90	2.80	41.1	126.4	3.8
115	8.1	31.6	28.6	0.91	2.77	41.1	125.1	4.6
115	9.0	31.6	28.6	0.91	2.75	41.0	124.1	5.5
115	9.5	31.6	28.6	0.91	2.74	41.0	123.6	6.0
115	9.9	31.6	28.6	0.91	2.73	40.9	123.3	6.5
115	10.8	31.7	28.6	0.90	2.72	41.0	122.6	7.5

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 9; Minimum CFM 912; Rated CFM 1140; Maximum CFM 1368.

Table 84. Heating capacities 3 tons (gross) - EXVG036

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Comp Pwr kW	LWT	Feet Head
25	5.9	23.1	17.0	1.78	19.2	4.2
25	7.2	23.5	17.4	1.79	20.2	5.9
25	8.1	23.7	17.6	1.79	20.7	7.3
25	9.0	23.9	17.8	1.79	21.0	8.7
25	9.5	24.0	17.9	1.79	21.2	9.5
25	9.9	24.0	17.9	1.79	21.4	10.2
25	10.8	24.2	18.1	1.79	21.6	11.9
32	5.9	25.8	19.6	1.82	25.4	3.8
32	7.2	26.3	20.1	1.83	26.4	5.4
32	8.1	26.5	20.2	1.83	27.0	6.6
32	9.0	26.7	20.4	1.84	27.5	8.0
32	9.5	26.8	20.5	1.84	27.7	8.8
32	9.9	26.9	20.6	1.84	27.8	9.4
32	10.8	27.1	20.8	1.84	28.1	11.0
45	5.9	31.2	24.7	1.90	36.6	3.3
45	7.2	31.9	25.4	1.91	37.9	4.7

Table 84. Heating capacities 3 tons (gross) - EXVG036 (continued)

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Comp Pwr kW	LWT	Feet Head
45	8.1	32.2	25.7	1.92	38.7	5.8
45	9.0	32.5	25.9	1.92	39.2	7.0
45	9.5	32.7	26.1	1.93	39.5	7.7
45	9.9	32.8	26.2	1.93	39.7	8.3
45	10.8	33.0	26.4	1.93	40.1	9.7
55	5.9	35.6	28.9	1.97	45.2	3.0
55	7.2	36.4	29.6	1.98	46.8	4.3
55	8.1	36.8	30.0	1.99	47.6	5.4
55	9.0	37.2	30.4	2.00	48.2	6.5
55	9.5	37.3	30.5	2.00	48.6	7.2
55	9.9	37.5	30.7	2.00	48.8	7.7
55	10.8	37.7	30.9	2.01	49.3	9.0
68	5.9	41.3	34.3	2.07	56.4	2.9
68	7.2	42.3	35.2	2.09	58.2	4.1
68	8.1	42.9	35.7	2.10	59.2	5.0
68	9.0	43.3	36.1	2.11	60.0	6.1
68	9.5	43.5	36.3	2.11	60.4	6.7
68	9.9	43.7	36.5	2.11	60.6	7.2
68	10.8	44.0	36.8	2.12	61.2	8.4
75	5.9	44.4	37.1	2.13	62.4	2.9
75	7.2	45.5	38.2	2.15	64.4	4.0
75	8.1	46.1	38.7	2.16	65.4	4.9
75	9.0	46.6	39.2	2.17	66.3	5.9
75	9.5	46.8	39.4	2.18	66.7	6.5
75	9.9	47.0	39.6	2.18	67.0	7.0
75	10.8	47.3	39.8	2.19	67.6	8.2
86	5.9	49.3	41.7	2.24	71.9	2.9
86	7.2	50.5	42.8	2.27	74.1	4.0
86	8.1	51.2	43.4	2.29	75.3	4.8
86	9.0	51.7	43.9	2.30	76.2	5.8
86	9.5	52.0	44.1	2.30	76.7	6.3
86	9.9	52.2	44.3	2.31	77.1	6.8
86	10.8	52.6	44.7	2.32	77.7	7.9

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 9;Minimum CFM 912; Rated CFM 1140; Maximum CFM 1368.

Table 85. Fan correction 3 tons EXVG036

Entering cfm	Cooling Capacity	Sensible Capacity	Cooling Input Watts	Heating Capacity	Heating Input Watts
912	0.961	0.875	0.998	0.980	1.088
969	0.973	0.907	0.999	0.986	1.062
1026	0.983	0.938	0.999	0.992	1.039

Table 85. Fan correction 3 tons EXVG036 (continued)

Entering cfm	Cooling Capacity	Sensible Capacity	Cooling Input Watts	Heating Capacity	Heating Input Watts
1083	0.992	0.969	1.000	0.996	1.018
1140	1.000	1.000	1.000	1.000	1.000
1254	1.015	1.062	1.001	1.006	0.968
1311	1.022	1.093	1.001	1.009	0.955
1368	1.029	1.123	1.002	1.012	0.942

Table 86. Correction factors for variation in entering air temperature 3 tons, EXVG036

Cooling Entering Air WB°F	Cooling capaci-ty	Cooling Input Watts	Sensible vs. Entering Dry Bulb Multiplier					Heating Entering Air DB°F	Heating capacity	Heating Input Watts
			65.6	70.6	75.6	80.6	85.6			
49.4	0.893	0.996	0.937	1.011	1.073	*	*	53.0	1.037	0.848
56.3	0.894	0.996	0.811	0.952	1.057	*	*	58.0	1.026	0.897
60.3	0.910	0.996	0.662	0.855	0.999	1.112	*	63.0	1.014	0.947
63.2	0.953	0.998	0.516	0.752	0.930	1.068	*	68.0	1.000	1.000
66.2	1.000	1.000	–	0.615	0.832	1.000	1.135	73.0	0.985	1.056
72.1	1.111	1.008	–	–	0.559	0.795	0.985	78.0	0.969	1.113
77.1	1.210	1.020	–	–	–	–	0.789	83.0	0.953	1.173

Note: * = Sensible equals total capacity

Table 87. Cooling capacities 3 tons (gross) - DXHF036

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Power kW	Reject Mbtuh	LWT	Feet Head
45	5.5	44.6	29.3	0.66	1.46	49.6	63.0	3.4
45	6.7	44.8	29.4	0.66	1.42	49.6	59.8	4.7
45	7.6	44.9	29.5	0.66	1.40	49.7	58.1	5.7
45	8.4	45.0	29.6	0.66	1.39	49.7	56.8	6.6
45	8.8	45.0	29.6	0.66	1.38	49.7	56.3	7.2
45	9.2	45.1	29.6	0.66	1.38	49.8	55.8	7.7
45	10.1	45.1	29.6	0.66	1.37	49.8	54.9	8.8
55	5.5	44.3	29.8	0.67	1.61	49.8	73.1	2.9
55	6.7	44.5	29.9	0.67	1.56	49.8	69.9	4.1
55	7.6	44.6	30.0	0.67	1.54	49.9	68.1	5.1
55	8.4	44.6	30.0	0.67	1.53	49.8	66.9	6.1
55	8.8	44.7	30.0	0.67	1.52	49.9	66.3	6.6
55	9.2	44.7	30.0	0.67	1.52	49.9	65.8	7.2
55	10.1	44.7	30.0	0.67	1.51	49.8	64.9	8.3
65	5.5	42.9	29.4	0.69	1.79	49.0	82.8	2.6
65	6.7	43.1	29.6	0.69	1.74	49.0	79.6	3.8
65	7.6	43.2	29.6	0.69	1.71	49.0	77.9	4.8
65	8.4	43.3	29.7	0.69	1.69	49.1	76.7	5.8
65	8.8	43.3	29.7	0.69	1.69	49.1	76.2	6.3
65	9.2	43.4	29.8	0.69	1.68	49.1	75.7	6.8
65	10.1	43.4	29.8	0.69	1.67	49.1	74.7	7.9
75	5.5	41.2	28.8	0.70	1.99	48.0	92.5	2.4
75	6.7	41.4	29.0	0.70	1.93	48.0	89.3	3.6

Table 87. Cooling capacities 3 tons (gross) - DXHF036 (continued)

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Power kW	Reject Mbtuh	LWT	Feet Head
75	7.6	41.5	29.1	0.70	1.91	48.0	87.6	4.6
75	8.4	41.6	29.1	0.70	1.89	48.0	86.4	5.6
75	8.8	41.6	29.1	0.70	1.88	48.0	85.9	6.1
75	9.2	41.6	29.1	0.70	1.87	48.0	85.4	6.6
75	10.1	41.7	29.2	0.70	1.86	48.0	84.5	7.7
85	5.5	39.3	28.1	0.72	2.23	46.9	102.1	2.2
85	6.7	39.5	28.2	0.71	2.16	46.9	99.0	3.5
85	7.6	39.6	28.3	0.71	2.13	46.9	97.3	4.5
85	8.4	39.7	28.4	0.72	2.11	46.9	96.2	5.4
85	8.8	39.8	28.5	0.72	2.10	47.0	95.7	6.0
85	9.2	39.8	28.5	0.72	2.09	46.9	95.2	6.5
85	10.1	39.8	28.5	0.72	2.08	46.9	94.3	7.6
95	5.5	37.4	27.4	0.73	2.49	45.9	111.7	2.1
95	6.7	37.6	27.5	0.73	2.42	45.9	108.7	3.4
95	7.6	37.7	27.6	0.73	2.39	45.9	107.1	4.4
95	8.4	37.8	27.7	0.73	2.37	45.9	105.9	5.4
95	8.8	37.8	27.7	0.73	2.36	45.8	105.4	5.9
95	9.2	37.8	27.7	0.73	2.35	45.8	105.0	6.4
95	10.1	37.9	27.7	0.73	2.33	45.9	104.1	7.5
105	5.5	35.3	26.6	0.75	2.78	44.8	121.3	2.1
105	6.7	35.5	26.7	0.75	2.72	44.8	118.4	3.3
105	7.6	35.6	26.8	0.75	2.68	44.8	116.8	4.3
105	8.4	35.7	26.9	0.75	2.66	44.8	115.7	5.3
105	8.8	35.7	26.9	0.75	2.65	44.7	115.2	5.8
105	9.2	35.7	26.9	0.75	2.64	44.7	114.7	6.3
105	10.1	35.8	27.0	0.75	2.62	44.7	113.9	7.4
115	5.5	33.0	25.7	0.78	3.12	43.6	130.9	2.1
115	6.7	33.2	25.9	0.78	3.05	43.6	128.0	3.3
115	7.6	33.3	25.9	0.78	3.01	43.6	126.5	4.3
115	8.4	33.3	25.9	0.78	2.99	43.5	125.4	5.3
115	8.8	33.4	26.0	0.78	2.97	43.6	124.9	5.8
115	9.2	33.4	26.0	0.78	2.96	43.5	124.5	6.3
115	10.1	33.4	26.0	0.78	2.95	43.5	123.6	7.4
120	5.5	31.7	25.2	0.79	3.30	42.9	135.6	2.0
120	6.7	31.9	25.3	0.79	3.23	42.9	132.8	3.3
120	7.6	32.0	25.4	0.79	3.19	42.9	131.3	4.3
120	8.4	32.1	25.5	0.79	3.16	42.9	130.2	5.2
120	8.8	32.1	25.5	0.79	3.15	42.9	129.8	5.8
120	9.2	32.2	25.6	0.80	3.14	42.9	129.3	6.3
120	10.1	32.2	25.6	0.80	3.12	42.9	128.5	7.4

Note: Cooling performance data is tabulated at 80°F DB/67°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 is permissible, extrapolation is not. Rated GPM 8.4, Rated CFM 1140, Minimum CFM 912, Maximum CFM 1254.

Table 88. Heating capacities 3 tons (gross) - DXHF036

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Power kW	LWT	Feet Head
25	8.4	26.1	19.3	1.99	20.4	8.6
25	8.8	26.3	19.5	2.00	20.6	9.1
25	9.2	26.5	19.7	2.00	20.7	9.7
25	10.1	27.0	20.1	2.02	21.0	10.8
35	5.5	28.7	21.6	2.09	27.1	4.3
35	6.7	30.0	22.7	2.14	28.2	5.5
35	7.6	30.6	23.3	2.15	28.9	6.5
35	8.4	31.1	23.7	2.17	29.4	7.5
35	8.8	31.3	23.9	2.18	29.6	8.0
35	9.2	31.5	24.0	2.18	29.8	8.6
35	10.1	31.9	24.4	2.20	30.2	9.7
45	5.5	35.3	27.8	2.20	34.9	3.4
45	6.7	36.6	28.9	2.25	36.4	4.7
45	7.6	37.2	29.5	2.27	37.2	5.7
45	8.4	37.7	29.9	2.28	37.9	6.6
45	8.8	37.9	30.1	2.29	38.2	7.2
45	9.2	38.1	30.3	2.29	38.4	7.7
45	10.1	38.6	30.7	2.31	38.9	8.8
55	5.5	40.2	32.1	2.37	43.3	2.9
55	6.7	41.5	33.3	2.41	45.1	4.1
55	7.6	42.1	33.8	2.43	46.1	5.1
55	8.4	42.6	34.3	2.45	46.8	6.1
55	8.8	42.8	34.4	2.45	47.2	6.6
55	9.2	43.0	34.6	2.46	47.5	7.2
55	10.1	43.5	35.0	2.48	48.1	8.3
65	5.5	44.2	35.5	2.55	52.1	2.6
65	6.7	45.5	36.6	2.60	54.1	3.8
65	7.6	46.1	37.2	2.61	55.2	4.8
65	8.4	46.6	37.6	2.63	56.0	5.8
65	8.8	46.8	37.8	2.64	56.4	6.3
65	9.2	47.0	38.0	2.64	56.7	6.8
65	10.1	47.5	38.4	2.66	57.4	7.9
75	5.5	49.2	40.0	2.71	60.5	2.4
75	6.7	50.5	41.1	2.75	62.7	3.6
75	7.6	51.1	41.7	2.77	64.0	4.6
75	8.4	51.6	42.1	2.79	65.0	5.6
75	8.8	51.8	42.3	2.79	65.4	6.1
75	9.2	52.0	42.5	2.80	65.8	6.6
75	10.1	52.4	42.8	2.82	66.5	7.7
85	5.5	54.6	44.8	2.87	68.7	2.2
85	6.7	55.9	46.0	2.91	71.3	3.5
85	7.6	56.5	46.5	2.93	72.8	4.5
85	8.4	57.0	46.9	2.95	73.8	5.4

Table 88. Heating capacities 3 tons (gross) - DXHF036 (continued)

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Power kW	LWT	Feet Head
85	8.8	57.2	47.1	2.95	74.3	6.0
85	9.2	57.4	47.3	2.96	74.7	6.5
85	10.1	57.9	47.7	2.98	75.6	7.6

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 is permissible, extrapolation is not. Rated GPM 3.6, Rated CFM 475, Minimum CFM 523, Maximum CFM 380.

Table 89. Fan correction 3 tons DXHF036

Entering CFM	Cooling capacity	Sensible capacity	Cooling comp watts	Heating capacity	Heating comp watts
912	0.958	0.884	0.996	0.986	1.105
1026	0.981	0.943	0.998	0.994	1.045
1140	1.000	1.000	1.000	1.000	1.000
1254	1.016	1.054	1.002	1.005	0.962

Table 90. orrection factors for variation in entering air temperature 3 tons, DXHF036

Cooling Entering Air WB°F	Cooling capacity	Cooling Input Watts	Sensible vs. Entering Dry Bulb Multiplier						Heating Entering Air DB°F	Heating capacity	Heating Input Watts
			65.0	70.0	75.0	80.0	85.0	90.0			
50.0	0.918	0.990	1.012	1.106	*	*	*	*	55.0	1.035	0.855
55.0	0.903	0.988	0.891	1.052	1.173	*	*	*	58.0	1.029	0.884
60.0	0.924	0.990	0.646	0.891	1.077	1.224	*	*	61.0	1.022	0.913
65.0	0.973	0.996	0.283	0.619	0.877	1.082	1.251	*	64.0	1.015	0.941
67.0	1.000	1.000	–	0.482	0.770	1.000	1.188	*	67.0	1.008	0.970
70.0	1.047	1.005	–	0.252	0.585	0.851	1.070	1.254	70.0	1.000	1.000
75.0	1.138	1.017	–	–	0.220	0.547	0.818	1.045	73.0	0.991	1.031
78.0	1.199	1.024	–	–	–	0.338	0.638	0.891	76.0	0.983	1.062

Note: * = Sensible equals total capacity

Table 91. Cooling capacities 3 tons (gross) - DXVG036

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Comp Pwr kW	Reject Mbtuh	LWT	Feet Head
45	5.9	40.0	32.2	0.81	1.36	44.6	60.1	3.3
45	7.2	40.2	32.4	0.81	1.35	44.8	57.4	4.8
45	8.1	40.3	32.5	0.81	1.35	44.9	56.1	5.9
45	9.0	40.3	32.5	0.81	1.35	44.9	55.0	7.2
45	9.5	40.3	32.5	0.81	1.35	44.9	54.5	7.9
45	9.9	40.4	32.5	0.80	1.35	45.0	54.1	8.5
45	10.8	40.4	32.5	0.80	1.35	45.0	53.3	9.9
55	5.9	38.8	31.7	0.82	1.42	43.7	69.8	3.1
55	7.2	39.0	31.8	0.82	1.41	43.8	67.2	4.5
55	8.1	39.1	31.9	0.82	1.40	43.9	65.8	5.5
55	9.0	39.1	31.9	0.82	1.39	43.8	64.7	6.7
55	9.5	39.1	31.9	0.82	1.39	43.8	64.2	7.4
55	9.9	39.2	32.0	0.82	1.39	43.9	63.9	8.0
55	10.8	39.2	32.0	0.82	1.38	43.9	63.1	9.3

Table 91. Cooling capacities 3 tons (gross) - DXVG036 (continued)

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Comp Pwr kW	Reject Mbtuh	LWT	Feet Head
68	5.9	37.1	30.9	0.83	1.58	42.5	82.4	3.0
68	7.2	37.3	31.1	0.83	1.55	42.6	79.8	4.2
68	8.1	37.4	31.2	0.83	1.53	42.6	78.5	5.2
68	9.0	37.4	31.2	0.83	1.52	42.6	77.5	6.3
68	9.5	37.5	31.3	0.83	1.52	42.7	77.0	6.9
68	9.9	37.5	31.3	0.83	1.51	42.7	76.6	7.5
68	10.8	37.5	31.3	0.83	1.50	42.6	75.9	8.7
75	5.9	36.2	30.5	0.84	1.69	42.0	89.2	3.0
75	7.2	36.4	30.7	0.84	1.65	42.0	86.7	4.2
75	8.1	36.4	30.7	0.84	1.64	42.0	85.4	5.1
75	9.0	36.5	30.8	0.84	1.62	42.0	84.3	6.2
75	9.5	36.5	30.8	0.84	1.62	42.0	83.8	6.8
75	9.9	36.6	30.9	0.84	1.61	42.1	83.5	7.3
75	10.8	36.6	30.9	0.84	1.60	42.1	82.8	8.5
86	5.9	34.6	29.8	0.86	1.91	41.1	99.9	3.0
86	7.2	34.8	30.0	0.86	1.86	41.2	97.4	4.1
86	8.1	34.9	30.1	0.86	1.84	41.2	96.2	5.0
86	9.0	34.9	30.1	0.86	1.83	41.1	95.1	6.0
86	9.5	35.0	30.2	0.86	1.82	41.2	94.7	6.6
86	9.9	35.0	30.2	0.86	1.81	41.2	94.3	7.1
86	10.8	35.0	30.2	0.86	1.80	41.1	93.6	8.3
95	5.9	33.2	29.2	0.88	2.11	40.4	108.7	2.9
95	7.2	33.4	29.4	0.88	2.07	40.5	106.3	4.1
95	8.1	33.5	29.5	0.88	2.05	40.5	105.0	5.0
95	9.0	33.5	29.5	0.88	2.03	40.4	104.0	5.9
95	9.5	33.6	29.6	0.88	2.02	40.5	103.5	6.5
95	9.9	33.6	29.6	0.88	2.01	40.5	103.2	7.0
95	10.8	33.6	29.6	0.88	2.00	40.4	102.5	8.1
105	5.9	31.6	28.6	0.91	2.37	39.7	118.5	2.9
105	7.2	31.7	28.6	0.90	2.33	39.6	116.0	4.0
105	8.1	31.8	28.7	0.90	2.30	39.7	114.8	4.9
105	9.0	31.9	28.8	0.90	2.29	39.7	113.8	5.8
105	9.5	31.9	28.8	0.90	2.28	39.7	113.4	6.4
105	9.9	31.9	28.8	0.90	2.27	39.6	113.0	6.9
105	10.8	32.0	28.9	0.90	2.26	39.7	112.4	8.0
115	5.9	29.8	27.8	0.93	2.66	38.9	128.2	2.7
115	7.2	30.0	27.9	0.93	2.62	38.9	125.8	3.9
115	8.1	30.1	28.0	0.93	2.59	38.9	124.6	4.7
115	9.0	30.1	28.0	0.93	2.57	38.9	123.6	5.7
115	9.5	30.1	28.0	0.93	2.57	38.9	123.2	6.2
115	9.9	30.2	28.1	0.93	2.56	38.9	122.9	6.7

Table 91. Cooling capacities 3 tons (gross) - DXVG036 (continued)

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Comp Pwr kW	Reject Mbtuh	LWT	Feet Head
115	10.8	30.2	28.1	0.93	2.55	38.9	122.2	7.8

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 9; Minimum CFM 912; Rated CFM 1140; Maximum CFM 1368.

Table 92. Heating capacities 3 tons (gross) - DXVG036

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Comp Pwr kW	LWT	Feet Head
25	5.9	21.6	16.2	1.58	19.5	4.2
25	7.2	21.9	16.5	1.59	20.4	5.9
25	8.1	22.1	16.7	1.59	20.9	7.3
25	9.0	22.3	16.9	1.59	21.2	8.7
25	9.5	22.3	16.9	1.60	21.4	9.5
25	9.9	22.4	17.0	1.60	21.6	10.2
25	10.8	22.5	17.1	1.60	21.8	11.8
32	5.9	24.0	18.5	1.62	25.7	3.8
32	7.2	24.5	19.0	1.62	26.7	5.4
32	8.1	24.7	19.2	1.63	27.3	6.7
32	9.0	24.9	19.3	1.63	27.7	8.1
32	9.5	25.0	19.4	1.63	27.9	8.9
32	9.9	25.0	19.4	1.63	28.1	9.5
32	10.8	25.2	19.6	1.63	28.4	11.1
45	5.9	28.8	23.0	1.69	37.2	3.3
45	7.2	29.4	23.6	1.70	38.4	4.8
45	8.1	29.7	23.9	1.70	39.1	5.9
45	9.0	29.9	24.1	1.70	39.6	7.2
45	9.5	30.0	24.2	1.71	39.9	7.9
45	9.9	30.1	24.3	1.71	40.1	8.5
45	10.8	30.3	24.5	1.71	40.5	9.9
55	5.9	32.6	26.6	1.76	46.0	3.1
55	7.2	33.3	27.3	1.77	47.4	4.5
55	8.1	33.7	27.6	1.78	48.2	5.5
55	9.0	34.0	27.9	1.78	48.8	6.7
55	9.5	34.2	28.1	1.78	49.1	7.4
55	9.9	34.3	28.2	1.79	49.3	8.0
55	10.8	34.5	28.4	1.79	49.7	9.3
68	5.9	38.0	31.6	1.87	57.3	3.0
68	7.2	38.9	32.4	1.89	59.0	4.2
68	8.1	39.3	32.8	1.90	59.9	5.2
68	9.0	39.7	33.2	1.91	60.6	6.3
68	9.5	39.9	33.4	1.92	61.0	6.9
68	9.9	40.0	33.4	1.92	61.3	7.5
68	10.8	40.3	33.7	1.93	61.8	8.7

Table 92. Heating capacities 3 tons (gross) - DXVG036 (continued)

75	5.9	41.0	34.4	1.95	63.3	3.0
75	7.2	42.0	35.3	1.98	65.2	4.2
75	8.1	42.5	35.7	1.99	66.2	5.1
75	9.0	43.0	36.2	2.00	67.0	6.2
75	9.5	43.2	36.3	2.01	67.4	6.8
75	9.9	43.3	36.4	2.01	67.6	7.3
75	10.8	43.7	36.8	2.02	68.2	8.5
86	5.9	46.1	38.9	2.10	72.8	3.0
86	7.2	47.3	40.0	2.14	74.9	4.1
86	8.1	47.9	40.5	2.16	76.0	5.0
86	9.0	48.4	41.0	2.17	76.9	6.0
86	9.5	48.7	41.3	2.18	77.3	6.6
86	9.9	48.8	41.3	2.19	77.7	7.1
86	10.8	49.2	41.7	2.20	78.3	8.3

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 9;Minimum CFM 912; Rated CFM 1140; Maximum CFM 1368.

Table 93. Fan correction factors 3 tons - DXVG036

Entering cfm	Cooling Capacity	Sensible Capacity	Cooling Input Watts	Heating Capacity	Heating Input Watts
912	0.963	0.872	0.995	0.978	1.078
969	0.972	0.906	0.996	0.985	1.054
1026	0.982	0.937	0.998	0.990	1.034
1083	0.992	0.968	0.999	0.995	1.016
1140	1.000	1.000	1.000	1.000	1.000
1254	1.014	1.064	1.002	1.008	0.973
1311	1.021	1.095	1.003	1.011	0.961
1368	1.028	1.127	1.004	1.014	0.951

Table 94. Correction factors for variation in entering air temperature 3 tons, DXVG036

Cooling Entering Air WB°F	Cooling capacity	Cooling Input Watts	Sensible vs. Entering Dry Bulb Multiplier					Heating Entering Air DB°F	Heating capacity	Heating Input Watts
			65.0	70.0	75.0	80.0	85.0			
49.4	0.899	0.992	0.925	0.993	1.049	*	*	53.0	1.048	0.863
56.3	0.904	0.992	0.812	0.947	1.048	*	*	58.0	1.032	0.905
60.3	0.923	0.992	0.663	0.854	0.996	*	*	63.0	1.016	0.951
63.2	0.960	0.995	0.515	0.752	0.929	1.065	*	68.0	1.000	1.000
66.2	1.000	1.000	–	0.617	0.833	1.000	1.133	73.0	0.983	1.053
72.1	1.115	1.019	–	–	0.563	0.800	0.988	78.0	0.967	1.110
77.1	1.212	1.046	–	–	–	–	0.796	83.0	0.950	1.170

Note: * = Sensible equals total capacity

Cooling and Heating Capacities 3.5 tons

Table 95. Cooling capacities 3.5 tons (gross) - EXHF042

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Power kW	EER	Reject Mbtuh	LWT	Feet Head
45	6.3	48.48	36.68	0.76	1.427	34.0	53.35	61.9	4.2
45	7.8	48.78	36.78	0.75	1.387	35.2	53.51	58.7	6.1
45	8.7	48.98	36.88	0.75	1.367	35.8	53.65	57.3	7.4
45	9.8	48.98	36.88	0.75	1.347	36.4	53.58	55.9	9.1
45	10.2	49.08	36.98	0.75	1.347	36.4	53.68	55.5	9.8
45	10.7	49.18	36.98	0.75	1.337	36.8	53.74	55.0	10.7
45	11.6	49.18	37.08	0.75	1.327	37.1	53.71	54.3	12.3
55	6.3	47.08	35.98	0.76	1.627	28.9	52.63	71.7	4.0
55	7.8	47.38	36.18	0.76	1.567	30.2	52.73	68.5	5.9
55	8.7	47.48	36.18	0.76	1.537	30.9	52.73	67.1	7.1
55	9.8	47.68	36.28	0.76	1.517	31.4	52.86	65.8	8.8
55	10.2	47.68	36.28	0.76	1.517	31.4	52.86	65.4	9.4
55	10.7	47.68	36.28	0.76	1.507	31.6	52.82	64.9	10.2
55	11.6	47.78	36.38	0.76	1.497	31.9	52.89	64.1	11.8
68	6.3	45.38	35.28	0.78	1.917	23.7	51.92	84.5	3.8
68	7.8	45.68	35.48	0.78	1.857	24.6	52.02	81.3	5.6
68	8.7	45.78	35.48	0.78	1.827	25.1	52.02	80.0	6.8
68	9.8	45.88	35.58	0.78	1.807	25.4	52.05	78.6	8.4
68	10.2	45.98	35.58	0.77	1.797	25.6	52.11	78.2	9.0
68	10.7	45.98	35.58	0.77	1.787	25.7	52.08	77.7	9.8
68	11.6	46.08	35.28	0.77	1.777	25.9	52.14	77.0	11.3
75	6.3	44.98	35.08	0.78	1.967	22.9	51.69	91.4	3.7
75	7.8	45.28	35.28	0.78	1.907	23.7	51.79	88.3	5.4
75	8.7	45.38	35.28	0.78	1.877	24.2	51.79	86.9	6.6
75	9.8	45.48	35.48	0.78	1.857	24.5	51.82	85.6	8.1
75	10.2	45.58	35.48	0.78	1.847	24.7	51.88	85.2	8.7
75	10.7	45.58	35.38	0.78	1.837	24.8	51.85	84.7	9.5
75	11.6	45.68	35.28	0.77	1.827	25.0	51.92	84.0	10.9
77	6.3	43.68	34.58	0.79	2.157	20.3	51.04	93.2	3.6
77	7.8	43.98	34.78	0.79	2.087	21.1	51.10	90.1	5.2
77	8.7	44.08	34.78	0.79	2.057	21.4	51.10	88.7	6.4
77	9.8	44.18	34.98	0.79	2.027	21.8	51.10	87.4	7.9
77	10.2	44.28	34.98	0.79	2.017	22.0	51.16	87.0	8.5
77	10.7	44.28	34.88	0.79	2.007	22.1	51.13	86.6	9.3
77	11.6	44.38	35.08	0.79	1.997	22.2	51.20	85.8	10.7
86	6.3	41.88	33.78	0.81	2.407	17.4	50.10	101.9	3.6
86	7.8	42.18	33.98	0.81	2.337	18.0	50.16	98.9	5.2
86	8.7	42.28	34.08	0.81	2.307	18.3	50.15	97.5	6.4
86	9.8	42.48	34.08	0.80	2.277	18.7	50.25	96.3	7.8
86	10.2	42.48	34.18	0.80	2.267	18.7	50.22	95.8	8.4
86	10.7	42.58	34.18	0.80	2.257	18.9	50.28	95.4	9.2
86	11.6	42.58	34.18	0.80	2.247	18.9	50.25	94.7	10.6

Table 95. Cooling capacities 3.5 tons (gross) - EXHF042 (continued)

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Power kW	EER	Reject Mbtuh	LWT	Feet Head
95	6.3	39.98	32.98	0.82	2.707	14.8	49.22	110.6	3.5
95	7.8	40.28	33.08	0.82	2.637	15.3	49.28	107.6	5.1
95	8.7	40.38	33.18	0.82	2.607	15.5	49.28	106.3	6.2
95	9.8	40.48	33.18	0.82	2.567	15.8	49.24	105.0	7.6
95	10.2	40.48	33.28	0.82	2.567	15.8	49.24	104.7	8.2
95	10.7	40.48	33.18	0.82	2.557	15.8	49.21	104.2	8.9
95	11.6	40.58	33.28	0.82	2.537	16.0	49.24	103.5	10.3
105	6.3	37.58	31.98	0.85	3.077	12.2	48.08	120.3	3.4
105	7.8	37.88	32.08	0.85	3.007	12.6	48.14	117.3	5.0
105	8.7	37.98	32.18	0.85	2.967	12.8	48.11	116.1	6.0
105	9.8	38.08	32.18	0.85	2.927	13.0	48.07	114.8	7.4
105	10.2	38.18	32.28	0.85	2.917	13.1	48.14	114.4	8.0
105	10.7	38.18	32.28	0.85	2.907	13.1	48.10	114.0	8.7
105	11.6	38.28	32.28	0.84	2.887	13.3	48.13	113.3	10.0
115	6.3	35.08	30.88	0.88	3.487	10.1	46.98	129.9	3.3
115	7.8	35.38	30.98	0.88	3.407	10.4	47.01	127.1	4.8
115	8.7	35.48	31.08	0.88	3.377	10.5	47.01	125.8	5.9
115	9.8	35.58	31.08	0.87	3.337	10.7	46.97	124.6	7.2
115	10.2	35.58	31.08	0.87	3.327	10.7	46.94	124.2	7.8
115	10.7	35.68	31.08	0.87	3.317	10.8	47.00	123.8	8.4
115	11.6	35.68	31.18	0.87	3.297	10.8	46.93	123.1	9.7
120	6.3	33.68	30.48	0.90	3.697	9.1	46.30	134.7	3.3
120	7.8	33.98	30.48	0.90	3.617	9.4	46.32	131.9	4.8
120	8.7	34.18	30.48	0.89	3.587	9.5	46.42	130.7	5.8
120	9.8	34.28	30.48	0.89	3.557	9.6	46.42	129.5	7.1
120	10.2	34.18	30.58	0.89	3.547	9.6	46.29	129.1	7.7
120	10.7	34.28	30.58	0.89	3.527	9.7	46.32	128.7	8.3
120	11.6	34.28	30.58	0.89	3.517	9.7	46.28	128.0	9.6

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 is permissible, extrapolation is not. Rated GPM 9.8, Rated CFM 1330, Minimum CFM 1064, Maximum CFM 1463.

Table 96. Heating capacities 3.5 tons (gross) - EXHF042

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Power kW	COP	LWT	Feet Head
25	9.8	30.29	22.62	2.247	3.9	20.4	12.7
25	10.2	30.39	22.72	2.247	4.0	20.5	13.7
25	10.7	30.39	22.72	2.247	4.0	20.8	14.9
25	11.6	30.59	22.89	2.257	4.0	21.1	17.1
32	6.3	32.19	24.45	2.267	4.2	24.2	5.7
32	7.8	32.99	25.22	2.277	4.2	25.5	8.3
32	8.7	33.29	25.52	2.277	4.3	26.1	10.1
32	9.8	33.59	25.78	2.287	4.3	26.7	12.4
32	10.2	33.69	25.88	2.287	4.3	26.9	13.3
32	10.7	33.69	25.88	2.287	4.3	27.2	14.4

Table 96. Heating capacities 3.5 tons (gross) - EXHF042 (continued)

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Power kW	COP	LWT	Feet Head
32	11.6	34.09	26.28	2.287	4.4	27.5	16.6
45	6.3	38.79	30.68	2.377	4.8	35.3	4.2
45	7.8	39.49	31.34	2.387	4.8	37.0	6.1
45	8.7	39.89	31.71	2.397	4.9	37.7	7.4
45	9.8	40.29	32.11	2.397	4.9	38.4	9.1
45	10.2	40.39	32.21	2.397	4.9	38.7	9.8
45	10.7	40.59	32.41	2.397	5.0	38.9	10.7
45	11.6	40.69	32.51	2.397	5.0	39.4	12.3
55	6.3	43.79	35.40	2.457	5.2	43.8	4.0
55	7.8	44.79	36.37	2.467	5.3	45.7	5.9
55	8.7	45.19	36.74	2.477	5.3	46.6	7.1
55	9.8	45.49	37.04	2.477	5.4	47.4	8.8
55	10.2	45.59	37.14	2.477	5.4	47.7	9.4
55	10.7	45.69	37.24	2.477	5.4	48.0	10.2
55	11.6	45.99	37.50	2.487	5.4	48.5	11.8
68	6.3	52.39	43.29	2.667	5.8	54.3	3.8
68	7.8	53.39	44.25	2.677	5.8	56.7	5.6
68	8.7	54.09	44.89	2.697	5.9	57.7	6.8
68	9.8	54.39	45.19	2.697	5.9	58.8	8.4
68	10.2	54.49	45.29	2.697	5.9	59.1	9.0
68	10.7	54.89	45.65	2.707	5.9	59.5	9.8
68	11.6	54.99	45.75	2.707	6.0	60.1	11.3
75	6.3	56.29	46.95	2.737	6.0	60.1	3.7
75	7.8	57.49	48.08	2.757	6.1	62.7	5.4
75	8.7	58.19	48.75	2.767	6.2	63.8	6.6
75	9.8	58.89	49.41	2.777	6.2	64.9	8.1
75	10.2	58.99	49.48	2.787	6.2	65.3	8.7
75	10.7	59.09	49.58	2.787	6.2	65.7	9.5
75	11.6	59.39	49.88	2.787	6.2	66.4	10.9
77	6.3	61.69	51.97	2.847	6.3	60.5	3.6
77	7.8	63.09	53.27	2.877	6.4	63.3	5.2
77	8.7	63.69	53.84	2.887	6.5	64.6	6.4
77	9.8	64.29	54.40	2.897	6.5	65.9	7.9
77	10.2	64.49	54.60	2.897	6.5	66.3	8.5
77	10.7	64.69	54.77	2.907	6.5	66.8	9.3
77	11.6	64.99	55.03	2.917	6.5	67.5	10.7
86	6.3	62.89	53.07	2.877	6.4	69.2	3.6
86	7.8	64.29	54.37	2.907	6.5	72.1	5.2
86	8.7	64.89	54.93	2.917	6.5	73.4	6.4
86	9.8	65.49	55.50	2.927	6.6	74.7	7.8
86	10.2	65.69	55.70	2.927	6.6	75.1	8.4
86	10.7	65.89	55.87	2.937	6.6	75.6	9.2

Table 96. Heating capacities 3.5 tons (gross) - EXHF042 (continued)

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Power kW	COP	LWT	Feet Head
86	11.6	66.29	56.23	2.947	6.6	76.3	10.6

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 is permissible, extrapolation is not. Rated GPM 3.6, Rated CFM 475, Minimum CFM 523, Maximum CFM 380.

Table 97. Fan correction factors 3.5 tons — EXHF042

Entering CFM	Cooling capacity	Sensible capacity	Cooling comp watts	Heating capacity	Heating comp watts
1064	0.959	0.879	1.001	0.981	1.082
1197	0.982	0.942	1.000	0.991	1.035
1330	1.000	1.000	1.000	1.000	1.000
1463	1.015	1.055	1.000	1.007	0.972

Table 98. Correction factors for variation in entering air temperature 3.5 tons, EXHF042

Cooling Entering Air WB°F	Cooling capaci-ty	Cooling Input Watts	Sensible vs. Entering Dry Bulb Multiplier					Heating Entering Air DB°F	Heating capacity	Heating Input Watts
			65.6	70.6	75.6	80.6	85.6			
49.4	0.929	1.011	0.978	1.046	1.116	*	*	53.0	1.036	0.858
56.3	0.931	1.009	0.801	1.008	1.115	*	*	58.0	1.024	0.902
60.3	0.927	1.011	0.604	0.836	1.049	*	*	63.0	1.012	0.951
63.2	0.949	1.013	0.466	0.690	0.920	1.128	*	68.0	1.000	1.000
66.2	1.000	1.000	—	0.556	0.781	1.000	1.199	73.0	0.987	1.051
72.1	1.097	0.985	—	—	0.479	0.705	0.936	78.0	0.972	1.103
77.1	1.167	0.970	—	—	—	0.450	0.682	83.0	0.960	1.161

Note: * = Sensible equals total capacity

Table 99. Cooling capacities 3.5 tons (gross) - EXVG42

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Comp Pwr kW	Reject Mbtuh	LWT	Feet Head
45	6.8	45.3	37.1	0.82	1.44	50.2	59.8	2.6
45	8.4	45.5	37.3	0.82	1.43	50.4	57.0	3.9
45	9.5	45.5	37.3	0.82	1.43	50.4	55.6	4.8
45	10.5	45.6	37.4	0.82	1.43	50.5	54.6	5.8
45	11.0	45.6	37.4	0.82	1.43	50.5	54.2	6.3
45	11.6	45.6	37.4	0.82	1.43	50.5	53.7	6.9
45	12.6	45.6	37.4	0.82	1.43	50.5	53.0	8.0
55	6.8	44.6	36.6	0.82	1.52	49.8	69.6	2.5
55	8.4	44.7	36.7	0.82	1.49	49.8	66.9	3.6
55	9.5	44.8	36.7	0.82	1.48	49.8	65.5	4.5
55	10.5	44.8	36.7	0.82	1.47	49.8	64.5	5.4
55	11.0	44.9	36.8	0.82	1.47	49.9	64.1	5.9
55	11.6	44.9	36.8	0.82	1.47	49.9	63.6	6.5
55	12.6	44.9	36.8	0.82	1.46	49.9	62.9	7.5
68	6.8	43.1	35.8	0.83	1.73	49.0	82.4	2.4
68	8.4	43.2	35.8	0.83	1.69	49.0	79.7	3.4
68	9.5	43.3	35.9	0.83	1.67	49.0	78.3	4.3

Table 99. Cooling capacities 3.5 tons (gross) - EXVG42 (continued)

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Comp Pwr kW	Reject Mbtuh	LWT	Feet Head
68	10.5	43.3	35.9	0.83	1.66	49.0	77.3	5.1
68	11.0	43.3	35.9	0.83	1.65	48.9	76.9	5.5
68	11.6	43.3	35.9	0.83	1.64	48.9	76.4	6.1
68	12.6	43.4	36.0	0.83	1.64	49.0	75.8	7.0
75	6.8	41.9	35.2	0.84	1.88	48.3	89.2	2.4
75	8.4	42.1	35.4	0.84	1.84	48.4	86.5	3.4
75	9.5	42.1	35.4	0.84	1.82	48.3	85.2	4.2
75	10.5	42.2	35.4	0.84	1.80	48.3	84.2	5.0
75	11.0	42.2	35.4	0.84	1.79	48.3	83.8	5.4
75	11.6	42.2	35.4	0.84	1.79	48.3	83.3	5.9
75	12.6	42.2	35.4	0.84	1.78	48.3	82.7	6.8
86	6.8	39.9	34.3	0.86	2.17	47.3	99.9	2.4
86	8.4	40.0	34.4	0.86	2.12	47.2	97.2	3.3
86	9.5	40.1	34.5	0.86	2.09	47.2	95.9	4.1
86	10.5	40.2	34.6	0.86	2.07	47.3	95.0	4.9
86	11.0	40.2	34.6	0.86	2.07	47.2	94.6	5.3
86	11.6	40.2	34.6	0.86	2.06	47.2	94.1	5.8
86	12.6	40.2	34.6	0.86	2.05	47.2	93.5	6.7
95	6.8	38.2	33.5	0.88	2.44	46.5	108.7	2.4
95	8.4	38.3	33.6	0.88	2.38	46.4	106.0	3.3
95	9.5	38.4	33.7	0.88	2.35	46.4	104.8	4.1
95	10.5	38.4	33.7	0.88	2.33	46.4	103.8	4.8
95	11.0	38.4	33.7	0.88	2.32	46.3	103.4	5.2
95	11.6	38.5	33.8	0.88	2.32	46.4	103.0	5.7
95	12.6	38.5	33.8	0.88	2.30	46.4	102.4	6.6
105	6.8	36.2	32.6	0.90	2.76	45.6	118.4	2.3
105	8.4	36.3	32.7	0.90	2.70	45.5	115.8	3.3
105	9.5	36.3	32.7	0.90	2.67	45.4	114.6	4.0
105	10.5	36.4	32.8	0.90	2.65	45.4	113.6	4.7
105	11.0	36.4	32.8	0.90	2.64	45.4	113.3	5.1
105	11.6	36.4	32.8	0.90	2.63	45.4	112.8	5.6
105	12.6	36.5	32.8	0.90	2.62	45.4	112.2	6.5
115	6.8	33.9	31.5	0.93	3.10	44.5	128.1	2.2
115	8.4	34.0	31.6	0.93	3.04	44.4	125.6	3.2
115	9.5	34.1	31.7	0.93	3.01	44.4	124.3	3.9
115	10.5	34.1	31.7	0.93	2.99	44.3	123.4	4.6
115	11.0	34.1	31.7	0.93	2.98	44.3	123.1	5.0
115	11.6	34.1	31.7	0.93	2.97	44.2	122.6	5.5
115	12.6	34.2	31.8	0.93	2.95	44.3	122.0	6.4

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 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 100. Heating capacities 3.5 tons (gross) - EXVG042

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Comp Pwr kW	LWT	Feet Head
25	6.8	24.7	18.3	1.86	19.6	3.4
25	8.4	25.1	18.7	1.87	20.5	4.9
25	9.5	25.3	18.9	1.87	21.0	6.1
25	10.5	25.5	19.1	1.87	21.4	7.2
25	11.0	25.6	19.2	1.87	21.5	7.8
25	11.6	25.6	19.2	1.87	21.7	8.5
25	12.6	25.8	19.4	1.88	21.9	9.8
32	6.8	27.5	21.0	1.90	25.8	3.1
32	8.4	28.0	21.5	1.91	26.9	4.5
32	9.5	28.3	21.8	1.91	27.4	5.5
32	10.5	28.5	22.0	1.92	27.8	6.6
32	11.0	28.6	22.1	1.92	28.0	7.1
32	11.6	28.7	22.2	1.92	28.2	7.8
32	12.6	28.8	22.3	1.92	28.5	9.0
45	6.8	33.8	27.1	1.97	37.0	2.6
45	8.4	34.6	27.8	1.98	38.4	3.9
45	9.5	35.0	28.2	1.99	39.1	4.8
45	10.5	35.2	28.4	1.99	39.6	5.8
45	11.0	35.4	28.6	1.99	39.8	6.3
45	11.6	35.5	28.7	1.99	40.1	6.9
45	12.6	35.7	28.9	2.00	40.4	8.0
55	6.8	39.0	32.1	2.03	45.6	2.5
55	8.4	40.0	33.0	2.04	47.1	3.6
55	9.5	40.5	33.5	2.05	47.9	4.5
55	10.5	40.8	33.8	2.06	48.6	5.4
55	11.0	41.0	34.0	2.06	48.8	5.9
55	11.6	41.1	34.1	2.06	49.1	6.5
55	12.6	41.4	34.3	2.07	49.6	7.5
68	6.8	45.9	38.7	2.12	56.6	2.4
68	8.4	47.1	39.8	2.15	58.5	3.4
68	9.5	47.7	40.3	2.16	59.5	4.3
68	10.5	48.1	40.7	2.17	60.2	5.1
68	11.0	48.3	40.9	2.18	60.6	5.5
68	11.6	48.5	41.1	2.18	60.9	6.1
68	12.6	48.9	41.4	2.19	61.4	7.0
75	6.8	49.6	42.1	2.20	62.6	2.4
75	8.4	50.9	43.3	2.23	64.7	3.4
75	9.5	51.5	43.9	2.24	65.8	4.2
75	10.5	52.0	44.3	2.25	66.6	5.0
75	11.0	52.2	44.5	2.26	66.9	5.4
75	11.6	52.5	44.8	2.26	67.3	5.9

Table 100. Heating capacities 3.5 tons (gross) - EXVG042 (continued)

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Comp Pwr kW	LWT	Feet Head
75	12.6	52.8	45.0	2.27	67.9	6.8
86	6.8	55.2	47.2	2.34	72.1	2.4
86	8.4	56.7	48.6	2.38	74.4	3.3
86	9.5	57.5	49.3	2.41	75.6	4.1
86	10.5	58.1	49.8	2.42	76.5	4.9
86	11.0	58.3	50.0	2.43	76.9	5.3
86	11.6	58.6	50.3	2.44	77.3	5.8
86	12.6	59.0	50.6	2.45	78.0	6.7

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 101. Fan correction factors 3.5 tons — EXVG042

Entering cfm	Cooling Capacity	Sensible Capacity	Cooling Input Watts	Heating Capacity	Heating Input Watts
1064	0.964	0.870	0.996	0.982	1.086
1131	0.974	0.904	0.997	0.988	1.060
1197	0.983	0.937	0.998	0.992	1.038
1264	0.992	0.969	0.999	0.997	1.018
1330	1.000	1.000	1.000	1.000	1.000
1463	1.015	1.061	1.001	1.006	0.970
1530	1.020	1.093	1.002	1.008	0.957
1596	1.026	1.124	1.003	1.010	0.945

Table 102. Correction factors for variation in entering air temperature 3.5 tons, EXVG042

Cooling Entering Air WB°F	Cooling capaci-ty	Cooling Input Watts	Sensible vs. Entering Dry Bulb Multiplier					Heating Entering Air DB°F	Heating capacity	Heating Input Watts
			65.6	70.6	75.6	80.6	85.6			
49.4	0.896	0.993	0.926	0.992	1.047	*	*	53.0	1.035	0.851
56.3	0.896	0.993	0.811	0.948	1.047	*	*	58.0	1.025	0.897
60.3	0.913	0.994	0.657	0.855	0.997	1.103	*	63.0	1.013	0.947
63.2	0.954	0.996	0.503	0.750	0.930	1.064	*	68.0	1.000	1.000
66.2	1.000	1.000	–	0.608	0.832	1.000	1.130	73.0	0.986	1.057
72.1	1.115	1.013	–	–	0.548	0.795	0.986	78.0	0.971	1.117
77.1	1.203	1.030	–	–	–	–	0.789	83.0	0.955	1.180

Note: * = Sensible equals total capacity

Cooling and Heating Capacities 4 tons

Table 103. Cooling capacities 4 tons (gross) -EXHF048

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Power kW	EER	Reject Mbtuh	LWT	Feet Head
45	7.2	54.75	41.35	0.76	1.709	32.0	60.58	61.8	4.4
45	8.8	54.95	41.45	0.75	1.659	33.1	60.61	58.8	6.3
45	9.9	55.15	41.45	0.75	1.639	33.6	60.74	57.3	7.8
45	11.2	55.35	41.55	0.75	1.619	34.2	60.88	55.9	9.7
45	11.6	55.25	41.55	0.75	1.609	34.3	60.74	55.5	10.4

Table 103. Cooling capacities 4 tons (gross) -EXHF048 (continued)

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Power kW	EER	Reject Mbtuh	LWT	Feet Head
45	12.1	55.35	41.55	0.75	1.599	34.6	60.81	55.1	11.2
45	13.2	55.35	41.55	0.75	1.589	34.8	60.77	54.2	13.0
55	7.2	53.15	40.65	0.76	1.929	27.6	59.73	71.6	4.3
55	8.8	53.45	40.75	0.76	1.869	28.6	59.83	68.6	6.1
55	9.9	53.55	40.85	0.76	1.839	29.1	59.83	67.1	7.5
55	11.2	53.75	40.95	0.76	1.809	29.7	59.92	65.7	9.4
55	11.6	53.75	40.95	0.76	1.799	29.9	59.89	65.3	10.0
55	12.1	53.75	40.95	0.76	1.799	29.9	59.89	64.9	10.7
55	13.2	53.85	40.85	0.76	1.779	30.3	59.92	64.1	12.5
68	7.2	51.05	39.85	0.78	2.259	22.6	58.76	84.3	4.0
68	8.8	51.35	40.05	0.78	2.189	23.5	58.82	81.4	5.7
68	9.9	51.55	40.05	0.78	2.149	24.0	58.88	79.9	7.1
68	11.2	51.65	40.05	0.78	2.119	24.4	58.88	78.5	8.8
68	11.6	51.65	40.15	0.78	2.109	24.5	58.85	78.1	9.4
68	12.1	51.75	40.15	0.78	2.099	24.7	58.91	77.7	10.1
68	13.2	51.85	40.25	0.78	2.079	24.9	58.95	76.9	11.8
75	7.2	50.65	39.65	0.78	2.319	21.8	58.56	91.3	3.9
75	8.8	50.95	39.85	0.78	2.249	22.7	58.63	88.3	5.6
75	9.9	51.15	39.85	0.78	2.209	23.2	58.69	86.9	6.9
75	11.2	51.25	39.85	0.78	2.179	23.5	58.69	85.5	8.5
75	11.6	51.25	39.95	0.78	2.169	23.6	58.65	85.1	9.1
75	12.1	51.35	39.95	0.78	2.159	23.8	58.72	84.7	9.8
75	13.2	51.45	40.05	0.78	2.139	24.1	58.75	83.9	11.4
77	7.2	49.25	39.05	0.79	2.529	19.5	57.88	93.1	3.8
77	8.8	49.55	39.25	0.79	2.459	20.2	57.94	90.2	5.4
77	9.9	49.65	39.35	0.79	2.419	20.5	57.91	88.7	6.7
77	11.2	49.85	39.35	0.79	2.379	21.0	57.97	87.4	8.3
77	11.6	49.75	39.35	0.79	2.369	21.0	57.84	87.0	8.8
77	12.1	49.85	39.35	0.79	2.369	21.0	57.94	86.6	9.5
77	13.2	49.95	39.35	0.79	2.349	21.3	57.97	85.8	11.1
86	7.2	47.35	38.45	0.81	2.839	16.7	57.04	101.8	3.8
86	8.8	47.65	38.45	0.81	2.759	17.3	57.07	99.0	5.4
86	9.9	47.85	38.65	0.81	2.719	17.6	57.13	97.5	6.6
86	11.2	47.95	38.55	0.80	2.679	17.9	57.09	96.2	8.2
86	11.6	47.95	38.55	0.80	2.669	18.0	57.06	95.8	8.7
86	12.1	48.05	38.55	0.80	2.659	18.1	57.13	95.4	9.4
86	13.2	48.15	38.65	0.80	2.639	18.2	57.16	94.7	11.0
95	7.2	45.25	37.75	0.83	3.179	14.2	56.10	110.6	3.7
95	8.8	45.55	37.85	0.83	3.099	14.7	56.13	107.8	5.2
95	9.9	45.65	37.95	0.83	3.059	14.9	56.09	106.3	6.4
95	11.2	45.85	37.95	0.83	3.019	15.2	56.15	105.0	8.0
95	11.6	45.85	37.95	0.83	3.009	15.2	56.12	104.7	8.5
95	12.1	45.85	37.95	0.83	2.999	15.3	56.09	104.3	9.2

Table 103. Cooling capacities 4 tons (gross) -EXHF048 (continued)

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Power kW	EER	Reject Mbtuh	LWT	Feet Head
95	13.2	45.95	38.05	0.83	2.979	15.4	56.12	103.5	10.7
105	7.2	42.65	36.65	0.86	3.599	11.9	54.93	120.3	3.6
105	8.8	42.95	36.65	0.85	3.509	12.2	54.93	117.5	5.1
105	9.9	43.15	36.85	0.85	3.469	12.4	54.99	116.1	6.3
105	11.2	43.25	36.95	0.85	3.429	12.6	54.95	114.8	7.8
105	11.6	43.25	36.85	0.85	3.419	12.6	54.92	114.5	8.3
105	12.1	43.25	36.95	0.85	3.409	12.7	54.88	114.1	8.9
105	13.2	43.35	37.05	0.85	3.389	12.8	54.92	113.3	10.4
115	7.2	39.95	35.35	0.88	4.059	9.8	53.80	129.9	3.5
115	8.8	40.15	35.55	0.89	3.969	10.1	53.70	127.2	5.0
115	9.9	40.35	35.55	0.88	3.929	10.3	53.76	125.9	6.1
115	11.2	40.45	35.65	0.88	3.889	10.4	53.72	124.6	7.6
115	11.6	40.45	35.65	0.88	3.869	10.5	53.65	124.3	8.1
115	12.1	40.55	35.65	0.88	3.859	10.5	53.72	123.9	8.7
115	13.2	40.55	35.65	0.88	3.839	10.6	53.65	123.1	10.1
120	7.2	38.45	34.75	0.90	4.299	8.9	53.12	134.8	3.4
120	8.8	38.75	34.75	0.90	4.219	9.2	53.15	132.1	4.9
120	9.9	38.85	34.85	0.90	4.169	9.3	53.08	130.7	6.0
120	11.2	38.95	34.95	0.90	4.129	9.4	53.04	129.5	7.5
120	11.6	39.05	35.05	0.90	4.119	9.5	53.11	129.2	8.0
120	12.1	39.05	35.05	0.90	4.109	9.5	53.07	128.8	8.6
120	13.2	39.15	35.05	0.90	4.079	9.6	53.07	128.0	10.0

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 is permissible, extrapolation is not. Rated GPM 9.8, Rated CFM 1330, Minimum CFM 1064, Maximum CFM 1463.

Table 104. Heating capacities 4 tons (gross) -EXHF048

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Power kW	COP	LWT	Feet Head
25	11.2	33.52	25.20	2.439	4.0	20.5	13.1
25	11.6	33.62	25.30	2.439	4.0	20.6	13.9
25	12.1	33.72	25.36	2.449	4.0	20.8	14.9
25	13.2	33.92	25.56	2.449	4.1	21.1	17.4
32	7.2	35.62	27.19	2.469	4.2	24.4	5.9
32	8.8	36.32	27.86	2.479	4.3	25.7	8.3
32	9.9	36.62	28.13	2.489	4.3	26.3	10.2
32	11.2	37.02	28.53	2.489	4.4	26.9	12.7
32	11.6	37.12	28.63	2.489	4.4	27.1	13.5
32	12.1	37.22	28.69	2.499	4.4	27.3	14.5
32	13.2	37.52	28.99	2.499	4.4	27.6	16.9
45	7.2	43.22	34.21	2.639	4.8	35.5	4.4
45	8.8	44.12	35.04	2.659	4.9	37.0	6.3
45	9.9	44.62	35.54	2.659	4.9	37.8	7.8
45	11.2	45.02	35.91	2.669	4.9	38.6	9.7
45	11.6	45.02	35.91	2.669	4.9	38.8	10.4

Table 104. Heating capacities 4 tons (gross) -EXHF048 (continued)

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Power kW	COP	LWT	Feet Head
45	12.1	45.22	36.11	2.669	5.0	39.0	11.2
45	13.2	45.62	36.48	2.679	5.0	39.5	13.0
55	7.2	48.92	39.54	2.749	5.2	44.0	4.3
55	8.8	49.82	40.40	2.759	5.3	45.8	6.1
55	9.9	50.62	41.14	2.779	5.3	46.7	7.5
55	11.2	51.12	41.60	2.789	5.4	47.6	9.4
55	11.6	50.92	41.44	2.779	5.4	47.9	10.0
55	12.1	51.32	41.80	2.789	5.4	48.1	10.7
55	13.2	51.62	42.07	2.799	5.4	48.6	12.5
68	7.2	57.72	47.69	2.939	5.8	54.8	4.0
68	8.8	59.42	49.25	2.979	5.8	56.8	5.7
68	9.9	60.12	49.92	2.989	5.9	57.9	7.1
68	11.2	60.82	50.58	2.999	5.9	59.0	8.8
68	11.6	60.92	50.68	2.999	6.0	59.3	9.4
68	12.1	61.12	50.85	3.009	6.0	59.6	10.1
68	13.2	61.42	51.15	3.009	6.0	60.3	11.8
75	7.2	62.42	52.05	3.039	6.0	60.5	3.9
75	8.8	64.02	53.58	3.059	6.1	62.8	5.6
75	9.9	64.42	53.98	3.059	6.2	64.1	6.9
75	11.2	65.32	54.81	3.079	6.2	65.2	8.5
75	11.6	65.52	55.01	3.079	6.2	65.5	9.1
75	12.1	65.72	55.21	3.079	6.3	65.9	9.8
75	13.2	66.32	55.78	3.089	6.3	66.5	11.4
77	7.2	68.42	57.67	3.149	6.4	61.0	3.8
77	8.8	70.12	59.30	3.169	6.5	63.5	5.4
77	9.9	71.12	60.24	3.189	6.5	64.8	6.7
77	11.2	71.82	60.90	3.199	6.6	66.1	8.3
77	11.6	72.02	61.10	3.199	6.6	66.5	8.8
77	12.1	72.22	61.30	3.199	6.6	66.9	9.5
77	13.2	72.82	61.87	3.209	6.6	67.6	11.1
86	7.2	69.72	58.90	3.169	6.4	69.6	3.8
86	8.8	71.42	60.50	3.199	6.5	72.3	5.4
86	9.9	72.62	61.63	3.219	6.6	73.5	6.6
86	11.2	73.22	62.20	3.229	6.6	74.9	8.2
86	11.6	73.42	62.40	3.229	6.7	75.2	8.7
86	12.1	73.72	62.70	3.229	6.7	75.6	9.4
86	13.2	74.22	63.17	3.239	6.7	76.4	11.0

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 is permissible, extrapolation is not. Rated GPM 3.6, Rated CFM 475, Minimum CFM 523, Maximum CFM 380.

Table 105. Fan correction factors 4 tons - EXHF048

Entering CFM	Cooling capacity	Sensible capacity	Cooling comp watts	Heating capacity	Heating comp watts
1216	0.959	0.878	1.002	0.977	1.080
1368	0.981	0.940	1.001	0.989	1.034
1520	1.000	1.000	1.000	1.000	1.000
1672	1.016	1.063	0.999	1.001	0.968

Table 106. Correction factors for variation in entering air temperature 4 tons, EXHF048

Cooling Entering Air WB°F	Cooling capaci-ty	Cooling Input Watts	Sensible vs. Entering Dry Bulb Multiplier					Heating Entering Air DB°F	Heating capacity	Heating Input Watts
			65.6	70.6	75.6	80.6	85.6			
49.4	0.942	1.006	0.982	1.048	1.115	*	*	53.0	1.034	0.861
56.3	0.941	1.004	0.805	1.021	1.114	*	*	58.0	1.020	0.903
60.3	0.941	1.004	0.606	0.840	1.069	*	*	63.0	1.009	0.949
63.2	0.957	1.003	0.458	0.693	0.925	1.148	*	68.0	1.000	1.000
66.2	1.000	1.000	—	0.535	0.767	1.000	1.224	73.0	0.983	1.046
72.1	1.095	0.990	—	—	0.459	0.692	0.924	78.0	0.966	1.096
77.1	1.178	0.978	—	—	—	0.422	0.655	83.0	0.952	1.149

Note: * = Sensible equals total capacity

Table 107. Cooling capacities 4 tons (gross) - EXVG048

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Comp Pwr kW	Reject Mbtuh	LWT	Feet Head
45	7.8	52.9	42.9	0.81	1.70	58.7	60.1	3.3
45	9.6	52.9	42.9	0.81	1.67	58.6	57.2	4.9
45	10.8	52.9	42.9	0.81	1.66	58.6	55.9	6.0
45	12.0	52.9	42.9	0.81	1.65	58.5	54.8	7.3
45	12.6	52.9	42.9	0.81	1.65	58.5	54.3	8.0
45	13.2	52.9	42.9	0.81	1.65	58.5	53.9	8.7
45	14.4	52.9	42.9	0.81	1.65	58.5	53.1	10.2
55	7.8	51.7	42.1	0.81	1.84	58.0	69.9	3.1
55	9.6	51.8	42.2	0.81	1.80	57.9	67.1	4.5
55	10.8	51.8	42.2	0.81	1.78	57.9	65.7	5.6
55	12.0	51.9	42.3	0.82	1.77	57.9	64.7	6.7
55	12.6	51.9	42.3	0.82	1.76	57.9	64.2	7.3
55	13.2	51.9	42.3	0.82	1.76	57.9	63.8	8.0
55	14.4	51.9	42.3	0.82	1.75	57.9	63.0	9.4
68	7.8	49.8	41.1	0.83	2.12	57.0	82.6	2.9
68	9.6	49.9	41.2	0.83	2.07	56.9	79.9	4.2
68	10.8	50.0	41.2	0.82	2.04	57.0	78.6	5.2
68	12.0	50.0	41.2	0.82	2.02	56.9	77.5	6.2
68	12.6	50.0	41.2	0.82	2.01	56.8	77.0	6.8
68	13.2	50.1	41.3	0.82	2.00	56.9	76.6	7.4
68	14.4	50.1	41.3	0.82	1.99	56.9	75.9	8.6
75	7.8	48.5	40.4	0.83	2.31	56.4	89.5	2.9
75	9.6	48.7	40.6	0.83	2.25	56.4	86.8	4.1

Table 107. Cooling capacities 4 tons (gross) - EXVG048 (continued)

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Comp Pwr kW	Reject Mbtuh	LWT	Feet Head
75	10.8	48.8	40.7	0.83	2.22	56.4	85.4	5.0
75	12.0	48.8	40.7	0.83	2.19	56.3	84.4	6.0
75	12.6	48.9	40.8	0.83	2.18	56.3	83.9	6.6
75	13.2	48.9	40.8	0.83	2.17	56.3	83.5	7.2
75	14.4	48.9	40.8	0.83	2.16	56.3	82.8	8.4
86	7.8	46.3	39.4	0.85	2.66	55.4	100.2	2.8
86	9.6	46.5	39.6	0.85	2.59	55.3	97.5	4.0
86	10.8	46.6	39.7	0.85	2.55	55.3	96.2	4.9
86	12.0	46.7	39.8	0.85	2.53	55.3	95.2	5.9
86	12.6	46.7	39.8	0.85	2.51	55.3	94.8	6.4
86	13.2	46.7	39.8	0.85	2.50	55.2	94.4	6.9
86	14.4	46.8	39.9	0.85	2.49	55.3	93.7	8.0
95	7.8	44.3	38.5	0.87	2.98	54.5	109.0	2.8
95	9.6	44.5	38.7	0.87	2.90	54.4	106.3	4.0
95	10.8	44.6	38.7	0.87	2.87	54.4	105.1	4.8
95	12.0	44.7	38.8	0.87	2.84	54.4	104.1	5.7
95	12.6	44.7	38.8	0.87	2.83	54.3	103.6	6.2
95	13.2	44.7	38.8	0.87	2.82	54.3	103.2	6.8
95	14.4	44.8	38.9	0.87	2.80	54.3	102.5	7.9
105	7.8	41.8	37.3	0.89	3.36	53.3	118.7	2.7
105	9.6	42.0	37.5	0.89	3.29	53.2	116.1	3.9
105	10.8	42.1	37.5	0.89	3.25	53.2	114.9	4.7
105	12.0	42.2	37.6	0.89	3.23	53.2	113.9	5.6
105	12.6	42.2	37.6	0.89	3.21	53.2	113.4	6.1
105	13.2	42.3	37.7	0.89	3.20	53.2	113.1	6.6
105	14.4	42.3	37.7	0.89	3.18	53.2	112.4	7.7
115	7.8	39.0	35.9	0.92	3.77	51.9	128.3	2.6
115	9.6	39.3	36.2	0.92	3.70	51.9	125.8	3.7
115	10.8	39.4	36.3	0.92	3.67	51.9	124.6	4.6
115	12.0	39.5	36.4	0.92	3.64	51.9	123.7	5.5
115	12.6	39.5	36.4	0.92	3.63	51.9	123.2	6.0
115	13.2	39.6	36.5	0.92	3.62	52.0	122.9	6.5
115	14.4	39.6	36.5	0.92	3.60	51.9	122.2	7.5

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 12; Minimum CFM 1216; Rated CFM 1520; Maximum CFM 1824.

Table 108. Heating capacities 4 tons (gross) -EXVG048

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Comp Pwr kW	LWT	Feet Head
25	7.8	29.2	21.7	2.19	19.4	4.3
25	9.6	29.8	22.3	2.20	20.4	6.2
25	10.8	30.0	22.5	2.21	20.8	7.6

Table 108. Heating capacities 4 tons (gross) -EXVG048 (continued)

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Comp Pwr kW	LWT	Feet Head
25	12.0	30.2	22.7	2.21	21.2	9.1
25	12.6	30.3	22.8	2.21	21.4	9.9
25	13.2	30.4	22.9	2.21	21.5	10.7
25	14.4	30.6	23.1	2.21	21.8	12.5
32	7.8	32.6	24.9	2.26	25.6	3.9
32	9.6	33.3	25.6	2.27	26.7	5.6
32	10.8	33.6	25.9	2.27	27.2	6.9
32	12.0	33.9	26.1	2.28	27.7	8.4
32	12.6	34.0	26.2	2.28	27.8	9.1
32	13.2	34.1	26.3	2.28	28.0	9.9
32	14.4	34.3	26.5	2.28	28.3	11.5
45	7.8	39.5	31.5	2.34	36.9	3.3
45	9.6	40.4	32.4	2.35	38.3	4.9
45	10.8	40.8	32.7	2.36	38.9	6.0
45	12.0	41.2	33.1	2.37	39.5	7.3
45	12.6	41.3	33.2	2.37	39.7	8.0
45	13.2	41.5	33.4	2.37	39.9	8.7
45	14.4	41.7	33.6	2.38	40.3	10.2
55	7.8	45.1	36.9	2.40	45.5	3.1
55	9.6	46.2	37.9	2.42	47.1	4.5
55	10.8	46.7	38.4	2.43	47.9	5.6
55	12.0	47.2	38.9	2.44	48.5	6.7
55	12.6	47.4	39.0	2.45	48.8	7.3
55	13.2	47.5	39.1	2.45	49.1	8.0
55	14.4	47.9	39.5	2.46	49.5	9.4
68	7.8	52.8	44.2	2.52	56.7	2.9
68	9.6	54.2	45.5	2.56	58.5	4.2
68	10.8	54.8	46.0	2.58	59.5	5.2
68	12.0	55.4	46.5	2.60	60.3	6.2
68	12.6	55.6	46.7	2.61	60.6	6.8
68	13.2	55.9	47.0	2.62	60.9	7.4
68	14.4	56.3	47.3	2.63	61.4	8.6
75	7.8	57.1	48.1	2.63	62.7	2.9
75	9.6	58.6	49.4	2.68	64.7	4.1
75	10.8	59.4	50.2	2.71	65.7	5.0
75	12.0	60.0	50.7	2.73	66.6	6.0
75	12.6	60.2	50.8	2.74	66.9	6.6
75	13.2	60.5	51.1	2.75	67.3	7.2
75	14.4	60.9	51.5	2.77	67.8	8.4
86	7.8	63.9	54.0	2.89	72.2	2.8
86	9.6	65.7	55.6	2.96	74.4	4.0

Table 108. Heating capacities 4 tons (gross) -EXVG048 (continued)

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Comp Pwr kW	LWT	Feet Head
86	10.8	66.6	56.4	3.00	75.6	4.9
86	12.0	67.3	57.0	3.03	76.5	5.9
86	12.6	67.6	57.2	3.05	76.9	6.4
86	13.2	67.9	57.5	3.06	77.3	6.9
86	14.4	68.4	57.9	3.08	78.0	8.0

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 12;Minimum CFM 1216; Rated CFM 1520; Maximum CFM 1824.

Table 109. Fan correction factors 4 tons - EXVG048

Entering cfm	Cooling Capacity	Sensible Capacity	Cooling Input Watts	Heating Capacity	Heating Input Watts
1216	0.964	0.872	0.992	0.983	1.092
1292	0.974	0.905	0.995	0.988	1.065
1368	0.983	0.937	0.996	0.993	1.041
1444	0.992	0.969	0.998	0.997	1.019
1520	1.000	1.000	1.000	1.000	1.000
1672	1.015	1.062	1.003	1.005	0.967
1748	1.021	1.094	1.005	1.008	0.953
1824	1.028	1.125	1.006	1.010	0.940

Table 110. Correction factors for variation in entering air temperature 4 tons, EXVG048

Cooling Entering Air WB°F	Cooling capaci-ty	Cooling Input Watts	Sensible vs. Entering Dry Bulb Multiplier					Heating Entering Air DB°F	Heating capacity	Heating Input Watts
			65.6	70.6	75.6	80.6	85.6			
49.4	0.903	0.986	0.938	1.009	1.068	*	*	53.0	1.033	0.833
56.3	0.903	0.986	0.813	0.954	1.058	*	*	58.0	1.023	0.886
60.3	0.919	0.988	0.656	0.855	1.001	1.112	*	63.0	1.012	0.942
63.2	0.958	0.993	0.502	0.748	0.930	1.069	*	68.0	1.000	1.000
66.2	1.000	1.000	–	0.605	0.829	1.000	1.134	73.0	0.987	1.061
72.1	1.104	1.025	–	–	0.545	0.789	0.982	78.0	0.972	1.125
77.1	1.197	1.058	–	–	–	–	0.782	83.0	0.957	1.190

Note: * = Sensible equals total capacity

Table 111. Cooling capacities 4 tons (gross) -DXHF048

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Power kW	Reject Mbtuh	LWT	Feet Head
45	7.3	62.5	41.6	0.67	1.86	68.9	63.9	4.8
45	9.0	62.5	41.6	0.67	1.79	68.6	60.2	6.9
45	10.1	62.4	41.5	0.67	1.76	68.4	58.5	8.7
45	11.2	62.2	41.4	0.67	1.74	68.1	57.2	10.4
45	11.8	62.1	41.3	0.67	1.73	68.0	56.5	11.3
45	12.3	61.9	41.2	0.67	1.72	67.8	56.0	12.1
45	13.4	61.7	41.0	0.66	1.70	67.5	55.1	13.6
55	7.3	60.4	41.0	0.68	2.05	67.4	73.5	4.5
55	9.0	60.6	41.1	0.68	1.98	67.4	70.0	6.3

Table 111. Cooling capacities 4 tons (gross) -DXHF048 (continued)

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Power kW	Reject Mbtuh	LWT	Feet Head
55	10.1	60.6	41.1	0.68	1.95	67.2	68.3	8.0
55	11.2	60.5	41.0	0.68	1.92	67.0	67.0	9.6
55	11.8	60.5	41.0	0.68	1.91	67.0	66.4	10.5
55	12.3	60.4	41.0	0.68	1.90	66.9	65.9	11.2
55	13.4	60.3	40.9	0.68	1.88	66.7	65.0	12.7
65	7.3	58.4	40.2	0.69	2.27	66.2	83.1	4.2
65	9.0	58.7	40.4	0.69	2.20	66.2	79.7	5.9
65	10.1	58.7	40.4	0.69	2.16	66.1	78.1	7.4
65	11.2	58.8	40.5	0.69	2.13	66.1	76.8	9.0
65	11.8	58.8	40.5	0.69	2.12	66.0	76.2	9.9
65	12.3	58.8	40.5	0.69	2.11	66.0	75.7	10.6
65	13.4	58.7	40.4	0.69	2.09	65.8	74.8	12.0
75	7.3	56.3	39.5	0.70	2.53	64.9	92.8	4.1
75	9.0	56.5	39.7	0.70	2.45	64.9	89.4	5.6
75	10.1	56.7	39.8	0.70	2.41	64.9	87.9	7.1
75	11.2	56.7	39.8	0.70	2.38	64.8	86.6	8.6
75	11.8	56.8	39.9	0.70	2.37	64.9	86.0	9.4
75	12.3	56.8	39.9	0.70	2.36	64.8	85.5	10.1
75	13.4	56.8	39.9	0.70	2.34	64.8	84.7	11.5
85	7.3	53.8	38.5	0.72	2.83	63.5	102.4	3.9
85	9.0	54.1	38.7	0.72	2.75	63.5	99.1	5.3
85	10.1	54.3	38.9	0.72	2.71	63.5	97.6	6.8
85	11.2	54.4	39.0	0.72	2.67	63.5	96.3	8.3
85	11.8	54.4	39.0	0.72	2.66	63.5	95.8	9.1
85	12.3	54.4	39.0	0.72	2.65	63.4	95.3	9.7
85	13.4	54.5	39.0	0.72	2.63	63.5	94.5	11.1
95	7.3	51.1	37.5	0.73	3.18	61.9	112.0	3.8
95	9.0	51.4	37.7	0.73	3.09	61.9	108.8	5.2
95	10.1	51.6	37.8	0.73	3.04	62.0	107.3	6.5
95	11.2	51.7	37.9	0.73	3.01	62.0	106.1	8.0
95	11.8	51.7	37.9	0.73	3.00	61.9	105.5	8.8
95	12.3	51.7	37.9	0.73	2.98	61.9	105.1	9.4
95	13.4	51.8	38.0	0.73	2.96	61.9	104.2	10.8
105	7.3	48.2	36.3	0.75	3.57	60.4	121.5	3.7
105	9.0	48.4	36.5	0.75	3.48	60.3	118.4	5.0
105	10.1	48.6	36.6	0.75	3.43	60.3	116.9	6.4
105	11.2	48.7	36.7	0.75	3.40	60.3	115.8	7.8
105	11.8	48.7	36.7	0.75	3.38	60.2	115.2	8.6
105	12.3	48.7	36.7	0.75	3.37	60.2	114.8	9.2
105	13.4	48.8	36.8	0.75	3.35	60.2	114.0	10.6
115	7.3	45.0	35.1	0.78	4.03	58.7	131.1	3.6
115	9.0	45.2	35.3	0.78	3.93	58.6	128.0	4.9
115	10.1	45.3	35.3	0.78	3.88	58.5	126.6	6.2

Table 111. Cooling capacities 4 tons (gross) -DXHF048 (continued)

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Power kW	Reject Mbtuh	LWT	Feet Head
115	11.2	45.4	35.4	0.78	3.84	58.5	125.4	7.6
115	11.8	45.5	35.5	0.78	3.83	58.6	124.9	8.4
115	12.3	45.5	35.5	0.78	3.81	58.5	124.5	9.0
115	13.4	45.5	35.5	0.78	3.79	58.4	123.7	10.3
120	7.3	43.3	34.4	0.79	4.27	57.9	135.9	3.6
120	9.0	43.6	34.7	0.80	4.17	57.8	132.8	4.8
120	10.1	43.7	34.7	0.79	4.12	57.8	131.4	6.1
120	11.2	43.7	34.7	0.79	4.08	57.6	130.3	7.5
120	11.8	43.7	34.7	0.79	4.07	57.6	129.8	8.3
120	12.3	43.8	34.8	0.79	4.05	57.6	129.4	8.9
120	13.4	43.8	34.8	0.79	4.03	57.5	128.6	10.3

Note: Cooling performance data is tabulated at 80°F DB/67°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 is permissible, extrapolation is not. Rated GPM 8.4, Rated CFM 1140, Minimum CFM 912, Maximum CFM 1254.

Table 112. Heating capacities 4 tons (gross) -DXHF048

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Power kW	LWT	Feet Head
25	11.2	34.3	25.6	2.54	20.4	13.7
25	11.8	34.6	25.9	2.55	20.6	14.8
25	12.3	34.8	26.1	2.56	20.8	15.7
25	13.4	35.2	26.4	2.57	21.1	17.5
35	7.3	38.0	29.0	2.65	27.1	5.3
35	9.0	39.3	30.2	2.67	28.3	7.8
35	10.1	40.1	30.9	2.69	28.9	9.7
35	11.2	40.7	31.5	2.70	29.4	11.6
35	11.8	40.9	31.7	2.70	29.6	12.6
35	12.3	41.1	31.9	2.71	29.8	13.4
35	13.4	41.5	32.2	2.71	30.2	15.1
45	7.3	45.3	35.8	2.80	35.2	4.8
45	9.0	46.7	37.1	2.82	36.8	6.9
45	10.1	47.4	37.7	2.83	37.5	8.7
45	11.2	48.0	38.3	2.84	38.2	10.4
45	11.8	48.2	38.5	2.84	38.5	11.3
45	12.3	48.5	38.8	2.85	38.7	12.1
45	13.4	48.9	39.2	2.85	39.1	13.6
55	7.3	51.1	41.1	2.94	43.7	4.5
55	9.0	52.5	42.4	2.96	45.6	6.3
55	10.1	53.2	43.0	2.98	46.5	8.0
55	11.2	53.8	43.6	2.99	47.2	9.6
55	11.8	54.0	43.8	2.99	47.6	10.5
55	12.3	54.3	44.1	3.00	47.8	11.2
55	13.4	54.7	44.5	3.00	48.4	12.7
65	7.3	57.2	46.6	3.10	52.2	4.2
65	9.0	58.6	47.9	3.14	54.4	5.9

Table 112. Heating capacities 4 tons (gross) -DXHF048 (continued)

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Power kW	LWT	Feet Head
65	10.1	59.3	48.5	3.16	55.4	7.4
65	11.2	59.9	49.1	3.17	56.2	9.0
65	11.8	60.1	49.3	3.18	56.6	9.9
65	12.3	60.3	49.4	3.18	57.0	10.6
65	13.4	60.7	49.8	3.19	57.6	12.0
75	7.3	65.5	54.2	3.31	60.2	4.1
75	9.0	66.9	55.4	3.36	62.7	5.6
75	10.1	67.6	56.0	3.39	63.9	7.1
75	11.2	68.2	56.6	3.41	64.9	8.6
75	11.8	68.4	56.7	3.42	65.4	9.4
75	12.3	68.6	56.9	3.43	65.7	10.1
75	13.4	69.0	57.3	3.44	66.4	11.5
85	7.3	73.7	61.5	3.59	68.2	3.9
85	9.0	75.1	62.6	3.66	71.1	5.3
85	10.1	75.8	63.2	3.70	72.5	6.8
85	11.2	76.4	63.7	3.73	73.6	8.3
85	11.8	76.6	63.8	3.74	74.2	9.1
85	12.3	76.9	64.1	3.75	74.6	9.7
85	13.4	77.3	64.4	3.77	75.4	11.1

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 is permissible, extrapolation is not. Rated GPM 3.6, Rated CFM 475, Minimum CFM 523, Maximum CFM 380.

Table 113. Fan correction factors 3 tons - DXHF048

Entering CFM	Cooling capacity	Sensible capacity	Cooling comp watts	Heating capacity	Heating comp watts
1216	0.958	0.883	0.997	0.971	1.105
1368	0.981	0.941	0.999	0.987	1.047
1520	1.000	0.997	1.000	1.000	1.000
1672	1.016	1.050	1.001	1.011	0.963

Table 114. Correction factors for variation in entering air temperature 4 tons, DXHF048

Cooling Entering Air WB°F	Cooling capaci-ty	Cooling Input Watts	Sensible vs. Entering Dry Bulb Multiplier						Heating Entering Air DB°F	Heating capacity	Heating Input Watts
			65.0	70.0	75.0	80.0	85.0	90.0			
50.0	0.916	0.991	1.004	1.096	*	*	*	*	55.0	1.066	0.870
55.0	0.901	0.989	0.892	1.048	1.166	*	*	*	58.0	1.059	0.898
60.0	0.923	0.992	0.653	0.894	1.076	1.219	*	*	61.0	1.048	0.926
65.0	0.974	0.997	0.292	0.626	0.880	1.081	1.245	*	64.0	1.035	0.952
67.0	1.000	1.000	–	0.490	0.775	1.000	1.184	*	67.0	1.020	0.977
70.0	1.045	1.004	–	0.261	0.591	0.853	1.068	1.247	70.0	1.000	1.000
75.0	1.128	1.010	–	–	0.227	0.552	0.817	1.040	73.0	0.976	1.021
78.0	1.180	1.014	–	–	–	0.342	0.639	0.887	76.0	0.947	1.039

Note: * = Sensible equals total capacity

Table 115. Cooling capacities 4 tons (gross) -DXVG048

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Comp Pwr kW	Reject Mbtuh	LWT	Feet Head
45	7.8	53.2	43.0	0.81	1.68	58.9	60.1	3.4
45	9.6	53.4	43.2	0.81	1.62	58.9	57.3	5.0
45	10.8	53.5	43.3	0.81	1.59	58.9	55.9	6.2
45	12.0	53.6	43.4	0.81	1.57	59.0	54.8	7.5
45	12.6	53.6	43.4	0.81	1.56	58.9	54.3	8.2
45	13.2	53.7	43.5	0.81	1.55	59.0	53.9	8.9
45	14.4	53.7	43.5	0.81	1.54	58.9	53.2	10.4
55	7.8	51.5	42.0	0.82	1.88	57.9	69.8	3.2
55	9.6	51.7	42.2	0.82	1.82	57.9	67.1	4.7
55	10.8	51.8	42.3	0.82	1.79	57.9	65.7	5.8
55	12.0	51.9	42.3	0.82	1.77	57.9	64.7	7.0
55	12.6	51.9	42.3	0.82	1.76	57.9	64.2	7.7
55	13.2	52.0	42.4	0.82	1.75	58.0	63.8	8.3
55	14.4	52.0	42.4	0.82	1.74	57.9	63.0	9.7
68	7.8	49.0	40.7	0.83	2.14	56.3	82.4	3.1
68	9.6	49.2	40.9	0.83	2.08	56.3	79.7	4.5
68	10.8	49.3	41.0	0.83	2.06	56.3	78.4	5.5
68	12.0	49.4	41.0	0.83	2.03	56.3	77.4	6.6
68	12.6	49.4	41.0	0.83	2.02	56.3	76.9	7.2
68	13.2	49.5	41.1	0.83	2.02	56.4	76.5	7.9
68	14.4	49.5	41.1	0.83	2.00	56.3	75.8	9.2
75	7.8	47.8	40.2	0.84	2.29	55.6	89.3	3.1
75	9.6	48.1	40.4	0.84	2.23	55.7	86.6	4.4
75	10.8	48.2	40.5	0.84	2.20	55.7	85.3	5.4
75	12.0	48.3	40.6	0.84	2.18	55.7	84.3	6.5
75	12.6	48.3	40.6	0.84	2.17	55.7	83.8	7.1
75	13.2	48.3	40.6	0.84	2.16	55.7	83.4	7.7
75	14.4	48.4	40.7	0.84	2.15	55.7	82.7	9.0
86	7.8	46.0	39.4	0.86	2.57	54.8	100.1	3.1
86	9.6	46.2	39.6	0.86	2.51	54.8	97.4	4.4
86	10.8	46.3	39.7	0.86	2.49	54.8	96.1	5.3
86	12.0	46.4	39.8	0.86	2.46	54.8	95.1	6.4
86	12.6	46.4	39.8	0.86	2.45	54.8	94.7	6.9
86	13.2	46.5	39.9	0.86	2.45	54.8	94.3	7.5
86	14.4	46.5	39.9	0.86	2.43	54.8	93.6	8.8
95	7.8	44.2	38.6	0.87	2.85	53.9	108.8	3.1
95	9.6	44.5	38.9	0.87	2.79	54.0	106.3	4.3
95	10.8	44.6	38.9	0.87	2.76	54.0	105.0	5.3
95	12.0	44.6	38.9	0.87	2.74	54.0	104.0	6.3
95	12.6	44.7	39.0	0.87	2.73	54.0	103.6	6.9
95	13.2	44.7	39.0	0.87	2.72	54.0	103.2	7.4

Table 115. Cooling capacities 4 tons (gross) -DXVG048 (continued)

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Comp Pwr kW	Reject Mbtuh	LWT	Feet Head
95	14.4	44.8	39.1	0.87	2.71	54.0	102.5	8.6
105	7.8	42.0	37.6	0.90	3.20	52.9	118.6	3.0
105	9.6	42.2	37.7	0.89	3.14	52.9	116.0	4.3
105	10.8	42.3	37.8	0.89	3.11	52.9	114.8	5.2
105	12.0	42.4	37.9	0.89	3.09	52.9	113.8	6.2
105	12.6	42.5	38.0	0.89	3.08	53.0	113.4	6.8
105	13.2	42.5	38.0	0.89	3.07	53.0	113.0	7.3
105	14.4	42.5	38.0	0.89	3.06	52.9	112.3	8.5
115	7.8	39.6	36.5	0.92	3.56	51.8	128.3	2.9
115	9.6	39.8	36.6	0.92	3.50	51.8	125.8	4.1
115	10.8	39.9	36.7	0.92	3.48	51.8	124.6	5.1
115	12.0	40.0	36.8	0.92	3.45	51.8	123.6	6.1
115	12.6	40.0	36.8	0.92	3.45	51.8	123.2	6.6
115	13.2	40.1	36.9	0.92	3.44	51.8	122.8	7.2
115	14.4	40.1	36.9	0.92	3.42	51.8	122.2	8.4

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 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 12; Minimum CFM 1216; Rated CFM 1520; Maximum CFM 1824.

Table 116. Heating capacities 4 tons (gross) -DXVG048

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Comp Pwr kW	LWT	Feet Head
25	7.8	29.2	21.7	2.19	19.4	4.3
25	9.6	29.8	22.3	2.20	20.4	6.2
25	10.8	30.0	22.5	2.21	20.8	7.6
25	12.0	30.2	22.7	2.21	21.2	9.1
25	12.6	30.3	22.8	2.21	21.4	9.9
25	13.2	30.4	22.9	2.21	21.5	10.7
25	14.4	30.6	23.1	2.21	21.8	12.5
32	7.8	32.6	24.9	2.26	25.6	3.9
32	9.6	33.3	25.6	2.27	26.7	5.6
32	10.8	33.6	25.9	2.27	27.2	6.9
32	12.0	33.9	26.1	2.28	27.7	8.4
32	12.6	34.0	26.2	2.28	27.8	9.1
32	13.2	34.1	26.3	2.28	28.0	9.9
32	14.4	34.3	26.5	2.28	28.3	11.5
45	7.8	39.5	31.5	2.34	36.9	3.3
45	9.6	40.4	32.4	2.35	38.3	4.9
45	10.8	40.8	32.7	2.36	38.9	6.0
45	12.0	41.2	33.1	2.37	39.5	7.3
45	12.6	41.3	33.2	2.37	39.7	8.0
45	13.2	41.5	33.4	2.37	39.9	8.7
45	14.4	41.7	33.6	2.38	40.3	10.2

Table 116. Heating capacities 4 tons (gross) -DXVG048 (continued)

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Comp Pwr kW	LWT	Feet Head
55	7.8	45.1	36.9	2.40	45.5	3.1
55	9.6	46.2	37.9	2.42	47.1	4.5
55	10.8	46.7	38.4	2.43	47.9	5.6
55	12.0	47.2	38.9	2.44	48.5	6.7
55	12.6	47.4	39.0	2.45	48.8	7.3
55	13.2	47.5	39.1	2.45	49.1	8.0
55	14.4	47.9	39.5	2.46	49.5	9.4
68	7.8	52.8	44.2	2.52	56.7	2.9
68	9.6	54.2	45.5	2.56	58.5	4.2
68	10.8	54.8	46.0	2.58	59.5	5.2
68	12.0	55.4	46.5	2.60	60.3	6.2
68	12.6	55.6	46.7	2.61	60.6	6.8
68	13.2	55.9	47.0	2.62	60.9	7.4
68	14.4	56.3	47.3	2.63	61.4	8.6
75	7.8	57.1	48.1	2.63	62.7	2.9
75	9.6	58.6	49.4	2.68	64.7	4.1
75	10.8	59.4	50.2	2.71	65.7	5.0
75	12.0	60.0	50.7	2.73	66.6	6.0
75	12.6	60.2	50.8	2.74	66.9	6.6
75	13.2	60.5	51.1	2.75	67.3	7.2
75	14.4	60.9	51.5	2.77	67.8	8.4
86	7.8	63.9	54.0	2.89	72.2	2.8
86	9.6	65.7	55.6	2.96	74.4	4.0
86	10.8	66.6	56.4	3.00	75.6	4.9
86	12.0	67.3	57.0	3.03	76.5	5.9
86	12.6	67.6	57.2	3.05	76.9	6.4
86	13.2	67.9	57.5	3.06	77.3	6.9
86	14.4	68.4	57.9	3.08	78.0	8.0

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 12;Minimum CFM 1216; Rated CFM 1520; Maximum CFM 1824.

Table 117. Fan correction factors 4 tons - DXVG048

Entering cfm	Cooling Capacity	Sensible Capacity	Cooling Input Watts	Heating Capacity	Heating Input Watts
1216	0.962	0.872	0.996	0.996	1.078
1292	0.972	0.905	0.997	0.997	1.055
1368	0.982	0.937	0.998	0.998	1.034
1444	0.991	0.969	0.999	0.999	1.016
1520	1.000	1.000	1.000	1.000	1.000
1672	1.015	1.062	1.002	1.002	0.972
1748	1.022	1.094	1.002	1.002	0.961
1824	1.029	1.125	1.003	1.003	0.950

Table 118. Correction factors for variation in entering air temperature 4 tons, DXVG048

Cooling Entering Air WB°F	Cooling capaci-ty	Cooling Input Watts	Sensible vs. Entering Dry Bulb Multiplier					Heating Entering Air DB°F	Heating capacity	Heating Input Watts
			65.0	70.0	75.0	80.0	85.0			
49.4	0.900	0.999	0.930	0.998	1.048	*	*	53.0	1.046	0.860
56.3	0.900	0.998	0.807	0.951	1.052	*	*	58.0	1.031	0.905
60.3	0.916	0.999	0.653	0.854	0.999	1.107	*	63.0	1.016	0.951
63.2	0.956	0.999	0.502	0.748	0.930	1.067	*	68.0	1.000	1.000
66.2	1.000	1.000	–	0.606	0.831	1.000	1.132	73.0	0.984	1.052
72.1	1.112	1.003	–	–	0.549	0.793	0.984	78.0	0.968	1.106
77.1	1.213	1.007	–	–	–	–	0.787	83.0	0.951	1.163

Note: * = Sensible equals total capacity

Cooling and Heating Capacities 5 tons

Table 119. Cooling capacities 5 tons (gross) -EXHF060

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Power kW	EER	Reject Mbtuh	LWT	Feet Head
45	9.4	69.49	49.89	0.72	2.064	33.7	76.53	61.3	3.9
45	11.6	69.89	49.99	0.72	1.974	35.4	76.63	58.2	5.7
45	13.1	69.99	50.09	0.72	1.934	36.2	76.59	56.7	7.0
45	14.0	69.99	49.99	0.71	1.914	36.6	76.52	55.9	7.9
45	15.2	70.19	50.19	0.72	1.884	37.3	76.62	55.1	9.2
45	16.0	70.19	50.09	0.71	1.874	37.5	76.59	54.6	10.0
45	17.4	70.29	50.19	0.71	1.854	37.9	76.62	53.8	11.6
55	9.4	67.19	48.99	0.73	2.394	28.1	75.36	71.0	3.8
55	11.6	67.49	49.09	0.73	2.304	29.3	75.35	68.0	5.5
55	13.1	67.59	49.09	0.73	2.264	29.9	75.32	66.5	6.8
55	14.0	67.69	49.19	0.73	2.244	30.2	75.35	65.8	7.6
55	15.2	67.69	49.19	0.73	2.214	30.6	75.25	64.9	8.8
55	16.0	67.79	49.19	0.73	2.204	30.8	75.31	64.4	9.6
55	17.4	67.89	49.29	0.73	2.184	31.1	75.34	63.7	11.2
68	9.4	64.99	48.39	0.74	2.844	22.9	74.70	83.9	3.7
68	11.6	65.29	48.49	0.74	2.764	23.6	74.72	80.9	5.4
68	13.1	65.49	48.59	0.74	2.714	24.1	74.75	79.4	6.7
68	14.0	65.49	48.59	0.74	2.694	24.3	74.68	78.7	7.5
68	15.2	65.59	48.59	0.74	2.674	24.5	74.72	77.8	8.7
68	16.0	65.59	48.69	0.74	2.664	24.6	74.68	77.3	9.5
68	17.4	65.69	48.69	0.74	2.634	24.9	74.68	76.6	11.0
75	9.4	64.49	48.19	0.75	2.924	22.1	74.47	90.8	3.6
75	11.6	64.79	48.29	0.75	2.834	22.9	74.46	87.8	5.2
75	13.1	64.99	48.39	0.74	2.794	23.3	74.53	86.4	6.5
75	14.0	64.99	48.39	0.74	2.764	23.5	74.42	85.6	7.3
75	15.2	65.09	48.39	0.74	2.744	23.7	74.46	84.8	8.4
75	16.0	65.09	48.39	0.74	2.734	23.8	74.42	84.3	9.2
75	17.4	65.19	48.39	0.74	2.704	24.1	74.42	83.6	10.7
77	9.4	62.69	47.49	0.76	3.184	19.7	73.56	92.7	3.6

Table 119. Cooling capacities 5 tons (gross) -EXHF060 (continued)

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Power kW	EER	Reject Mbtuh	LWT	Feet Head
77	11.6	62.89	47.39	0.75	3.094	20.3	73.45	89.7	5.2
77	13.1	63.09	47.49	0.75	3.054	20.7	73.51	88.2	6.4
77	14.0	63.09	47.49	0.75	3.024	20.9	73.41	87.5	7.2
77	15.2	63.19	47.49	0.75	3.004	21.0	73.44	86.7	8.3
77	16.0	63.29	47.49	0.75	2.984	21.2	73.47	86.2	9.1
77	17.4	63.29	47.49	0.75	2.964	21.4	73.41	85.4	10.6
86	9.4	59.39	45.69	0.77	3.544	16.8	71.49	101.2	3.6
86	11.6	59.69	45.79	0.77	3.434	17.4	71.41	98.3	5.2
86	13.1	59.79	45.89	0.77	3.394	17.6	71.37	96.9	6.4
86	14.0	59.89	45.79	0.76	3.364	17.8	71.37	96.2	7.2
86	15.2	59.99	45.99	0.77	3.344	17.9	71.40	95.4	8.3
86	16.0	59.99	45.79	0.76	3.324	18.0	71.33	94.9	9.1
86	17.4	59.99	45.89	0.76	3.304	18.2	71.27	94.2	10.6
95	9.4	56.79	44.79	0.79	3.954	14.4	70.29	110.0	3.5
95	11.6	56.99	44.79	0.79	3.854	14.8	70.14	107.1	5.0
95	13.1	57.19	44.89	0.78	3.804	15.0	70.17	105.7	6.2
95	14.0	57.19	44.89	0.78	3.774	15.2	70.07	105.0	7.0
95	15.2	57.29	44.89	0.78	3.754	15.3	70.10	104.2	8.1
95	16.0	57.29	44.89	0.78	3.734	15.3	70.03	103.8	8.9
95	17.4	57.39	44.99	0.78	3.704	15.5	70.03	103.0	10.3
105	9.4	53.59	43.19	0.81	4.474	12.0	68.86	119.7	3.4
105	11.6	53.89	43.49	0.81	4.364	12.3	68.78	116.9	4.9
105	13.1	53.99	43.59	0.81	4.304	12.5	68.68	115.5	6.1
105	14.0	53.99	43.39	0.80	4.284	12.6	68.61	114.8	6.8
105	15.2	54.09	43.59	0.81	4.254	12.7	68.61	114.0	7.9
105	16.0	54.19	43.49	0.80	4.234	12.8	68.64	113.6	8.6
105	17.4	54.29	43.69	0.80	4.204	12.9	68.64	112.9	10.0
115	9.4	50.09	41.79	0.83	5.064	9.9	67.37	129.3	3.3
115	11.6	50.29	41.99	0.83	4.944	10.2	67.16	126.6	4.8
115	13.1	50.49	41.99	0.83	4.884	10.3	67.16	125.3	5.9
115	14.0	50.49	42.09	0.83	4.854	10.4	67.06	124.6	6.6
115	15.2	50.69	42.19	0.83	4.824	10.5	67.15	123.8	7.7
115	16.0	50.69	41.99	0.83	4.814	10.5	67.12	123.4	8.4
115	17.4	50.69	41.99	0.83	4.784	10.6	67.02	122.7	9.7
120	9.4	48.19	40.99	0.85	5.384	9.0	66.57	134.2	3.2
120	11.6	48.49	41.09	0.85	5.264	9.2	66.46	131.5	4.7
120	13.1	48.59	41.19	0.85	5.204	9.3	66.35	130.1	5.8
120	14.0	48.69	41.29	0.85	5.174	9.4	66.35	129.5	6.6
120	15.2	48.69	41.29	0.85	5.154	9.4	66.28	128.7	7.6
120	16.0	48.79	41.29	0.85	5.124	9.5	66.28	128.3	8.3
120	17.4	48.79	41.29	0.85	5.104	9.6	66.21	127.6	9.6

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 is permissible, extrapolation is not. Rated GPM 9.8, Rated CFM 1330, Minimum CFM 1064, Maximum CFM 1463.

Table 120. Heating capacities 5 tons (gross) -EXHF060

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Power kW	COP	LWT	Feet Head
25	14.0	43.68	32.14	3.381	3.8	20.4	6.8
25	15.2	43.98	32.37	3.401	3.8	20.7	7.8
25	16.0	44.08	32.51	3.391	3.8	20.9	8.5
25	17.4	44.28	32.67	3.401	3.8	21.2	9.9
32	9.4	46.38	34.67	3.431	4.0	24.6	3.3
32	11.6	47.48	35.67	3.461	4.0	25.9	4.7
32	13.1	47.98	36.13	3.471	4.1	26.5	5.9
32	14.0	48.18	36.30	3.481	4.1	26.8	6.6
32	15.2	48.48	36.60	3.481	4.1	27.2	7.6
32	16.0	48.68	36.77	3.491	4.1	27.4	8.3
32	17.4	48.98	37.07	3.491	4.1	27.7	9.6
45	9.4	56.58	43.71	3.771	4.4	35.7	3.9
45	11.6	57.98	45.01	3.801	4.5	37.2	5.7
45	13.1	58.48	45.47	3.811	4.5	38.1	7.0
45	14.0	58.68	45.64	3.821	4.5	38.5	7.9
45	15.2	59.18	46.07	3.841	4.5	38.9	9.2
45	16.0	59.38	46.27	3.841	4.5	39.2	10.0
45	17.4	59.78	46.64	3.851	4.5	39.6	11.6
55	9.4	63.98	50.43	3.971	4.7	44.3	3.8
55	11.6	65.38	51.72	4.001	4.8	46.1	5.5
55	13.1	66.28	52.49	4.041	4.8	47.0	6.8
55	14.0	66.68	52.85	4.051	4.8	47.5	7.6
55	15.2	67.08	53.22	4.061	4.8	48.0	8.8
55	16.0	67.28	53.42	4.061	4.9	48.3	9.6
55	17.4	67.68	53.79	4.071	4.9	48.8	11.2
68	9.4	75.08	60.06	4.401	5.0	55.2	3.7
68	11.6	76.78	61.59	4.451	5.1	57.4	5.4
68	13.1	77.58	62.32	4.471	5.1	58.5	6.7
68	14.0	77.98	62.69	4.481	5.1	59.0	7.5
68	15.2	78.48	63.12	4.501	5.1	59.7	8.7
68	16.0	78.68	63.32	4.501	5.1	60.1	9.5
68	17.4	79.18	63.75	4.521	5.1	60.7	11.0
75	9.4	80.58	64.95	4.581	5.2	61.2	3.6
75	11.6	82.48	66.61	4.651	5.2	63.5	5.2
75	13.1	84.08	68.04	4.701	5.2	64.6	6.5
75	14.0	84.18	68.14	4.701	5.2	65.3	7.3
75	15.2	84.98	68.87	4.721	5.3	65.9	8.4
75	16.0	85.18	69.03	4.731	5.3	66.4	9.2
75	17.4	85.48	69.30	4.741	5.3	67.0	10.7
77	9.4	88.38	71.76	4.871	5.3	61.7	3.6
77	11.6	90.48	73.62	4.941	5.4	64.3	5.2
77	13.1	91.88	74.85	4.991	5.4	65.6	6.4
77	14.0	92.18	75.11	5.001	5.4	66.3	7.2

Table 120. Heating capacities 5 tons (gross) -EXHF060 (continued)

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Power kW	COP	LWT	Feet Head
77	15.2	92.88	75.74	5.021	5.4	67.0	8.3
77	16.0	93.08	75.91	5.031	5.4	67.5	9.1
77	17.4	93.58	76.34	5.051	5.4	68.2	10.6
86	9.4	90.08	73.25	4.931	5.4	70.4	3.6
86	11.6	92.28	75.18	5.011	5.4	73.0	5.2
86	13.1	93.58	76.31	5.061	5.4	74.3	6.4
86	14.0	93.98	76.67	5.071	5.4	75.0	7.2
86	15.2	94.58	77.20	5.091	5.4	75.8	8.3
86	16.0	94.88	77.47	5.101	5.4	76.3	9.1
86	17.4	95.38	77.90	5.121	5.5	77.0	10.6

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 is permissible, extrapolation is not. Rated GPM 3.6, Rated CFM 475, Minimum CFM 523, Maximum CFM 380.

Table 121. Fan correction factors 5 tons - EXHF060

Entering CFM	Cooling capacity	Sensible capacity	Cooling comp watts	Heating capacity	Heating comp watts
1360	0.954	0.879	1.000	0.982	1.097
1530	0.979	0.941	0.999	0.991	1.042
1700	1.000	1.000	1.000	1.000	1.000
1870	1.018	1.060	1.001	1.009	0.969

Table 122. Correction factors for variation in entering air temperature 5 tons, EXHF060

Cooling Entering Air WB°F	Cooling capaci-ty	Cooling Input Watts	Sensible vs. Entering Dry Bulb Multiplier					Heating Entering Air DB°F	Heating capacity	Heating Input Watts
			65.6	70.6	75.6	80.6	85.6			
49.4	0.921	1.001	1.012	1.082	1.152	*	*	53.0	1.034	0.865
56.3	0.920	1.001	0.814	1.033	1.151	*	*	58.0	1.026	0.910
60.3	0.920	1.001	0.627	0.843	1.062	*	*	63.0	1.009	0.952
63.2	0.950	1.003	0.489	0.711	0.924	1.142	*	68.0	1.000	1.000
66.2	1.000	1.000	—	0.561	0.782	1.000	1.219	73.0	0.991	1.050
72.1	1.100	1.001	—	—	0.491	0.708	0.928	78.0	0.979	1.101
77.1	1.191	1.002	—	—	—	0.458	0.676	83.0	0.968	1.154

Note: * = Sensible equals total capacity

Table 123. Cooling capacities 5 tons (gross) -EXVG060

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Comp Pwr kW	Reject Mbtuh	LWT	Feet Head
45	9.8	63.6	52.8	0.83	2.05	70.6	59.4	6.3
45	12.0	63.5	52.7	0.83	2.04	70.5	56.8	9.1
45	13.5	63.5	52.7	0.83	2.04	70.4	55.4	11.3
45	15.0	63.4	52.6	0.83	2.03	70.3	54.4	13.6
45	15.8	63.4	52.6	0.83	2.03	70.3	53.9	15.0
45	16.5	63.4	52.6	0.83	2.03	70.3	53.5	16.2
45	18.0	63.4	52.6	0.83	2.03	70.3	52.8	18.9
55	9.8	62.3	52.0	0.83	2.18	69.7	69.2	5.7
55	12.0	62.3	52.0	0.83	2.14	69.6	66.6	8.3

Table 123. Cooling capacities 5 tons (gross) -EXVG060 (continued)

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Comp Pwr kW	Reject Mbtuh	LWT	Feet Head
55	13.5	62.3	52.0	0.83	2.13	69.6	65.3	10.3
55	15.0	62.3	52.0	0.83	2.12	69.5	64.3	12.4
55	15.8	62.3	52.0	0.83	2.12	69.5	63.8	13.6
55	16.5	62.3	52.0	0.83	2.11	69.5	63.4	14.7
55	18.0	62.4	52.1	0.83	2.11	69.6	62.7	17.2
68	9.8	60.4	50.8	0.84	2.48	68.9	82.1	5.4
68	12.0	60.5	50.8	0.84	2.43	68.8	79.5	7.7
68	13.5	60.5	50.8	0.84	2.41	68.7	78.2	9.4
68	15.0	60.6	50.9	0.84	2.39	68.7	77.2	11.4
68	15.8	60.6	50.9	0.84	2.38	68.7	76.7	12.5
68	16.5	60.6	50.9	0.84	2.37	68.7	76.3	13.5
68	18.0	60.6	50.9	0.84	2.36	68.6	75.6	15.7
75	9.8	59.2	50.2	0.85	2.70	68.4	89.0	5.3
75	12.0	59.3	50.3	0.85	2.64	68.3	86.4	7.5
75	13.5	59.4	50.4	0.85	2.62	68.3	85.1	9.1
75	15.0	59.4	50.4	0.85	2.59	68.2	84.1	11.0
75	15.8	59.4	50.4	0.85	2.58	68.2	83.6	12.0
75	16.5	59.4	50.4	0.85	2.57	68.2	83.3	13.0
75	18.0	59.5	50.5	0.85	2.56	68.2	82.6	15.2
86	9.8	56.9	49.1	0.86	3.12	67.5	99.8	5.2
86	12.0	57.1	49.3	0.86	3.05	67.5	97.3	7.2
86	13.5	57.2	49.4	0.86	3.01	67.5	96.0	8.8
86	15.0	57.3	49.5	0.86	2.98	67.5	95.0	10.6
86	15.8	57.3	49.5	0.86	2.97	67.4	94.5	11.6
86	16.5	57.3	49.5	0.86	2.96	67.4	94.2	12.5
86	18.0	57.4	49.6	0.86	2.94	67.4	93.5	14.5
95	9.8	54.8	48.1	0.88	3.50	66.7	108.6	5.1
95	12.0	55.0	48.3	0.88	3.42	66.7	106.1	7.1
95	13.5	55.1	48.4	0.88	3.39	66.7	104.9	8.7
95	15.0	55.2	48.5	0.88	3.36	66.7	103.9	10.3
95	15.8	55.2	48.5	0.88	3.34	66.6	103.4	11.3
95	16.5	55.2	48.5	0.88	3.33	66.6	103.1	12.2
95	18.0	55.3	48.6	0.88	3.31	66.6	102.4	14.1
105	9.8	52.0	46.7	0.90	3.96	65.5	118.4	5.0
105	12.0	52.3	47.0	0.90	3.88	65.5	115.9	7.0
105	13.5	52.4	47.1	0.90	3.84	65.5	114.7	8.5
105	15.0	52.5	47.2	0.90	3.81	65.5	113.7	10.1
105	15.8	52.5	47.2	0.90	3.79	65.4	113.3	11.0
105	16.5	52.6	47.2	0.90	3.78	65.5	112.9	11.9
105	18.0	52.6	47.2	0.90	3.76	65.4	112.3	13.8
115	9.8	48.8	45.2	0.93	4.43	63.9	128.0	4.7
115	12.0	49.1	45.5	0.93	4.35	64.0	125.7	6.7
115	13.5	49.2	45.6	0.93	4.31	63.9	124.5	8.2

Table 123. Cooling capacities 5 tons (gross) -EXVG060 (continued)

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Comp Pwr kW	Reject Mbtuh	LWT	Feet Head
115	15.0	49.3	45.7	0.93	4.28	63.9	123.5	9.8
115	15.8	49.4	45.8	0.93	4.27	64.0	123.1	10.8
115	16.5	49.4	45.8	0.93	4.26	63.9	122.7	11.6
115	18.0	49.5	45.9	0.93	4.24	64.0	122.1	13.5

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 124. Heating capacities 5 tons (gross) -EXVG060

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Comp Pwr kW	LWT	Feet Head
25	9.8	36.0	27.0	2.65	19.5	8.4
25	12.0	36.6	27.5	2.66	20.4	11.9
25	13.5	36.9	27.8	2.66	20.9	14.6
25	15.0	37.2	28.1	2.67	21.3	17.4
25	15.8	37.3	28.2	2.67	21.4	19.0
25	16.5	37.4	28.3	2.67	21.6	20.5
25	18.0	37.6	28.5	2.67	21.8	23.7
32	9.8	40.2	30.9	2.71	25.7	7.4
32	12.0	41.0	31.7	2.72	26.7	10.7
32	13.5	41.4	32.1	2.73	27.2	13.2
32	15.0	41.7	32.4	2.73	27.7	15.9
32	15.8	41.9	32.6	2.74	27.9	17.4
32	16.5	42.0	32.7	2.74	28.0	18.7
32	18.0	42.2	32.9	2.74	28.3	21.8
45	9.8	48.9	39.2	2.83	37.0	6.3
45	12.0	50.0	40.3	2.85	38.3	9.1
45	13.5	50.5	40.8	2.86	39.0	11.3
45	15.0	51.0	41.2	2.86	39.5	13.6
45	15.8	51.2	41.4	2.86	39.8	15.0
45	16.5	51.3	41.5	2.87	40.0	16.2
45	18.0	51.6	41.8	2.87	40.4	18.9
55	9.8	56.0	46.0	2.93	45.6	5.7
55	12.0	57.3	47.2	2.95	47.1	8.3
55	13.5	57.9	47.8	2.96	47.9	10.3
55	15.0	58.5	48.4	2.97	48.5	12.4
55	15.8	58.7	48.6	2.97	48.8	13.6
55	16.5	58.9	48.7	2.98	49.1	14.7
55	18.0	59.3	49.1	2.98	49.5	17.2
68	9.8	65.4	54.9	3.08	56.8	5.4
68	12.0	67.0	56.4	3.10	58.6	7.7
68	13.5	67.8	57.2	3.12	59.5	9.4
68	15.0	68.4	57.7	3.13	60.3	11.4

Table 124. Heating capacities 5 tons (gross) -EXVG060 (continued)

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Comp Pwr kW	LWT	Feet Head
68	15.8	68.8	58.1	3.13	60.6	12.5
68	16.5	69.0	58.3	3.14	60.9	13.5
68	18.0	69.5	58.8	3.15	61.5	15.7
75	9.8	70.5	59.7	3.16	62.8	5.3
75	12.0	72.2	61.3	3.19	64.8	7.5
75	13.5	73.1	62.1	3.21	65.8	9.1
75	15.0	73.8	62.8	3.22	66.6	11.0
75	15.8	74.2	63.2	3.23	67.0	12.0
75	16.5	74.4	63.4	3.24	67.3	13.0
75	18.0	75.0	63.9	3.24	67.9	15.2
86	9.8	78.4	67.1	3.32	72.3	5.2
86	12.0	80.4	68.9	3.36	74.5	7.2
86	13.5	81.4	69.9	3.38	75.6	8.8
86	15.0	82.2	70.6	3.39	76.6	10.6
86	15.8	82.6	71.0	3.40	77.0	11.6
86	16.5	82.9	71.3	3.41	77.4	12.5
86	18.0	83.5	71.8	3.42	78.0	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 15;Minimum CFM 1520; Rated CFM 1900; Maximum CFM 2280.

Table 125. Fan correction factors 5 tons - EXVG060

Entering cfm	Cooling Capacity	Sensible Capacity	Cooling Input Watts	Heating Capacity	Heating Input Watts
1520	0.963	0.871	1.000	0.984	1.084
1615	0.974	0.903	1.000	0.989	1.059
1710	0.983	0.936	1.000	0.993	1.037
1805	0.992	0.969	1.000	0.997	1.017
1900	1.000	1.000	1.000	1.000	1.000
2090	1.015	1.062	1.000	1.005	0.971
2185	1.021	1.093	1.000	1.007	0.958
2280	1.027	1.125	1.000	1.009	0.947

Table 126. Correction factors for variation in entering air temperature 5 tons, EXVG060

Cooling Entering Air WB°F	Cooling capaci-ty	Cooling Input Watts	Sensible vs. Entering Dry Bulb Multiplier					Heating Entering Air DB°F	Heating capacity	Heating Input Watts
			65.6	70.6	75.6	80.6	85.6			
49.4	0.900	0.999	0.923	0.993	1.055	*	*	53.0	1.034	0.853
56.3	0.900	0.999	0.811	0.947	1.048	*	*	58.0	1.024	0.898
60.3	0.915	0.999	0.657	0.853	0.996	1.105	*	63.0	1.012	0.947
63.2	0.955	0.999	0.502	0.749	0.929	1.065	*	68.0	1.000	1.000
66.2	1.000	1.000	–	0.608	0.831	1.000	1.133	73.0	0.986	1.057
72.1	1.109	1.003	–	–	0.550	0.795	0.988	78.0	0.972	1.117
77.1	1.206	1.007	–	–	–	–	0.791	83.0	0.957	1.180

Note: * = Sensible equals total capacity

Table 127. Cooling capacities 5 tons (gross) -DXHF060

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Power kW	Reject Mbtuh	LWT	Feet Head
45	9.1	73.5	46.1	0.63	2.27	81.2	62.8	3.6
45	11.2	73.5	46.1	0.63	2.21	81.0	59.5	5.2
45	12.6	73.5	46.1	0.63	2.18	81.0	57.9	6.4
45	14.0	73.5	46.1	0.63	2.16	80.9	56.6	7.7
45	14.7	73.5	46.1	0.63	2.16	80.9	56.0	8.4
45	15.4	73.5	46.1	0.63	2.15	80.8	55.5	9.1
45	16.8	73.6	46.1	0.63	2.14	80.9	54.6	10.6
55	9.1	70.5	45.5	0.65	2.54	79.2	72.4	3.5
55	11.2	70.7	45.7	0.65	2.47	79.1	69.1	5.1
55	12.6	70.7	45.7	0.65	2.44	79.0	67.5	6.3
55	14.0	70.7	45.7	0.65	2.42	78.9	66.3	7.5
55	14.7	70.7	45.7	0.65	2.41	78.9	65.7	8.2
55	15.4	70.8	45.7	0.65	2.40	79.0	65.3	8.9
55	16.8	70.9	45.8	0.65	2.38	79.0	64.4	10.4
65	9.1	67.6	44.6	0.66	2.83	77.3	82.0	3.5
65	11.2	67.8	44.7	0.66	2.75	77.2	78.8	5.0
65	12.6	67.9	44.8	0.66	2.72	77.2	77.3	6.1
65	14.0	68.0	44.9	0.66	2.69	77.2	76.0	7.4
65	14.7	68.0	44.9	0.66	2.68	77.1	75.5	8.1
65	15.4	68.0	44.9	0.66	2.67	77.1	75.0	8.7
65	16.8	68.2	45.0	0.66	2.65	77.3	74.2	10.2
75	9.1	64.8	43.5	0.67	3.15	75.6	91.6	3.4
75	11.2	65.0	43.7	0.67	3.07	75.5	88.5	4.9
75	12.6	65.1	43.7	0.67	3.03	75.4	87.0	6.0
75	14.0	65.2	43.8	0.67	3.00	75.4	85.8	7.3
75	14.7	65.3	43.9	0.67	2.98	75.5	85.3	7.9
75	15.4	65.3	43.9	0.67	2.97	75.4	84.8	8.6
75	16.8	65.4	43.9	0.67	2.95	75.5	84.0	10.0
85	9.1	61.8	42.3	0.68	3.51	73.8	101.2	3.3
85	11.2	62.2	42.5	0.68	3.42	73.9	98.2	4.8
85	12.6	62.3	42.6	0.68	3.37	73.8	96.7	5.9
85	14.0	62.4	42.7	0.68	3.34	73.8	95.5	7.1
85	14.7	62.4	42.7	0.68	3.33	73.7	95.0	7.8
85	15.4	62.5	42.8	0.68	3.31	73.8	94.6	8.4
85	16.8	62.6	42.8	0.68	3.29	73.8	93.8	9.8
95	9.1	58.8	41.0	0.70	3.91	72.1	110.8	3.3
95	11.2	59.2	41.3	0.70	3.81	72.2	107.9	4.7
95	12.6	59.3	41.4	0.70	3.77	72.2	106.5	5.8
95	14.0	59.4	41.5	0.70	3.73	72.1	105.3	7.0
95	14.7	59.5	41.5	0.70	3.71	72.2	104.8	7.6
95	15.4	59.5	41.5	0.70	3.70	72.1	104.4	8.3
95	16.8	59.7	41.7	0.70	3.68	72.2	103.6	9.6
105	9.1	55.7	39.9	0.72	4.36	70.6	120.5	3.2

Table 127. Cooling capacities 5 tons (gross) -DXHF060 (continued)

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Power kW	Reject Mbtuh	LWT	Feet Head
105	11.2	56.0	40.2	0.72	4.26	70.5	117.6	4.6
105	12.6	56.2	40.3	0.72	4.21	70.6	116.2	5.7
105	14.0	56.3	40.4	0.72	4.18	70.5	115.1	6.8
105	14.7	56.4	40.4	0.72	4.16	70.6	114.6	7.5
105	15.4	56.4	40.4	0.72	4.14	70.5	114.2	8.1
105	16.8	56.5	40.5	0.72	4.12	70.6	113.4	9.4
115	9.1	52.3	38.8	0.74	4.87	68.9	130.1	3.2
115	11.2	52.7	39.1	0.74	4.77	69.0	127.3	4.5
115	12.6	52.9	39.2	0.74	4.72	69.0	126.0	5.6
115	14.0	53.0	39.3	0.74	4.68	69.0	124.9	6.7
115	14.7	53.0	39.3	0.74	4.67	68.9	124.4	7.3
115	15.4	53.0	39.3	0.74	4.65	68.9	123.9	7.9
115	16.8	53.1	39.3	0.74	4.62	68.9	123.2	9.3
120	9.1	50.5	38.2	0.76	5.15	68.1	135.0	3.1
120	11.2	50.9	38.5	0.76	5.05	68.1	132.2	4.5
120	12.6	51.1	38.6	0.76	5.00	68.2	130.8	5.5
120	14.0	51.2	38.7	0.76	4.96	68.1	129.7	6.7
120	14.7	51.2	38.7	0.76	4.95	68.1	129.3	7.2
120	15.4	51.3	38.8	0.76	4.93	68.1	128.8	7.9
120	16.8	51.3	38.8	0.76	4.90	68.0	128.1	9.2

Note: Cooling performance data is tabulated at 80°F DB/67°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 is permissible, extrapolation is not. Rated GPM 8.4, Rated CFM 1140, Minimum CFM 912, Maximum CFM 1254.

Table 128. Heating capacities 5 tons (gross) -DXHF060

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Power kW	LWT	Feet Head
25	14.0	44.1	32.1	3.52	20.4	8.0
25	14.7	44.9	32.9	3.51	20.5	8.7
25	15.4	45.5	33.6	3.49	20.6	9.4
25	16.8	46.1	34.3	3.46	20.9	11.0
35	9.1	52.2	39.8	3.62	26.3	3.7
35	11.2	52.3	39.9	3.64	27.9	5.3
35	12.6	53.1	40.6	3.66	28.6	6.5
35	14.0	53.9	41.4	3.66	29.1	7.8
35	14.7	54.2	41.7	3.65	29.3	8.5
35	15.4	54.4	42.0	3.65	29.5	9.3
35	16.8	54.1	41.7	3.62	30.0	10.8
45	9.1	60.9	48.0	3.79	34.5	3.6
45	11.2	60.9	47.8	3.83	36.5	5.2
45	12.6	61.6	48.4	3.86	37.3	6.4
45	14.0	62.3	49.1	3.87	38.0	7.7
45	14.7	62.5	49.3	3.87	38.3	8.4
45	15.4	62.6	49.4	3.87	38.6	9.1
45	16.8	62.0	48.8	3.86	39.2	10.6

Table 128. Heating capacities 5 tons (gross) -DXHF060 (continued)

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Power kW	LWT	Feet Head
55	9.1	68.7	55.0	4.03	42.9	3.5
55	11.2	69.1	55.2	4.08	45.1	5.1
55	12.6	69.9	55.8	4.12	46.1	6.3
55	14.0	70.8	56.6	4.15	46.9	7.5
55	14.7	71.1	56.9	4.16	47.3	8.2
55	15.4	71.2	57.0	4.16	47.6	8.9
55	16.8	70.7	56.5	4.16	48.3	10.4
65	9.1	76.3	61.6	4.31	51.5	3.5
65	11.2	77.2	62.2	4.39	53.9	5.0
65	12.6	78.4	63.2	4.44	55.0	6.1
65	14.0	79.6	64.3	4.48	55.8	7.4
65	14.7	80.0	64.6	4.50	56.2	8.1
65	15.4	80.3	64.9	4.51	56.6	8.7
65	16.8	80.0	64.6	4.52	57.3	10.2
75	9.1	84.0	68.1	4.65	60.0	3.4
75	11.2	85.6	69.4	4.74	62.6	4.9
75	12.6	87.2	70.8	4.81	63.8	6.0
75	14.0	88.8	72.2	4.86	64.7	7.3
75	14.7	89.4	72.7	4.89	65.1	7.9
75	15.4	89.8	73.1	4.90	65.5	8.6
75	16.8	89.9	73.1	4.93	66.3	10.0
85	9.1	91.7	74.6	5.02	68.6	3.3
85	11.2	94.1	76.6	5.13	71.3	4.8
85	12.6	96.2	78.4	5.21	72.6	5.9
85	14.0	98.2	80.2	5.28	73.5	7.1
85	14.7	99.1	81.0	5.31	74.0	7.8
85	15.4	99.7	81.5	5.33	74.4	8.4
85	16.8	100.2	81.9	5.37	75.3	9.8

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 is permissible, extrapolation is not. Rated GPM 3.6, Rated CFM 475, Minimum CFM 523, Maximum CFM 380.

Table 129. Fan correction factors 5 tons - DXHF060

Entering CFM	Cooling capacity	Sensible capacity	Cooling comp watts	Heating capacity	Heating comp watts
1360	0.957	0.892	0.995	0.985	1.121
1530	0.980	0.946	0.998	0.994	1.053
1700	1.000	1.000	1.000	1.000	1.000
1870	1.018	1.054	1.002	1.008	0.963

Table 130. Correction factors for variation in entering air temperature 5 tons, DXHF060

Cooling Entering Air WB°F	Cooling capaci-ty	Cooling Input Watts	Sensible vs. Entering Dry Bulb Multiplier						Heating Entering Air DB°F	Heating capacity	Heating Input Watts
			65.0	70.0	75.0	80.0	85.0	90.0			
50.0	0.910	0.987	1.073	1.193	*	*	*	*	55.0	1.033	0.871
55.0	0.898	0.985	0.906	1.092	1.237	*	*	*	58.0	1.030	0.901

Table 130. Correction factors for variation in entering air temperature 5 tons, DXHF060 (continued)

Cooling Entering Air WB°F	Cooling capacity	Cooling Input Watts	Sensible vs. Entering Dry Bulb Multiplier						Heating Entering Air DB°F	Heating capacity	Heating Input Watts
			65.0	70.0	75.0	80.0	85.0	90.0			
60.0	0.922	0.988	0.659	0.896	1.098	1.267	*	*	61.0	1.025	0.927
65.0	0.973	0.996	0.356	0.631	0.875	1.093	1.284	*	64.0	1.018	0.951
67.0	1.000	1.000	–	0.510	0.768	1.000	1.209	*	67.0	1.010	0.975
70.0	1.046	1.007	–	0.318	0.591	0.843	1.073	1.285	70.0	1.000	1.000
75.0	1.133	1.020	–	–	0.270	0.541	0.797	1.039	73.0	0.988	1.024
78.0	1.189	1.029	–	–	–	0.345	0.609	0.863	76.0	0.975	1.047

Note: * = Sensible equals total capacity

Table 131. Cooling capacities 5 tons (gross) -DXVG060

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Comp Pwr kW	Reject Mbtuh	LWT	Feet Head
45	9.8	58.8	50.7	0.86	1.84	65.1	58.3	6.6
45	12.0	58.9	50.8	0.86	1.77	64.9	55.8	9.5
45	13.5	58.9	50.8	0.86	1.74	64.8	54.6	11.8
45	15.0	59.0	50.9	0.86	1.71	64.8	53.6	14.2
45	15.8	59.0	50.9	0.86	1.70	64.8	53.2	15.6
45	16.5	59.0	50.9	0.86	1.69	64.8	52.9	16.9
45	18.0	59.0	50.9	0.86	1.68	64.7	52.2	19.7
55	9.8	57.7	50.0	0.87	2.09	64.8	68.2	6.0
55	12.0	57.8	50.1	0.87	2.02	64.7	65.8	8.7
55	13.5	57.8	50.1	0.87	1.99	64.6	64.6	10.8
55	15.0	57.8	50.1	0.87	1.97	64.5	63.6	13.1
55	15.8	57.8	50.1	0.87	1.96	64.5	63.2	14.3
55	16.5	57.9	50.2	0.87	1.95	64.5	62.8	15.5
55	18.0	57.9	50.2	0.87	1.93	64.5	62.2	18.1
68	9.8	56.2	49.1	0.87	2.43	64.5	81.2	5.7
68	12.0	56.3	49.2	0.87	2.36	64.4	78.7	8.1
68	13.5	56.3	49.2	0.87	2.33	64.3	77.5	10.0
68	15.0	56.3	49.2	0.87	2.31	64.2	76.6	12.0
68	15.8	56.4	49.3	0.87	2.30	64.2	76.1	13.2
68	16.5	56.4	49.3	0.87	2.29	64.2	75.8	14.3
68	18.0	56.4	49.3	0.87	2.27	64.1	75.1	16.6
75	9.8	55.2	48.7	0.88	2.62	64.1	88.1	5.6
75	12.0	55.3	48.7	0.88	2.55	64.0	85.7	7.9
75	13.5	55.3	48.7	0.88	2.52	63.9	84.5	9.7
75	15.0	55.4	48.8	0.88	2.50	63.9	83.5	11.6
75	15.8	55.4	48.8	0.88	2.48	63.9	83.1	12.8
75	16.5	55.4	48.8	0.88	2.48	63.8	82.7	13.8
75	18.0	55.4	48.8	0.88	2.46	63.8	82.1	16.1
86	9.8	53.2	47.8	0.90	2.96	63.3	98.9	5.5
86	12.0	53.3	47.9	0.90	2.89	63.2	96.5	7.7
86	13.5	53.3	47.9	0.90	2.86	63.1	95.3	9.4

Table 131. Cooling capacities 5 tons (gross) -DXVG060 (continued)

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Comp Pwr kW	Reject Mbtuh	LWT	Feet Head
86	15.0	53.3	47.9	0.90	2.83	63.0	94.4	11.2
86	15.8	53.4	48.0	0.90	2.82	63.0	94.0	12.3
86	16.5	53.4	48.0	0.90	2.81	63.0	93.6	13.2
86	18.0	53.4	48.0	0.90	2.80	62.9	93.0	15.4
95	9.8	51.1	46.9	0.92	3.29	62.3	107.7	5.4
95	12.0	51.2	47.0	0.92	3.22	62.2	105.4	7.5
95	13.5	51.2	47.0	0.92	3.19	62.1	104.2	9.2
95	15.0	51.3	47.0	0.92	3.16	62.1	103.3	11.0
95	15.8	51.3	47.0	0.92	3.15	62.1	102.9	12.0
95	16.5	51.3	47.0	0.92	3.14	62.0	102.5	12.9
95	18.0	51.3	47.0	0.92	3.13	62.0	101.9	15.0
105	9.8	48.4	45.6	0.94	3.71	61.1	117.5	5.3
105	12.0	48.5	45.7	0.94	3.64	60.9	115.2	7.3
105	13.5	48.5	45.7	0.94	3.61	60.8	114.0	9.0
105	15.0	48.6	45.8	0.94	3.59	60.8	113.1	10.7
105	15.8	48.6	45.8	0.94	3.58	60.8	112.7	11.7
105	16.5	48.6	45.8	0.94	3.57	60.8	112.4	12.6
105	18.0	48.6	45.8	0.94	3.55	60.7	111.7	14.6
115	9.8	45.6	44.3	0.97	4.18	59.9	127.2	5.0
115	12.0	45.7	44.4	0.97	4.12	59.7	125.0	7.1
115	13.5	45.8	44.5	0.97	4.09	59.7	123.8	8.7
115	15.0	45.8	44.5	0.97	4.06	59.7	123.0	10.4
115	15.8	45.8	44.5	0.97	4.05	59.6	122.5	11.4
115	16.5	45.9	44.6	0.97	4.04	59.7	122.2	12.3
115	18.0	45.9	44.6	0.97	4.02	59.6	121.6	14.3

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 132. Heating capacities 5 tons (gross) -DXVG060

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Comp Pwr kW	LWT	Feet Head
25	9.8	34.8	26.1	2.55	19.7	8.5
25	12.0	35.5	26.7	2.57	20.6	12.1
25	13.5	35.9	27.1	2.58	21.0	14.9
25	15.0	36.2	27.4	2.59	21.3	17.8
25	15.8	36.3	27.5	2.59	21.5	19.5
25	16.5	36.4	27.5	2.60	21.7	20.9
25	18.0	36.6	27.7	2.61	21.9	24.3
32	9.8	39.3	30.3	2.64	25.8	7.7
32	12.0	40.1	31.0	2.66	26.8	11.0
32	13.5	40.6	31.5	2.67	27.3	13.6
32	15.0	40.9	31.8	2.68	27.8	16.3

Table 132. Heating capacities 5 tons (gross) -DXVG060 (continued)

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Comp Pwr kW	LWT	Feet Head
32	15.8	41.1	32.0	2.68	27.9	17.9
32	16.5	41.3	32.1	2.68	28.1	19.3
32	18.0	41.5	32.3	2.69	28.4	22.4
45	9.8	47.8	38.4	2.76	37.2	6.6
45	12.0	48.9	39.4	2.78	38.4	9.5
45	13.5	49.5	40.0	2.79	39.1	11.8
45	15.0	50.0	40.4	2.80	39.6	14.2
45	15.8	50.2	40.6	2.80	39.9	15.6
45	16.5	50.4	40.8	2.81	40.1	16.9
45	18.0	50.7	41.1	2.82	40.4	19.7
55	9.8	54.6	44.9	2.86	45.8	6.0
55	12.0	55.9	46.1	2.88	47.3	8.7
55	13.5	56.6	46.8	2.89	48.1	10.8
55	15.0	57.1	47.2	2.90	48.7	13.1
55	15.8	57.4	47.5	2.90	49.0	14.3
55	16.5	57.6	47.7	2.90	49.2	15.5
55	18.0	58.0	48.1	2.91	49.7	18.1
68	9.8	63.7	53.4	3.01	57.1	5.7
68	12.0	65.3	55.0	3.03	58.8	8.1
68	13.5	66.1	55.7	3.04	59.7	10.0
68	15.0	66.8	56.4	3.05	60.5	12.0
68	15.8	67.1	56.7	3.05	60.8	13.2
68	16.5	67.4	57.0	3.05	61.1	14.3
68	18.0	67.8	57.4	3.06	61.6	16.6
75	9.8	68.9	58.3	3.09	63.1	5.6
75	12.0	70.6	60.0	3.11	65.0	7.9
75	13.5	71.5	60.8	3.12	66.0	9.7
75	15.0	72.2	61.5	3.13	66.8	11.6
75	15.8	72.6	61.9	3.14	67.2	12.8
75	16.5	72.8	62.1	3.14	67.5	13.8
75	18.0	73.4	62.7	3.15	68.0	16.1
86	9.8	77.4	66.4	3.21	72.4	5.5
86	12.0	79.3	68.3	3.23	74.6	7.7
86	13.5	80.3	69.2	3.24	75.7	9.4
86	15.0	81.1	70.0	3.25	76.7	11.2
86	15.8	81.5	70.4	3.26	77.1	12.3
86	16.5	81.8	70.7	3.26	77.4	13.2
86	18.0	82.3	71.1	3.27	78.1	15.4

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 133. Fan correction factors 5 tons - DXVG060

Entering cfm	Cooling Capacity	Sensible Capacity	Cooling Input Watts	Heating Capacity	Heating Input Watts
1520	0.965	0.869	0.994	0.994	1.090
1615	0.976	0.901	0.996	0.996	1.063
1710	0.985	0.934	0.998	0.997	1.039
1805	0.993	0.967	0.999	0.999	1.019
1900	1.000	1.000	1.000	1.000	1.000
2090	1.013	1.065	1.002	1.002	0.969
2185	1.020	1.098	1.004	1.003	0.955
2280	1.026	1.131	1.005	1.004	0.943

Table 134. Correction factors for variation in entering air temperature 5 tons, DXVG060

Cooling Entering Air WB°F	Cooling capaci-ty	Cooling Input Watts	Sensible vs. Entering Dry Bulb Multiplier					Heating Entering Air DB°F	Heating capacity	Heating Input Watts
			65.0	70.0	75.0	80.0	85.0			
49.4	0.900	0.999	0.923	0.993	1.055	*	*	53.0	1.034	0.853
56.3	0.900	0.999	0.811	0.947	1.048	*	*	58.0	1.024	0.898
60.3	0.915	0.999	0.657	0.853	0.996	1.105	*	63.0	1.012	0.947
63.2	0.955	0.999	0.502	0.749	0.929	1.065	*	68.0	1.000	1.000
66.2	1.000	1.000	–	0.608	0.831	1.000	1.133	73.0	0.986	1.057
72.1	1.109	1.003	–	–	0.550	0.795	0.988	78.0	0.972	1.117
77.1	1.206	1.007	–	–	–	–	0.791	83.0	0.957	1.180

Note: * = Sensible equals total capacity

Cooling and Heating Capacities 6 tons

Table 135. Cooling capacities 6 tons (gross) - EXHF070

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Power kW	EER	Reject Mbtuh	LWT	Feet Head
45	10.0	76.30	56.97	0.75	2.303	33.1	84.16	62.1	3.4
45	12.3	76.52	57.12	0.75	2.207	34.7	84.05	58.7	4.9
45	13.9	76.52	57.02	0.75	2.157	35.5	83.88	57.1	6.0
45	15.4	76.62	57.12	0.75	2.127	36.0	83.88	55.9	7.2
45	16.2	76.72	57.22	0.75	2.107	36.4	83.91	55.4	7.9
45	16.9	76.72	57.22	0.75	2.097	36.6	83.88	54.9	8.6
45	18.5	76.62	57.02	0.74	2.077	36.9	83.71	54.0	10.0
55	10.0	74.50	56.25	0.76	2.651	28.1	83.54	72.0	3.3
55	12.3	74.72	56.32	0.75	2.547	29.3	83.41	68.6	4.7
55	13.9	74.92	56.42	0.75	2.497	30.0	83.44	67.0	5.8
55	15.4	74.92	56.32	0.75	2.467	30.4	83.34	65.8	7.0
55	16.2	75.02	56.52	0.75	2.447	30.7	83.37	65.3	7.6
55	16.9	75.02	56.42	0.75	2.437	30.8	83.34	64.9	8.2
55	18.5	75.02	56.52	0.75	2.417	31.0	83.27	64.0	9.6
68	10.0	72.52	55.70	0.77	3.151	23.0	83.28	84.9	3.2
68	12.3	72.82	55.92	0.77	3.047	23.9	83.22	81.5	4.5
68	13.9	73.02	56.02	0.77	2.997	24.4	83.25	80.0	5.5
68	15.4	73.12	55.92	0.76	2.957	24.7	83.21	78.8	6.6

Table 135. Cooling capacities 6 tons (gross) - EXHF070 (continued)

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Power kW	EER	Reject Mbtuh	LWT	Feet Head
68	16.2	73.12	55.92	0.76	2.947	24.8	83.18	78.3	7.2
68	16.9	73.22	56.02	0.77	2.927	25.0	83.21	77.8	7.9
68	18.5	73.22	56.02	0.77	2.907	25.2	83.14	77.0	9.2
75	10.0	72.02	55.50	0.77	3.231	22.3	83.05	91.9	3.0
75	12.3	72.32	55.72	0.77	3.127	23.1	82.99	88.5	4.3
75	13.9	72.52	55.72	0.77	3.077	23.6	83.02	86.9	5.4
75	15.4	72.62	55.72	0.77	3.037	23.9	82.99	85.8	6.4
75	16.2	72.62	55.72	0.77	3.027	24.0	82.95	85.2	7.0
75	16.9	72.72	55.82	0.77	3.007	24.2	82.98	84.8	7.6
75	18.5	72.72	55.82	0.77	2.987	24.3	82.91	84.0	8.9
77	10.0	70.15	54.60	0.78	3.518	19.9	82.16	93.7	2.9
77	12.3	70.52	54.82	0.78	3.407	20.7	82.15	90.4	4.2
77	13.9	70.62	54.82	0.78	3.357	21.0	82.08	88.8	5.2
77	15.4	70.72	54.92	0.78	3.317	21.3	82.04	87.7	6.3
77	16.2	70.82	55.02	0.78	3.297	21.5	82.07	87.1	6.8
77	16.9	70.82	54.92	0.78	3.287	21.5	82.04	86.7	7.4
77	18.5	70.92	55.02	0.78	3.257	21.8	82.04	85.9	8.7
86	10.0	67.55	53.77	0.80	3.873	17.4	80.77	102.4	2.9
86	12.3	67.92	53.62	0.79	3.747	18.1	80.71	99.1	4.2
86	13.9	68.12	53.82	0.79	3.697	18.4	80.74	97.6	5.2
86	15.4	68.22	53.72	0.79	3.657	18.7	80.70	96.5	6.3
86	16.2	68.32	53.82	0.79	3.637	18.8	80.73	96.0	6.8
86	16.9	68.42	53.82	0.79	3.627	18.9	80.80	95.6	7.4
86	18.5	68.42	53.82	0.79	3.597	19.0	80.70	94.7	8.7
95	10.0	64.37	52.42	0.81	4.333	14.9	79.17	111.1	2.9
95	12.3	64.82	52.42	0.81	4.207	15.4	79.18	107.9	4.1
95	13.9	65.12	52.72	0.81	4.147	15.7	79.27	106.4	5.1
95	15.4	65.22	52.82	0.81	4.107	15.9	79.24	105.3	6.1
95	16.2	65.32	52.92	0.81	4.087	16.0	79.27	104.8	6.7
95	16.9	65.32	52.72	0.81	4.067	16.1	79.20	104.4	7.2
95	18.5	65.42	52.82	0.81	4.047	16.2	79.23	103.6	8.4
105	10.0	60.67	50.87	0.84	4.921	12.3	77.47	120.7	2.8
105	12.3	61.12	51.02	0.83	4.787	12.8	77.46	117.6	4.0
105	13.9	61.32	51.12	0.83	4.717	13.0	77.42	116.1	4.9
105	15.4	61.52	51.22	0.83	4.677	13.2	77.48	115.1	5.9
105	16.2	61.52	51.22	0.83	4.657	13.2	77.41	114.6	6.5
105	16.9	61.52	51.22	0.83	4.627	13.3	77.31	114.1	7.0
105	18.5	61.72	51.22	0.83	4.607	13.4	77.44	113.4	8.2
115	10.0	56.67	48.95	0.86	5.595	10.1	75.77	130.4	2.7
115	12.3	57.12	49.02	0.86	5.447	10.5	75.71	127.3	3.9
115	13.9	57.22	49.12	0.86	5.377	10.6	75.57	125.9	4.8
115	15.4	57.42	49.12	0.86	5.327	10.8	75.60	124.8	5.8
115	16.2	57.52	49.32	0.86	5.307	10.8	75.63	124.3	6.3

Table 135. Cooling capacities 6 tons (gross) - EXHF070 (continued)

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Power kW	EER	Reject Mbtuh	LWT	Feet Head
115	16.9	57.52	49.22	0.86	5.287	10.9	75.56	123.9	6.8
115	18.5	57.62	49.22	0.85	5.247	11.0	75.53	123.2	8.0
120	10.0	54.40	47.82	0.88	5.948	9.1	74.70	135.2	2.7
120	12.3	54.92	48.12	0.88	5.807	9.5	74.74	132.2	3.9
120	13.9	55.12	48.22	0.87	5.747	9.6	74.73	130.8	4.7
120	15.4	55.22	48.12	0.87	5.687	9.7	74.63	129.7	5.7
120	16.2	55.32	48.32	0.87	5.667	9.8	74.66	129.2	6.2
120	16.9	55.32	48.22	0.87	5.647	9.8	74.59	128.8	6.8
120	18.5	55.42	48.32	0.87	5.617	9.9	74.59	128.1	7.9

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 is permissible, extrapolation is not. Rated GPM 9.8, Rated CFM 1330, Minimum CFM 1064, Maximum CFM 1463.

Table 136. Heating capacities 6 tons (gross) - EXHF070

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Power kW	COP	LWT	Feet Head
25	15.4	44.24	31.56	3.715	3.5	20.9	9.6
25	16.2	44.44	31.76	3.715	3.5	21.1	10.5
25	16.9	44.54	31.83	3.725	3.5	21.2	11.4
25	18.5	44.84	32.09	3.735	3.5	21.5	13.2
32	10.0	47.20	34.37	3.760	3.7	25.0	4.5
32	12.3	48.24	35.36	3.775	3.7	26.3	6.3
32	13.9	48.74	35.82	3.785	3.8	26.8	7.8
32	15.4	49.24	36.25	3.805	3.8	27.3	9.4
32	16.2	49.44	36.45	3.805	3.8	27.5	10.2
32	16.9	49.54	36.55	3.805	3.8	27.7	11.0
32	18.5	49.74	36.75	3.805	3.8	28.0	12.8
45	10.0	60.36	46.62	4.025	4.4	35.6	3.4
45	12.3	61.84	48.00	4.055	4.5	37.2	4.9
45	13.9	62.44	48.60	4.055	4.5	38.0	6.0
45	15.4	63.04	49.13	4.075	4.5	38.6	7.2
45	16.2	63.24	49.33	4.075	4.5	38.9	7.9
45	16.9	63.34	49.43	4.075	4.6	39.2	8.6
45	18.5	63.74	49.83	4.075	4.6	39.6	10.0
55	10.0	68.59	54.29	4.188	4.8	44.0	3.3
55	12.3	70.44	56.02	4.225	4.9	45.9	4.7
55	13.9	70.74	56.35	4.215	4.9	46.9	5.8
55	15.4	71.64	57.19	4.235	5.0	47.6	7.0
55	16.2	71.94	57.45	4.245	5.0	47.9	7.6
55	16.9	72.14	57.65	4.245	5.0	48.2	8.2
55	18.5	72.64	58.12	4.255	5.0	48.7	9.6
68	10.0	79.51	64.15	4.500	5.2	55.0	3.2
68	12.3	81.74	66.23	4.545	5.3	57.2	4.5
68	13.9	82.64	67.09	4.555	5.3	58.3	5.5
68	15.4	83.34	67.79	4.555	5.4	59.2	6.6

Table 136. Heating capacities 6 tons (gross) - EXHF070 (continued)

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Power kW	COP	LWT	Feet Head
68	16.2	83.64	68.06	4.565	5.4	59.6	7.2
68	16.9	84.04	68.46	4.565	5.4	59.9	7.9
68	18.5	84.54	68.93	4.575	5.4	60.5	9.2
75	10.0	85.79	69.99	4.628	5.4	60.8	3.0
75	12.3	87.94	72.02	4.665	5.5	63.3	4.3
75	13.9	89.14	73.15	4.685	5.6	64.5	5.4
75	15.4	90.14	74.08	4.705	5.6	65.4	6.4
75	16.2	90.54	74.45	4.715	5.6	65.8	7.0
75	16.9	90.84	74.75	4.715	5.6	66.2	7.6
75	18.5	91.44	75.31	4.725	5.7	66.9	8.9
77	10.0	93.95	77.55	4.806	5.7	61.3	2.9
77	12.3	96.84	80.24	4.865	5.8	64.0	4.2
77	13.9	98.04	81.40	4.875	5.9	65.3	5.2
77	15.4	98.94	82.27	4.885	5.9	66.3	6.3
77	16.2	99.34	82.63	4.895	5.9	66.8	6.8
77	16.9	99.74	83.00	4.905	6.0	67.2	7.4
77	18.5	100.24	83.50	4.905	6.0	68.0	8.7
86	10.0	95.80	79.26	4.846	5.8	70.0	2.9
86	12.3	98.84	82.10	4.905	5.9	72.7	4.2
86	13.9	100.04	83.27	4.915	6.0	74.0	5.2
86	15.4	100.94	84.13	4.925	6.0	75.1	6.3
86	16.2	101.34	84.50	4.935	6.0	75.6	6.8
86	16.9	101.74	84.86	4.945	6.0	76.0	7.4
86	18.5	102.24	85.36	4.945	6.1	76.8	8.7

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 is permissible, extrapolation is not. Rated GPM 3.6, Rated CFM 475, Minimum CFM 523, Maximum CFM 380.

Table 137. Fan correction factors 6 tons - EXHF070

Entering CFM	Cooling capacity	Sensible capacity	Cooling comp watts	Heating capacity	Heating comp watts
1672	0.956	0.878	1.001	0.983	1.086
1881	0.980	0.940	1.001	0.993	1.038
2090	1.000	1.000	1.000	1.000	1.000
2299	1.017	1.064	0.999	1.010	0.973

Table 138. Correction factors for variation in entering air temperature 6 tons, EXHF070

Cooling Entering Air WB°F	Cooling capacity	Cooling Input Watts	Sensible vs. Entering Dry Bulb Multiplier					Heating Entering Air DB°F	Heating capacity	Heating Input Watts
			65.6	70.6	75.6	80.6	85.6			
49.4	0.932	1.005	0.989	1.060	1.128	*	*	53.0	1.037	0.868
56.3	0.931	1.005	0.804	1.025	1.127	*	*	58.0	1.024	0.910
60.3	0.929	1.005	0.609	0.834	1.058	*	*	63.0	1.018	0.957
63.2	0.955	1.005	0.462	0.692	0.925	1.144	*	68.0	1.000	1.000
66.2	1.000	1.000	—	0.545	0.771	1.000	1.219	73.0	0.988	1.050
72.1	1.101	0.993	—	—	0.470	0.700	0.929	78.0	0.976	1.101

Table 138. Correction factors for variation in entering air temperature 6 tons, EXHF070 (continued)

Cooling Entering Air WB°F	Cooling capacity	Cooling Input Watts	Sensible vs. Entering Dry Bulb Multiplier					Heating Entering Air DB°F	Heating capacity	Heating Input Watts
			65.6	70.6	75.6	80.6	85.6			
77.1	1.192	0.988	—	—	—	0.434	0.671	83.0	0.962	1.154

Note: * = Sensible equals total capacity

Table 139. Cooling capacities 6 tons (gross) - EXVG070

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Comp Pwr kW	Reject Mbtuh	LWT	Feet Head
45	11.4	72.2	60.5	0.84	2.30	80.0	59.0	5.3
45	14.0	72.1	60.4	0.84	2.29	79.9	56.4	7.7
45	15.8	72.0	60.3	0.84	2.29	79.8	55.1	9.6
45	17.5	72.0	60.3	0.84	2.29	79.8	54.1	11.6
45	18.4	72.0	60.3	0.84	2.29	79.8	53.7	12.7
45	19.3	72.0	60.3	0.84	2.29	79.8	53.3	13.9
45	21.0	72.0	60.3	0.84	2.29	79.8	52.6	16.2
55	11.4	70.9	59.9	0.84	2.43	79.2	68.9	4.9
55	14.0	70.8	59.8	0.84	2.39	79.0	66.3	7.1
55	15.8	70.7	59.7	0.84	2.38	78.8	65.0	8.9
55	17.5	70.7	59.7	0.84	2.36	78.8	64.0	10.7
55	18.4	70.7	59.7	0.84	2.36	78.7	63.6	11.7
55	19.3	70.7	59.7	0.84	2.35	78.7	63.2	12.8
55	21.0	70.7	59.7	0.84	2.35	78.7	62.5	14.9
68	11.4	69.0	58.8	0.85	2.77	78.5	81.8	4.6
68	14.0	69.0	58.8	0.85	2.71	78.3	79.2	6.6
68	15.8	69.0	58.8	0.85	2.69	78.2	77.9	8.2
68	17.5	69.0	58.8	0.85	2.67	78.1	76.9	9.9
68	18.4	69.0	58.8	0.85	2.66	78.1	76.5	10.8
68	19.3	69.0	58.8	0.85	2.65	78.0	76.1	11.8
68	21.0	69.1	58.9	0.85	2.64	78.1	75.4	13.8
75	11.4	67.8	58.4	0.86	3.02	78.1	88.7	4.6
75	14.0	67.8	58.4	0.86	2.95	77.9	86.1	6.5
75	15.8	67.8	58.4	0.86	2.92	77.8	84.8	8.0
75	17.5	67.8	58.4	0.86	2.90	77.7	83.9	9.6
75	18.4	67.8	58.4	0.86	2.89	77.7	83.4	10.5
75	19.3	67.8	58.4	0.86	2.88	77.6	83.0	11.4
75	21.0	67.8	58.4	0.86	2.86	77.6	82.4	13.3
86	11.4	65.2	57.3	0.88	3.47	77.0	99.5	4.5
86	14.0	65.2	57.3	0.88	3.40	76.8	97.0	6.3
86	15.8	65.3	57.4	0.88	3.36	76.8	95.7	7.8
86	17.5	65.3	57.4	0.88	3.33	76.7	94.8	9.3
86	18.4	65.3	57.4	0.88	3.32	76.6	94.3	10.1
86	19.3	65.4	57.5	0.88	3.31	76.7	93.9	11.0
86	21.0	65.4	57.5	0.88	3.29	76.6	93.3	12.8
95	11.4	62.6	56.0	0.89	3.89	75.9	108.3	4.5

Table 139. Cooling capacities 6 tons (gross) - EXVG070 (continued)

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Comp Pwr kW	Reject Mbtuh	LWT	Feet Head
95	14.0	62.7	56.1	0.89	3.81	75.7	105.8	6.2
95	15.8	62.7	56.1	0.89	3.77	75.5	104.6	7.6
95	17.5	62.8	56.2	0.89	3.74	75.6	103.6	9.1
95	18.4	62.8	56.2	0.89	3.72	75.5	103.2	9.9
95	19.3	62.9	56.3	0.90	3.71	75.6	102.8	10.8
95	21.0	62.9	56.3	0.90	3.69	75.5	102.2	12.5
105	11.4	59.2	54.3	0.92	4.38	74.2	118.0	4.3
105	14.0	59.4	54.5	0.92	4.30	74.1	115.6	6.1
105	15.8	59.5	54.6	0.92	4.26	74.0	114.4	7.5
105	17.5	59.5	54.6	0.92	4.23	73.9	113.4	8.9
105	18.4	59.6	54.7	0.92	4.21	74.0	113.0	9.7
105	19.3	59.6	54.7	0.92	4.20	73.9	112.7	10.6
105	21.0	59.7	54.8	0.92	4.18	74.0	112.0	12.2
115	11.4	55.4	52.5	0.95	4.91	72.1	127.6	4.1
115	14.0	55.6	52.7	0.95	4.82	72.1	125.3	5.9
115	15.8	55.7	52.8	0.95	4.78	72.0	124.1	7.3
115	17.5	55.8	52.9	0.95	4.75	72.0	123.2	8.7
115	18.4	55.9	53.0	0.95	4.73	72.1	122.8	9.5
115	19.3	55.9	53.0	0.95	4.72	72.0	122.5	10.3
115	21.0	56.0	53.1	0.95	4.70	72.0	121.9	12.0

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 17.5; Minimum CFM 1772; Rated CFM 2215; Maximum CFM 2658.

Table 140. Heating capacities 6 tons (gross) - EXVG070

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Comp Pwr kW	LWT	Feet Head
25	11.4	42.9	32.2	3.15	19.4	6.9
25	14.0	43.5	32.7	3.16	20.3	9.8
25	15.8	43.8	33.0	3.16	20.8	12.1
25	17.5	44.1	33.3	3.16	21.2	14.5
25	18.4	44.2	33.4	3.17	21.4	15.8
25	19.3	44.2	33.4	3.17	21.5	17.1
25	21.0	44.3	33.5	3.17	21.8	19.8
32	11.4	47.7	36.7	3.23	25.6	6.2
32	14.0	48.5	37.4	3.24	26.7	9.0
32	15.8	49.0	37.9	3.25	27.2	11.1
32	17.5	49.3	38.2	3.26	27.6	13.3
32	18.4	49.5	38.4	3.26	27.8	14.5
32	19.3	49.6	38.5	3.26	28.0	15.8
32	21.0	49.7	38.6	3.26	28.3	18.3
45	11.4	57.1	45.5	3.40	37.0	5.3
45	14.0	58.3	46.6	3.42	38.3	7.7

Table 140. Heating capacities 6 tons (gross) - EXVG070 (continued)

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Comp Pwr kW	LWT	Feet Head
45	15.8	59.0	47.3	3.43	39.0	9.6
45	17.5	59.5	47.8	3.44	39.5	11.6
45	18.4	59.7	47.9	3.45	39.8	12.7
45	19.3	59.9	48.1	3.45	40.0	13.9
45	21.0	60.1	48.3	3.45	40.4	16.2
55	11.4	64.7	52.6	3.55	45.8	4.9
55	14.0	66.2	54.0	3.57	47.3	7.1
55	15.8	67.0	54.8	3.59	48.1	8.9
55	17.5	67.6	55.3	3.60	48.7	10.7
55	18.4	67.9	55.6	3.61	49.0	11.7
55	19.3	68.1	55.8	3.61	49.2	12.8
55	21.0	68.5	56.2	3.62	49.6	14.9
68	11.4	75.2	62.4	3.76	57.1	4.6
68	14.0	76.9	64.0	3.79	58.9	6.6
68	15.8	77.9	64.9	3.81	59.8	8.2
68	17.5	78.6	65.5	3.83	60.5	9.9
68	18.4	79.0	65.9	3.84	60.8	10.8
68	19.3	79.2	66.1	3.84	61.2	11.8
68	21.0	79.7	66.6	3.85	61.7	13.8
75	11.4	81.0	67.7	3.89	63.1	4.6
75	14.0	82.9	69.5	3.93	65.1	6.5
75	15.8	84.0	70.5	3.95	66.1	8.0
75	17.5	84.8	71.3	3.97	66.9	9.6
75	18.4	85.1	71.5	3.97	67.2	10.5
75	19.3	85.4	71.8	3.98	67.6	11.4
75	21.0	85.9	72.3	3.99	68.1	13.3
86	11.4	90.5	76.5	4.11	72.6	4.5
86	14.0	92.6	78.4	4.16	74.8	6.3
86	15.8	93.7	79.4	4.18	75.9	7.8
86	17.5	94.6	80.3	4.20	76.8	9.3
86	18.4	95.0	80.6	4.21	77.2	10.1
86	19.3	95.3	80.9	4.22	77.6	11.0
86	21.0	95.8	81.4	4.23	78.2	12.8

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 17.5;Minimum CFM 1772; Rated CFM 2215; Maximum CFM 2658.

Table 141. Fan correction factors 6 tons - EXVG070

Entering cfm	Cooling Capacity	Sensible Capacity	Cooling Input Watts	Heating Capacity	Heating Input Watts
1772	0.965	0.867	0.995	0.989	1.088
1883	0.975	0.900	0.997	0.993	1.062
1994	0.984	0.934	0.998	0.996	1.039

Table 141. Fan correction factors 6 tons - EXVG070 (continued)

Entering cfm	Cooling Capacity	Sensible Capacity	Cooling Input Watts	Heating Capacity	Heating Input Watts
2104	0.992	0.967	0.999	0.998	1.018
2215	1.000	1.000	1.000	1.000	1.000
2437	1.017	1.063	1.002	1.003	0.968
2547	1.025	1.094	1.003	1.004	0.955
2658	1.031	1.128	1.004	1.005	0.943

Table 142. Correction factors for variation in entering air temperature 6 tons, EXVG070

Cooling Entering Air WB°F	Cooling capaci-ty	Cooling Input Watts	Sensible vs. Entering Dry Bulb Multiplier					Heating Entering Air DB°F	Heating capacity	Heating Input Watts
			65.6	70.6	75.6	80.6	85.6			
49.4	0.910	0.993	0.926	0.994	1.051	*	*	53.0	1.028	0.844
56.3	0.913	0.992	0.808	0.948	1.049	*	*	58.0	1.020	0.893
60.3	0.929	0.993	0.654	0.853	0.997	*	*	63.0	1.011	0.945
63.2	0.962	0.996	0.500	0.748	0.929	1.065	*	68.0	1.000	1.000
66.2	1.000	1.000	–	0.605	0.830	1.000	1.132	73.0	0.988	1.058
72.1	1.109	1.015	–	–	0.546	0.793	0.987	78.0	0.975	1.117
77.1	1.207	1.034	–	–	–	–	0.789	83.0	0.961	1.179

Note: * = Sensible equals total capacity

Table 143. Cooling capacities 6 tons (gross) - DXHF070

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Power kW	Reject Mbtuh	LWT	Feet Head
45	10.0	80.6	50.2	0.62	2.63	89.6	62.9	3.5
45	12.3	80.9	50.4	0.62	2.52	89.5	59.6	5.0
45	13.9	81.0	50.5	0.62	2.47	89.4	57.9	6.3
45	15.4	81.1	50.5	0.62	2.43	89.4	56.6	7.6
45	16.2	81.2	50.6	0.62	2.41	89.4	56.0	8.4
45	16.9	81.2	50.6	0.62	2.39	89.4	55.6	9.0
45	18.5	81.3	50.6	0.62	2.36	89.4	54.7	10.6
55	10.0	78.1	50.3	0.64	2.98	88.3	72.7	3.2
55	12.3	78.4	50.5	0.64	2.86	88.2	69.3	4.6
55	13.9	78.5	50.6	0.64	2.81	88.1	67.7	5.8
55	15.4	78.6	50.6	0.64	2.77	88.0	66.4	7.0
55	16.2	78.7	50.7	0.64	2.75	88.1	65.9	7.7
55	16.9	78.7	50.7	0.64	2.73	88.0	65.4	8.3
55	18.5	78.8	50.7	0.64	2.70	88.0	64.5	9.8
65	10.0	76.3	50.6	0.66	3.31	87.6	82.5	3.0
65	12.3	76.5	50.7	0.66	3.20	87.4	79.2	4.4
65	13.9	76.7	50.9	0.66	3.15	87.4	77.6	5.4
65	15.4	76.8	50.9	0.66	3.11	87.4	76.4	6.6
65	16.2	76.8	50.9	0.66	3.09	87.3	75.8	7.2
65	16.9	76.9	51.0	0.66	3.07	87.4	75.3	7.8
65	18.5	76.9	51.0	0.66	3.04	87.3	74.4	9.2
75	10.0	73.9	50.0	0.68	3.69	86.5	92.3	3.0
75	12.3	74.1	50.2	0.68	3.57	86.3	89.0	4.2

Table 143. Cooling capacities 6 tons (gross) - DXHF070 (continued)

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Power kW	Reject Mbtuh	LWT	Feet Head
75	13.9	74.3	50.3	0.68	3.52	86.3	87.4	5.3
75	15.4	74.4	50.4	0.68	3.48	86.3	86.2	6.3
75	16.2	74.4	50.4	0.68	3.46	86.2	85.6	6.9
75	16.9	74.4	50.4	0.68	3.44	86.2	85.2	7.5
75	18.5	74.5	50.4	0.68	3.42	86.2	84.3	8.8
85	10.0	70.7	48.9	0.69	4.11	84.7	101.9	3.0
85	12.3	71.0	49.1	0.69	3.99	84.6	98.8	4.2
85	13.9	71.1	49.1	0.69	3.94	84.5	97.2	5.2
85	15.4	71.2	49.2	0.69	3.90	84.5	96.0	6.2
85	16.2	71.3	49.3	0.69	3.88	84.5	95.4	6.8
85	16.9	71.3	49.3	0.69	3.86	84.5	95.0	7.3
85	18.5	71.4	49.3	0.69	3.84	84.5	94.1	8.6
95	10.0	67.2	47.6	0.71	4.58	82.8	111.6	3.0
95	12.3	67.4	47.7	0.71	4.46	82.6	108.4	4.2
95	13.9	67.6	47.9	0.71	4.41	82.7	106.9	5.1
95	15.4	67.7	47.9	0.71	4.37	82.6	105.7	6.1
95	16.2	67.7	47.9	0.71	4.35	82.5	105.2	6.7
95	16.9	67.8	48.0	0.71	4.33	82.6	104.8	7.2
95	18.5	67.8	48.0	0.71	4.31	82.5	103.9	8.4
105	10.0	63.6	46.2	0.73	5.10	81.0	121.2	2.9
105	12.3	63.9	46.5	0.73	4.99	80.9	118.2	4.1
105	13.9	64.0	46.5	0.73	4.94	80.8	116.6	5.0
105	15.4	64.1	46.6	0.73	4.89	80.8	115.5	6.0
105	16.2	64.1	46.6	0.73	4.88	80.7	115.0	6.5
105	16.9	64.2	46.7	0.73	4.86	80.8	114.6	7.0
105	18.5	64.2	46.7	0.73	4.83	80.7	113.7	8.2
115	10.0	59.9	44.9	0.75	5.69	79.3	130.9	2.7
115	12.3	60.2	45.2	0.75	5.58	79.2	127.9	3.9
115	13.9	60.3	45.2	0.75	5.52	79.1	126.4	4.9
115	15.4	60.4	45.3	0.75	5.48	79.1	125.3	5.8
115	16.2	60.4	45.3	0.75	5.46	79.0	124.8	6.4
115	16.9	60.5	45.4	0.75	5.45	79.1	124.4	6.8
115	18.5	60.5	45.4	0.75	5.42	79.0	123.5	8.0
120	10.0	57.7	43.9	0.76	6.01	78.2	135.6	2.5
120	12.3	57.9	44.1	0.76	5.90	78.0	132.7	3.8
120	13.9	58.1	44.2	0.76	5.85	78.0	131.2	4.7
120	15.4	58.2	44.3	0.76	5.80	78.0	130.1	5.7
120	16.2	58.2	44.3	0.76	5.79	77.9	129.6	6.2
120	16.9	58.3	44.4	0.76	5.77	78.0	129.2	6.7
120	18.5	58.3	44.4	0.76	5.74	77.9	128.4	7.9

Note: Cooling performance data is tabulated at 80°F DB/67°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 is permissible, extrapolation is not. Rated GPM 8.4, Rated CFM 1140, Minimum CFM 912, Maximum CFM 1254.

Table 144. Heating capacities 6 tons (gross) - DXHF070

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Power kW	LWT	Feet Head
25	16.2	53.9	40.8	3.85	20.0	10.7
25	16.9	54.4	41.2	3.86	20.1	11.5
25	18.5	55.3	42.0	3.89	20.5	13.3
35	10.0	55.9	42.1	4.03	26.6	4.0
35	12.3	57.8	43.9	4.09	27.9	5.7
35	13.9	59.2	45.1	4.13	28.5	7.1
35	15.4	60.3	46.1	4.17	29.0	8.6
35	16.2	60.8	46.5	4.18	29.3	9.4
35	16.9	61.2	46.9	4.19	29.4	10.1
35	18.5	61.8	47.4	4.22	29.9	11.8
45	10.0	64.9	50.3	4.28	34.9	3.5
45	12.3	66.2	51.4	4.33	36.6	5.0
45	13.9	67.3	52.4	4.38	37.5	6.3
45	15.4	68.2	53.1	4.41	38.1	7.6
45	16.2	68.6	53.5	4.42	38.4	8.4
45	16.9	68.9	53.8	4.43	38.6	9.0
45	18.5	69.3	54.1	4.46	39.2	10.6
55	10.0	73.8	58.4	4.51	43.3	3.2
55	12.3	74.9	59.3	4.57	45.4	4.6
55	13.9	76.0	60.2	4.62	46.3	5.8
55	15.4	76.9	61.0	4.65	47.1	7.0
55	16.2	77.2	61.3	4.66	47.4	7.7
55	16.9	77.5	61.6	4.67	47.7	8.3
55	18.5	77.8	61.8	4.70	48.3	9.8
65	10.0	82.6	66.3	4.79	51.7	3.0
65	12.3	84.0	67.5	4.84	54.0	4.4
65	13.9	85.2	68.5	4.89	55.1	5.4
65	15.4	86.1	69.3	4.93	56.0	6.6
65	16.2	86.5	69.7	4.94	56.4	7.2
65	16.9	86.8	69.9	4.95	56.7	7.8
65	18.5	87.2	70.2	4.97	57.4	9.2
75	10.0	91.1	73.6	5.11	60.3	3.0
75	12.3	93.2	75.6	5.17	62.7	4.2
75	13.9	94.7	76.9	5.22	63.9	5.3
75	15.4	95.8	77.9	5.25	64.9	6.3
75	16.2	96.3	78.3	5.26	65.3	6.9
75	16.9	96.7	78.7	5.27	65.7	7.5
75	18.5	97.3	79.2	5.30	66.4	8.8
85	10.0	99.3	80.7	5.46	68.9	3.0
85	12.3	102.4	83.6	5.51	71.4	4.2
85	13.9	104.4	85.4	5.56	72.7	5.2
85	15.4	106.0	86.9	5.59	73.7	6.2
85	16.2	106.6	87.5	5.60	74.2	6.8

Table 144. Heating capacities 6 tons (gross) - DXHF070 (continued)

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Power kW	LWT	Feet Head
85	16.9	107.1	87.9	5.61	74.6	7.3
85	18.5	108.0	88.7	5.64	75.4	8.6
85	16.2	53.9	40.8	3.85	20.0	10.7

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 is permissible, extrapolation is not. Rated GPM 3.6, Rated CFM 475, Minimum CFM 523, Maximum CFM 380.

Table 145. Fan correction factors 6 tons - DXHF070

Entering CFM	Cooling capacity	Sensible capacity	Cooling comp watts	Heating capacity	Heating comp watts
1672	0.958	0.893	0.996	0.990	1.103
1881	0.981	0.948	0.998	0.996	1.047
2090	1.000	1.000	1.000	1.000	1.000
2299	1.016	1.053	1.002	1.003	0.963

Table 146. Correction factors for variation in entering air temperature 6 tons, DXHF070

Cooling Entering Air WB°F	Cooling capaci-ty	Cooling Input Watts	Sensible vs. Entering Dry Bulb Multiplier						Heating Entering Air DB°F	Heating capacity	Heating Input Watts
			65.0	70.0	75.0	80.0	85.0	90.0			
50.0	0.912	0.988	1.040	1.142	*	*	*	*	55.0	1.019	0.852
55.0	0.900	0.987	0.903	1.074	1.203	*	*	*	58.0	1.018	0.885
60.0	0.922	0.990	0.644	0.896	1.092	1.248	*	*	61.0	1.015	0.914
65.0	0.973	0.996	0.271	0.608	0.874	1.089	1.267	*	64.0	1.011	0.942
67.0	1.000	1.000	–	0.466	0.761	1.000	1.198	*	67.0	1.006	0.971
70.0	1.046	1.006	–	0.228	0.565	0.840	1.069	1.262	70.0	1.000	1.000
75.0	1.136	1.018	–	–	0.186	0.520	0.799	1.035	73.0	0.993	1.031
78.0	1.195	1.026	–	–	–	0.301	0.609	0.871	76.0	0.986	1.062

Note: * = Sensible equals total capacity

Table 147. Cooling capacities 6 tons (gross) - DXGV070

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Comp Pwr kW	Reject Mbtuh	LWT	Feet Head
45	11.4	73.8	60.9	0.83	3.11	84.4	59.8	5.4
45	14.0	74.0	61.1	0.83	3.05	84.4	57.1	7.8
45	15.8	74.0	61.1	0.83	3.02	84.3	55.7	9.8
45	17.5	74.1	61.2	0.83	3.01	84.4	54.6	11.8
45	18.4	74.1	61.2	0.83	3.00	84.3	54.2	12.9
45	19.3	74.1	61.2	0.83	2.99	84.3	53.7	14.0
45	21.0	74.2	61.2	0.82	2.98	84.4	53.0	16.3
55	11.4	71.5	59.7	0.83	3.42	83.2	69.6	4.9
55	14.0	71.7	59.9	0.84	3.36	83.1	66.9	7.2
55	15.8	71.7	59.9	0.84	3.32	83.0	65.5	9.0
55	17.5	71.8	60.0	0.84	3.30	83.1	64.5	10.8
55	18.4	71.8	60.0	0.84	3.29	83.0	64.0	11.8
55	19.3	71.8	60.0	0.84	3.28	83.0	63.6	12.9
55	21.0	71.9	60.1	0.84	3.26	83.0	62.9	15.0

Table 147. Cooling capacities 6 tons (gross) - DXGV070 (continued)

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Comp Pwr kW	Reject Mbtuh	LWT	Feet Head
68	11.4	69.4	59.0	0.85	3.90	82.7	82.5	4.7
68	14.0	69.6	59.1	0.85	3.82	82.6	79.8	6.7
68	15.8	69.7	59.2	0.85	3.78	82.6	78.5	8.3
68	17.5	69.7	59.2	0.85	3.75	82.5	77.4	10.0
68	18.4	69.7	59.2	0.85	3.74	82.5	77.0	10.9
68	19.3	69.8	59.3	0.85	3.73	82.5	76.5	11.9
68	21.0	69.8	59.3	0.85	3.71	82.5	75.9	13.8
75	11.4	68.2	58.5	0.86	4.20	82.5	89.5	4.6
75	14.0	68.4	58.7	0.86	4.11	82.4	86.8	6.6
75	15.8	68.4	58.7	0.86	4.07	82.3	85.4	8.1
75	17.5	68.5	58.8	0.86	4.04	82.3	84.4	9.7
75	18.4	68.5	58.8	0.86	4.02	82.2	83.9	10.6
75	19.3	68.5	58.8	0.86	4.01	82.2	83.5	11.5
75	21.0	68.6	58.8	0.86	3.99	82.2	82.8	13.4
86	11.4	65.6	57.3	0.87	4.72	81.7	100.3	4.6
86	14.0	65.8	57.5	0.87	4.63	81.6	97.7	6.4
86	15.8	65.9	57.6	0.87	4.58	81.5	96.3	7.9
86	17.5	65.9	57.6	0.87	4.54	81.4	95.3	9.4
86	18.4	65.9	57.6	0.87	4.53	81.4	94.8	10.2
86	19.3	66.0	57.7	0.87	4.52	81.4	94.4	11.1
86	21.0	66.0	57.7	0.87	4.49	81.3	93.7	12.9
95	11.4	63.0	56.1	0.89	5.21	80.8	109.2	4.6
95	14.0	63.2	56.2	0.89	5.11	80.6	106.5	6.4
95	15.8	63.2	56.2	0.89	5.06	80.5	105.2	7.8
95	17.5	63.3	56.3	0.89	5.02	80.4	104.2	9.2
95	18.4	63.3	56.3	0.89	5.00	80.4	103.7	10.0
95	19.3	63.3	56.3	0.89	4.99	80.3	103.3	10.9
95	21.0	63.4	56.4	0.89	4.96	80.3	102.6	12.6
105	11.4	59.7	54.5	0.91	5.82	79.6	119.0	4.4
105	14.0	59.8	54.6	0.91	5.71	79.3	116.3	6.2
105	15.8	59.9	54.7	0.91	5.66	79.2	115.0	7.6
105	17.5	59.9	54.7	0.91	5.62	79.1	114.0	9.1
105	18.4	60.0	54.8	0.91	5.60	79.1	113.6	9.9
105	19.3	60.0	54.8	0.91	5.59	79.1	113.2	10.7
105	21.0	60.0	54.8	0.91	5.56	79.0	112.5	12.4
115	11.4	56.1	52.9	0.94	6.51	78.3	128.7	4.2
115	14.0	56.3	53.1	0.94	6.39	78.1	126.2	6.0
115	15.8	56.3	53.1	0.94	6.34	77.9	124.9	7.4
115	17.5	56.3	53.1	0.94	6.30	77.8	123.9	8.8
115	18.4	56.4	53.2	0.94	6.28	77.8	123.5	9.6
115	19.3	56.4	53.2	0.94	6.27	77.8	123.1	10.5

Table 147. Cooling capacities 6 tons (gross) - DXGV070 (continued)

EWT	GPM	Total Mbtuh	Sen Mbtuh	SHR	Comp Pwr kW	Reject Mbtuh	LWT	Feet Head
115	21.0	56.4	53.2	0.94	6.24	77.7	122.4	12.1

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 17.5; Minimum CFM 1772; Rated CFM 2215; Maximum CFM 2658.

Table 148. Heating capacities 6 tons (gross) - DXVG070

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Comp Pwr kW	LWT	Feet Head
25	11.40	43.40	29.30	4.130	19.90	7.10
25	14.00	44.20	30.10	4.150	20.70	10.10
25	15.80	44.60	30.40	4.160	21.20	12.50
25	17.50	44.80	30.60	4.160	21.50	14.80
25	18.40	44.90	30.70	4.170	21.70	16.20
25	19.30	45.10	30.90	4.170	21.80	17.50
25	21.00	45.30	31.10	4.170	22.00	20.20
32	11.40	48.40	33.90	4.250	26.10	6.30
32	14.00	49.40	34.80	4.270	27.00	9.10
32	15.80	49.80	35.20	4.280	27.50	11.30
32	17.50	50.20	35.60	4.290	27.90	13.60
32	18.40	50.30	35.60	4.290	28.10	14.80
32	19.30	50.50	35.80	4.30	28.30	16.10
32	21.00	50.70	36.00	4.30	28.60	18.60
45	11.40	58.20	42.80	4.50	37.50	5.40
45	14.00	59.50	44.00	4.53	38.70	7.80
45	15.80	60.10	44.60	4.55	39.40	9.80
45	17.50	60.60	45.10	4.56	39.80	11.80
45	18.4	60.8	45.2	4.56	40.1	12.9
45	19.3	61.0	45.4	4.56	40.3	14.0
45	21.0	61.3	45.7	4.57	40.6	16.3
55	11.4	66.1	50.0	4.71	46.2	4.9
55	14.0	67.6	51.4	4.75	47.7	7.2
55	15.8	68.3	52.0	4.76	48.4	9.0
55	17.5	68.9	52.6	4.78	49.0	10.8
55	18.4	69.2	52.9	4.78	49.3	11.8
55	19.3	69.4	53.1	4.79	49.5	12.9
55	21.0	69.8	53.4	4.80	49.9	15.0
68	11.4	76.7	59.7	5.00	57.5	4.7
68	14.0	78.5	61.3	5.04	59.2	6.7
68	15.8	79.4	62.1	5.06	60.1	8.3
68	17.5	80.1	62.8	5.08	60.8	10.0
68	18.4	80.4	63.0	5.09	61.2	10.9
68	19.3	80.7	63.3	5.09	61.4	11.9
68	21.0	81.1	63.7	5.10	61.9	13.8

Table 148. Heating capacities 6 tons (gross) - DXVG070 (continued)

EWT	GPM	Htg Cap Mbtuh	Absorb Mbtuh	Comp Pwr kW	LWT	Feet Head
75	11.4	82.5	64.9	5.15	63.6	4.6
75	14.0	84.4	66.7	5.20	65.5	6.6
75	15.8	85.5	67.7	5.23	66.4	8.1
75	17.5	86.2	68.3	5.24	67.2	9.7
75	18.4	86.6	68.7	5.25	67.5	10.6
75	19.3	86.9	69.0	5.26	67.8	11.5
75	21.0	87.4	69.4	5.27	68.4	13.4
86	11.4	91.7	73.3	5.39	73.1	4.6
86	14.0	93.9	75.3	5.45	75.2	6.4
86	15.8	95.1	76.4	5.48	76.3	7.9
86	17.5	95.9	77.1	5.51	77.2	9.4
86	18.4	96.3	77.5	5.52	77.6	10.2
86	19.3	96.7	77.8	5.53	77.9	11.1
86	21.0	97.2	78.3	5.54	78.5	12.9

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 17.5;Minimum CFM 1772; Rated CFM 2215; Maximum CFM 2658.

Table 149. Fan correction factors 6 tons - DXVG070

Entering cfm	Cooling Capacity	Sensible Capacity	Cooling Input Watts	Heating Capacity	Heating Input Watts
1772	0.963	0.869	0.996	0.989	1.081
1883	0.974	0.901	0.997	0.993	1.057
1994	0.983	0.936	0.998	0.997	1.036
2104	0.991	0.968	0.999	1.000	1.017
2215	1.000	1.000	1.000	1.002	1.000
2437	1.018	1.062	1.002	1.007	0.971
2547	1.025	1.094	1.002	1.009	0.959
2658	1.032	1.127	1.003	1.011	0.948

Table 150. Correction factors for variation in entering air temperature 6 tons, DXVG070

Cooling Entering Air WB°F	Cooling capaci-ty	Cooling Input Watts	Sensible vs. Entering Dry Bulb Multiplier					Heating Entering Air DB°F	Heating capacity	Heating Input Watts
			65.0	70.0	75.0	80.0	85.0			
49.4	0.900	0.995	0.913	0.980	1.029	*	*	53.0	1.038	0.858
56.3	0.910	0.993	0.804	0.948	1.048	*	*	58.0	1.025	0.904
60.3	0.925	0.995	0.652	0.855	1.002	*	*	63.0	1.013	0.950
63.2	0.960	0.997	0.499	0.747	0.932	1.070	*	68.0	1.000	1.000
66.2	1.000	1.000	–	0.601	0.828	1.000	1.134	73.0	0.987	1.053
72.1	1.114	1.011	–	–	0.539	0.782	0.974	78.0	0.973	1.108
77.1	1.218	1.024	–	–	–	–	0.774	83.0	0.957	1.170

Note: * = Sensible equals total capacity

Unit Fan Performance

Table 151. Fan performance for standard ECM motor (includes wet coils and 1" filter)

Model Number	Max ESP (in. wc)	Fan Motor (hp)	Profile Setting	Cooling Mode	HGR Mode	Heating Mode	Fan Mode
EXHF006	0.70	1/3	A	237	190	237	190
EXHF006	0.70	1/3	B	215	172	215	172
EXHF006	0.70	1/3	C	194	155	194	155
EXHF006	0.70	1/3	D	172	138	172	138
EXHF009	0.70	1/3	A	314	251	314	251
EXHF009	0.70	1/3	B	285	228	285	228
EXHF009	0.70	1/3	C	257	206	257	206
EXHF009	0.70	1/3	D	228	182	228	182
EXHF012	0.70	1/3	A	418	334	418	334
EXHF012	0.70	1/3	B	380	304	380	304
EXHF012	0.70	1/3	C	342	274	342	274
EXHF012	0.70	1/3	D	304	243	304	243
EXHF015	0.70	1/3	A	523	418	523	418
EXHF015	0.70	1/3	B	475	380	475	380
EXHF015	0.70	1/3	C	428	342	428	342
EXHF015	0.70	1/3	D	380	304	380	304
EXHF018	0.80	1/3	A	627	502	627	314
EXHF018	0.80	1/3	B	570	456	570	285
EXHF018	0.80	1/3	C	513	410	513	257
EXHF018	0.80	1/3	D	456	365	456	228
EXHF024	0.80	1/3	A	836	669	836	418
EXHF024	0.80	1/3	B	760	608	760	380
EXHF024	0.80	1/3	C	684	547	684	342
EXHF024	0.80	1/3	D	608	486	608	304
EXHF030	0.70	1/2	A	1045	836	1045	523
EXHF030	0.70	1/2	B	950	760	950	475
EXHF030	0.70	1/2	C	855	684	855	428
EXHF030	0.70	1/2	D	760	608	760	380
EXHF036	0.70	3/4	A	1254	1003	1254	627
EXHF036	0.70	3/4	B	1140	912	1140	570
EXHF036	0.70	3/4	C	1026	821	1026	513
EXHF036	0.70	3/4	D	912	730	912	456
EXHF042	0.70	3/4	A	1463	1170	1463	732
EXHF042	0.70	3/4	B	1330	1064	1330	665
EXHF042	0.70	3/4	C	1197	958	1197	599
EXHF042	0.70	3/4	D	1064	851	1064	532
EXHF048	0.70	3/4	A	1672	1338	1672	836
EXHF048	0.70	3/4	B	1520	1216	1520	760
EXHF048	0.70	3/4	C	1368	1094	1368	684

Table 151. Fan performance for standard ECM motor (includes wet coils and 1" filter) (continued)

Model Number	Max ESP (in. wc)	Fan Motor (hp)	Profile Setting	Cooling Mode	HGR Mode	Heating Mode	Fan Mode
EXHF048	0.70	3/4	D	1216	973	1216	608
EXHF060	0.70	1	A	1870	1496	1870	935
EXHF060	0.70	1	B	1700	1360	1700	850
EXHF060	0.70	1	C	1530	1224	1530	765
EXHF060	0.70	1	D	1360	1088	1360	680
EXHF070	0.70	1	A	2299	1839	2299	1150
EXHF070	0.70	1	B	2090	1672	2090	1045
EXHF070	0.70	1	C	1881	1505	1881	941
EXHF070	0.70	1	D	1672	1338	1672	836

Notes:
1. For HGR, the ECM motor will automatically reduce the speed when the unit is in dehumidification mode.
2. Airflow reduces to approximately 80% for the 006-015 units and 50% 018 to 070 units in fan only mode.
3. Fan profile settings are selected by the ECM motor control board DIP switch setting on units with Deluxe 24V or ZN524 controls.
4. Tracer® TU is used to adjust fan speed on units with UC400 controls.

Table 152. Fan performance for standard ECM motor (includes wet coils and 1" filter)

Model Number	Max ESP (in. wc)	Fan Motor (hp)	Profile Setting	Full Load	Partial Load	Fan Mode
DXHF024	0.80	1/3	A	836	669	418
DXHF024	0.80	1/3	B	760	608	380
DXHF024	0.80	1/3	C	684	547	342
DXHF024	0.80	1/3	D	608	486	304
DXHF036	0.70	3/4	A	1254	1003	627
DXHF036	0.70	3/4	B	1140	912	570
DXHF036	0.70	3/4	C	1026	821	513
DXHF036	0.70	3/4	D	912	730	456
DXHF048	0.70	3/4	A	1672	1338	836
DXHF048	0.70	3/4	B	1520	1216	760
DXHF048	0.70	3/4	C	1368	1094	684
DXHF048	0.70	3/4	D	1216	973	608
DXHF060	0.70	1	A	1870	1496	935
DXHF060	0.70	1	B	1700	1360	850
DXHF060	0.70	1	C	1530	1224	765
DXHF060	0.70	1	D	1360	1088	680
DXHF070	0.70	1	A	2299	1839	1150
DXHF070	0.70	1	B	2090	1672	1045
DXHF070	0.70	1	C	1881	1505	941
DXHF070	0.70	1	D	1672	1338	836

Notes:
1. Airflow reduces to approximately 50% in fan only mode.
2. Fan profile settings are selected by the ECM motor control board DIP switch setting on units with Deluxe 24V or ZN524 controls.
3. Tracer® TU is used to adjust fan speed on units with UC400 controls.

Table 153. Unit fan performance EXH

Model	External Static Pressure																			
			0.00		0.05		0.10		0.15		0.20		0.25		0.30		0.35		0.40	
	Profile	CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM
EXHF006	A	237	0.016	471	0.021	542	0.025	609	0.030	674	0.034	735	0.039	794	0.043	850	0.048	902	0.053	952
	B	215	0.011	427	0.015	497	0.020	565	0.024	630	0.029	691	0.033	750	0.038	805	0.042	858	0.046	907
	C	194	0.008	406	0.012	476	0.016	544	0.020	608	0.025	670	0.029	729	0.033	784	0.037	837	0.042	886
	D	172	0.006	381	0.010	452	0.014	519	0.018	584	0.022	645	0.026	704	0.030	760	0.034	812	0.038	862
			0.45		**0.50**		**0.55**		**0.60**		**0.65**		**0.70**		**0.75**		**0.80**			
	Profile	**CFM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**		
EXHF006	A	237	0.057	998	0.062	1042	0.067	1082	0.071	1120	0.076	1154	0.081	1186	—	—	—	—		
	B	215	0.051	954	0.055	997	0.060	1038	0.064	1076	0.069	1110	0.073	1142	—	—	—	—		
	C	194	0.046	933	0.050	976	0.055	1017	0.059	1054	0.063	1089	0.068	1120	—	—	—	—		
	D	172	0.043	908	0.047	952	0.051	992	0.055	1030	0.059	1064	0.063	1096	—	—	—	—		
			0.00		**0.05**		**0.10**		**0.15**		**0.20**		**0.25**		**0.30**		**0.35**		**0.40**	
	Profile	**CFM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**
EXHF009	A	314	0.038	686	0.042	731	0.045	775	0.049	817	0.053	859	0.058	899	0.063	938	0.067	975	0.072	1012
	B	285	0.030	619	0.033	667	0.037	714	0.041	759	0.045	803	0.050	846	0.054	888	0.059	928	0.064	967
	C	257	0.018	547	0.022	598	0.025	648	0.029	697	0.033	745	0.038	791	0.043	836	0.048	879	0.052	922
	D	228	0.012	472	0.016	527	0.019	582	0.023	634	0.027	686	0.032	736	0.037	786	0.041	833	0.046	880
			0.45		**0.50**		**0.55**		**0.60**		**0.65**		**0.70**		**0.75**		**0.80**			
	Profile	**CFM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**		
EXHF009	A	314	0.077	1047	0.082	1081	0.087	1114	0.092	1145	0.096	1175	0.100	1204	—	—	—	—		
	B	285	0.069	1005	0.074	1042	0.079	1077	0.083	1111	0.088	1144	0.092	1176	—	—	—	—		
	C	257	0.057	963	0.062	1003	0.067	1042	0.072	1080	0.076	1116	0.080	1151	—	—	—	—		
	D	228	0.051	926	0.056	970	0.061	1013	0.066	1054	0.070	1095	0.074	1134	—	—	—	—		
			0.00		**0.05**		**0.10**		**0.15**		**0.20**		**0.25**		**0.30**		**0.35**		**0.40**	
	Profile	**CFM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**
EXHF012	A	418	0.021	468	0.028	543	0.035	612	0.042	678	0.049	739	0.057	796	0.065	849	0.073	898	0.080	944
	B	380	0.017	428	0.022	506	0.029	578	0.035	646	0.042	709	0.050	768	0.057	823	0.064	875	0.072	922
	C	342	0.014	401	0.019	481	0.025	555	0.031	625	0.037	690	0.044	750	0.050	807	0.057	859	0.064	907
	D	304	0.013	378	0.017	459	0.022	535	0.027	605	0.032	671	0.038	732	0.044	788	0.051	840	0.057	888

Table 153. Unit fan performance EXH (continued)

Model		External Static Pressure																							
			0.45		0.50		0.55		0.60		0.65		0.70		0.75		0.80								
	Pro-file	CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM							
EXHF012	A	418	0.088	986	0.095	1026	0.102	1063	0.108	1096	0.114	1128	0.120	1157	—	—	—	—							
	B	380	0.079	966	0.086	1006	0.093	1044	0.099	1078	0.105	1110	0.111	1139	—	—	—	—							
	C	342	0.071	951	0.078	992	0.084	1029	0.090	1064	0.096	1095	0.102	1123	—	—	—	—							
	D	304	0.063	932	0.070	973	0.076	1009	0.082	1042	0.087	1072	0.092	1100	—	—	—	—							
			0.00		0.05		0.10		0.15		0.20		0.25		0.30		0.35		0.40						
EXHF015	Pro-file	CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM					
	A	523	0.044	615	0.050	666	0.057	716	0.064	763	0.072	809	0.079	853	0.088	896	0.096	937	0.105	978					
	B	475	0.035	568	0.041	623	0.048	677	0.055	728	0.062	777	0.070	824	0.078	870	0.085	913	0.094	955					
	C	428	0.027	518	0.033	580	0.040	638	0.047	694	0.054	748	0.061	798	0.068	846	0.075	892	0.083	935					
	D	380	0.020	459	0.026	529	0.032	594	0.039	656	0.046	714	0.052	769	0.059	821	0.066	869	0.073	914					
			0.45		0.50		0.55		0.60		0.65		0.70		0.75		0.80								
EXHF015	Pro-file	CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM							
	A	523	0.113	1017	0.122	1055	0.131	1093	0.140	1130	0.149	1166	0.157	1202	—	—	—	—							
	B	475	0.102	995	0.110	1033	0.118	1071	0.126	1107	0.134	1142	0.142	1176	—	—	—	—							
	C	428	0.090	976	0.098	1015	0.105	1052	0.112	1087	0.119	1120	0.125	1152	—	—	—	—							
	D	380	0.079	956	0.086	995	0.092	1032	0.098	1066	0.104	1097	0.109	1126	—	—	—	—							
			0.00		0.05		0.10		0.15		0.20		0.25		0.30		0.35		0.40						
EXHF018	Pro-file	CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM					
	A	627	0.065	583	0.074	629	0.083	671	0.092	710	0.101	746	0.109	779	0.117	810	0.124	839	0.132	867					
	B	570	0.052	543	0.060	590	0.069	634	0.076	675	0.084	712	0.091	747	0.098	780	0.105	811	0.112	840					
	C	513	0.040	501	0.048	550	0.055	595	0.061	637	0.068	677	0.075	713	0.081	748	0.087	780	0.094	811					
	D	456	0.033	461	0.039	511	0.044	558	0.050	601	0.056	642	0.061	680	0.067	717	0.073	751	0.078	783					
			0.45		0.50		0.55		0.60		0.65		0.70		0.75		0.80								
EXHF018	Pro-file	CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM							
	A	627	0.139	893	0.146	918	0.153	943	0.160	967	0.167	991	0.174	1015	0.181	1040	0.187	1066							
	B	570	0.119	868	0.126	894	0.132	920	0.139	946	0.146	972	0.152	998	0.159	1025	0.166	1052							
	C	513	0.100	840	0.106	869	0.112	897	0.119	925	0.125	952	0.132	980	0.138	1008	0.145	1038							
	D	456	0.084	814	0.090	845	0.096	874	0.102	904	0.109	933	0.115	963	0.122	993	0.129	1024							

Table 153. Unit fan performance EXH (continued)

Model	External Static Pressure																			
			0.00		0.05		0.10		0.15		0.20		0.25		0.30		0.35		0.40	
	Profile	CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM
EXHF024	A	836	0.180	824	0.190	851	0.200	878	0.209	903	0.218	928	0.228	952	0.237	975	0.246	997	0.254	1019
	B	760	0.136	756	0.145	787	0.155	817	0.164	846	0.174	874	0.183	901	0.192	927	0.201	953	0.209	977
	C	684	0.096	683	0.106	718	0.115	752	0.124	784	0.132	815	0.141	845	0.150	874	0.158	902	0.166	929
	D	608	0.072	620	0.080	658	0.089	695	0.097	730	0.104	764	0.112	796	0.120	827	0.128	856	0.135	885
			0.45		0.50		0.55		0.60		0.65		0.70		0.75		0.80			
	Profile	CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM		
EXHF024	A	836	0.263	1041	0.272	1062	0.280	1083	0.289	1103	0.297	1123	0.306	1143	0.314	1163	0.323	1184		
	B	760	0.218	1001	0.227	1025	0.235	1047	0.244	1070	0.252	1092	0.261	1114	0.270	1135	0.278	1157		
	C	684	0.175	955	0.183	980	0.191	1005	0.199	1029	0.208	1052	0.216	1075	0.224	1097	0.233	1119		
	D	608	0.143	912	0.150	938	0.158	964	0.165	988	0.173	1012	0.181	1035	0.188	1057	0.196	1078		
			0.00		0.05		0.10		0.15		0.20		0.25		0.30		0.35		0.40	
	Profile	CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM
EXHF030	A	1045	0.186	694	0.203	723	0.219	752	0.235	779	0.251	805	0.266	830	0.282	854	0.297	877	0.311	899
	B	950	0.138	634	0.153	666	0.169	697	0.184	727	0.199	756	0.214	784	0.229	810	0.243	836	0.258	860
	C	855	0.105	583	0.118	618	0.132	651	0.146	683	0.159	714	0.173	744	0.186	772	0.200	799	0.213	826
	D	760	0.084	538	0.095	575	0.107	609	0.118	643	0.129	675	0.141	706	0.152	736	0.164	764	0.175	791
			0.45		0.50		0.55		0.60		0.65		0.70		0.75		0.80			
	Profile	CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM		
EXHF030	A	1045	0.326	920	0.340	941	0.353	961	0.367	980	0.380	999	0.392	1017	—	—	—	—		
	B	950	0.272	884	0.286	907	0.299	929	0.312	950	0.325	971	0.338	991	—	—	—	—		
	C	855	0.226	851	0.239	876	0.252	899	0.264	922	0.277	944	0.289	965	—	—	—	—		
	D	760	0.186	818	0.198	843	0.209	867	0.220	891	0.231	914	0.242	935	—	—	—	—		
			0.00		0.05		0.10		0.15		0.20		0.25		0.30		0.35		0.40	
	Profile	CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM
EXHF036	A	1254	0.276	749	0.296	776	0.315	802	0.333	826	0.351	850	0.369	872	0.386	894	0.403	915	0.420	935
	B	1140	0.200	679	0.218	708	0.235	736	0.252	762	0.269	787	0.285	812	0.301	835	0.317	858	0.333	880
	C	1026	0.145	618	0.161	649	0.177	679	0.193	708	0.208	735	0.223	762	0.237	787	0.252	812	0.266	835
	D	912	0.112	560	0.126	594	0.140	627	0.154	659	0.167	689	0.180	718	0.193	746	0.207	773	0.220	799

Table 153. Unit fan performance EXH (continued)

Model		External Static Pressure																							
		0.45		0.50		0.55		0.60		0.65		0.70		0.75		0.80									
	Profile	CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM							
EXHF036	A	1254	0.436	955	0.453	974	0.470	993	0.486	1012	0.503	1030	0.520	1049	—	—	—	—							
	B	1140	0.349	901	0.364	922	0.380	942	0.396	962	0.412	982	0.429	1002	—	—	—	—							
	C	1026	0.281	859	0.295	881	0.310	903	0.325	925	0.341	947	0.357	968	—	—	—	—							
	D	912	0.233	824	0.246	849	0.260	873	0.274	897	0.289	920	0.304	943	—	—	—	—							
		0.00		0.05		0.10		0.15		0.20		0.25		0.30		0.35		0.40							
EXHF042	Profile	CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM					
	A	1463	0.231	615	0.257	651	0.285	685	0.312	718	0.341	749	0.369	780	0.398	809	0.426	837	0.454	863					
	B	1330	0.179	565	0.203	603	0.227	640	0.251	675	0.276	708	0.301	739	0.326	770	0.350	798	0.374	825					
	C	1197	0.140	527	0.161	568	0.183	606	0.205	643	0.227	679	0.249	712	0.271	743	0.293	772	0.313	799					
	D	1064	0.107	487	0.127	531	0.147	573	0.168	613	0.188	650	0.208	685	0.228	717	0.247	747	0.265	774					
		0.45		0.50		0.55		0.60		0.65		0.70		0.75		0.80									
EXHF042	Profile	CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM							
	A	1463	0.482	889	0.509	913	0.535	937	0.560	959	0.583	980	0.606	1000	—	—	—	—							
	B	1330	0.398	851	0.420	875	0.442	898	0.462	919	0.481	939	0.499	957	—	—	—	—							
	C	1197	0.333	825	0.352	848	0.370	870	0.387	890	0.402	908	0.415	924	—	—	—	—							
	D	1064	0.282	799	0.299	822	0.313	842	0.327	860	0.339	876	0.348	889	—	—	—	—							
		0.00		0.05		0.10		0.15		0.20		0.25		0.30		0.35		0.40							
EXHF048	Profile	CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM					
	A	1672	0.275	618	0.313	657	0.351	695	0.388	730	0.424	764	0.459	796	0.493	826	0.526	854	0.558	881					
	B	1520	0.206	570	0.242	612	0.278	652	0.313	690	0.348	726	0.382	761	0.416	793	0.448	824	0.480	853					
	C	1368	0.157	530	0.189	574	0.222	616	0.254	656	0.286	694	0.317	730	0.348	764	0.378	796	0.408	826					
	D	1216	0.129	493	0.156	539	0.183	582	0.210	623	0.237	662	0.264	699	0.291	733	0.317	766	0.343	797					
		0.45		0.50		0.55		0.60		0.65		0.70		0.75		0.80									
EXHF048	Profile	CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM							
	A	1672	0.588	907	0.618	931	0.646	954	0.672	975	0.697	996	0.720	1015	—	—	—	—							
	B	1520	0.511	880	0.540	906	0.569	930	0.596	954	0.622	975	0.647	996	—	—	—	—							
	C	1368	0.437	854	0.465	881	0.492	907	0.519	930	0.544	953	0.568	974	—	—	—	—							
	D	1216	0.368	826	0.393	853	0.417	878	0.440	902	0.463	924	0.484	945	—	—	—	—							

Table 153. Unit fan performance EXH (continued)

Model	External Static Pressure																			
			0.00		0.05		0.10		0.15		0.20		0.25		0.30		0.35		0.40	
	Profile	CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM
EXHF060	A	1870	0.291	618	0.356	664	0.418	709	0.475	750	0.529	790	0.580	827	0.629	862	0.676	895	0.722	926
	B	1700	0.239	583	0.299	629	0.353	673	0.403	716	0.450	755	0.492	793	0.533	829	0.570	862	0.606	893
	C	1530	0.161	550	0.218	596	0.269	640	0.316	681	0.359	721	0.398	758	0.433	793	0.465	827	0.495	858
	D	1360	0.064	523	0.123	567	0.176	609	0.224	649	0.267	688	0.305	724	0.340	758	0.371	790	0.400	820
			0.45		0.50		0.55		0.60		0.65		0.70		0.75		0.80			
	Profile	CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM		
EXHF060	A	1870	0.766	954	0.810	981	0.855	1005	0.899	1028	0.945	1048	0.993	1067	—	—	—	—		
	B	1700	0.640	923	0.674	950	0.707	976	0.740	999	0.773	1021	0.808	1041	—	—	—	—		
	C	1530	0.523	887	0.550	915	0.576	940	0.601	964	0.626	986	0.652	1006	—	—	—	—		
	D	1360	0.426	849	0.450	875	0.472	900	0.494	923	0.515	944	0.536	964	—	—	—	—		
			0.00		0.05		0.10		0.15		0.20		0.25		0.30		0.35		0.40	
	Profile	CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM
EXHF070	A	2299	0.797	855	0.817	866	0.838	877	0.859	889	0.881	902	0.903	916	0.926	931	0.948	946	0.969	963
	B	2090	0.617	790	0.644	807	0.672	825	0.702	843	0.732	862	0.764	882	0.796	902	0.827	922	0.859	944
	C	1881	0.434	718	0.462	742	0.493	766	0.525	791	0.560	815	0.595	840	0.631	865	0.668	890	0.706	916
	D	1672	0.317	640	0.337	670	0.360	700	0.385	729	0.412	759	0.442	788	0.473	817	0.505	845	0.538	874
			0.45		0.50		0.55		0.60		0.65		0.70		0.75		0.80			
	Profile	CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM		
EXHF070	A	2299	0.990	980	1.009	999	1.027	1018	1.043	1038	1.058	1059	1.070	1081	—	—	—	—		
	B	2090	0.891	965	0.921	988	0.951	1011	0.980	1034	1.007	1059	1.032	1083	—	—	—	—		
	C	1881	0.743	941	0.781	967	0.818	993	0.854	1020	0.890	1046	0.924	1073	—	—	—	—		
	D	1672	0.573	902	0.607	930	0.643	958	0.678	986	0.713	1013	0.747	1041	—	—	—	—		

Table 154. Unit fan performance DXH

Model	External Static Pressure																			
			0.00		0.05		0.10		0.15		0.20		0.25		0.30		0.35		0.40	
	Profile	CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM
DXHF024	A	836	0.180	824	0.190	851	0.200	878	0.209	903	0.218	928	0.228	952	0.237	975	0.246	997	0.254	1019
	B	760	0.136	756	0.145	787	0.155	817	0.164	846	0.174	874	0.183	901	0.192	927	0.201	953	0.209	977
	C	684	0.096	683	0.106	718	0.115	752	0.124	784	0.132	815	0.141	845	0.150	874	0.158	902	0.166	929
	D	608	0.072	620	0.080	658	0.089	695	0.097	730	0.104	764	0.112	796	0.120	827	0.128	856	0.135	885
			0.45		0.50		0.55		0.60		0.65		0.70		0.75		0.80			
	Profile	CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM		
DXHF024	A	836	0.263	1041	0.272	1062	0.280	1083	0.289	1103	0.297	1123	0.306	1143	0.314	1163	0.323	1184		
	B	760	0.218	1001	0.227	1025	0.235	1047	0.244	1070	0.252	1092	0.261	1114	0.270	1135	0.278	1157		
	C	684	0.175	955	0.183	980	0.191	1005	0.199	1029	0.208	1052	0.216	1075	0.224	1097	0.233	1119		
	D	608	0.143	912	0.150	938	0.158	964	0.165	988	0.173	1012	0.181	1035	0.188	1057	0.196	1078		
			0.00		0.05		0.10		0.15		0.20		0.25		0.30		0.35		0.40	
	Profile	CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM
DXHF036	A	1254	0.276	749	0.296	776	0.315	802	0.333	826	0.351	850	0.369	872	0.386	894	0.403	915	0.420	935
	B	1140	0.200	679	0.218	708	0.235	736	0.252	762	0.269	787	0.285	812	0.301	835	0.317	858	0.333	880
	C	1026	0.145	618	0.161	649	0.177	679	0.193	708	0.208	735	0.223	762	0.237	787	0.252	812	0.266	835
	D	912	0.112	560	0.126	594	0.140	627	0.154	659	0.167	689	0.180	718	0.193	746	0.207	773	0.220	799
			0.45		0.50		0.55		0.60		0.65		0.70		0.75		0.80			
	Profile	CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM		
DXHF036	A	1254	0.436	955	0.453	974	0.470	993	0.486	1012	0.503	1030	0.520	1049	—	—	—	—		
	B	1140	0.349	901	0.364	922	0.380	942	0.396	962	0.412	982	0.429	1002	—	—	—	—		
	C	1026	0.281	859	0.295	881	0.310	903	0.325	925	0.341	947	0.357	968	—	—	—	—		
	D	912	0.233	824	0.246	849	0.260	873	0.274	897	0.289	920	0.304	943	—	—	—	—		
			0.00		0.05		0.10		0.15		0.20		0.25		0.30		0.35		0.40	
	Profile	CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM
DXHF048	A	1672	0.275	618	0.313	657	0.351	695	0.388	730	0.424	764	0.459	796	0.493	826	0.526	854	0.558	881
	B	1520	0.206	570	0.242	612	0.278	652	0.313	690	0.348	726	0.382	761	0.416	793	0.448	824	0.480	853
	C	1368	0.157	530	0.189	574	0.222	616	0.254	656	0.286	694	0.317	730	0.348	764	0.378	796	0.408	826
	D	1216	0.129	493	0.156	539	0.183	582	0.210	623	0.237	662	0.264	699	0.291	733	0.317	766	0.343	797

Table 154. Unit fan performance DXH (continued)

Model	External Static Pressure																			
			0.45		0.50		0.55		0.60		0.65		0.70		0.75		0.80			
	Profile	CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM		
DXHF048	A	1672	0.588	907	0.618	931	0.646	954	0.672	975	0.697	996	0.720	1015	—	—	—	—		
	B	1520	0.511	880	0.540	906	0.569	930	0.596	954	0.622	975	0.647	996	—	—	—	—		
	C	1368	0.437	854	0.465	881	0.492	907	0.519	930	0.544	953	0.568	974	—	—	—	—		
	D	1216	0.368	826	0.393	853	0.417	878	0.440	902	0.463	924	0.484	945	—	—	—	—		
			0.00		0.05		0.10		0.15		0.20		0.25		0.30		0.35		0.40	
	Profile	CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM
DXHF060	A	1870	0.291	618	0.356	664	0.418	709	0.475	750	0.529	790	0.580	827	0.629	862	0.676	895	0.722	926
	B	1700	0.239	583	0.299	629	0.353	673	0.403	716	0.450	755	0.492	793	0.533	829	0.570	862	0.606	893
	C	1530	0.161	550	0.218	596	0.269	640	0.316	681	0.359	721	0.398	758	0.433	793	0.465	827	0.495	858
	D	1360	0.064	523	0.123	567	0.176	609	0.224	649	0.267	688	0.305	724	0.340	758	0.371	790	0.400	820
			0.45		0.50		0.55		0.60		0.65		0.70		0.75		0.80			
	Profile	CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM		
DXHF060	A	1870	0.766	954	0.810	981	0.855	1005	0.899	1028	0.945	1048	0.993	1067	—	—	—	—		
	B	1700	0.640	923	0.674	950	0.707	976	0.740	999	0.773	1021	0.808	1041	—	—	—	—		
	C	1530	0.523	887	0.550	915	0.576	940	0.601	964	0.626	986	0.652	1006	—	—	—	—		
	D	1360	0.426	849	0.450	875	0.472	900	0.494	923	0.515	944	0.536	964	—	—	—	—		
			0.00		0.05		0.10		0.15		0.20		0.25		0.30		0.35		0.40	
	Profile	CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM
DXHF070	A	2299	0.797	855	0.817	866	0.838	877	0.859	889	0.881	902	0.903	916	0.926	931	0.948	946	0.969	963
	B	2090	0.617	790	0.644	807	0.672	825	0.702	843	0.732	862	0.764	882	0.796	902	0.827	922	0.859	944
	C	1881	0.434	718	0.462	742	0.493	766	0.525	791	0.560	815	0.595	840	0.631	865	0.668	890	0.706	916
	D	1672	0.317	640	0.337	670	0.360	700	0.385	729	0.412	759	0.442	788	0.473	817	0.505	845	0.538	874
			0.45		0.50		0.55		0.60		0.65		0.70		0.75		0.80			
	Profile	CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM		
DXHF070	A	2299	0.990	980	1.009	999	1.027	1018	1.043	1038	1.058	1059	1.070	1081	—	—	—	—		
	B	2090	0.891	965	0.921	988	0.951	1011	0.980	1034	1.007	1059	1.032	1083	—	—	—	—		
	C	1881	0.743	941	0.781	967	0.818	993	0.854	1020	0.890	1046	0.924	1073	—	—	—	—		
	D	1672	0.573	902	0.607	930	0.643	958	0.678	986	0.713	1013	0.747	1041	—	—	—	—		

ECM Control Board

Horizontal - Units with Deluxe 24V or Tracer®ZN524 controls

For horizontal sizes EXHF006-070 and DXHF024-070, the ECM is programmed for constant CFM over a range of static pressures. The DIP switch on the ECM control board allows for a quick fan speed adjustment to optimize unit performance. The factory default setting is Profile B.

Figure 12. ECM control board

To adjust the cfm, set the DIP switch located in the control box to the desired profile setting.

Profile A = 110% of rated airflow

Profile B = 100% of rated airflow

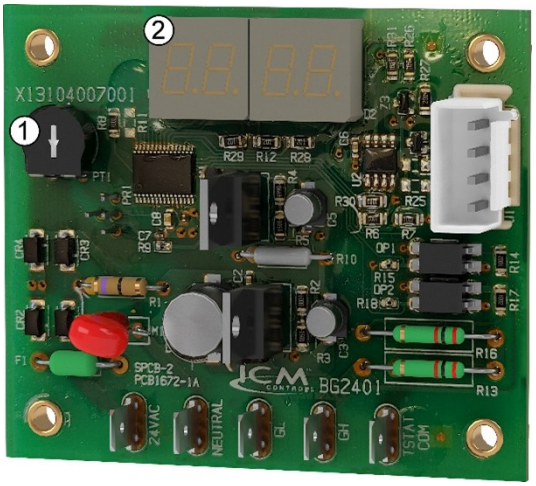
Profile C = 90% of rated airflow

Profile D = 80% of rated airflow

Vertical - Units with Deluxe 24V or Tracer® ZN524 controls

For vertical sizes EXVG009-070 and DXVG024-070, the ECM is programmed for constant torque and delivers airflow similar to a PSC motor while operating at a higher efficiency.

Figure 13. ECM control board



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

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.

Table 155. Unit fan performance EXVG009

External Static Pressure																		
	0.00		0.05		0.10		0.15		0.20		0.25		0.30		0.35		0.40	
CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM
191	0.014	340	0.015	408	0.017	473	0.020	534	0.022	592	0.026	647	0.029	698	0.033	747	0.038	793
200	0.014	345	0.015	412	0.017	477	0.020	538	0.023	595	0.026	650	0.030	701	0.034	750	0.038	796
214	0.014	351	0.016	419	0.018	483	0.020	543	0.023	600	0.027	654	0.031	706	0.035	754	0.040	800
228	0.014	358	0.016	425	0.018	489	0.021	549	0.024	606	0.028	659	0.032	710	0.036	759	0.041	804
242	0.014	366	0.016	432	0.018	495	0.021	555	0.025	611	0.029	665	0.033	715	0.038	763	0.043	809
257	0.015	374	0.017	440	0.019	502	0.022	561	0.026	617	0.030	670	0.034	721	0.039	768	0.044	814
271	0.015	382	0.017	447	0.020	509	0.023	568	0.027	623	0.031	676	0.036	726	0.041	773	0.046	818
285	0.016	389	0.018	454	0.021	516	0.024	574	0.028	629	0.032	682	0.037	732	0.043	779	0.048	823
299	0.016	398	0.019	462	0.022	523	0.025	581	0.029	636	0.034	688	0.039	737	0.044	784	0.050	828
314	0.017	407	0.020	470	0.023	531	0.026	588	0.031	643	0.035	694	0.041	743	0.046	790	0.052	834
342	0.019	424	0.022	486	0.025	546	0.029	602	0.034	656	0.039	707	0.044	756	0.050	802	0.057	845
	0.45		0.50		0.55		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	kW	RPM	kW	RPM	kW	RPM
191	0.042	837	0.047	878	0.051	917	0.056	954	0.061	988	0.065	1021	0.069	1052	0.073	1082	0.077	1110
200	0.043	839	0.048	881	0.052	919	0.057	956	0.062	991	0.067	1023	0.071	1055	0.075	1084	0.079	1112
214	0.045	843	0.049	884	0.054	923	0.060	960	0.065	994	0.069	1027	0.074	1058	0.079	1088	0.083	1116
228	0.046	847	0.051	888	0.057	927	0.062	963	0.067	998	0.072	1031	0.077	1062	0.082	1092	0.087	1120
242	0.048	852	0.053	892	0.059	931	0.064	967	0.070	1002	0.075	1035	0.080	1066	0.085	1096	0.090	1125
257	0.050	856	0.056	897	0.061	935	0.067	972	0.073	1006	0.078	1039	0.084	1071	0.089	1101	0.094	1129
271	0.052	861	0.058	901	0.064	940	0.070	976	0.076	1011	0.081	1044	0.087	1075	0.093	1105	0.098	1134
285	0.054	866	0.060	906	0.066	944	0.072	980	0.078	1015	0.085	1048	0.091	1079	0.096	1110	0.102	1138
299	0.056	871	0.062	911	0.069	949	0.075	985	0.081	1020	0.088	1052	0.094	1084	0.100	1114	0.106	1143
314	0.058	876	0.065	916	0.071	954	0.078	990	0.085	1025	0.091	1057	0.098	1089	0.104	1119	0.110	1149
342	0.063	887	0.070	926	0.077	964	0.084	1000	0.091	1034	0.098	1067	0.105	1099	0.112	1129	0.119	1159
	0.90		0.95		1.00		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	kW	RPM	kW	RPM	kW	RPM
191	0.081	1136	0.084	1162	0.086	1186	0.088	1210	0.090	1233	0.090	1255	0.090	1277	0.089	1298	0.088	1319
200	0.083	1139	0.086	1165	0.089	1189	0.091	1213	0.093	1236	0.094	1258	0.094	1280	0.093	1302	0.092	1324
214	0.087	1143	0.090	1169	0.093	1194	0.096	1218	0.098	1241	0.099	1264	0.099	1287	0.099	1309	0.098	1331
228	0.091	1147	0.095	1174	0.098	1199	0.101	1223	0.103	1247	0.104	1270	0.105	1293	0.105	1315	0.104	1338
242	0.095	1152	0.099	1178	0.102	1204	0.105	1228	0.108	1252	0.110	1276	0.111	1299	0.111	1322	0.111	1345
257	0.099	1157	0.103	1183	0.107	1209	0.111	1234	0.114	1259	0.116	1283	0.117	1306	0.118	1330	0.118	1353
271	0.103	1162	0.108	1188	0.112	1214	0.116	1240	0.119	1264	0.121	1289	0.123	1313	0.124	1337	0.125	1361
285	0.107	1166	0.112	1193	0.117	1220	0.121	1245	0.124	1270	0.127	1295	0.129	1320	0.131	1344	0.131	1368
299	0.112	1171	0.117	1199	0.122	1225	0.126	1251	0.130	1276	0.133	1301	0.135	1326	0.137	1351	0.138	1376

Table 155. Unit fan performance EXVG009 (continued)

External Static Pressure																		
314	0.116	1177	0.122	1204	0.127	1231	0.132	1257	0.136	1283	–	–	–	–	–	–	–	–
342	0.125	1187	0.131	1215	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	1.35		**1.40**		**1.45**		**1.50**		**1.55**		**1.60**		**1.65**		**1.70**		**1.75**	
CFM	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**
191	0.103	1361	0.100	1383	–	–	–	–	–	–	–	–	–	–	–	–	–	–
200	0.110	1368	0.107	1392	–	–	–	–	–	–	–	–	–	–	–	–	–	–
214	0.117	1377	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
228	0.124	1385	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
242	0.131	1393	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

Table 156. Unit fan performance EXVG012

External Static Pressure																		
	0.00		**0.05**		**0.10**		**0.15**		**0.20**		**0.25**		**0.30**		**0.35**		**0.40**	
CFM	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**
255	0.015	373	0.017	439	0.019	501	0.022	560	0.026	616	0.030	670	0.034	720	0.039	768	0.044	813
266	0.015	379	0.017	444	0.019	506	0.023	565	0.026	621	0.031	674	0.035	724	0.040	772	0.046	817
285	0.016	389	0.018	454	0.021	516	0.024	574	0.028	629	0.032	682	0.037	732	0.043	779	0.048	823
304	0.017	401	0.019	465	0.022	525	0.025	583	0.030	638	0.034	690	0.039	739	0.045	786	0.051	830
323	0.018	412	0.020	475	0.023	536	0.027	593	0.032	647	0.036	698	0.042	747	0.048	794	0.054	838
342	0.019	424	0.022	486	0.025	546	0.029	602	0.034	656	0.039	707	0.044	756	0.050	802	0.057	845
361	0.021	436	0.024	498	0.027	557	0.031	613	0.036	666	0.041	716	0.047	764	0.053	810	0.060	853
380	0.023	448	0.026	509	0.029	568	0.034	623	0.039	675	0.044	725	0.050	773	0.057	818	0.063	861
399	0.025	461	0.028	521	0.032	579	0.036	634	0.041	686	0.047	735	0.053	782	0.060	827	0.067	869
418	0.027	474	0.030	534	0.034	591	0.039	645	0.044	696	0.050	745	0.057	791	0.064	836	0.071	878
456	0.032	501	0.036	559	0.040	615	0.045	667	0.051	717	0.057	765	0.064	811	0.072	854	0.079	896
	0.45		**0.50**		**0.55**		**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**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**
255	0.050	856	0.055	896	0.061	935	0.067	971	0.072	1006	0.078	1039	0.083	1070	0.089	1100	0.094	1129
266	0.051	859	0.057	900	0.063	938	0.069	974	0.075	1009	0.080	1042	0.086	1073	0.092	1103	0.097	1132
285	0.054	866	0.060	906	0.066	944	0.072	980	0.078	1015	0.085	1048	0.091	1079	0.096	1110	0.102	1138
304	0.057	872	0.063	912	0.070	950	0.076	987	0.083	1021	0.089	1054	0.095	1086	0.102	1116	0.108	1145
323	0.060	879	0.067	919	0.073	957	0.080	993	0.087	1028	0.094	1061	0.100	1092	0.107	1123	0.113	1152
342	0.063	887	0.070	926	0.077	964	0.084	1000	0.091	1034	0.098	1067	0.105	1099	0.112	1129	0.119	1159
361	0.067	894	0.074	934	0.081	971	0.089	1007	0.096	1041	0.103	1074	0.111	1106	0.118	1136	0.125	1166
380	0.071	902	0.078	941	0.085	978	0.093	1014	0.101	1048	0.109	1081	0.116	1113	0.124	1144	0.131	1173
399	0.074	910	0.082	949	0.090	986	0.098	1022	0.106	1056	0.114	1089	0.122	1120	0.130	1151	0.137	1181
418	0.079	918	0.086	957	0.094	994	0.103	1029	0.111	1063	0.119	1096	0.128	1128	0.136	1158	0.144	1188
456	0.087	935	0.096	973	0.104	1010	0.113	1045	0.122	1079	0.131	1111	0.140	1143	0.149	1174	0.157	1204
	0.90		**0.95**		**1.00**		**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**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**
255	0.098	1156	0.103	1183	0.107	1208	0.110	1233	0.113	1258	0.115	1282	0.116	1305	0.117	1329	0.117	1352
266	0.102	1160	0.106	1187	0.110	1212	0.114	1238	0.117	1262	0.119	1286	0.121	1310	0.122	1334	0.122	1358
285	0.107	1166	0.112	1193	0.117	1220	0.121	1245	0.124	1270	0.127	1295	0.129	1320	0.131	1344	0.131	1368

Table 156. Unit fan performance EXVG012 (continued)

External Static Pressure																		
304	0.113	1173	0.119	1200	0.123	1227	0.128	1253	0.132	1278	0.135	1304	0.137	1329	0.139	1354	0.140	1379
323	0.119	1180	0.125	1208	0.130	1234	0.135	1261	0.139	1287	0.143	1313	0.146	1338	0.148	1364	0.150	1390
342	0.125	1187	0.131	1215	0.137	1242	0.142	1269	0.147	1295	0.151	1322	0.154	1348	0.157	1374	0.159	1400
361	0.132	1195	0.138	1223	0.144	1250	0.150	1277	0.155	1304	0.159	1331	0.163	1357	0.166	1384	–	–
380	0.138	1202	0.145	1230	0.151	1258	0.157	1286	0.163	1313	0.167	1340	0.172	1367	0.175	1395	–	–
399	0.145	1210	0.152	1238	0.159	1266	0.165	1294	0.171	1322	0.176	1349	0.181	1377	–	–	–	–
418	0.152	1218	0.159	1246	0.166	1275	0.173	1303	0.179	1331	0.185	1359	–	–	–	–	–	–
456	0.166	1234	0.174	1263	–	–	–	–	–	–	–	–	–	–	–	–	–	–

Table 157. Unit fan performance EXVG015

External Static Pressure																		
	0.00		**0.05**		**0.10**		**0.15**		**0.20**		**0.25**		**0.30**		**0.35**		**0.40**	
CFM	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**
255	0.015	373	0.017	439	0.019	501	0.022	560	0.026	616	0.030	670	0.034	720	0.039	768	0.044	813
266	0.015	379	0.017	444	0.019	506	0.023	565	0.026	621	0.031	674	0.035	724	0.040	772	0.046	817
285	0.016	389	0.018	454	0.021	516	0.024	574	0.028	629	0.032	682	0.037	732	0.043	779	0.048	823
304	0.017	401	0.019	465	0.022	525	0.025	583	0.030	638	0.034	690	0.039	739	0.045	786	0.051	830
323	0.018	412	0.020	475	0.023	536	0.027	593	0.032	647	0.036	698	0.042	747	0.048	794	0.054	838
342	0.019	424	0.022	486	0.025	546	0.029	602	0.034	656	0.039	707	0.044	756	0.050	802	0.057	845
361	0.021	436	0.024	498	0.027	557	0.031	613	0.036	666	0.041	716	0.047	764	0.053	810	0.060	853
380	0.023	448	0.026	509	0.029	568	0.034	623	0.039	675	0.044	725	0.050	773	0.057	818	0.063	861
399	0.025	461	0.028	521	0.032	579	0.036	634	0.041	686	0.047	735	0.053	782	0.060	827	0.067	869
418	0.027	474	0.030	534	0.034	591	0.039	645	0.044	696	0.050	745	0.057	791	0.064	836	0.071	878
456	0.032	501	0.036	559	0.040	615	0.045	667	0.051	717	0.057	765	0.064	811	0.072	854	0.079	896
	0.45		**0.50**		**0.55**		**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**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**
255	0.050	856	0.055	896	0.061	935	0.067	971	0.072	1006	0.078	1039	0.083	1070	0.089	1100	0.094	1129
266	0.051	859	0.057	900	0.063	938	0.069	974	0.075	1009	0.080	1042	0.086	1073	0.092	1103	0.097	1132
285	0.054	866	0.060	906	0.066	944	0.072	980	0.078	1015	0.085	1048	0.091	1079	0.096	1110	0.102	1138
304	0.057	872	0.063	912	0.070	950	0.076	987	0.083	1021	0.089	1054	0.095	1086	0.102	1116	0.108	1145
323	0.060	879	0.067	919	0.073	957	0.080	993	0.087	1028	0.094	1061	0.100	1092	0.107	1123	0.113	1152
342	0.063	887	0.070	926	0.077	964	0.084	1000	0.091	1034	0.098	1067	0.105	1099	0.112	1129	0.119	1159
361	0.067	894	0.074	934	0.081	971	0.089	1007	0.096	1041	0.103	1074	0.111	1106	0.118	1136	0.125	1166
380	0.071	902	0.078	941	0.085	978	0.093	1014	0.101	1048	0.109	1081	0.116	1113	0.124	1144	0.131	1173
399	0.074	910	0.082	949	0.090	986	0.098	1022	0.106	1056	0.114	1089	0.122	1120	0.130	1151	0.137	1181
418	0.079	918	0.086	957	0.094	994	0.103	1029	0.111	1063	0.119	1096	0.128	1128	0.136	1158	0.144	1188
456	0.087	935	0.096	973	0.104	1010	0.113	1045	0.122	1079	0.131	1111	0.140	1143	0.149	1174	0.157	1204
	0.90		**0.95**		**1.00**		**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**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**
255	0.098	1156	0.103	1183	0.107	1208	0.110	1233	0.113	1258	0.115	1282	0.116	1305	0.117	1329	0.117	1352
266	0.102	1160	0.106	1187	0.110	1212	0.114	1238	0.117	1262	0.119	1286	0.121	1310	0.122	1334	0.122	1358
285	0.107	1166	0.112	1193	0.117	1220	0.121	1245	0.124	1270	0.127	1295	0.129	1320	0.131	1344	0.131	1368
304	0.113	1173	0.119	1200	0.123	1227	0.128	1253	0.132	1278	0.135	1304	0.137	1329	0.139	1354	0.140	1379

Table 157. Unit fan performance EXVG015 (continued)

External Static Pressure																		
323	0.119	1180	0.125	1208	0.130	1234	0.135	1261	0.139	1287	0.143	1313	0.146	1338	0.148	1364	0.150	1390
342	0.125	1187	0.131	1215	0.137	1242	0.142	1269	0.147	1295	0.151	1322	0.154	1348	0.157	1374	0.159	1400
361	0.132	1195	0.138	1223	0.144	1250	0.150	1277	0.155	1304	0.159	1331	0.163	1357	0.166	1384	–	–
380	0.138	1202	0.145	1230	0.151	1258	0.157	1286	0.163	1313	0.167	1340	0.172	1367	0.175	1395	–	–
399	0.145	1210	0.152	1238	0.159	1266	0.165	1294	0.171	1322	0.176	1349	0.181	1377	–	–	–	–
418	0.152	1218	0.159	1246	0.166	1275	0.173	1303	0.179	1331	0.185	1359	–	–	–	–	–	–
456	0.166	1234	0.174	1263	–	–	–	–	–	–	–	–	–	–	–	–	–	–

Table 158. Unit fan performance EXVG018

External Static Pressure																		
	0.00		0.05		0.10		0.15		0.20		0.25		0.30		0.35		0.40	
CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM
382	0.012	353	0.018	407	0.023	459	0.029	509	0.035	557	0.041	602	0.047	646	0.053	688	0.060	728
399	0.014	359	0.019	413	0.024	465	0.030	515	0.036	562	0.042	608	0.049	651	0.056	693	0.062	732
428	0.016	370	0.021	424	0.027	475	0.033	525	0.039	572	0.046	617	0.052	660	0.059	701	0.066	740
456	0.018	381	0.024	434	0.030	485	0.036	534	0.042	581	0.049	625	0.056	668	0.063	709	0.071	748
485	0.020	393	0.026	445	0.032	496	0.039	544	0.046	590	0.053	634	0.060	677	0.067	717	0.075	756
513	0.023	404	0.029	456	0.036	506	0.042	554	0.049	599	0.057	643	0.064	685	0.072	725	0.080	764
542	0.026	415	0.032	467	0.039	516	0.046	564	0.053	609	0.061	652	0.069	694	0.077	734	0.085	772
570	0.029	427	0.036	478	0.043	527	0.050	574	0.057	618	0.065	661	0.073	703	0.081	742	0.090	780
599	0.033	438	0.039	489	0.046	537	0.054	584	0.062	628	0.070	671	0.078	712	0.087	751	0.095	788
627	0.036	450	0.043	500	0.051	548	0.058	594	0.066	638	0.075	680	0.083	720	0.092	759	0.101	796
684	0.045	473	0.052	522	0.060	569	0.068	614	0.076	657	0.085	699	0.094	738	0.104	776	0.114	813
	0.45		0.50		0.55		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	kW	RPM	kW	RPM	kW	RPM
382	0.067	766	0.074	802	0.081	837	0.088	870	0.095	902	0.102	932	0.110	962	0.117	989	0.124	1016
399	0.069	770	0.076	806	0.083	841	0.091	874	0.098	906	0.106	936	0.113	965	0.121	993	0.128	1020
428	0.074	778	0.081	814	0.089	848	0.096	881	0.104	913	0.112	943	0.120	972	0.128	1000	0.136	1027
456	0.078	785	0.086	821	0.094	855	0.102	888	0.110	920	0.118	950	0.126	979	0.135	1006	0.143	1033
485	0.083	793	0.091	829	0.099	863	0.107	895	0.116	927	0.125	957	0.133	985	0.142	1013	0.151	1040
513	0.088	801	0.096	836	0.105	870	0.113	902	0.122	933	0.131	963	0.140	992	0.149	1019	0.159	1046
542	0.093	809	0.102	844	0.111	877	0.120	909	0.129	940	0.138	970	0.148	999	0.157	1026	0.167	1053
570	0.099	816	0.108	851	0.117	884	0.126	916	0.136	947	0.145	977	0.155	1005	0.165	1032	0.175	1059
599	0.105	824	0.114	859	0.123	892	0.133	924	0.143	954	0.153	983	0.163	1012	0.173	1039	0.184	1066
627	0.111	832	0.120	866	0.130	899	0.140	931	0.150	961	0.161	990	0.171	1018	0.182	1046	0.193	1072
684	0.124	848	0.134	881	0.144	914	0.155	945	0.166	975	0.177	1004	0.188	1032	0.200	1059	0.211	1085
	0.90		0.95		1.00		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	kW	RPM	kW	RPM	kW	RPM
382	0.132	1042	0.139	1067	0.147	1091	0.154	1114	0.161	1136	0.169	1158	0.176	1179	0.183	1199	0.190	1219
399	0.136	1046	0.144	1071	0.152	1095	0.159	1118	0.167	1140	0.175	1162	0.182	1183	0.190	1204	0.197	1224
428	0.144	1052	0.152	1077	0.160	1101	0.168	1124	0.176	1147	0.185	1169	0.193	1190	0.201	1211	0.208	1232
456	0.152	1059	0.160	1084	0.169	1108	0.177	1131	0.186	1153	0.194	1175	0.203	1197	0.211	1218	0.220	1239
485	0.160	1065	0.169	1090	0.178	1114	0.187	1138	0.196	1160	0.205	1182	0.214	1204	0.223	1225	0.232	1246

Table 158. Unit fan performance EXVG018 (continued)

External Static Pressure																		
513	0.168	1072	0.177	1097	0.187	1121	0.196	1144	0.206	1167	0.215	1189	0.225	1211	0.234	1232	0.243	1253
542	0.177	1078	0.186	1103	0.196	1127	0.206	1151	0.216	1174	0.226	1196	0.236	1218	0.246	1240	0.256	1261
570	0.185	1085	0.195	1109	0.206	1134	0.216	1157	0.226	1180	0.237	1203	0.247	1225	0.258	1246	0.268	1268
599	0.194	1091	0.205	1116	0.216	1140	0.227	1164	0.237	1187	0.248	1209	0.259	1232	0.270	1254	0.281	1275
627	0.204	1097	0.215	1122	0.226	1146	0.237	1170	0.248	1193	0.260	1216	0.271	1238	0.282	1260	0.294	1282
684	0.223	1110	0.235	1135	0.247	1159	0.259	1183	0.271	1206	0.284	1229	-	-	-	-	-	-
	1.35		**1.40**		**1.45**		**1.50**		**1.55**		**1.60**		**1.65**		**1.70**		**1.75**	
CFM	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**
382	0.197	1239	0.204	1259	0.211	1278	0.218	1297	0.224	1317	0.231	1336	0.237	1355	0.243	1375	0.248	1395
399	0.204	1244	0.212	1264	0.219	1283	0.226	1303	0.233	1322	0.239	1342	0.246	1361	0.252	1381	-	-
428	0.216	1252	0.224	1272	0.232	1292	0.239	1311	0.247	1331	0.254	1351	0.261	1371	0.268	1392	-	-
456	0.228	1259	0.236	1280	0.245	1300	0.253	1320	0.261	1340	0.268	1360	0.276	1381	-	-	-	-
485	0.241	1267	0.249	1288	0.258	1308	0.267	1328	0.275	1349	0.284	1370	0.292	1391	-	-	-	-
513	0.253	1274	0.262	1295	0.271	1316	0.281	1337	0.290	1358	0.298	1379	0.307	1400	-	-	-	-
542	0.266	1282	0.276	1303	0.285	1324	0.295	1345	0.305	1367	-	-	-	-	-	-	-	-
570	0.279	1289	0.289	1311	0.299	1332	-	-	-	-	-	-	-	-	-	-	-	-
599	0.292	1297	0.303	1318	-	-	-	-	-	-	-	-	-	-	-	-	-	-
627	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
684	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 159. Unit fan performance EXVG024

External Static Pressure																		
	0.00		**0.05**		**0.10**		**0.15**		**0.20**		**0.25**		**0.30**		**0.35**		**0.40**	
CFM	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**
509	0.023	402	0.029	454	0.035	504	0.042	552	0.049	598	0.056	642	0.063	684	0.071	724	0.079	763
532	0.025	411	0.031	463	0.038	513	0.045	560	0.052	606	0.059	649	0.067	691	0.075	731	0.083	769
570	0.029	427	0.036	478	0.043	527	0.050	574	0.057	618	0.065	661	0.073	703	0.081	742	0.090	780
608	0.034	442	0.041	492	0.048	541	0.055	587	0.063	631	0.071	674	0.080	714	0.088	753	0.097	791
646	0.039	458	0.046	507	0.054	555	0.061	601	0.070	644	0.078	686	0.087	726	0.096	765	0.105	802
684	0.045	473	0.052	522	0.060	569	0.068	614	0.076	657	0.085	699	0.094	738	0.104	776	0.114	813
722	0.051	489	0.059	538	0.067	584	0.075	628	0.084	671	0.093	711	0.103	750	0.112	788	0.123	824
760	0.058	505	0.066	553	0.074	598	0.083	642	0.092	684	0.102	724	0.111	763	0.122	800	0.132	835
798	0.065	522	0.073	568	0.082	613	0.091	656	0.101	697	0.111	737	0.121	775	0.131	811	0.142	846
836	0.073	538	0.082	584	0.091	628	0.100	670	0.110	711	0.120	750	0.131	787	0.142	823	0.153	858
912	0.091	572	0.100	616	0.110	659	0.120	699	0.131	739	0.142	776	0.153	813	0.165	848	0.177	881
	0.45		**0.50**		**0.55**		**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**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**
509	0.087	800	0.095	835	0.104	869	0.113	901	0.121	932	0.130	962	0.139	991	0.148	1018	0.157	1045
532	0.091	806	0.100	841	0.109	875	0.118	907	0.127	938	0.136	968	0.145	996	0.154	1024	0.164	1050
570	0.099	816	0.108	851	0.117	884	0.126	916	0.136	947	0.145	977	0.155	1005	0.165	1032	0.175	1059
608	0.106	827	0.116	861	0.125	894	0.135	926	0.145	956	0.155	986	0.166	1014	0.176	1041	0.187	1068
646	0.115	837	0.125	871	0.135	904	0.145	935	0.155	966	0.166	995	0.177	1023	0.188	1050	0.199	1076

Table 159. Unit fan performance EXVG024 (continued)

External Static Pressure																		
684	0.124	848	0.134	881	0.144	914	0.155	945	0.166	975	0.177	1004	0.188	1032	0.200	1059	0.211	1085
722	0.133	859	0.144	892	0.155	924	0.166	955	0.177	984	0.189	1013	0.200	1041	0.212	1068	0.225	1094
760	0.143	869	0.154	902	0.165	934	0.177	964	0.189	994	0.201	1022	0.213	1050	0.226	1076	0.238	1102
798	0.154	880	0.165	913	0.177	944	0.189	974	0.201	1003	0.214	1031	0.227	1059	0.240	1085	0.253	1111
836	0.165	891	0.177	923	0.189	954	0.202	984	0.214	1013	0.227	1041	0.241	1068	0.254	1094	0.268	1120
912	0.189	913	0.202	945	0.215	975	0.229	1004	0.243	1032	0.257	1059	0.271	1086	0.286	1112	0.300	1137
	0.90		**0.95**		**1.00**		**1.05**		**1.10**		**1.15**							
CFM	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**						
509	0.167	1071	0.176	1096	0.185	1120	0.195	1143	0.204	1166	0.214	1188						
532	0.173	1076	0.183	1101	0.193	1125	0.203	1148	0.212	1171	0.222	1194						
570	0.185	1085	0.195	1109	0.206	1134	0.216	1157	0.226	1180	-	-						
608	0.197	1093	0.208	1118	0.219	1142	0.230	1166	0.241	1189	-	-						
646	0.210	1102	0.221	1127	0.233	1151	0.244	1174	0.256	1198	-	-						
684	0.223	1110	0.235	1135	0.247	1159	0.259	1183	-	-	-	-						
722	0.237	1119	0.249	1144	0.262	1168	0.275	1192	-	-	-	-						
760	0.251	1128	0.264	1152	0.278	1176	0.291	1200	-	-	-	-						
798	0.266	1136	0.280	1161	0.294	1185	-	-	-	-	-	-						
836	0.282	1145	0.296	1169	0.311	1194	-	-	-	-	-	-						

Table 160. Unit fan performance EXVG030

External Static Pressure																		
	0.00		**0.05**		**0.10**		**0.15**		**0.20**		**0.25**		**0.30**		**0.35**		**0.40**	
CFM	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**
637	0.037	344	0.043	383	0.049	421	0.056	458	0.063	494	0.071	528	0.079	562	0.087	594	0.096	625
665	0.039	349	0.045	388	0.051	426	0.058	463	0.066	498	0.074	533	0.082	566	0.091	598	0.100	630
713	0.041	359	0.048	397	0.055	435	0.063	472	0.071	507	0.079	541	0.088	574	0.098	606	0.108	637
760	0.044	368	0.052	407	0.059	444	0.068	480	0.076	516	0.086	550	0.095	582	0.105	614	0.116	645
808	0.048	378	0.056	417	0.064	454	0.073	490	0.083	525	0.092	559	0.103	591	0.113	623	0.125	654
855	0.053	389	0.061	427	0.070	464	0.079	500	0.089	534	0.100	568	0.111	600	0.122	632	0.134	662
903	0.058	400	0.067	438	0.076	474	0.086	510	0.097	544	0.108	577	0.120	610	0.131	641	0.144	671
950	0.064	411	0.073	448	0.083	485	0.094	520	0.105	554	0.117	587	0.129	619	0.141	650	0.154	680
998	0.070	422	0.080	459	0.091	496	0.102	531	0.114	564	0.126	597	0.139	629	0.152	660	0.166	690
1045	0.077	434	0.088	471	0.099	507	0.111	541	0.124	575	0.137	607	0.150	639	0.164	669	0.178	699
1140	0.094	458	0.106	494	0.118	529	0.131	563	0.145	596	0.159	628	0.174	659	0.189	690	0.204	719
	0.45		**0.50**		**0.55**		**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**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**
637	0.106	656	0.115	685	0.126	714	0.136	741	0.147	768	0.158	794	0.169	819	0.180	843	0.192	867
665	0.110	660	0.120	689	0.131	718	0.141	745	0.152	772	0.164	798	0.175	823	0.187	847	0.199	870
713	0.118	667	0.129	697	0.140	725	0.151	752	0.163	779	0.175	804	0.187	829	0.199	853	0.212	876
760	0.127	675	0.138	704	0.150	732	0.161	759	0.174	786	0.186	811	0.199	836	0.212	860	0.225	883
808	0.136	683	0.148	712	0.160	740	0.173	767	0.185	793	0.199	818	0.212	843	0.225	867	0.239	890

Table 160. Unit fan performance EXVG030 (continued)

855	0.146	692	0.158	720	0.171	748	0.184	775	0.198	801	0.211	826	0.225	850	0.239	874	0.254	897
903	0.156	700	0.170	729	0.183	756	0.197	783	0.211	809	0.225	834	0.239	858	0.254	881	0.269	904
950	0.168	709	0.181	737	0.195	765	0.210	791	0.224	817	0.239	842	0.254	866	0.269	889	0.285	912
998	0.180	718	0.194	746	0.209	773	0.223	800	0.239	825	0.254	850	0.270	874	0.286	897	0.302	919
1045	0.192	728	0.207	755	0.222	782	0.238	808	0.254	834	0.270	858	0.286	882	0.302	905	0.319	927
1140	0.220	747	0.236	774	0.252	801	0.269	826	0.286	851	0.303	875	0.321	898	0.338	921	0.356	943
	0.90		**0.95**		**1.00**		**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**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**
637	0.204	889	0.216	912	0.228	933	0.240	954	0.252	974	0.265	994	0.277	1013	0.289	1031	0.302	1049
665	0.211	893	0.223	915	0.236	936	0.248	957	0.261	977	0.274	997	0.286	1016	0.299	1034	0.312	1052
713	0.225	899	0.237	921	0.250	942	0.264	963	0.277	983	0.290	1003	0.303	1022	0.317	1040	0.330	1058
760	0.238	905	0.252	927	0.265	948	0.279	969	0.293	989	0.307	1008	0.321	1027	0.335	1046	0.348	1064
808	0.253	912	0.267	934	0.281	955	0.296	975	0.310	995	0.324	1015	0.339	1034	0.353	1052	0.368	1070
855	0.268	919	0.283	941	0.298	962	0.312	982	0.327	1002	0.342	1021	0.357	1040	0.372	1058	0.388	1076
903	0.284	926	0.299	948	0.315	969	0.330	989	0.346	1008	0.361	1028	0.377	1046	0.393	1064	0.408	1082
950	0.301	934	0.316	955	0.332	976	0.348	996	0.365	1015	0.381	1034	0.397	1053	0.413	1071	0.429	1089
998	0.318	941	0.335	962	0.351	983	0.368	1003	0.384	1022	0.401	1041	0.418	1060	0.435	1078	0.452	1095
1045	0.336	949	0.353	970	0.370	990	0.387	1010	0.405	1029	0.422	1048	0.439	1066	0.457	1084	-	-
1140	0.374	964	0.392	985	0.411	1005	0.429	1025	-	-	-	-	-	-	-	-	-	-
	1.35		**1.40**		**1.45**		**1.50**		**1.55**		**1.60**		**1.65**		**1.70**		**1.75**	
CFM	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**
637	0.314	1067	0.326	1084	0.339	1101	0.351	1118	0.363	1134	0.374	1150	0.386	1165	0.398	1180	0.409	1196
665	0.325	1070	0.337	1087	0.350	1104	0.362	1121	0.375	1137	0.387	1153	0.399	1168	0.411	1184	0.422	1199
713	0.343	1076	0.357	1093	0.370	1110	0.383	1126	0.396	1142	0.408	1158	0.421	1174	0.433	1189	-	-
760	0.362	1081	0.376	1098	0.390	1115	0.403	1132	0.417	1148	0.430	1164	0.443	1179	0.456	1194	-	-
808	0.382	1087	0.397	1104	0.411	1121	0.425	1137	0.439	1153	0.453	1169	0.467	1185	0.480	1200	-	-
855	0.403	1093	0.417	1110	0.432	1127	0.447	1143	0.462	1159	0.476	1175	0.490	1191	-	-	-	-
903	0.424	1100	0.439	1117	0.455	1133	0.470	1149	0.485	1165	-	-	-	-	-	-	-	-
950	0.446	1106	0.462	1123	0.478	1139	-	-	-	-	-	-	-	-	-	-	-	-
998	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1045	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1140	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 161. Unit fan performance EXVG036

External Static Pressure																		
	0.00		**0.05**		**0.10**		**0.15**		**0.20**		**0.25**		**0.30**		**0.35**		**0.40**	
CFM	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**
764	0.045	369	0.052	408	0.060	445	0.068	481	0.077	516	0.086	550	0.096	583	0.106	615	0.117	646
798	0.047	376	0.055	415	0.063	452	0.072	488	0.081	523	0.091	557	0.101	589	0.112	621	0.123	652
855	0.053	389	0.061	427	0.070	464	0.079	500	0.089	534	0.100	568	0.111	600	0.122	632	0.134	662
912	0.059	402	0.068	440	0.078	476	0.088	512	0.099	546	0.110	579	0.121	611	0.133	643	0.146	673
969	0.066	415	0.076	453	0.086	489	0.097	524	0.109	558	0.121	591	0.133	623	0.146	654	0.159	684

Table 161. Unit fan performance EXVG036 (continued)

External Static Pressure																		
1026	0.074	429	0.085	466	0.096	502	0.108	537	0.120	571	0.132	603	0.145	635	0.159	665	0.173	695
1083	0.084	443	0.095	480	0.107	516	0.119	550	0.132	583	0.145	616	0.159	647	0.173	677	0.188	707
1140	0.094	458	0.106	494	0.118	529	0.131	563	0.145	596	0.159	628	0.174	659	0.189	690	0.204	719
1197	0.105	472	0.118	508	0.131	543	0.145	577	0.159	610	0.174	641	0.189	672	0.205	702	0.221	731
1254	0.117	487	0.131	523	0.145	557	0.160	591	0.175	623	0.190	655	0.206	685	0.223	714	0.239	743
1368	0.146	518	0.161	553	0.176	586	0.192	619	0.209	651	0.226	681	0.243	711	0.261	740	0.279	767
	0.45		**0.50**		**0.55**		**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**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**
764	0.127	676	0.139	705	0.150	733	0.162	760	0.175	786	0.187	812	0.200	836	0.213	860	0.226	884
798	0.134	682	0.146	710	0.158	738	0.170	765	0.183	792	0.196	817	0.209	841	0.223	865	0.236	888
855	0.146	692	0.158	720	0.171	748	0.184	775	0.198	801	0.211	826	0.225	850	0.239	874	0.254	897
912	0.159	702	0.172	730	0.185	758	0.199	784	0.213	810	0.228	835	0.242	859	0.257	883	0.272	906
969	0.172	713	0.186	741	0.200	768	0.215	795	0.230	820	0.245	845	0.260	869	0.276	892	0.292	915
1026	0.187	724	0.202	752	0.217	779	0.232	805	0.247	830	0.263	855	0.279	878	0.296	902	0.312	924
1083	0.203	735	0.218	763	0.234	790	0.250	815	0.266	840	0.283	865	0.299	888	0.316	911	0.334	933
1140	0.220	747	0.236	774	0.252	801	0.269	826	0.286	851	0.303	875	0.321	898	0.338	921	0.356	943
1197	0.238	759	0.254	786	0.272	812	0.289	837	0.307	862	0.325	885	0.343	909	0.361	931	0.380	953
1254	0.257	770	0.274	797	0.292	823	0.310	848	0.329	872	0.347	896	0.366	919	0.385	941	0.405	962
1368	0.298	794	0.317	820	0.336	846	0.356	870	0.376	894	0.396	917	0.417	939	0.437	961	0.458	982
	0.90		**0.95**		**1.00**		**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**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**
764	0.240	906	0.253	928	0.267	949	0.280	970	0.294	990	0.308	1009	0.322	1028	0.336	1046	0.350	1064
798	0.250	911	0.264	933	0.278	954	0.292	974	0.306	994	0.321	1013	0.335	1032	0.349	1051	0.364	1068
855	0.268	919	0.283	941	0.298	962	0.312	982	0.327	1002	0.342	1021	0.357	1040	0.372	1058	0.388	1076
912	0.287	928	0.303	949	0.318	970	0.334	990	0.349	1010	0.365	1029	0.381	1048	0.397	1066	0.412	1083
969	0.307	937	0.324	958	0.340	978	0.356	999	0.372	1018	0.389	1037	0.405	1056	0.422	1074	0.438	1091
1026	0.329	946	0.345	967	0.362	987	0.379	1007	0.396	1026	0.414	1045	0.431	1064	0.448	1082	0.465	1099
1083	0.351	955	0.368	976	0.386	996	0.404	1016	0.422	1035	0.439	1054	0.457	1072	0.475	1090	0.493	1107
1140	0.374	964	0.392	985	0.411	1005	0.429	1025	0.448	1044	0.466	1062	0.485	1080	0.503	1098	0.522	1115
1197	0.399	974	0.418	994	0.437	1014	0.456	1034	0.475	1053	0.494	1071	0.514	1089	0.533	1106	0.552	1124
1254	0.424	983	0.444	1004	0.464	1023	0.484	1043	0.503	1061	0.523	1079	0.543	1097	0.563	1115	0.583	1132
1368	0.479	1002	0.500	1022	0.521	1042	0.542	1060	0.564	1079	0.585	1097	0.607	1114	0.628	1131	-	-
	1.35		**1.40**		**1.45**		**1.50**		**1.55**		**1.60**		**1.65**		**1.70**			
CFM	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**		
764	0.364	1082	0.378	1099	0.391	1116	0.405	1132	0.419	1148	0.432	1164	0.445	1180	0.458	1195		
798	0.378	1086	0.392	1103	0.406	1120	0.420	1136	0.434	1152	0.448	1168	0.462	1184	0.475	1199		
855	0.403	1093	0.417	1110	0.432	1127	0.447	1143	0.462	1159	0.476	1175	0.490	1191	-	-		
912	0.428	1101	0.444	1118	0.459	1134	0.475	1151	0.490	1167	0.505	1182	0.520	1198	-	-		
969	0.455	1108	0.471	1125	0.487	1142	0.503	1158	0.519	1174	0.535	1190	-	-	-	-		
1026	0.482	1116	0.499	1133	0.516	1150	0.533	1166	0.550	1182	0.566	1197	-	-	-	-		
1083	0.511	1124	0.528	1141	0.546	1157	0.564	1173	0.581	1189	-	-	-	-	-	-		

Table 161. Unit fan performance EXVG036 (continued)

External Static Pressure																
1140	0.540	1132	0.559	1149	0.577	1165	0.595	1181	-	-	-	-	-	-	-	-
1197	0.571	1140	0.590	1157	0.609	1173	0.628	1189	-	-	-	-	-	-	-	-
1254	0.603	1148	0.623	1165	0.643	1181	0.663	1196	-	-	-	-	-	-	-	-
1368	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 162. Unit fan performance EXVG042

External Static Pressure																		
	0.00		0.05		0.10		0.15		0.20		0.25		0.30		0.35		0.40	
CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM
891	0.116	444	0.121	461	0.126	480	0.132	502	0.138	525	0.145	549	0.152	575	0.159	601	0.167	628
931	0.116	447	0.121	464	0.127	484	0.134	505	0.141	528	0.148	553	0.156	578	0.164	605	0.172	632
998	0.116	454	0.123	471	0.130	490	0.138	512	0.145	535	0.154	559	0.163	585	0.172	611	0.181	638
1064	0.118	461	0.126	478	0.134	497	0.143	519	0.152	542	0.161	566	0.171	592	0.181	618	0.192	646
1131	0.122	469	0.130	486	0.140	505	0.149	527	0.159	550	0.170	574	0.180	600	0.192	627	0.203	654
1197	0.126	478	0.136	495	0.146	514	0.157	535	0.168	558	0.179	583	0.191	609	0.203	635	0.216	662
1264	0.132	487	0.143	504	0.154	523	0.166	544	0.178	568	0.190	592	0.203	618	0.217	644	0.230	671
1330	0.139	496	0.151	513	0.163	532	0.176	554	0.189	577	0.203	601	0.216	627	0.231	653	0.246	680
1397	0.148	505	0.161	522	0.174	541	0.188	563	0.202	586	0.216	610	0.231	636	0.247	663	0.263	690
1463	0.157	514	0.171	531	0.185	550	0.200	572	0.215	595	0.231	619	0.247	645	0.263	671	0.280	698
1596	0.180	530	0.196	547	0.213	566	0.229	588	0.247	611	0.264	635	0.282	661	0.301	688	0.320	715
	0.45		0.50		0.55		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	kW	RPM	kW	RPM	kW	RPM
891	0.176	656	0.185	684	0.194	711	0.204	739	0.214	766	0.224	793	0.236	819	0.247	845	0.259	869
931	0.181	659	0.191	687	0.201	715	0.211	742	0.222	770	0.233	796	0.245	823	0.257	848	0.269	873
998	0.192	666	0.202	694	0.213	721	0.224	749	0.236	776	0.248	803	0.261	829	0.274	855	0.288	879
1064	0.203	673	0.214	701	0.226	728	0.239	756	0.252	783	0.265	810	0.279	836	0.293	862	0.307	887
1131	0.216	681	0.228	709	0.241	737	0.255	764	0.269	791	0.283	818	0.298	844	0.313	870	0.328	895
1197	0.229	690	0.243	717	0.257	745	0.272	773	0.286	800	0.302	827	0.318	853	0.334	878	0.351	903
1264	0.245	699	0.259	726	0.274	754	0.290	782	0.306	809	0.322	836	0.339	862	0.356	887	0.374	912
1330	0.261	708	0.277	736	0.293	763	0.309	791	0.326	818	0.344	845	0.362	871	0.380	897	0.399	921
1397	0.279	717	0.296	745	0.313	773	0.330	800	0.348	827	0.367	854	0.386	880	0.405	906	0.425	931
1463	0.298	726	0.315	754	0.334	781	0.352	809	0.371	836	0.391	863	0.411	889	0.431	915	0.452	939
1596	0.339	742	0.359	770	0.380	798	0.400	825	0.421	852	0.443	879	0.465	905	0.487	931	0.510	956
	0.90		0.95		1.00		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	kW	RPM	kW	RPM	kW	RPM
891	0.271	893	0.284	916	0.297	939	0.311	960	0.325	980	0.339	1000	0.354	1018	0.370	1036	0.386	1053
931	0.282	897	0.296	920	0.310	942	0.324	963	0.338	984	0.354	1003	0.369	1022	0.385	1040	0.402	1057
998	0.302	903	0.316	926	0.331	949	0.347	970	0.362	990	0.378	1010	0.395	1028	0.412	1046	0.430	1063
1064	0.322	910	0.338	934	0.354	956	0.370	977	0.387	997	0.404	1017	0.422	1036	0.440	1053	0.458	1071
1131	0.345	919	0.361	942	0.378	964	0.395	985	0.413	1005	0.431	1025	0.450	1044	0.469	1061	0.489	1079
1197	0.368	927	0.385	950	0.403	972	0.422	994	0.440	1014	0.460	1033	0.479	1052	0.500	1070	0.520	1087

Table 162. Unit fan performance EXVG042 (continued)

External Static Pressure																		
1264	0.392	936	0.411	959	0.430	981	0.449	1003	0.469	1023	0.490	1043	0.510	1061	0.532	1079	0.553	1096
1330	0.418	945	0.438	968	0.458	991	0.478	1012	0.499	1032	0.520	1052	0.542	1070	0.564	1088	0.587	1105
1397	0.445	955	0.466	978	0.487	1000	0.508	1021	0.530	1041	0.553	1061	0.576	1080	0.599	1097	0.623	1115
1463	0.473	963	0.495	987	0.517	1009	0.540	1030	0.563	1050	0.586	1070	0.610	1088	0.634	1106	0.659	1123
1596	0.534	980	0.557	1003	0.582	1025	0.606	1046	0.631	1066	0.657	1086	-	-	-	-	-	-
	1.35		**1.40**		**1.45**		**1.50**		**1.55**		**1.60**		**1.65**		**1.70**		**1.75**	
CFM	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**
891	0.402	1070	0.419	1086	0.436	1102	0.453	1117	0.471	1132	0.490	1148	0.508	1164	0.528	1180	0.548	1197
931	0.419	1073	0.436	1089	0.454	1105	0.472	1120	0.490	1136	0.509	1151	0.529	1167	0.549	1183	0.569	1200
998	0.448	1080	0.466	1096	0.485	1111	0.504	1127	0.524	1142	0.544	1158	0.564	1173	0.585	1190	-	-
1064	0.477	1087	0.497	1103	0.517	1119	0.537	1134	0.557	1149	0.579	1165	0.600	1181	0.622	1197	-	-
1131	0.509	1095	0.529	1111	0.550	1127	0.571	1142	0.593	1157	0.615	1173	0.638	1189	-	-	-	-
1197	0.541	1104	0.563	1120	0.585	1135	0.607	1151	0.630	1166	0.653	1181	0.676	1197	-	-	-	-
1264	0.575	1113	0.598	1129	0.621	1144	0.644	1160	0.668	1175	0.692	1191	-	-	-	-	-	-
1330	0.610	1122	0.634	1138	0.658	1154	0.682	1169	0.707	1184	0.732	1200	-	-	-	-	-	-
1397	0.647	1131	0.671	1147	0.696	1163	0.722	1178	-	-	-	-	-	-	-	-	-	-
1463	0.684	1140	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1596	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 163. Unit fan performance EXVG048

External Static Pressure																		
	0.00		**0.05**		**0.10**		**0.15**		**0.20**		**0.25**		**0.30**		**0.35**		**0.40**	
CFM	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**
1018	0.117	456	0.124	473	0.131	492	0.139	514	0.147	537	0.156	561	0.165	587	0.174	613	0.184	640
1064	0.118	461	0.126	478	0.134	497	0.143	519	0.152	542	0.161	566	0.171	592	0.181	618	0.192	646
1140	0.122	470	0.131	487	0.140	507	0.150	528	0.160	551	0.171	576	0.182	601	0.193	628	0.205	655
1216	0.128	480	0.138	497	0.148	517	0.159	538	0.170	561	0.182	585	0.194	611	0.207	638	0.220	665
1292	0.135	491	0.146	508	0.158	527	0.170	548	0.182	571	0.195	596	0.209	622	0.223	648	0.237	675
1368	0.144	501	0.156	518	0.169	537	0.182	559	0.196	582	0.210	606	0.225	632	0.240	659	0.255	686
1444	0.154	511	0.168	528	0.182	548	0.196	569	0.211	592	0.227	617	0.242	642	0.258	669	0.275	696
1520	0.167	521	0.181	538	0.197	558	0.212	579	0.228	602	0.245	627	0.262	652	0.279	679	0.297	706
1596	0.180	530	0.196	547	0.213	566	0.229	588	0.247	611	0.264	635	0.282	661	0.301	688	0.320	715
1672	0.196	538	0.213	555	0.231	574	0.249	595	0.267	619	0.286	643	0.305	669	0.325	695	0.345	722
1824	0.232	548	0.251	565	0.271	585	0.292	606	0.312	629	0.334	654	0.355	679	0.377	706	0.400	733
	0.45		**0.50**		**0.55**		**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**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**
1018	0.195	668	0.206	696	0.217	723	0.229	751	0.241	778	0.253	805	0.266	831	0.280	857	0.294	881
1064	0.203	673	0.214	701	0.226	728	0.239	756	0.252	783	0.265	810	0.279	836	0.293	862	0.307	887
1140	0.217	682	0.230	710	0.243	738	0.257	765	0.271	792	0.285	819	0.300	845	0.316	871	0.331	896
1216	0.234	692	0.247	720	0.262	748	0.277	775	0.292	802	0.308	829	0.324	855	0.340	881	0.357	906
1292	0.251	703	0.267	730	0.282	758	0.298	786	0.314	813	0.331	840	0.349	866	0.366	891	0.384	916

Table 163. Unit fan performance EXVG048 (continued)

1368	0.271	713	0.287	741	0.304	769	0.321	796	0.339	823	0.357	850	0.375	876	0.394	902	0.413	927
1444	0.292	723	0.310	751	0.327	779	0.346	806	0.365	834	0.384	860	0.403	887	0.424	912	0.444	937
1520	0.315	733	0.334	761	0.353	789	0.372	816	0.392	843	0.413	870	0.433	896	0.455	922	0.476	947
1596	0.339	742	0.359	770	0.380	798	0.400	825	0.421	852	0.443	879	0.465	905	0.487	931	0.510	956
1672	0.366	750	0.387	777	0.408	805	0.430	833	0.452	860	0.475	887	0.498	913	0.522	938	0.546	963
1824	0.423	760	0.446	788	0.470	816	0.494	843	0.519	871	0.544	897	0.570	924	0.596	949	0.622	974
	0.90		**0.95**		**1.00**		**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**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**
1018	0.308	905	0.323	928	0.338	951	0.354	972	0.370	992	0.386	1012	0.403	1030	0.420	1048	0.438	1065
1064	0.322	910	0.338	934	0.354	956	0.370	977	0.387	997	0.404	1017	0.422	1036	0.440	1053	0.458	1071
1140	0.348	920	0.364	943	0.381	965	0.399	986	0.417	1007	0.435	1026	0.454	1045	0.473	1063	0.493	1080
1216	0.375	930	0.392	953	0.411	975	0.429	996	0.448	1017	0.468	1036	0.488	1055	0.509	1073	0.529	1090
1292	0.403	940	0.422	963	0.442	985	0.461	1007	0.482	1027	0.503	1046	0.524	1065	0.545	1083	0.567	1100
1368	0.433	951	0.453	974	0.474	996	0.495	1017	0.517	1037	0.539	1057	0.561	1076	0.584	1093	0.607	1111
1444	0.465	961	0.486	984	0.508	1006	0.531	1027	0.553	1048	0.576	1067	0.600	1086	0.624	1104	0.648	1121
1520	0.499	971	0.521	994	0.544	1016	0.568	1037	0.591	1058	0.616	1077	0.641	1096	0.666	1114	0.691	1131
1596	0.534	980	0.557	1003	0.582	1025	0.606	1046	0.631	1066	0.657	1086	0.683	1105	0.709	1122	0.736	1140
1672	0.571	987	0.595	1010	0.621	1032	0.647	1054	0.673	1074	0.700	1094	0.727	1112	0.754	1130	0.782	1147
1824	0.649	998	0.676	1021	0.704	1043	0.732	1064	0.761	1085	0.790	1104	-	-	-	-	-	-
	1.35		**1.40**		**1.45**		**1.50**		**1.55**		**1.60**		**1.65**		**1.70**			
CFM	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**		
1018	0.456	1082	0.475	1098	0.494	1114	0.514	1129	0.534	1144	0.554	1160	0.575	1176	0.596	1192		
1064	0.477	1087	0.497	1103	0.517	1119	0.537	1134	0.557	1149	0.579	1165	0.600	1181	0.622	1197		
1140	0.513	1096	0.534	1112	0.555	1128	0.576	1143	0.598	1159	0.620	1174	0.643	1190	-	-		
1216	0.551	1106	0.572	1122	0.595	1138	0.617	1153	0.640	1169	0.664	1184	0.688	1200	-	-		
1292	0.590	1117	0.613	1133	0.636	1148	0.660	1164	0.684	1179	0.709	1194	-	-	-	-		
1368	0.631	1127	0.655	1143	0.679	1159	0.704	1174	0.730	1190	-	-	-	-	-	-		
1444	0.673	1137	0.699	1153	0.724	1169	0.751	1185	0.777	1200	-	-	-	-	-	-		
1520	0.717	1147	0.744	1163	0.771	1179	0.798	1194	-	-	-	-	-	-	-	-		
1596	0.763	1156	0.791	1172	0.819	1188	-	-	-	-	-	-	-	-	-	-		
1672	0.811	1164	0.840	1180	0.869	1195	-	-	-	-	-	-	-	-	-	-		
1824	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		

Table 164. Unit fan performance EXVG060

External Static Pressure																		
	0.00		**0.05**		**0.10**		**0.15**		**0.20**		**0.25**		**0.30**		**0.35**		**0.40**	
CFM	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**
1273	0.077	436	0.092	472	0.108	506	0.124	539	0.140	571	0.155	602	0.171	632	0.187	661	0.203	689
1330	0.089	451	0.105	485	0.121	519	0.137	551	0.153	582	0.170	613	0.186	642	0.202	671	0.218	698
1425	0.113	475	0.129	508	0.146	540	0.163	572	0.179	602	0.196	631	0.212	660	0.229	687	0.246	714
1520	0.140	499	0.157	531	0.174	562	0.191	592	0.208	621	0.225	650	0.243	677	0.260	704	0.278	729
1615	0.171	524	0.188	554	0.205	584	0.223	613	0.241	641	0.259	668	0.276	695	0.294	720	0.313	745

Table 164. Unit fan performance EXVG060 (continued)

External Static Pressure																		
1710	0.205	548	0.223	578	0.241	606	0.259	634	0.277	661	0.295	687	0.314	713	0.333	738	0.352	762
1805	0.243	573	0.262	601	0.280	629	0.299	656	0.318	682	0.336	707	0.356	731	0.375	755	0.394	778
1900	0.286	598	0.305	625	0.324	652	0.343	678	0.362	703	0.382	727	0.401	750	0.421	773	0.441	796
1995	0.334	624	0.353	650	0.372	676	0.392	700	0.411	724	0.431	747	0.452	770	0.472	792	0.493	814
2090	0.386	651	0.405	676	0.425	700	0.445	723	0.465	746	0.486	769	0.507	791	0.528	812	0.549	833
2280	0.505	706	0.525	729	0.546	751	0.567	773	0.588	794	0.610	814	0.632	834	0.654	854	0.677	873
	0.45		**0.50**		**0.55**		**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**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**
1273	0.218	716	0.234	743	0.250	769	0.267	794	0.283	818	0.299	841	0.316	864	0.333	886	0.350	908
1330	0.234	725	0.251	751	0.267	776	0.284	801	0.301	825	0.318	848	0.335	870	0.352	892	0.370	913
1425	0.263	740	0.280	765	0.298	789	0.315	813	0.333	836	0.350	859	0.368	881	0.387	902	0.405	923
1520	0.295	755	0.313	779	0.331	803	0.349	826	0.368	848	0.386	870	0.405	891	0.425	912	0.444	932
1615	0.331	770	0.350	793	0.368	816	0.387	838	0.407	860	0.426	881	0.446	902	0.466	922	0.486	942
1710	0.371	785	0.390	808	0.409	830	0.429	851	0.449	873	0.470	893	0.490	913	0.511	933	0.532	952
1805	0.414	801	0.434	823	0.454	844	0.475	865	0.496	886	0.517	906	0.538	925	0.560	945	0.582	964
1900	0.462	817	0.483	839	0.504	859	0.525	880	0.547	900	0.568	919	0.591	938	0.614	957	0.637	975
1995	0.514	835	0.536	855	0.557	875	0.579	895	0.602	914	0.624	933	0.648	952	0.671	970	0.695	988
2090	0.571	853	0.593	873	0.616	892	0.638	911	0.662	930	0.685	948	0.709	966	0.734	984	0.759	1002
2280	0.700	892	0.723	910	0.747	929	0.771	946	0.796	964	0.821	981	0.847	999	0.873	1016	0.900	1033
	0.90		**0.95**		**1.00**		**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**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**
1273	0.367	929	0.384	950	0.402	970	0.420	989	0.438	1008	0.457	1027	0.476	1046	0.495	1064	0.514	1082
1330	0.387	934	0.405	955	0.424	974	0.442	994	0.461	1013	0.480	1031	0.500	1050	0.520	1068	0.540	1085
1425	0.424	943	0.443	963	0.462	982	0.482	1001	0.502	1020	0.522	1038	0.543	1056	0.564	1074	0.585	1092
1520	0.464	952	0.484	971	0.504	990	0.525	1009	0.546	1028	0.567	1046	0.589	1064	0.611	1081	0.634	1099
1615	0.507	961	0.528	980	0.549	999	0.571	1018	0.593	1036	0.616	1054	0.639	1071	0.662	1089	0.686	1107
1710	0.554	971	0.576	990	0.598	1009	0.621	1027	0.644	1045	0.668	1062	0.692	1080	0.716	1097	0.741	1115
1805	0.605	982	0.628	1000	0.651	1019	0.675	1036	0.699	1054	0.724	1072	0.749	1089	0.775	1107	0.801	1124
1900	0.660	994	0.684	1012	0.708	1029	0.733	1047	0.759	1065	0.784	1082	0.811	1099	0.837	1117	0.865	1134
1995	0.720	1006	0.745	1024	0.770	1041	0.796	1059	0.822	1076	0.849	1093	0.876	1111	0.904	1128	0.933	1145
2090	0.784	1019	0.810	1037	0.836	1054	0.863	1071	0.890	1088	0.918	1106	0.947	1123	0.976	1140	1.006	1158
2280	0.927	1050	0.955	1066	0.983	1083	1.012	1100	1.042	1117	-	-	-	-	-	-	-	-
	1.35		**1.40**		**1.45**		**1.50**		**1.55**		**1.60**							
CFM	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**						
1273	0.534	1099	0.554	1116	0.575	1134	0.596	1151	0.617	1167	0.639	1184						
1330	0.561	1103	0.582	1120	0.603	1137	0.625	1154	0.647	1171	0.670	1188						
1425	0.607	1109	0.629	1127	0.652	1144	0.675	1161	0.699	1178	0.723	1195						
1520	0.657	1116	0.680	1134	0.704	1151	0.729	1168	0.754	1185	-	-						
1615	0.710	1124	0.735	1141	0.760	1159	0.786	1176	0.812	1193	-	-						
1710	0.767	1132	0.793	1150	0.819	1167	0.847	1184	-	-	-	-						
1805	0.828	1141	0.855	1159	0.883	1176	0.911	1194	-	-	-	-						

Table 164. Unit fan performance EXVG060 (continued)

External Static Pressure												
1900	0.893	1152	0.921	1169	0.950	1187	-	-	-	-	-	-
1995	0.962	1163	0.992	1180	1.022	1198	-	-	-	-	-	-
2090	1.036	1175	1.067	1193	-	-	-	-	-	-	-	-
2280	-	-	-	-	-	-	-	-	-	-	-	-

Table 165. Unit fan performance EXVG070

External Static Pressure																		
	0.00		0.05		0.10		0.15		0.20		0.25		0.30		0.35		0.40	
CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM
1484	0.129	490	0.146	523	0.163	554	0.180	584	0.197	614	0.214	643	0.231	670	0.248	697	0.265	724
1551	0.149	507	0.167	539	0.184	569	0.201	599	0.218	628	0.236	656	0.253	683	0.271	709	0.289	735
1661	0.187	535	0.204	566	0.222	595	0.240	623	0.258	651	0.276	678	0.294	703	0.312	729	0.331	753
1772	0.230	564	0.248	593	0.266	621	0.285	648	0.303	674	0.322	700	0.341	725	0.360	749	0.379	772
1883	0.278	594	0.297	621	0.316	648	0.335	674	0.354	699	0.373	723	0.393	747	0.413	770	0.433	792
1994	0.333	624	0.352	650	0.372	675	0.391	700	0.411	724	0.431	747	0.451	770	0.472	792	0.492	813
2104	0.394	655	0.413	679	0.433	704	0.453	727	0.474	750	0.494	772	0.515	794	0.536	815	0.558	835
2215	0.462	687	0.482	710	0.502	733	0.523	755	0.544	777	0.565	798	0.587	819	0.609	839	0.631	859
2326	0.537	720	0.557	742	0.578	764	0.600	785	0.621	806	0.643	826	0.665	846	0.688	865	0.711	884
2437	0.620	755	0.641	776	0.662	797	0.684	817	0.706	836	0.728	855	0.751	874	0.775	892	0.798	910
2658	0.808	829	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	0.45		0.50		0.55		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	kW	RPM	kW	RPM	kW	RPM
1484	0.283	749	0.300	774	0.318	797	0.336	821	0.354	843	0.372	865	0.391	887	0.410	908	0.429	928
1551	0.307	759	0.325	783	0.343	807	0.361	830	0.380	852	0.399	873	0.418	895	0.438	915	0.457	935
1661	0.350	777	0.369	800	0.388	823	0.407	845	0.427	866	0.447	887	0.467	907	0.487	927	0.508	947
1772	0.399	795	0.418	818	0.438	839	0.459	860	0.479	881	0.500	901	0.521	921	0.543	941	0.565	960
1883	0.453	814	0.474	836	0.494	857	0.516	877	0.537	897	0.559	917	0.581	936	0.604	955	0.627	973
1994	0.514	834	0.535	855	0.557	875	0.579	895	0.601	914	0.624	933	0.647	952	0.671	970	0.695	988
2104	0.580	856	0.602	875	0.625	895	0.647	913	0.671	932	0.695	950	0.719	968	0.743	986	0.768	1004
2215	0.653	878	0.676	897	0.700	916	0.724	934	0.748	952	0.772	969	0.798	987	0.823	1004	0.849	1022
2326	0.734	902	0.758	920	0.782	938	0.807	956	0.832	973	0.858	990	0.884	1007	0.910	1024	0.937	1041
2437	0.822	928	0.847	945	0.872	962	0.898	979	0.923	996	0.950	1013	-	-	-	-	-	-
2658	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	0.90		0.95		1.00		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	kW	RPM	kW	RPM	kW	RPM
1484	0.448	948	0.468	968	0.488	987	0.508	1006	0.529	1025	0.550	1043	0.571	1061	0.593	1079	0.615	1096
1551	0.477	955	0.498	974	0.518	993	0.539	1012	0.561	1030	0.583	1048	0.605	1066	0.627	1084	0.650	1101
1661	0.529	966	0.551	985	0.573	1004	0.595	1022	0.617	1040	0.640	1058	0.664	1076	0.688	1093	0.712	1111
1772	0.587	978	0.609	997	0.632	1015	0.656	1033	0.680	1051	0.704	1068	0.729	1086	0.754	1103	0.780	1121
1883	0.650	991	0.674	1010	0.698	1027	0.723	1045	0.748	1063	0.773	1080	0.799	1098	0.826	1115	0.853	1132
1994	0.719	1006	0.744	1024	0.769	1041	0.795	1058	0.821	1076	0.848	1093	0.876	1110	0.904	1128	0.932	1145
2104	0.794	1021	0.820	1039	0.846	1056	0.873	1073	0.901	1090	0.929	1108	0.958	1125	0.987	1142	1.017	1159

Table 165. Unit fan performance EXVG070 (continued)

External Static Pressure																		
2215	0.876	1039	0.903	1056	0.931	1073	0.959	1090	0.988	1107	1.017	1124	1.047	1141	1.077	1158	-	-
2326	0.965	1058	0.993	1074	1.022	1091	-	-	-	-	-	-	-	-	-	-	-	-
2437	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2658	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1.35		**1.40**		**1.45**		**1.50**		**1.55**		**1.60**							
CFM	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**						
1484	0.638	1114	0.661	1131	0.684	1148	0.708	1165	0.732	1182	0.757	1200						
1551	0.674	1119	0.698	1136	0.722	1153	0.747	1171	0.772	1188	-	-						
1661	0.737	1128	0.762	1145	0.788	1163	0.815	1180	0.842	1197	-	-						
1772	0.806	1138	0.833	1156	0.860	1173	0.888	1191	-	-	-	-						
1883	0.881	1150	0.909	1167	0.938	1185	-	-	-	-	-	-						
1994	0.961	1163	0.991	1180	1.021	1198	-	-	-	-	-	-						
2104	1.047	1177	1.078	1195	-	-	-	-	-	-	-	-						
2215	-	-	-	-	-	-	-	-	-	-	-	-						
2326	-	-	-	-	-	-	-	-	-	-	-	-						
2437	-	-	-	-	-	-	-	-	-	-	-	-						
2658	-	-	-	-	-	-	-	-	-	-	-	-						

Table 166. Unit fan performance DXVG024

External Static Pressure																		
	0.00		**0.05**		**0.10**		**0.15**		**0.20**		**0.25**		**0.30**		**0.35**		**0.40**	
CFM	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**
509	0.023	402	0.029	454	0.035	504	0.042	552	0.049	598	0.056	642	0.063	684	0.071	724	0.079	763
532	0.025	411	0.031	463	0.038	513	0.045	560	0.052	606	0.059	649	0.067	691	0.075	731	0.083	769
570	0.029	427	0.036	478	0.043	527	0.050	574	0.057	618	0.065	661	0.073	703	0.081	742	0.090	780
608	0.034	442	0.041	492	0.048	541	0.055	587	0.063	631	0.071	674	0.080	714	0.088	753	0.097	791
646	0.039	458	0.046	507	0.054	555	0.061	601	0.070	644	0.078	686	0.087	726	0.096	765	0.105	802
684	0.045	473	0.052	522	0.060	569	0.068	614	0.076	657	0.085	699	0.094	738	0.104	776	0.114	813
722	0.051	489	0.059	538	0.067	584	0.075	628	0.084	671	0.093	711	0.103	750	0.112	788	0.123	824
760	0.058	505	0.066	553	0.074	598	0.083	642	0.092	684	0.102	724	0.111	763	0.122	800	0.132	835
798	0.065	522	0.073	568	0.082	613	0.091	656	0.101	697	0.111	737	0.121	775	0.131	811	0.142	846
836	0.073	538	0.082	584	0.091	628	0.100	670	0.110	711	0.120	750	0.131	787	0.142	823	0.153	858
912	0.091	572	0.100	616	0.110	659	0.120	699	0.131	739	0.142	776	0.153	813	0.165	848	0.177	881
	0.45		**0.50**		**0.55**		**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**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**
509	0.087	800	0.095	835	0.104	869	0.113	901	0.121	932	0.130	962	0.139	991	0.148	1018	0.157	1045
532	0.091	806	0.100	841	0.109	875	0.118	907	0.127	938	0.136	968	0.145	996	0.154	1024	0.164	1050
570	0.099	816	0.108	851	0.117	884	0.126	916	0.136	947	0.145	977	0.155	1005	0.165	1032	0.175	1059
608	0.106	827	0.116	861	0.125	894	0.135	926	0.145	956	0.155	986	0.166	1014	0.176	1041	0.187	1068
646	0.115	837	0.125	871	0.135	904	0.145	935	0.155	966	0.166	995	0.177	1023	0.188	1050	0.199	1076
684	0.124	848	0.134	881	0.144	914	0.155	945	0.166	975	0.177	1004	0.188	1032	0.200	1059	0.211	1085

Table 166. Unit fan performance DXVG024 (continued)

External Static Pressure																		
722	0.133	859	0.144	892	0.155	924	0.166	955	0.177	984	0.189	1013	0.200	1041	0.212	1068	0.225	1094
760	0.143	869	0.154	902	0.165	934	0.177	964	0.189	994	0.201	1022	0.213	1050	0.226	1076	0.238	1102
798	0.154	880	0.165	913	0.177	944	0.189	974	0.201	1003	0.214	1031	0.227	1059	0.240	1085	0.253	1111
836	0.165	891	0.177	923	0.189	954	0.202	984	0.214	1013	0.227	1041	0.241	1068	0.254	1094	0.268	1120
912	0.189	913	0.202	945	0.215	975	0.229	1004	0.243	1032	0.257	1059	0.271	1086	0.286	1112	0.300	1137
	0.90		**0.95**		**1.00**		**1.05**		**1.10**		**1.15**							
CFM	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**						
509	0.167	1071	0.176	1096	0.185	1120	0.195	1143	0.204	1166	0.214	1188						
532	0.173	1076	0.183	1101	0.193	1125	0.203	1148	0.212	1171	0.222	1194						
570	0.185	1085	0.195	1109	0.206	1134	0.216	1157	0.226	1180	-	-						
608	0.197	1093	0.208	1118	0.219	1142	0.230	1166	0.241	1189	-	-						
646	0.210	1102	0.221	1127	0.233	1151	0.244	1174	0.256	1198	-	-						
684	0.223	1110	0.235	1135	0.247	1159	0.259	1183	-	-	-	-						
722	0.237	1119	0.249	1144	0.262	1168	0.275	1192	-	-	-	-						
760	0.251	1128	0.264	1152	0.278	1176	0.291	1200	-	-	-	-						
798	0.266	1136	0.280	1161	0.294	1185	-	-	-	-	-	-						
836	0.282	1145	0.296	1169	0.311	1194	-	-	-	-	-	-						
912	0.316	1162	0.331	1187	-	-	-	-	-	-	-	-						

Table 167. Unit fan performance DXVG036

External Static Pressure																		
	0.00		**0.05**		**0.10**		**0.15**		**0.20**		**0.25**		**0.30**		**0.35**		**0.40**	
CFM	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**
764	0.045	369	0.052	408	0.060	445	0.068	481	0.077	516	0.086	550	0.096	583	0.106	615	0.117	646
798	0.047	376	0.055	415	0.063	452	0.072	488	0.081	523	0.091	557	0.101	589	0.112	621	0.123	652
855	0.053	389	0.061	427	0.070	464	0.079	500	0.089	534	0.100	568	0.111	600	0.122	632	0.134	662
912	0.059	402	0.068	440	0.078	476	0.088	512	0.099	546	0.110	579	0.121	611	0.133	643	0.146	673
969	0.066	415	0.076	453	0.086	489	0.097	524	0.109	558	0.121	591	0.133	623	0.146	654	0.159	684
1026	0.074	429	0.085	466	0.096	502	0.108	537	0.120	571	0.132	603	0.145	635	0.159	665	0.173	695
1083	0.084	443	0.095	480	0.107	516	0.119	550	0.132	583	0.145	616	0.159	647	0.173	677	0.188	707
1140	0.094	458	0.106	494	0.118	529	0.131	563	0.145	596	0.159	628	0.174	659	0.189	690	0.204	719
1197	0.105	472	0.118	508	0.131	543	0.145	577	0.159	610	0.174	641	0.189	672	0.205	702	0.221	731
1254	0.117	487	0.131	523	0.145	557	0.160	591	0.175	623	0.190	655	0.206	685	0.223	714	0.239	743
1368	0.146	518	0.161	553	0.176	586	0.192	619	0.209	651	0.226	681	0.243	711	0.261	740	0.279	767
	0.45		**0.50**		**0.55**		**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**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**
764	0.127	676	0.139	705	0.150	733	0.162	760	0.175	786	0.187	812	0.200	836	0.213	860	0.226	884
798	0.134	682	0.146	710	0.158	738	0.170	765	0.183	792	0.196	817	0.209	841	0.223	865	0.236	888
855	0.146	692	0.158	720	0.171	748	0.184	775	0.198	801	0.211	826	0.225	850	0.239	874	0.254	897
912	0.159	702	0.172	730	0.185	758	0.199	784	0.213	810	0.228	835	0.242	859	0.257	883	0.272	906
969	0.172	713	0.186	741	0.200	768	0.215	795	0.230	820	0.245	845	0.260	869	0.276	892	0.292	915

Table 167. Unit fan performance DXVG036 (continued)

External Static Pressure																		
1026	0.187	724	0.202	752	0.217	779	0.232	805	0.247	830	0.263	855	0.279	878	0.296	902	0.312	924
1083	0.203	735	0.218	763	0.234	790	0.250	815	0.266	840	0.283	865	0.299	888	0.316	911	0.334	933
1140	0.220	747	0.236	774	0.252	801	0.269	826	0.286	851	0.303	875	0.321	898	0.338	921	0.356	943
1197	0.238	759	0.254	786	0.272	812	0.289	837	0.307	862	0.325	885	0.343	909	0.361	931	0.380	953
1254	0.257	770	0.274	797	0.292	823	0.310	848	0.329	872	0.347	896	0.366	919	0.385	941	0.405	962
1368	0.298	794	0.317	820	0.336	846	0.356	870	0.376	894	0.396	917	0.417	939	0.437	961	0.458	982
	0.90		**0.95**		**1.00**		**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**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**
764	0.240	906	0.253	928	0.267	949	0.280	970	0.294	990	0.308	1009	0.322	1028	0.336	1046	0.350	1064
798	0.250	911	0.264	933	0.278	954	0.292	974	0.306	994	0.321	1013	0.335	1032	0.349	1051	0.364	1068
855	0.268	919	0.283	941	0.298	962	0.312	982	0.327	1002	0.342	1021	0.357	1040	0.372	1058	0.388	1076
912	0.287	928	0.303	949	0.318	970	0.334	990	0.349	1010	0.365	1029	0.381	1048	0.397	1066	0.412	1083
969	0.307	937	0.324	958	0.340	978	0.356	999	0.372	1018	0.389	1037	0.405	1056	0.422	1074	0.438	1091
1026	0.329	946	0.345	967	0.362	987	0.379	1007	0.396	1026	0.414	1045	0.431	1064	0.448	1082	0.465	1099
1083	0.351	955	0.368	976	0.386	996	0.404	1016	0.422	1035	0.439	1054	0.457	1072	0.475	1090	0.493	1107
1140	0.374	964	0.392	985	0.411	1005	0.429	1025	0.448	1044	0.466	1062	0.485	1080	0.503	1098	0.522	1115
1197	0.399	974	0.418	994	0.437	1014	0.456	1034	0.475	1053	0.494	1071	0.514	1089	0.533	1106	0.552	1124
1254	0.424	983	0.444	1004	0.464	1023	0.484	1043	0.503	1061	0.523	1079	0.543	1097	0.563	1115	0.583	1132
1368	0.479	1002	0.500	1022	0.521	1042	0.542	1060	0.564	1079	0.585	1097	0.607	1114	0.628	1131	-	-
	1.35		**1.40**		**1.45**		**1.50**		**1.55**		**1.60**		**1.65**		**1.70**			
CFM	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**		
764	0.364	1082	0.378	1099	0.391	1116	0.405	1132	0.419	1148	0.432	1164	0.445	1180	0.458	1195		
798	0.378	1086	0.392	1103	0.406	1120	0.420	1136	0.434	1152	0.448	1168	0.462	1184	0.475	1199		
855	0.403	1093	0.417	1110	0.432	1127	0.447	1143	0.462	1159	0.476	1175	0.49	1191	-	-		
912	0.428	1101	0.444	1118	0.459	1134	0.475	1151	0.490	1167	0.505	1182	0.52	1198	-	-		
969	0.455	1108	0.471	1125	0.487	1142	0.503	1158	0.519	1174	0.535	1190	-	-	-	-		
1026	0.482	1116	0.499	1133	0.516	1150	0.533	1166	0.550	1182	0.566	1197	-	-	-	-		
1083	0.511	1124	0.528	1141	0.546	1157	0.564	1173	0.581	1189	-	-	-	-	-	-		
1140	0.540	1132	0.559	1149	0.577	1165	0.595	1181	-	-	-	-	-	-	-	-		
1197	0.571	1140	0.590	1157	0.609	1173	0.628	1189	-	-	-	-	-	-	-	-		
1254	0.603	1148	0.623	1165	0.643	1181	0.663	1196	-	-	-	-	-	-	-	-		
1368	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		

Table 168. Unit fan performance DXVG048

External Static Pressure																		
	0.00		**0.05**		**0.10**		**0.15**		**0.20**		**0.25**		**0.30**		**0.35**		**0.40**	
CFM	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**
1018	0.117	456	0.124	473	0.131	492	0.139	514	0.147	537	0.156	561	0.165	587	0.174	613	0.184	640
1064	0.118	461	0.126	478	0.134	497	0.143	519	0.152	542	0.161	566	0.171	592	0.181	618	0.192	646
1140	0.122	470	0.131	487	0.140	507	0.150	528	0.160	551	0.171	576	0.182	601	0.193	628	0.205	655
1216	0.128	480	0.138	497	0.148	517	0.159	538	0.170	561	0.182	585	0.194	611	0.207	638	0.220	665

Table 168. Unit fan performance DXVG048 (continued)

External Static Pressure																		
1292	0.135	491	0.146	508	0.158	527	0.170	548	0.182	571	0.195	596	0.209	622	0.223	648	0.237	675
1368	0.144	501	0.156	518	0.169	537	0.182	559	0.196	582	0.210	606	0.225	632	0.240	659	0.255	686
1444	0.154	511	0.168	528	0.182	548	0.196	569	0.211	592	0.227	617	0.242	642	0.258	669	0.275	696
1520	0.167	521	0.181	538	0.197	558	0.212	579	0.228	602	0.245	627	0.262	652	0.279	679	0.297	706
1596	0.180	530	0.196	547	0.213	566	0.229	588	0.247	611	0.264	635	0.282	661	0.301	688	0.320	715
1672	0.196	538	0.213	555	0.231	574	0.249	595	0.267	619	0.286	643	0.305	669	0.325	695	0.345	722
1824	0.232	548	0.251	565	0.271	585	0.292	606	0.312	629	0.334	654	0.355	679	0.377	706	0.400	733
	0.45		**0.50**		**0.55**		**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**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**
1018	0.195	668	0.206	696	0.217	723	0.229	751	0.241	778	0.253	805	0.266	831	0.280	857	0.294	881
1064	0.203	673	0.214	701	0.226	728	0.239	756	0.252	783	0.265	810	0.279	836	0.293	862	0.307	887
1140	0.217	682	0.230	710	0.243	738	0.257	765	0.271	792	0.285	819	0.300	845	0.316	871	0.331	896
1216	0.234	692	0.247	720	0.262	748	0.277	775	0.292	802	0.308	829	0.324	855	0.340	881	0.357	906
1292	0.251	703	0.267	730	0.282	758	0.298	786	0.314	813	0.331	840	0.349	866	0.366	891	0.384	916
1368	0.271	713	0.287	741	0.304	769	0.321	796	0.339	823	0.357	850	0.375	876	0.394	902	0.413	927
1444	0.292	723	0.310	751	0.327	779	0.346	806	0.365	834	0.384	860	0.403	887	0.424	912	0.444	937
1520	0.315	733	0.334	761	0.353	789	0.372	816	0.392	843	0.413	870	0.433	896	0.455	922	0.476	947
1596	0.339	742	0.359	770	0.380	798	0.400	825	0.421	852	0.443	879	0.465	905	0.487	931	0.510	956
1672	0.366	750	0.387	777	0.408	805	0.430	833	0.452	860	0.475	887	0.498	913	0.522	938	0.546	963
1824	0.423	760	0.446	788	0.470	816	0.494	843	0.519	871	0.544	897	0.570	924	0.596	949	0.622	974
	0.90		**0.95**		**1.00**		**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**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**
1018	0.308	905	0.323	928	0.338	951	0.354	972	0.370	992	0.386	1012	0.403	1030	0.420	1048	0.438	1065
1064	0.322	910	0.338	934	0.354	956	0.370	977	0.387	997	0.404	1017	0.422	1036	0.440	1053	0.458	1071
1140	0.348	920	0.364	943	0.381	965	0.399	986	0.417	1007	0.435	1026	0.454	1045	0.473	1063	0.493	1080
1216	0.375	930	0.392	953	0.411	975	0.429	996	0.448	1017	0.468	1036	0.488	1055	0.509	1073	0.529	1090
1292	0.403	940	0.422	963	0.442	985	0.461	1007	0.482	1027	0.503	1046	0.524	1065	0.545	1083	0.567	1100
1368	0.433	951	0.453	974	0.474	996	0.495	1017	0.517	1037	0.539	1057	0.561	1076	0.584	1093	0.607	1111
1444	0.465	961	0.486	984	0.508	1006	0.531	1027	0.553	1048	0.576	1067	0.600	1086	0.624	1104	0.648	1121
1520	0.499	971	0.521	994	0.544	1016	0.568	1037	0.591	1058	0.616	1077	0.641	1096	0.666	1114	0.691	1131
1596	0.534	980	0.557	1003	0.582	1025	0.606	1046	0.631	1066	0.657	1086	0.683	1105	0.709	1122	0.736	1140
1672	0.571	987	0.595	1010	0.621	1032	0.647	1054	0.673	1074	0.700	1094	0.727	1112	0.754	1130	0.782	1147
1824	0.649	998	0.676	1021	0.704	1043	0.732	1064	0.761	1085	0.790	1104	-	-	-	-	-	-
	1.35		**1.40**		**1.45**		**1.50**		**1.55**		**1.60**		**1.65**		**1.70**			
CFM	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**		
1018	0.456	1082	0.475	1098	0.494	1114	0.514	1129	0.534	1144	0.554	1160	0.575	1176	0.596	1192		
1064	0.477	1087	0.497	1103	0.517	1119	0.537	1134	0.557	1149	0.579	1165	0.6	1181	0.622	1197		
1140	0.513	1096	0.534	1112	0.555	1128	0.576	1143	0.598	1159	0.620	1174	0.643	1190	-	-		
1216	0.551	1106	0.572	1122	0.595	1138	0.617	1153	0.640	1169	0.664	1184	0.688	1200	-	-		
1292	0.590	1117	0.613	1133	0.636	1148	0.660	1164	0.684	1179	0.709	1194	-	-	-	-		
1368	0.631	1127	0.655	1143	0.679	1159	0.704	1174	0.730	1190	-	-	-	-	-	-		

Table 168. Unit fan performance DXVG048 (continued)

External Static Pressure																
1444	0.673	1137	0.699	1153	0.724	1169	0.751	1185	0.777	1200	-	-	-	-	-	-
1520	0.717	1147	0.744	1163	0.771	1179	0.798	1194	-	-	-	-	-	-	-	-
1596	0.763	1156	0.791	1172	0.819	1188	-	-	-	-	-	-	-	-	-	-
1672	0.811	1164	0.840	1180	0.869	1195	-	-	-	-	-	-	-	-	-	-
1824	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 169. Unit fan performance DXVG060

External Static Pressure																		
	0.00		0.05		0.10		0.15		0.20		0.25		0.30		0.35		0.40	
CFM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM
1273	0.077	436	0.092	472	0.108	506	0.124	539	0.140	571	0.155	602	0.171	632	0.187	661	0.203	689
1330	0.089	451	0.105	485	0.121	519	0.137	551	0.153	582	0.170	613	0.186	642	0.202	671	0.218	698
1425	0.113	475	0.129	508	0.146	540	0.163	572	0.179	602	0.196	631	0.212	660	0.229	687	0.246	714
1520	0.140	499	0.157	531	0.174	562	0.191	592	0.208	621	0.225	650	0.243	677	0.260	704	0.278	729
1615	0.171	524	0.188	554	0.205	584	0.223	613	0.241	641	0.259	668	0.276	695	0.294	720	0.313	745
1710	0.205	548	0.223	578	0.241	606	0.259	634	0.277	661	0.295	687	0.314	713	0.333	738	0.352	762
1805	0.243	573	0.262	601	0.280	629	0.299	656	0.318	682	0.336	707	0.356	731	0.375	755	0.394	778
1900	0.286	598	0.305	625	0.324	652	0.343	678	0.362	703	0.382	727	0.401	750	0.421	773	0.441	796
1995	0.334	624	0.353	650	0.372	676	0.392	700	0.411	724	0.431	747	0.452	770	0.472	792	0.493	814
2090	0.386	651	0.405	676	0.425	700	0.445	723	0.465	746	0.486	769	0.507	791	0.528	812	0.549	833
2280	0.505	706	0.525	729	0.546	751	0.567	773	0.588	794	0.610	814	0.632	834	0.654	854	0.677	873
	0.45		0.50		0.55		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	kW	RPM	kW	RPM	kW	RPM
1273	0.218	716	0.234	743	0.250	769	0.267	794	0.283	818	0.299	841	0.316	864	0.333	886	0.350	908
1330	0.234	725	0.251	751	0.267	776	0.284	801	0.301	825	0.318	848	0.335	870	0.352	892	0.370	913
1425	0.263	740	0.280	765	0.298	789	0.315	813	0.333	836	0.350	859	0.368	881	0.387	902	0.405	923
1520	0.295	755	0.313	779	0.331	803	0.349	826	0.368	848	0.386	870	0.405	891	0.425	912	0.444	932
1615	0.331	770	0.350	793	0.368	816	0.387	838	0.407	860	0.426	881	0.446	902	0.466	922	0.486	942
1710	0.371	785	0.390	808	0.409	830	0.429	851	0.449	873	0.470	893	0.490	913	0.511	933	0.532	952
1805	0.414	801	0.434	823	0.454	844	0.475	865	0.496	886	0.517	906	0.538	925	0.560	945	0.582	964
1900	0.462	817	0.483	839	0.504	859	0.525	880	0.547	900	0.568	919	0.591	938	0.614	957	0.637	975
1995	0.514	835	0.536	855	0.557	875	0.579	895	0.602	914	0.624	933	0.648	952	0.671	970	0.695	988
2090	0.571	853	0.593	873	0.616	892	0.638	911	0.662	930	0.685	948	0.709	966	0.734	984	0.759	1002
2280	0.700	892	0.723	910	0.747	929	0.771	946	0.796	964	0.821	981	0.847	999	0.873	1016	0.900	1033
	0.90		0.95		1.00		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	kW	RPM	kW	RPM	kW	RPM
1273	0.367	929	0.384	950	0.402	970	0.420	989	0.438	1008	0.457	1027	0.476	1046	0.495	1064	0.514	1082
1330	0.387	934	0.405	955	0.424	974	0.442	994	0.461	1013	0.480	1031	0.500	1050	0.520	1068	0.540	1085
1425	0.424	943	0.443	963	0.462	982	0.482	1001	0.502	1020	0.522	1038	0.543	1056	0.564	1074	0.585	1092
1520	0.464	952	0.484	971	0.504	990	0.525	1009	0.546	1028	0.567	1046	0.589	1064	0.611	1081	0.634	1099
1615	0.507	961	0.528	980	0.549	999	0.571	1018	0.593	1036	0.616	1054	0.639	1071	0.662	1089	0.686	1107

Table 169. Unit fan performance DXVG060 (continued)

External Static Pressure																		
1710	0.554	971	0.576	990	0.598	1009	0.621	1027	0.644	1045	0.668	1062	0.692	1080	0.716	1097	0.741	1115
1805	0.605	982	0.628	1000	0.651	1019	0.675	1036	0.699	1054	0.724	1072	0.749	1089	0.775	1107	0.801	1124
1900	0.660	994	0.684	1012	0.708	1029	0.733	1047	0.759	1065	0.784	1082	0.811	1099	0.837	1117	0.865	1134
1995	0.720	1006	0.745	1024	0.770	1041	0.796	1059	0.822	1076	0.849	1093	0.876	1111	0.904	1128	0.933	1145
2090	0.784	1019	0.810	1037	0.836	1054	0.863	1071	0.890	1088	0.918	1106	0.947	1123	0.976	1140	1.006	1158
2280	0.927	1050	0.955	1066	0.983	1083	1.012	1100	1.042	1117	-	-	-	-	-	-	-	-
	1.35		**1.40**		**1.45**		**1.50**		**1.55**		**1.60**							
CFM	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**						
1273	0.534	1099	0.554	1116	0.575	1134	0.596	1151	0.617	1167	0.639	1184						
1330	0.561	1103	0.582	1120	0.603	1137	0.625	1154	0.647	1171	0.670	1188						
1425	0.607	1109	0.629	1127	0.652	1144	0.675	1161	0.699	1178	0.723	1195						
1520	0.657	1116	0.680	1134	0.704	1151	0.729	1168	0.754	1185	-	-						
1615	0.710	1124	0.735	1141	0.760	1159	0.786	1176	0.812	1193	-	-						
1710	0.767	1132	0.793	1150	0.819	1167	0.847	1184	-	-	-	-						
1805	0.828	1141	0.855	1159	0.883	1176	0.911	1194	-	-	-	-						
1900	0.893	1152	0.921	1169	0.950	1187	-	-	-	-	-	-						
1995	0.962	1163	0.992	1180	1.022	1198	-	-	-	-	-	-						
2090	1.036	1175	1.067	1193	-	-	-	-	-	-	-	-						
2280	-	-	-	-	-	-	-	-	-	-	-	-						

Table 170. Unit fan performance DXVG070

External Static Pressure																		
	0.00		**0.05**		**0.10**		**0.15**		**0.20**		**0.25**		**0.30**		**0.35**		**0.40**	
CFM	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**
1484	0.129	490	0.146	523	0.163	554	0.180	584	0.197	614	0.214	643	0.231	670	0.248	697	0.265	724
1551	0.149	507	0.167	539	0.184	569	0.201	599	0.218	628	0.236	656	0.253	683	0.271	709	0.289	735
1661	0.187	535	0.204	566	0.222	595	0.240	623	0.258	651	0.276	678	0.294	703	0.312	729	0.331	753
1772	0.230	564	0.248	593	0.266	621	0.285	648	0.303	674	0.322	700	0.341	725	0.360	749	0.379	772
1883	0.278	594	0.297	621	0.316	648	0.335	674	0.354	699	0.373	723	0.393	747	0.413	770	0.433	792
1994	0.333	624	0.352	650	0.372	675	0.391	700	0.411	724	0.431	747	0.451	770	0.472	792	0.492	813
2104	0.394	655	0.413	679	0.433	704	0.453	727	0.474	750	0.494	772	0.515	794	0.536	815	0.558	835
2215	0.462	687	0.482	710	0.502	733	0.523	755	0.544	777	0.565	798	0.587	819	0.609	839	0.631	859
2326	0.537	720	0.557	742	0.578	764	0.600	785	0.621	806	0.643	826	0.665	846	0.688	865	0.711	884
2437	0.620	755	0.641	776	0.662	797	0.684	817	0.706	836	0.728	855	0.751	874	0.775	892	0.798	910
2658	0.808	829	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	0.45		**0.50**		**0.55**		**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**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**
1484	0.283	749	0.300	774	0.318	797	0.336	821	0.354	843	0.372	865	0.391	887	0.410	908	0.429	928
1551	0.307	759	0.325	783	0.343	807	0.361	830	0.380	852	0.399	873	0.418	895	0.438	915	0.457	935
1661	0.350	777	0.369	800	0.388	823	0.407	845	0.427	866	0.447	887	0.467	907	0.487	927	0.508	947
1772	0.399	795	0.418	818	0.438	839	0.459	860	0.479	881	0.500	901	0.521	921	0.543	941	0.565	960

Table 170. Unit fan performance DXVG070 (continued)

External Static Pressure																		
1883	0.453	814	0.474	836	0.494	857	0.516	877	0.537	897	0.559	917	0.581	936	0.604	955	0.627	973
1994	0.514	834	0.535	855	0.557	875	0.579	895	0.601	914	0.624	933	0.647	952	0.671	970	0.695	988
2104	0.580	856	0.602	875	0.625	895	0.647	913	0.671	932	0.695	950	0.719	968	0.743	986	0.768	1004
2215	0.653	878	0.676	897	0.700	916	0.724	934	0.748	952	0.772	969	0.798	987	0.823	1004	0.849	1022
2326	0.734	902	0.758	920	0.782	938	0.807	956	0.832	973	0.858	990	0.884	1007	0.910	1024	0.937	1041
2437	0.822	928	0.847	945	0.872	962	0.898	979	0.923	996	0.950	1013	-	-	-	-	-	-
2658	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	0.90		**0.95**		**1.00**		**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**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**
1484	0.448	948	0.468	968	0.488	987	0.508	1006	0.529	1025	0.550	1043	0.571	1061	0.593	1079	0.615	1096
1551	0.477	955	0.498	974	0.518	993	0.539	1012	0.561	1030	0.583	1048	0.605	1066	0.627	1084	0.650	1101
1661	0.529	966	0.551	985	0.573	1004	0.595	1022	0.617	1040	0.640	1058	0.664	1076	0.688	1093	0.712	1111
1772	0.587	978	0.609	997	0.632	1015	0.656	1033	0.680	1051	0.704	1068	0.729	1086	0.754	1103	0.780	1121
1883	0.650	991	0.674	1010	0.698	1027	0.723	1045	0.748	1063	0.773	1080	0.799	1098	0.826	1115	0.853	1132
1994	0.719	1006	0.744	1024	0.769	1041	0.795	1058	0.821	1076	0.848	1093	0.876	1110	0.904	1128	0.932	1145
2104	0.794	1021	0.820	1039	0.846	1056	0.873	1073	0.901	1090	0.929	1108	0.958	1125	0.987	1142	1.017	1159
2215	0.876	1039	0.903	1056	0.931	1073	0.959	1090	0.988	1107	1.017	1124	1.047	1141	1.077	1158	-	-
2326	0.965	1058	0.993	1074	1.022	1091	-	-	-	-	-	-	-	-	-	-	-	-
2437	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2658	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1.35		**1.40**		**1.45**		**1.50**		**1.55**		**1.60**							
CFM	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**	**kW**	**RPM**						
1484	0.638	1114	0.661	1131	0.684	1148	0.708	1165	0.732	1182	0.757	1200						
1551	0.674	1119	0.698	1136	0.722	1153	0.747	1171	0.772	1188	-	-						
1661	0.737	1128	0.762	1145	0.788	1163	0.815	1180	0.842	1197	-	-						
1772	0.806	1138	0.833	1156	0.860	1173	0.888	1191	-	-	-	-						
1883	0.881	1150	0.909	1167	0.938	1185	-	-	-	-	-	-						
1994	0.961	1163	0.991	1180	1.021	1198	-	-	-	-	-	-						
2104	1.047	1177	1.078	1195	-	-	-	-	-	-	-	-						
2215	-	-	-	-	-	-	-	-	-	-	-	-						
2326	-	-	-	-	-	-	-	-	-	-	-	-						
2437	-	-	-	-	-	-	-	-	-	-	-	-						
2658	-	-	-	-	-	-	-	-	-	-	-	-						

Table 171. Added pressure drop through optional filters (inches water column), 0.5 to 6 tons, EXH*006-070

Model No.	CFM	2" MERV 8	2" MERV13	4" MERV 8	4" MERV13
EXHF006	172	0.03	0.04	N/A	N/A
EXHF006	194	0.04	0.04	N/A	N/A
EXHF006	215	0.04	0.05	N/A	N/A
EXHF006	237	0.05	0.06	N/A	N/A
EXHF009	228	0.05	0.05	N/A	N/A

Table 171. Added pressure drop through optional filters (inches water column), 0.5 to 6 tons, EXH*006-070 (continued)

Model No.	CFM	2" MERV 8	2" MERV13	4" MERV 8	4" MERV13
EXHF009	257	0.05	0.06	N/A	N/A
EXHF009	285	0.06	0.07	N/A	N/A
EXHF009	314	0.07	0.08	N/A	N/A
EXHF012	304	0.07	0.07	N/A	N/A
EXHF012	342	0.08	0.09	N/A	N/A
EXHF012	380	0.09	0.10	N/A	N/A
EXHF012	418	0.10	0.11	N/A	N/A
EXHF015	380	0.09	0.10	N/A	N/A
EXHF015	428	0.10	0.11	N/A	N/A
EXHF015	475	0.11	0.13	N/A	N/A
EXHF015	523	0.13	0.15	N/A	N/A
EXHF018	456	0.07	0.08	N/A	N/A
EXHF018	513	0.08	0.09	N/A	N/A
EXHF018	570	0.09	0.10	N/A	N/A
EXHF018	627	0.10	0.12	N/A	N/A
EXHF024	608	0.10	0.11	N/A	N/A
EXHF024	684	0.11	0.13	N/A	N/A
EXHF024	760	0.13	0.15	N/A	N/A
EXHF024	836	0.14	0.17	N/A	N/A
EXHF030	760	0.11	0.11	N/A	N/A
EXHF030	855	0.13	0.15	N/A	N/A
EXHF030	950	0.15	0.17	N/A	N/A
EXHF030	1045	0.17	0.20	N/A	N/A
EXHF036	1026	0.16	0.19	N/A	N/A
EXHF036	1140	0.19	0.22	N/A	N/A
EXHF036	1254	0.21	0.26	N/A	N/A
EXHF036	912	0.00	0.14	N/A	N/A
EXHF042	1064	0.12	0.14	N/A	N/A
EXHF042	1197	0.14	0.17	N/A	N/A
EXHF042	1330	0.16	0.19	N/A	N/A
EXHF042	1463	0.18	0.22	N/A	N/A
EXHF048	1216	0.15	0.17	N/A	N/A
EXHF048	1368	0.17	0.20	N/A	N/A
EXHF048	1520	0.19	0.23	N/A	N/A
EXHF048	1672	0.22	0.26	N/A	N/A
EXHF060	1360	0.17	0.20	N/A	N/A
EXHF060	1530	0.19	0.23	N/A	N/A
EXHF060	1700	0.22	0.27	N/A	N/A
EXHF060	1870	0.25	0.31	N/A	N/A
EXHF070	1672	0.22	0.26	N/A	N/A
EXHF070	1881	0.25	0.31	N/A	N/A

Table 171. Added pressure drop through optional filters (inches water column), 0.5 to 6 tons, EXH*006-070 (continued)

Model No.	CFM	2" MERV 8	2" MERV13	4" MERV 8	4" MERV13
EXHF070	2090	0.29	0.36	N/A	N/A
EXHF070	2299	0.33	0.42	N/A	N/A
EXVG009	228	0.04	0.06	0.02	0.05
EXVG009	242	0.04	0.07	0.02	0.05
EXVG009	257	0.04	0.07	0.02	0.05
EXVG009	271	0.05	0.08	0.02	0.06
EXVG009	285	0.05	0.08	0.03	0.06
EXVG009	299	0.05	0.09	0.03	0.06
EXVG009	314	0.06	0.09	0.03	0.06
EXVG009	328	0.06	0.10	0.03	0.07
EXVG009	342	0.06	0.10	0.03	0.07
EXVG012	304	0.05	0.09	0.03	0.06
EXVG012	323	0.06	0.09	0.03	0.07
EXVG012	342	0.06	0.10	0.03	0.07
EXVG012	361	0.07	0.11	0.04	0.07
EXVG012	380	0.07	0.11	0.04	0.08
EXVG012	399	0.08	0.12	0.04	0.08
EXVG012	418	0.08	0.13	0.05	0.09
EXVG012	437	0.09	0.13	0.05	0.09
EXVG012	456	0.09	0.14	0.05	0.10
EXVG015	380	0.06	0.10	0.03	0.07
EXVG015	404	0.07	0.10	0.03	0.07
EXVG015	428	0.07	0.11	0.04	0.08
EXVG015	451	0.07	0.12	0.04	0.08
EXVG015	475	0.08	0.12	0.04	0.09
EXVG015	499	0.08	0.13	0.05	0.09
EXVG015	523	0.09	0.14	0.05	0.10
EXVG015	546	0.09	0.15	0.06	0.10
EXVG015	570	0.10	0.15	0.06	0.11
EXVG018	456	0.05	0.08	0.03	0.06
EXVG018	485	0.06	0.09	0.03	0.06
EXVG018	513	0.06	0.10	0.03	0.07
EXVG018	542	0.06	0.10	0.03	0.07
EXVG018	570	0.07	0.11	0.04	0.07
EXVG018	599	0.07	0.11	0.04	0.08
EXVG018	627	0.08	0.12	0.04	0.08
EXVG018	656	0.08	0.13	0.05	0.09
EXVG018	684	0.08	0.13	0.05	0.09
EXVG024	608	0.07	0.12	0.04	0.08
EXVG024	646	0.08	0.12	0.04	0.09
EXVG024	684	0.08	0.13	0.05	0.09

Table 171. Added pressure drop through optional filters (inches water column), 0.5 to 6 tons, EXH*006-070 (continued)

Model No.	CFM	2" MERV 8	2" MERV13	4" MERV 8	4" MERV13
EXVG024	722	0.09	0.14	0.05	0.10
EXVG024	760	0.10	0.15	0.06	0.11
EXVG024	798	0.10	0.16	0.06	0.11
EXVG024	836	0.11	0.17	0.07	0.12
EXVG024	874	0.11	0.18	0.07	0.13
EXVG024	912	0.12	0.19	0.08	0.14
EXVG030	760	0.07	0.11	0.04	0.08
EXVG030	808	0.08	0.12	0.04	0.08
EXVG030	855	0.08	0.13	0.05	0.09
EXVG030	903	0.09	0.14	0.05	0.09
EXVG030	950	0.09	0.14	0.05	0.10
EXVG030	998	0.10	0.15	0.06	0.11
EXVG030	1045	0.10	0.16	0.06	0.11
EXVG030	1093	0.11	0.17	0.07	0.12
EXVG030	1140	0.11	0.18	0.07	0.13
EXVG036	912	0.09	0.14	0.05	0.10
EXVG036	969	0.09	0.15	0.06	0.10
EXVG036	1026	0.10	0.16	0.06	0.11
EXVG036	1083	0.11	0.17	0.07	0.12
EXVG036	1140	0.11	0.18	0.07	0.13
EXVG036	1197	0.12	0.19	0.08	0.14
EXVG036	1254	0.13	0.20	0.09	0.15
EXVG036	1311	0.13	0.21	0.09	0.16
EXVG036	1368	0.14	0.23	0.10	0.17
EXVG042	1064	0.07	0.12	0.04	0.08
EXVG042	1131	0.08	0.12	0.04	0.09
EXVG042	1197	0.08	0.13	0.05	0.09
EXVG042	1264	0.09	0.14	0.05	0.10
EXVG042	1330	0.10	0.15	0.06	0.11
EXVG042	1397	0.10	0.16	0.06	0.11
EXVG042	1463	0.11	0.17	0.07	0.12
EXVG042	1530	0.11	0.18	0.07	0.13
EXVG042	1596	0.12	0.19	0.08	0.14
EXVG048	1216	0.09	0.13	0.05	0.09
EXVG048	1292	0.09	0.15	0.05	0.10
EXVG048	1368	0.10	0.16	0.06	0.11
EXVG048	1444	0.10	0.17	0.07	0.12
EXVG048	1520	0.11	0.18	0.07	0.13
EXVG048	1596	0.12	0.19	0.08	0.14
EXVG048	1672	0.12	0.20	0.08	0.15
EXVG048	1748	0.13	0.21	0.09	0.16

Table 171. Added pressure drop through optional filters (inches water column), 0.5 to 6 tons, EXH*006-070 (continued)

Model No.	CFM	2" MERV 8	2" MERV13	4" MERV 8	4" MERV13
EXVG048	1824	0.14	0.22	0.10	0.17
EXVG060	1520	0.09	0.14	0.05	0.10
EXVG060	1615	0.09	0.15	0.06	0.11
EXVG060	1710	0.10	0.16	0.06	0.11
EXVG060	1805	0.11	0.17	0.07	0.12
EXVG060	1900	0.11	0.18	0.07	0.13
EXVG060	1995	0.12	0.19	0.08	0.14
EXVG060	2090	0.13	0.21	0.09	0.15
EXVG060	2185	0.13	0.22	0.09	0.16
EXVG060	2280	0.14	0.23	0.10	0.17
EXVG070	1772	0.11	0.17	0.07	0.12
EXVG070	1883	0.11	0.18	0.07	0.13
EXVG070	1994	0.12	0.19	0.08	0.14
EXVG070	2104	0.13	0.21	0.09	0.15
EXVG070	2215	0.14	0.22	0.10	0.16
EXVG070	2326	0.14	0.24	0.10	0.18
EXVG070	2437	0.15	0.25	0.11	0.19
EXVG070	2547	0.16	0.26	0.12	0.20
EXVG070	2658	0.17	0.28	0.13	0.22

Table 172. Added pressure drop through optional filters (inches water column), 2 to 6 tons, DX*024-070

Model No.	CFM	2" MERV 8	2" MERV13	4" MERV 8	4" MERV13
DXHF024	608	0.10	0.11	N/A	N/A
DXHF024	684	0.11	0.13	N/A	N/A
DXHF024	760	0.13	0.15	N/A	N/A
DXHF024	836	0.14	0.17	N/A	N/A
DXHF036	1026	0.16	0.19	N/A	N/A
DXHF036	1140	0.19	0.22	N/A	N/A
DXHF036	1254	0.21	0.26	N/A	N/A
DXHF036	912	0.00	0.14	N/A	N/A
DXHF048	1216	0.15	0.17	N/A	N/A
DXHF048	1368	0.17	0.20	N/A	N/A
DXHF048	1520	0.19	0.23	N/A	N/A
DXHF048	1672	0.22	0.26	N/A	N/A
DXHF060	1360	0.17	0.20	N/A	N/A
DXHF060	1530	0.19	0.23	N/A	N/A
DXHF060	1700	0.22	0.27	N/A	N/A
DXHF060	1870	0.25	0.31	N/A	N/A
DXHF070	1672	0.22	0.26	N/A	N/A
DXHF070	1881	0.25	0.31	N/A	N/A
DXHF070	2090	0.29	0.36	N/A	N/A

Table 172. Added pressure drop through optional filters (inches water column), 2 to 6 tons, DX*024-070 (continued)

Model No.	CFM	2" MERV 8	2" MERV13	4" MERV 8	4" MERV13
DXHF070	2299	0.33	0.42	N/A	N/A
DXVG024	608	0.07	0.12	0.04	0.08
DXVG024	646	0.08	0.12	0.04	0.09
DXVG024	684	0.08	0.13	0.05	0.09
DXVG024	722	0.09	0.14	0.05	0.10
DXVG024	760	0.10	0.15	0.06	0.11
DXVG024	798	0.10	0.16	0.06	0.11
DXVG024	836	0.11	0.17	0.07	0.12
DXVG024	874	0.11	0.18	0.07	0.13
DXVG024	912	0.12	0.19	0.08	0.14
DXVG036	912	0.09	0.14	0.05	0.10
DXVG036	969	0.09	0.15	0.06	0.10
DXVG036	1026	0.10	0.16	0.06	0.11
DXVG036	1083	0.11	0.17	0.07	0.12
DXVG036	1140	0.11	0.18	0.07	0.13
DXVG036	1197	0.12	0.19	0.08	0.14
DXVG036	1254	0.13	0.20	0.09	0.15
DXVG036	1311	0.13	0.21	0.09	0.16
DXVG036	1368	0.14	0.23	0.10	0.17
DXVG048	1216	0.09	0.13	0.05	0.09
DXVG048	1292	0.09	0.15	0.05	0.10
DXVG048	1368	0.10	0.16	0.06	0.11
DXVG048	1444	0.10	0.17	0.07	0.12
DXVG048	1520	0.11	0.18	0.07	0.13
DXVG048	1596	0.12	0.19	0.08	0.14
DXVG048	1672	0.12	0.20	0.08	0.15
DXVG048	1748	0.13	0.21	0.09	0.16
DXVG048	1824	0.14	0.22	0.10	0.17
DXVG060	1520	0.09	0.14	0.05	0.10
DXVG060	1615	0.09	0.15	0.06	0.11
DXVG060	1710	0.10	0.16	0.06	0.11
DXVG060	1805	0.11	0.17	0.07	0.12
DXVG060	1900	0.11	0.18	0.07	0.13
DXVG060	1995	0.12	0.19	0.08	0.14
DXVG060	2090	0.13	0.21	0.09	0.15
DXVG060	2185	0.13	0.22	0.09	0.16
DXVG060	2280	0.14	0.23	0.10	0.17
DXVG070	1772	0.11	0.17	0.07	0.12
DXVG070	1883	0.11	0.18	0.07	0.13
DXVG070	1994	0.12	0.19	0.08	0.14
DXVG070	2104	0.13	0.21	0.09	0.15

Table 172. Added pressure drop through optional filters (inches water column), 2 to 6 tons, DX*024-070 (continued)

Model No.	CFM	2" MERV 8	2" MERV13	4" MERV 8	4" MERV13
DXVG070	2215	0.14	0.22	0.10	0.16
DXVG070	2326	0.14	0.24	0.10	0.18
DXVG070	2437	0.15	0.25	0.11	0.19
DXVG070	2547	0.16	0.26	0.12	0.20
DXVG070	2658	0.17	0.28	0.13	0.22

Table 173. Waterside economizer performance 0.5 to 6 tons, EXH*006-070

			Output Data						
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)
EXHF006	215	1.5	7.24	5.34	57.4	56.2	0.04	54.6	0.21
EXHF006	215	1.8	7.60	5.49	56.8	55.6	0.04	53.4	0.28
EXHF006	215	2.0	7.80	5.57	56.4	55.3	0.04	52.8	0.33
EXHF009	285	1.7	8.39	6.54	59.1	57.7	0.06	54.8	0.25
EXHF009	285	2.1	8.90	6.76	58.4	57.1	0.06	53.4	0.38
EXHF009	285	2.3	9.18	6.88	58.0	56.7	0.06	52.9	0.45
EXHF012	380	2.2	10.08	8.21	60.4	58.7	0.10	54.1	0.42
EXHF012	380	2.8	11.23	8.71	59.1	57.7	0.10	53.0	0.63
EXHF012	380	3.1	11.76	8.93	58.6	57.2	0.10	52.5	0.75
EXHF015	460	2.8	12.06	9.84	60.6	58.8	0.13	53.6	0.63
EXHF015	460	3.5	13.39	10.39	59.4	57.8	0.14	52.6	0.92
EXHF015	460	3.8	13.88	10.60	59.0	57.4	0.14	52.3	1.06
EXHF018	570	3.3	16.29	12.85	59.5	58.0	0.08	54.8	0.68
EXHF018	570	4.2	18.29	13.71	58.1	56.8	0.08	53.7	1.03
EXHF018	570	4.6	19.06	14.05	57.6	56.3	0.08	53.2	1.21
EXHF024	760	4.5	21.11	16.78	59.9	58.3	0.13	54.3	1.16
EXHF024	760	5.6	23.44	17.75	58.7	57.2	0.13	53.3	1.75
EXHF024	760	6.2	24.48	18.20	58.2	56.7	0.13	52.9	2.13
EXHF030	950	5.6	27.40	21.39	59.5	57.9	0.14	54.7	2.04
EXHF030	950	7.0	30.33	22.63	58.3	56.8	0.14	53.6	3.17
EXHF030	950	7.7	31.50	23.16	57.8	56.4	0.14	53.1	3.82
EXHF036	1140	6.7	31.98	25.11	60.0	58.2	0.19	54.5	2.90
EXHF036	1140	8.4	35.27	26.51	58.8	57.2	0.19	53.4	4.54
EXHF036	1140	9.2	36.50	27.06	58.4	56.8	0.19	52.9	5.43
EXHF042	1330	7.8	34.80	28.33	60.6	58.8	0.16	53.9	1.09
EXHF042	1330	9.8	39.10	30.10	59.4	57.7	0.16	52.9	1.70
EXHF042	1330	10.8	40.85	30.84	58.9	57.2	0.16	52.5	2.06
EXHF048	1520	9.0	39.36	32.00	60.8	58.9	0.20	53.7	1.44
EXHF048	1520	11.2	43.82	33.86	59.7	57.9	0.20	52.8	2.21
EXHF048	1520	12.3	45.63	34.63	59.2	57.5	0.20	52.4	2.66
EXHF060	1900	11.2	47.57	38.66	61.5	59.2	0.29	53.5	2.21
EXHF060	1900	14.0	52.69	41.02	60.3	58.3	0.29	52.5	3.44

Table 173. Waterside economizer performance 0.5 to 6 tons, EXH*006-070 (continued)

			Output Data						
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)
EXHF060	1900	15.4	54.74	41.91	59.9	57.9	0.29	52.1	4.15
EXHF070	2090	12.3	51.48	41.83	61.8	59.3	0.33	53.3	2.66
EXHF070	2090	15.4	56.87	44.43	60.7	58.5	0.33	52.4	4.15
EXHF070	2090	16.9	58.95	45.34	60.2	58.1	0.33	52.0	4.99

Note: Entering air DB/WB (80/67). Entering fluid (°F) 45.

Table 174. Waterside economizer performance 0.75 to 6 tons, EXVG*009-070

MODEL	Airside		Waterside			Cooling Capacity	
	CFM	APD (in. w.g.)	GPM	EWT	WPD (ft. hd.)	Total Mbtuh	Sensible Mbtuh
EXVG009	285	0.05	2.3	45	1.02	9.8	7.3
				50	1.01	7.5	6.5
				55	1.01	5.8	5.5
				60	1.00	4.5	4.4
				65	0.98	3.4	3.4
				70	0.97	2.2	2.2
EXVG012	380	0.07	3.0	45	1.67	12.2	9.3
				50	1.65	9.3	8.3
				55	1.62	7.4	7.1
				60	1.59	5.8	5.7
				65	1.57	4.3	4.3
				70	1.55	2.9	2.9
EXVG015	475	0.08	3.8	45	2.45	15.4	11.7
				50	2.41	11.8	10.4
				55	2.39	9.3	8.8
				60	2.36	7.3	7.2
				65	2.34	5.4	5.3
				70	2.33	3.6	3.6
EXVG018	570	0.07	4.5	45	2.31	19.4	14.6
				50	2.26	14.9	13.0
				55	2.23	11.7	11.1
				60	2.20	9.1	8.9
				65	2.18	6.7	6.6
				70	2.17	4.5	4.5

Table 174. Waterside economizer performance 0.75 to 6 tons, EXVG*009-070 (continued)

MODEL	Airside		Waterside			Cooling Capacity	
	CFM	APD (in. w.g.)	GPM	EWT	WPD (ft. hd.)	Total Mbtuh	Sensible Mbtuh
EXVG024	760	0.11	6.0	45	3.87	24.9	18.9
				50	3.86	19.0	16.7
				55	3.85	14.9	14.2
				60	3.84	11.7	11.5
				65	3.83	8.7	8.6
				70	3.82	5.8	5.8
EXVG030	950	0.10	7.5	45	2.31	29.8	22.9
				50	2.28	22.9	20.6
				55	2.26	18.2	17.5
				60	2.25	14.3	14.0
				65	2.24	10.7	10.6
				70	2.23	7.1	7.1
EXVG036	1140	0.13	9.0	45	3.24	35.0	27.3
				50	3.23	26.7	24.3
				55	3.22	21.2	20.6
				60	3.21	16.7	16.4
				65	3.21	12.5	12.4
				70	3.20	8.4	8.4
EXVG042	1330	0.11	10.5	45	2.52	41.3	32.2
				50	2.50	31.6	28.4
				55	2.49	25.1	24.3
				60	2.47	19.7	19.3
				65	2.46	14.7	14.6
				70	2.46	9.9	9.9
EXVG048	1520	0.13	12.0	45	3.24	46.4	36.2
				50	3.23	35.4	32.2
				55	3.22	28.1	27.3
				60	3.21	22.1	21.7
				65	3.21	16.6	16.4
				70	3.20	11.1	11.1
EXVG060	1900	0.14	15.0	45	3.58	58.3	45.5
				50	3.57	44.4	40.0
				55	3.56	35.2	34.1
				60	3.56	27.7	27.1
				65	3.55	20.7	20.5
				70	3.55	13.9	13.9

Table 174. Waterside economizer performance 0.75 to 6 tons, EXVG*009-070 (continued)

MODEL	Airside		Waterside			Cooling Capacity	
	CFM	APD (in. w.g.)	GPM	EWT	WPD (ft. hd.)	Total Mbtuh	Sensible Mbtuh
EXVG070	2215	0.17	17.5	45	4.86	66.5	51.9
				50	4.84	50.4	45.9
				55	4.84	39.9	38.7
				60	4.83	31.4	30.8
				65	4.82	23.6	23.4
				70	4.82	15.8	15.8

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 175. Waterside economizer performance 2 to 6 tons, DXH*024-070

			Output Data						
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)
DXHF024	760	4.5	21.11	16.78	59.9	58.3	0.13	54.3	1.16
DXHF024	760	5.6	23.44	17.75	58.7	57.2	0.13	53.3	1.75
DXHF024	760	6.2	24.48	18.20	58.2	56.7	0.13	52.9	2.13
DXHF036	1140	6.7	31.98	25.11	60.0	58.2	0.19	54.5	2.90
DXHF036	1140	8.4	35.27	26.51	58.8	57.2	0.19	53.4	4.54
DXHF036	1140	9.2	36.50	27.06	58.4	56.8	0.19	52.9	5.43
DXHF048	1520	9.0	39.36	32.00	60.8	58.9	0.20	53.7	1.44
DXHF048	1520	11.2	43.82	33.86	59.7	57.9	0.20	52.8	2.21
DXHF048	1520	12.3	45.63	34.63	59.2	57.5	0.20	52.4	2.66
DXHF060	1900	11.2	47.57	38.66	61.5	59.2	0.29	53.5	2.21
DXHF060	1900	14.0	52.69	41.02	60.3	58.3	0.29	52.5	3.44
DXHF060	1900	15.4	54.74	41.91	59.9	57.9	0.29	52.1	4.15
DXHF070	2090	12.3	51.48	41.83	61.8	59.3	0.33	53.3	2.66
DXHF070	2090	15.4	56.87	44.43	60.7	58.5	0.33	52.4	4.15
DXHF070	2090	16.9	58.95	45.34	60.2	58.1	0.33	52.0	4.99

Note: Entering air DB/WB (80/67). Entering fluid (°F) 45.

Table 176. Waterside economizer performance 2 to 6 tons, DXVG*024-070

MODEL	Airside		Waterside			Cooling Capacity	
	CFM	APD (in. w.g.)	GPM	EWT	WPD (ft. hd.)	Total Mbtuh	Sensible Mbtuh
DXVG024	760	0.11	6.0	45	3.87	24.9	18.9
				50	3.86	19.0	16.7
				55	3.85	14.9	14.2
				60	3.84	11.7	11.5
				65	3.83	8.7	8.6
				70	3.82	5.8	5.8
DXVG036	1140	0.13	9.0	45	3.24	35.0	27.3
				50	3.23	26.7	24.3
				55	3.22	21.2	20.6
				60	3.21	16.7	16.4
				65	3.21	12.5	12.4
				70	3.20	8.4	8.4
DXVG048	1520	0.13	12.0	45	3.24	46.4	36.2
				50	3.23	35.4	32.2
				55	3.22	28.1	27.3
				60	3.21	22.1	21.7
				65	3.21	16.6	16.4
				70	3.20	11.1	11.1
DXVG060	1900	0.14	15.0	45	3.58	58.3	45.5
				50	3.57	44.4	40.0
				55	3.56	35.2	34.1
				60	3.56	27.7	27.1
				65	3.55	20.7	20.5
				70	3.55	13.9	13.9
DXVG070	2215	0.17	17.5	45	4.86	66.5	51.9
				50	4.84	50.4	45.9
				55	4.84	39.9	38.7
				60	4.83	31.4	30.8
				65	4.82	23.6	23.4
				70	4.82	15.8	15.8

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 177. Antifreeze correction factors

Methanol (concentration by volume)						
Item	0%	10%	20%	30%	40%	50%
Cooling Capacity	1	0.998	0.997	0.995	0.993	0.992
Heating Capacity	1	0.995	0.99	0.985	0.979	0.974
Pressure Drop	1	1.023	1.057	1.091	1.122	1.16

Table 177. Antifreeze correction factors (continued)

Ethylene Glycol (concentration by volume)						
Item	**0%**	**10%**	**20%**	**30%**	**40%**	**50%**
Cooling Capacity	1	0.996	0.991	0.987	0.983	0.979
Heating Capacity	1	0.993	0.985	0.977	0.969	0.961
Pressure Drop	1	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	0.993	0.987	0.98	0.974	0.968
Heating Capacity	1	0.986	0.973	0.96	0.948	0.935
Pressure Drop	1	1.04	1.098	1.174	1.273	1.405
Brine (NaCL) (concentration by volume)						
Item	**0%**	**10%**	**20%**	**30%**	**40%**	**50%**
Cooling Capacity	1	0.994	0.987	0.979	0.971	0.963
Heating Capacity	1	0.993	0.987	0.982	0.978	0.976
Pressure Drop	1	1.154	1.325	1.497	1.669	1.841

Examples

Example 1 (Ethylene Glycol):

The antifreeze solution is 20% by volume of Ethylene Glycol. Determine the corrected cooling capacity and waterside pressure drop for a GEHE018 when the EWT is 86°F and the GPM is 4.2.

From the catalog data, the cooling capacity at these conditions with 100% water is 17.6 Mbtuh, and the waterside pressure drop is 6.4 feet of head. At 20% Ethylene Glycol, the correction factor for cool capacity is 0.991 and the pressure drop is 1.068.

The corrected cooling capacity (Mbtuh) = 17.6 * 0.991 = 17.4. The corrected water side pressure drop (Ft. head) = 6.4 * 1.068 = 6.8.

Example 2 (Propylene Glycol):

The antifreeze solution is 30% by volume of Propylene Glycol. Determine the corrected heating capacity and waterside pressure drop for a GEHE042 when the EWT is 45°F and the GPM is 9.8.

From the catalog data, the heating capacity at these conditions with 100% water is 40.7 Mbtuh, and the waterside pressure drop is 16.6 feet of head. At 30% Propylene Glycol, the correction factor for heat capacity is 0.960 and the pressure drop is 1.174.

The corrected heating capacity (Mbtuh) = 40.7 * 0.960 = 39.1. The corrected water side pressure drop (Ft. head) = 16.6 * 1.174 = 19.5.

Figure 14. Cooling capacity correction factor

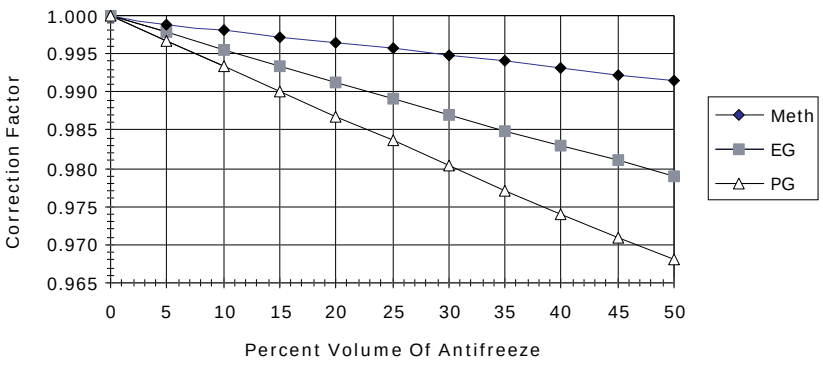


Figure 15. Heating capacity correction factor

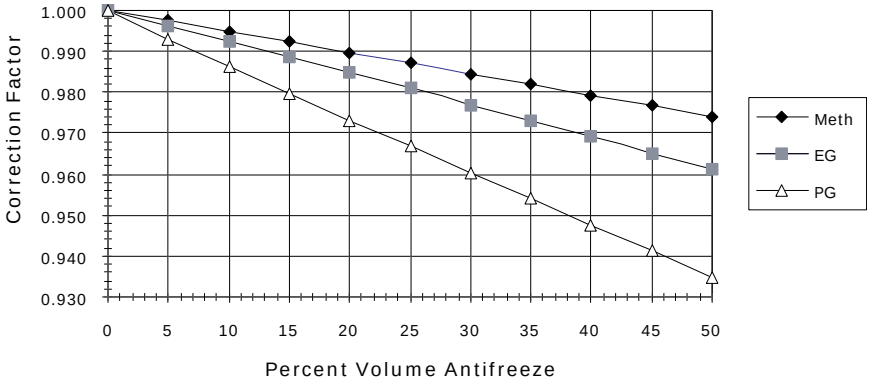
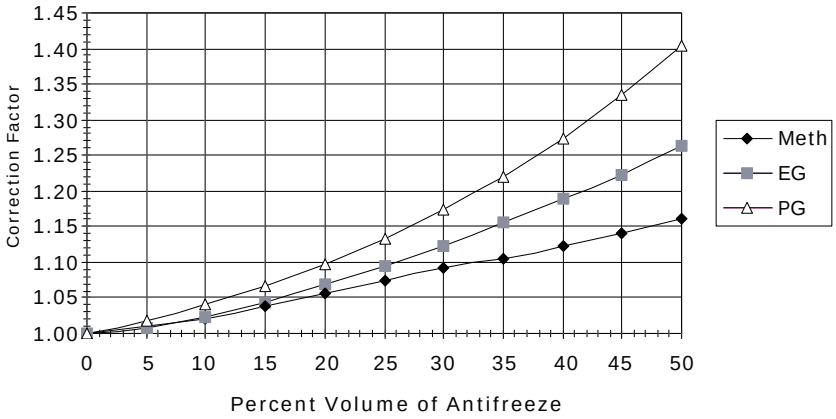


Figure 16. Water pressure drop correction factor



Controls

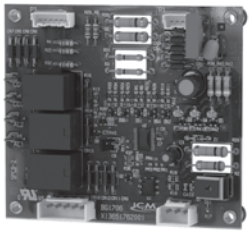
From our industry-leading building automation systems to equipment controls and sensors, Trane offers a complete portfolio of controls products. Trane unit mounted controls are mounted, wired, configured and tested to deliver a high quality product with time savings at the job site. Our building controls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

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 17. 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
- Anti-short cycle compressor protection
- Brown out protection
- Compressor contactor
- Compressor delay on start
- Compressor lock-out
- Condensate overflow
- Electric heat and compressor enable
- Freeze protection
- High pressure switch
- Hot gas reheat — EX models only
- 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.

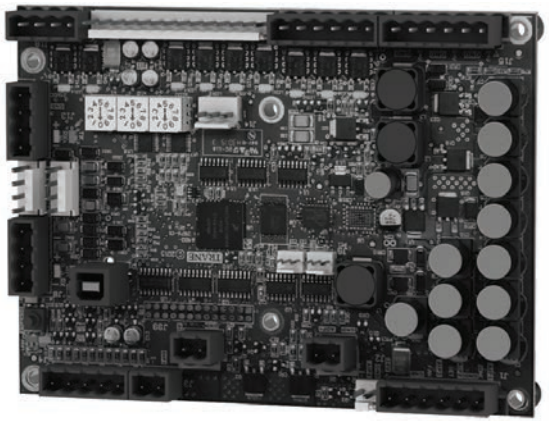
The high pressure switch prevents compressor operation during high or excessive discharge pressures that exceed 650 psig.

Figure 18. High and low pressure switches

Tracer® Controls

The Tracer® family of controllers, ZN524, UC400, and UC400B offer 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 Rover service software (ZN524) and the UC400 is serviced via Tracer® TU. For more detailed information, refer to CNT-SVX11*-EN (for Tracer® ZN524), BAS-SVX065*-EN (for UC400B), or the most recent version of the publication. Tracer® ZN524 and UC400(B) are 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 19. Tracer® UC400B



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) — for EX models only.

Tracer® ZN524

The ZN524 controller can be used in a stand-alone application or as part of a Trane® Integrated Comfort™ System (ICS). The Tracer® ZN524 is LonTalk® certified. It is capable of working with, and talking to other LonTalk® certified controllers providing the building owner more choices, and the design engineers more flexibility to meet the challenges of building automation.

Tracer® UC400/400B

The Tracer® UC400(B) is a BTL Listed BACnet® controller that can operate stand-alone or within a Building Automation system such as Tracer® SC.

Tracer® UC400(B)/ZN524 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.

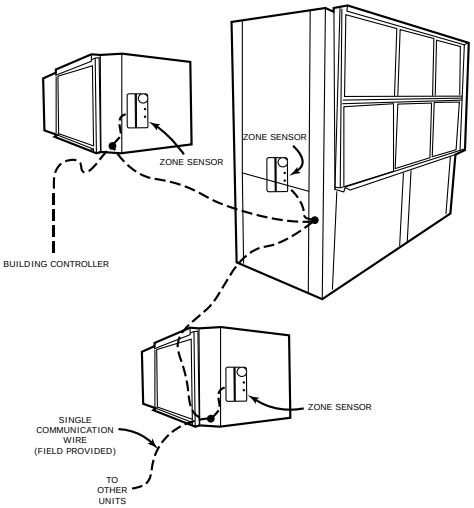
Compressor Operation

The compressor is cycled on and off to meet heating or cooling zone demands. Units 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 20. Building control advantages



The Tracer® ZN524 or UC400(B) controllers have the ability to share information with one or several units on the same communication link.

An advantage of installing a Tracer® UC400(B) or ZN524 is its capability to work with other BACnet® or LonTalk® controllers. This provides greater flexibility to the building owner, as well as greater flexibility in design.

Integrating the UC400(B) or ZN524 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, UC400(B) and ZN524 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 Tracer® UC400(B) and ZN524 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 (applicable to EX units only)

Dehumidification[1] for the water-source heat pump is applicable with the UC400(B) and ZN524. 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 zone's 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.

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 fan's 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 Tracer® UC400(B) and ZN524 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 Tracer® UC400(B) and ZN524 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

1. *For 6 to 25 ton units, applicable to single and dual circuited*

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.

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. Once an isolation valve has been opened, it will remain open for a 10 minute minimum to reduce excessive cycling of the valve.

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 prior to the compressor and indoor fan (if not already energized) outputs to ensure adequate water flow to the heat exchanger. To reduce excessive cycling of the isolation valve once opened, the isolation valve will remain open for a minimum of 10 minutes.

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 and the 10 minute minimum on time has expired.

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.

The WCI is available in three configurations:

- The universal model is the most common. It installs the same as a wired zone sensor in indoor applications.
- The outdoor model is housed in an enclosure suitable for outdoor environments. It is usually used on equipment above the roof deck.
- The flush mount model is used on fan coils, blower coils, and unit ventilators.

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.)

Several WCS models are available:

- CO_2 with occupancy WCS-SCO_2
- Digital display (WCS-SD) model
- Occupancy WCS-SO
- 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

In most applications, one WCS sensor is used per WCI acting as a router.However, up to six (6) WCS 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 178. 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 • 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. • 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. • 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 set point 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. • 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 179. Zone sensor selection for use with Tracer® ZN524 and UC400 controller

Sensor	Part Number	Description
	X13790886040	Wired temperature sensor with an LCD display • Allows an occupant to control the temperature setpoint, request timed override of system operation, and provides a COMM module to service technicians. Tracer® ZN524 and UC400 Compatible
	X13651467020	Communication Module • Sold in packs of 12 • Provides local RJ22 connection to Trane® service tools for easy, low cost maintenance.
	X13511529010	Zone Sensor • Tracer® UC400 and ZN524 compatible • External setpoint adjustment wheel
	X13511527010	Zone Sensor • Tracer® UC400 and ZN524 compatible • External setpoint adjustment wheel • ON and CANCEL buttons
	X1379084501	Zone Sensor • Tracer® UC400 and ZN524 compatible • External setpoint adjustment wheel • ON and CANCEL buttons • Fan switch AUTO-OFF
	X1379044401	Temperature and relative humidity sensor • Tracer® UC400 and ZN524 compatible

Table 179. Zone sensor selection for use with Tracer® ZN524 and UC400 controller (continued)

Sensor	Part Number	Description
	X13790993001	Commercial Touch Screen Programmable Zone Sensor • 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 UC400.
	X13790992001	Residential Touch Screen Programmable Zone Sensor • 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 UC400.

Table 180. Wireless zone sensor selection for use with Tracer® UC400 controller

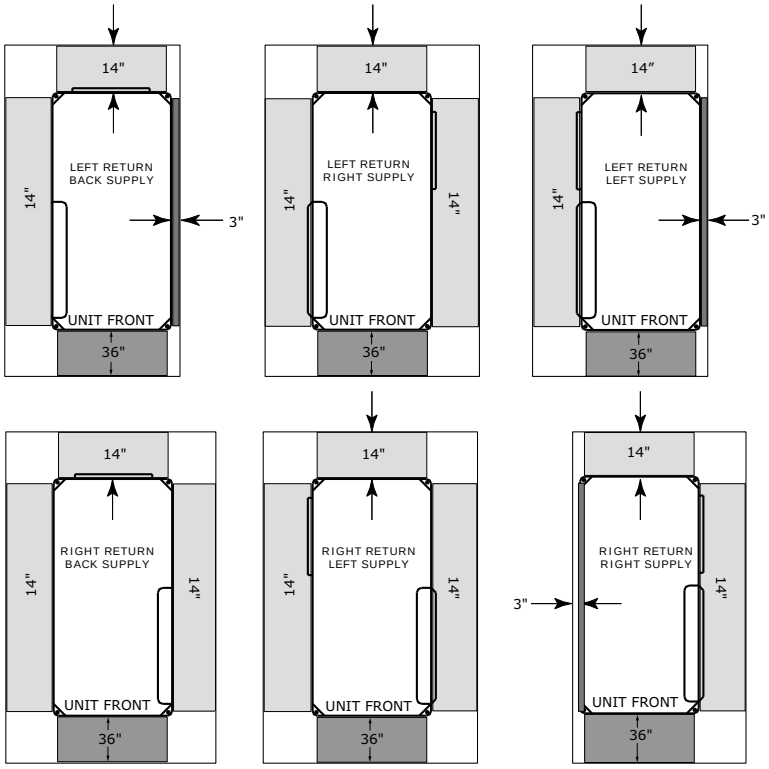
Sensor	Part Number	Description
	X13790955040	Trane Air-Fi® WCS-SD (display) • Tracer® UC400 Compatible • Easy-to-use interface for clear and simple monitoring and control
	X13790956010	Trane Air-Fi® WCS-SB (base) • Tracer® UC400 Compatible • Simplicity • Eliminates local temperature control when higher control level is required.
	X13790973030	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.

Dimensional Data

Service Clearances

Per NEC requirements, 36 inches of access and working space shall be 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.

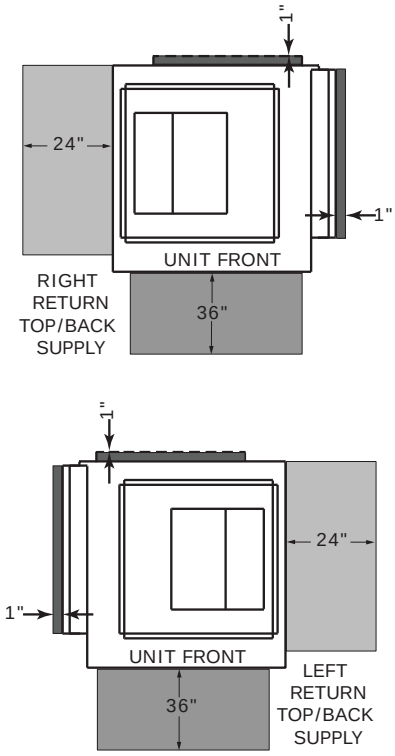
Figure 21. Clearances - EXHF/DXHF 0.5 to 6 tons



A minimum 14 inch clearance for servicing the unit is required for all EXH 0.5 to 6 ton 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.

Equipment containing a same-side supply/return combination requires a 3 inches limitation on one side. Access to the TXV may not be possible with this 3 inches clearance. This configuration is typically applied in a corridor installation, where space limitations force the left or right side of the unit against a wall.

Figure 22. Clearance – EXVG/DXVG 0.75 to 6 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 EXVG/DXVG 0.75-6T 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.

Unit Dimensions

Figure 23. Left return/left supply (EXHF/DXHF)

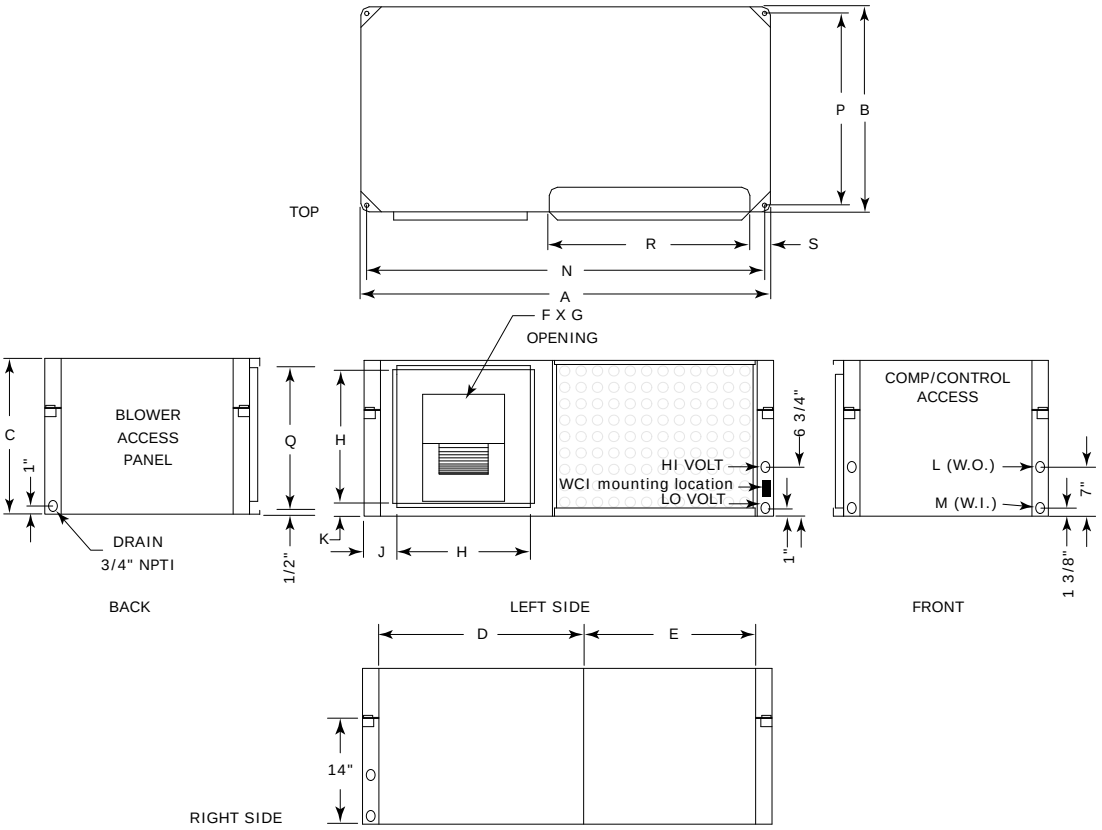


Table 181. Left return/left supply (EXHF/DXHF)

Unit	A	B	C	D[a]	E	F x G	H	J	K	L NPTI	M NPTI	N	P	Q	R[b]	S
EXHF006-009	40	20	15	20	15	6-7/8 x 8	11-1/2	4-1/2	1-3/4	1/2	1/2	38-3/4	18-3/4	13-5/8	18-1/2	3-1/4
EXHF012-015	40	20	15	20	15	8-1/4 x 9-3/4	11-1/2	4-1/4	3/4	1/2	1/2	38-3/4	18-3/4	13-5/8	18-1/2	3-1/4
EXHF018 EXHF/DXHF024	46	23	18	23	18	8-1/4 x 11-3/8	13-1/2	4-3/4	1-3/8	3/4	3/4	44-3/4	21-3/4	16-5/8	18-1/2	4-1/4
EXHF030 EXHF/DXHF036	50	25	19	25	20	10-1/2 x 13-1/2	17	4	1	3/4	3/4	48-3/4	23-3/4	17-5/8	23-1/2	3-1/4
EXHF042-060 DXHF048-060	58	33	21	29-1/2	23-1/2	13-7/8 x 13-7/8	18	5-1/4	1-1/2	1	1	56-3/4	31-3/4	19-5/8	23-1/2	5-1/2
EXHF/DXHF070	58	39	21	29-1/2	23-1/2	13-7/8 x 13-7/8	18	5-1/4	1-1/2	1	1	56-3/4	37-3/4	19-5/8	23-1/2	5-1/2

Note: Equipment containing a same-side supply/return combination requires a 3 in. clearance on one side. Access to the TXV may not be possible with this 3 in. clearance.

(a) Return air opening dimension.

(b) Filter rack dimension.

Figure 24. Left return/back supply (EXH/DXH)

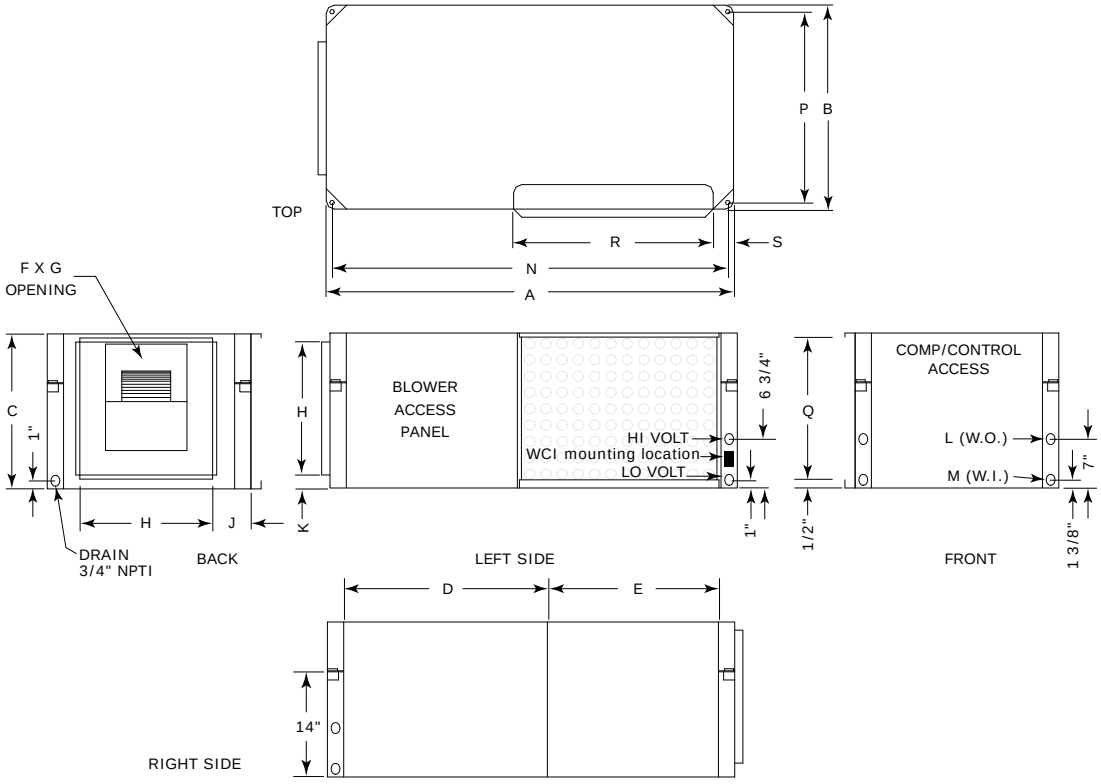


Table 182. Dimensional data left return/back supply (EXH/DXH)

Unit	A	B	C	D[a]	E	F x G	H	J	K	L NPTI	M NPTI	N	P	Q	R[b]	S
EXHF006-009	40	20	15	20	15	6-7/8 x 8	11-1/2	4-1/2	1-3/4	1/2	1/2	38-3/4	18-3/4	13-5/8	18-1/2	3-1/4
EXHF012-015	40	20	15	20	15	8-1/4 x 9-3/4	11-1/2	4-1/4	3/4	1/2	1/2	38-3/4	18-3/4	13-5/8	18-1/2	3-1/4
EXHF018 EXHF/ DXHF024	46	23	18	23	18	8-1/4 x 11-3/8	13-1/2	4-3/4	1-3/8	3/4	3/4	44-3/4	21-3/4	16-5/8	18-1/2	4-1/4
EXHF030 EXHF/ DXHF036	50	25	19	25	20	10-1/2 x 13-1/2	17	4	1	3/4	3/4	48-3/4	23-3/4	17-5/8	23-1/2	3-1/4
EXHF042-060 DXHF048-060	58	33	21	29-1/2	23-1/2	13-7/8 x 13-7/8	18	5-1/4	1-1/2	1	1	56-3/4	31-3/4	19-5/8	23-1/2	5-1/2
EXHF/ DXHF070	58	39	21	29-1/2	23-1/2	13-7/8 x 13-7/8	18	5-1/4	1-1/2	1	1	56-3/4	37-3/4	19-5/8	23-1/2	5-1/2

Note: Equipment containing a same-side supply/return combination requires a 3 in. clearance on one side. Access to the TXV may not be possible with this 3 in. clearance.

(a) Return air opening dimension.

(b) Filter rack dimension.

Figure 25. Left return/right supply (EXH/DXH)

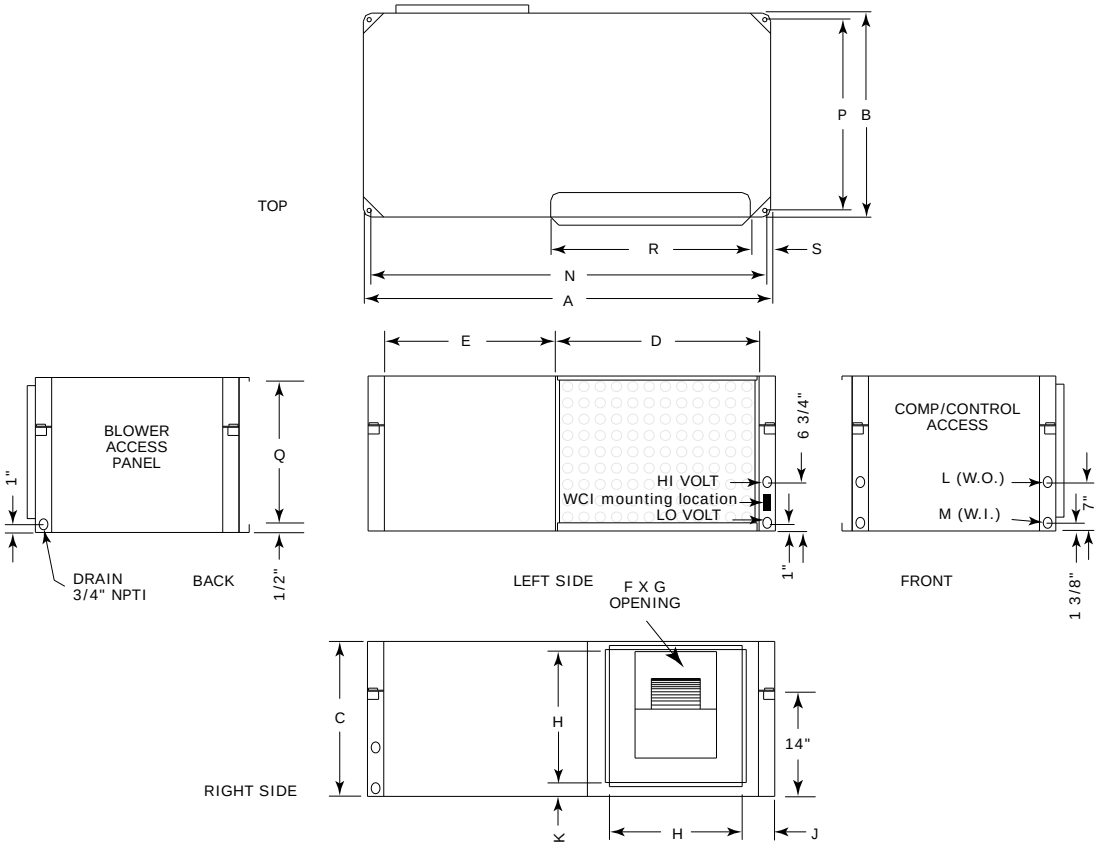


Table 183. Dimensional data left return/right supply (EXH/DXH)

Unit	A	B	C	D[a]	E	F x G	H	J	K	L NPTI	M NPTI	N	P	Q	R[b]	S
EXHF006-009	40	20	15	20	15	6-7/8 x 8	11-1/2	4-1/2	1-3/4	1/2	1/2	38-3/4	18-3/4	13-5/8	18-1/2	3-1/4
EXHF012, 015	40	20	15	20	15	8-1/4 x 9-3/4	11-1/2	4-1/4	3/4	1/2	1/2	38-3/4	18-3/4	13-5/8	18-1/2	3-1/4
EXHF018, EXHF/ DXHF024	46	23	18	23	18	8-1/4 x 11-3/8	13-1/2	4-3/4	1-3/8	3/4	3/4	44-3/4	21-3/4	16-5/8	18-1/2	4-1/4
EXHF030, EXHF/ DXHF036	50	25	19	25	20	10-1/2 x 13-1/ 2	17	4	1	3/4	3/4	48-3/4	23-3/4	17-5/8	23-1/2	3-1/4
EXHF042-060, DXHF048-060	58	33	21	29-1/2	23-1/2	13-7/8 x 13-7/ 8	18	5-1/4	1-1/2	1	1	56-3/4	31-3/4	19-5/8	23-1/2	5-1/2
EXHF/ DXHF070	58	39	21	29-1/2	23-1/2	13-7/8 x 13-7/ 8	18	5-1/4	1-1/2	1	1	56-3/4	37-3/4	19-5/8	23-1/2	5-1/2

Note: Equipment containing a same-side supply/return combination requires a 3 in. clearance on one side. Access to the TXV may not be possible with this 3 in. clearance.

(a) Return air opening dimension.

(b) Filter rack dimension.

Figure 26. Right return/left supply (EXH/DXH)

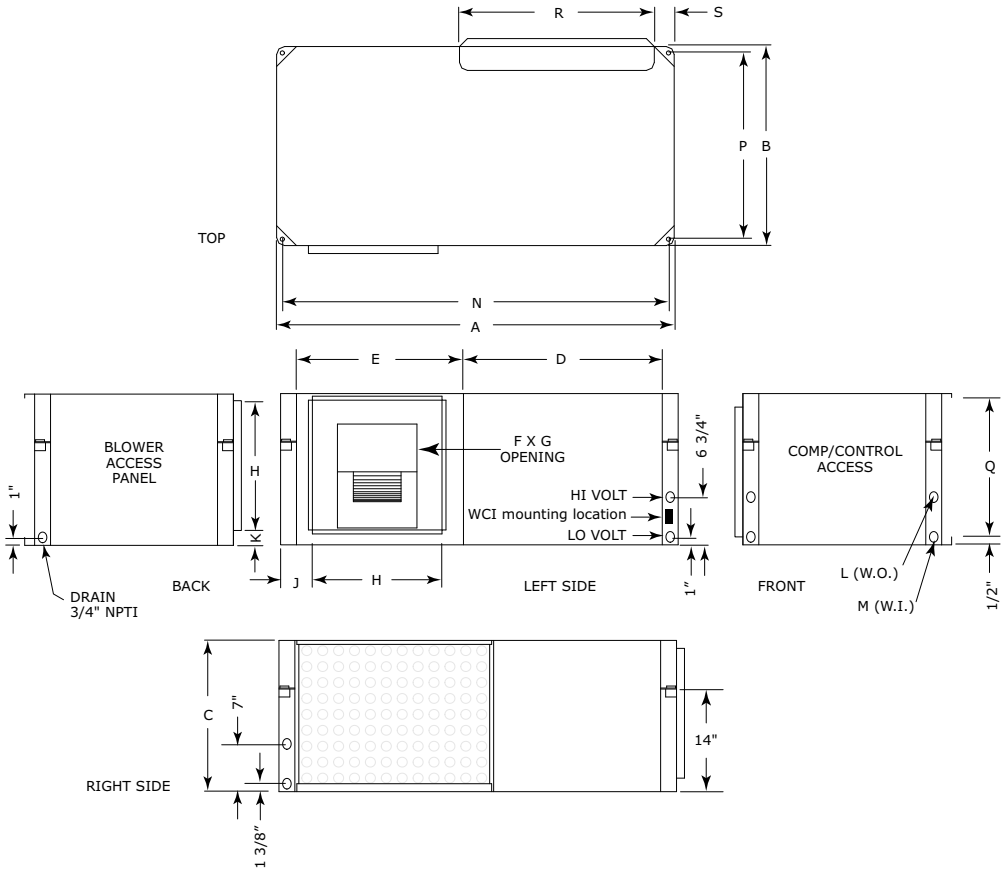


Table 184. Dimensional data right return/left supply (EXH/DXH)

Unit	A	B	C	D[a]	E	F x G	H	J	K	L NPTI	M NPTI	N	P	Q	R[b]	S
EXHF006-009	40	20	15	20	15	6-7/8 x 8	11-1/2	4-1/2	1-3/4	1/2	1/2	38-3/4	18-3/4	13-5/8	18-1/2	3-1/4
EXHF012-015	40	20	15	20	15	8-1/4 x 9-3/4	11-1/2	4-1/4	3/4	1/2	1/2	38-3/4	18-3/4	13-5/8	18-1/2	3-1/4
EXHF018, EXHF/ DXHF024	46	23	18	23	18	8-1/4 x 11-3/8	13-1/2	4-3/4	1-3/8	3/4	3/4	44-3/4	21-3/4	16-5/8	18-1/2	4-1/4
EXHF030, EXHF/ DXHF036	50	25	19	25	20	10-1/2 x 13-1/2	17	4	1	3/4	3/4	48-3/4	23-3/4	17-5/8	23-1/2	3-1/4
EXHF042-060, DXHF048-060	58	33	21	29-1/2	23-1/2	13-7/8 x 13-7/8	18	5-1/4	1-1/2	1	1	56-3/4	31-3/4	19-5/8	23-1/2	5-1/2
EXHF/ DXHF070	58	39	21	29-1/2	23-1/2	13-7/8 x 13-7/8	18	5-1/4	1-1/2	1	1	56-3/4	37-3/4	19-5/8	23-1/2	5-1/2

Note: Equipment containing a same-side supply/return combination requires a 3 in. clearance on one side. Access to the TXV may not be possible with this 3 in. clearance.

[a] Return air opening dimension.

[b] Filter rack dimension.

Figure 27. Right return/back supply (EXH/DXH)

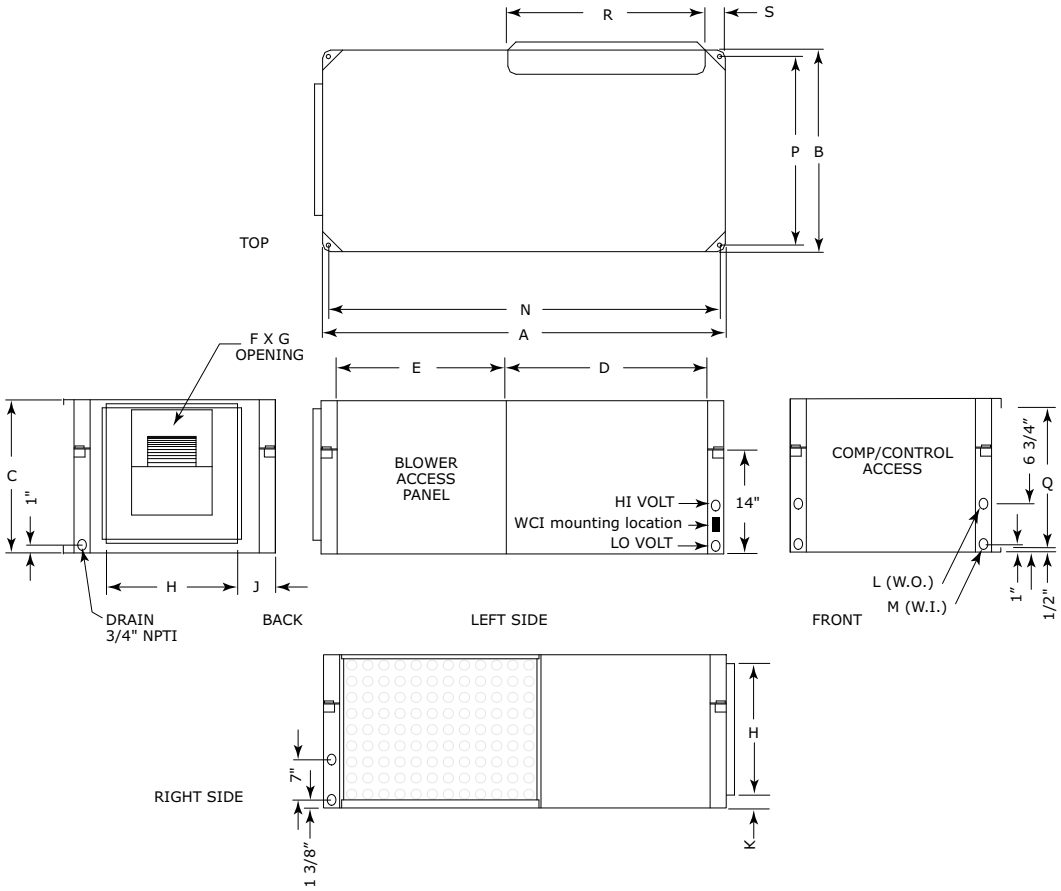


Table 185. Dimensional data right return/back supply (EXH/DXH)

Unit	A	B	C	D[a]	E	F x G	H	J	K	L NPTI	M NPTI	N	P	Q	R[b]	S
EXHF006-009	40	20	15	20	15	6-7/8 x 8	11-1/2	4-1/2	1-3/4	1/2	1/2	38-3/4	18-3/4	13-5/8	18-1/2	3-1/4
EXHF012-015	40	20	15	20	15	8-1/4 x 9-3/4	11-1/2	4-1/4	3/4	1/2	1/2	38-3/4	18-3/4	13-5/8	18-1/2	3-1/4
EXHF018, EXHF/ DXHF024	46	23	18	23	18	8-1/4 x 11-3/8	13-1/2	4-3/4	1-3/8	3/4	3/4	44-3/4	21-3/4	16-5/8	18-1/2	4-1/4
EXHF030, EXHF/ DXHF036	50	25	19	25	20	10-1/2 x 13-1/ 2	17	4	1	3/4	3/4	48-3/4	23-3/4	17-5/8	23-1/2	3-1/4
EXHF042-060, DXHF048-060	58	33	21	29-1/2	23-1/2	13-7/8 x 13-7/ 8	18	5-1/4	1-1/2	1	1	56-3/4	31-3/4	19-5/8	23-1/2	5-1/2
EXHF/ DXHF070	58	39	21	29-1/2	23-1/2	13-7/8 x 13-7/ 8	18	5-1/4	1-1/2	1	1	56-3/4	37-3/4	19-5/8	23-1/2	5-1/2

Note: Equipment containing a same-side supply/return combination requires a 3 in. clearance on one side. Access to the TXV may not be possible with this 3 in. clearance.

(a) Return air opening dimension.

(b) Filter rack dimension.

Figure 28. Right return/right supply (EXH/DXH)

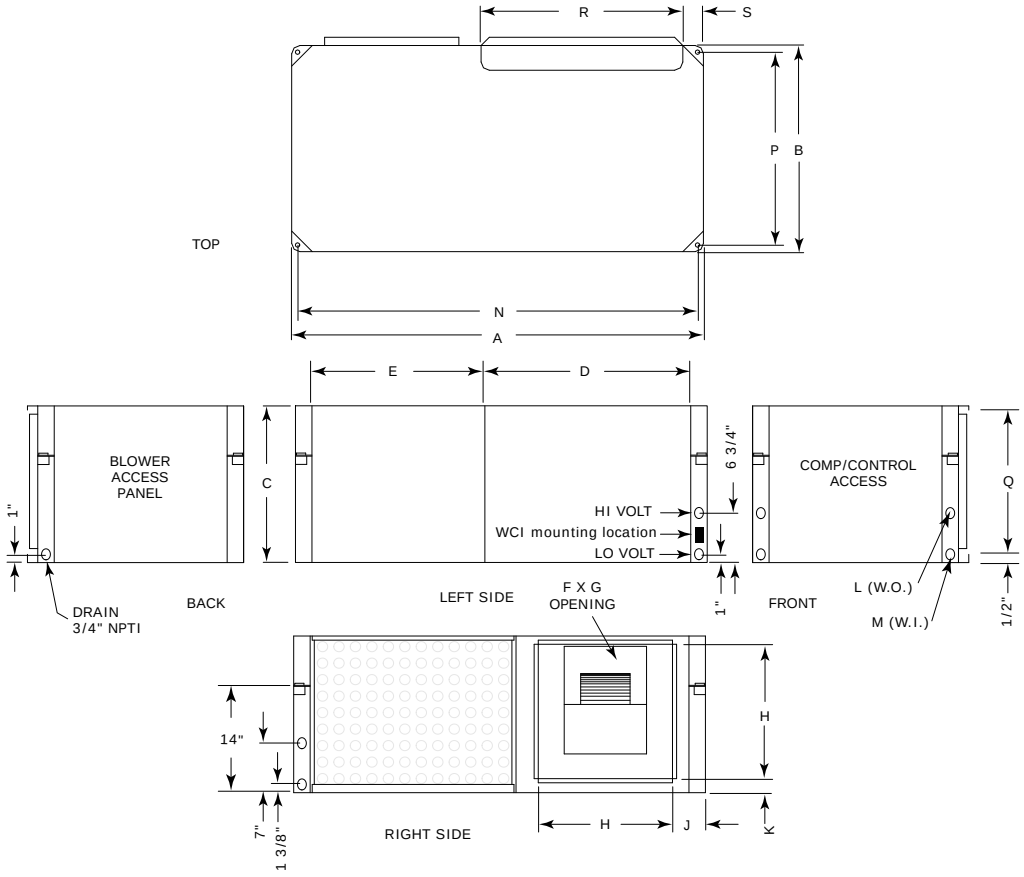


Table 186. Dimensional data right return/right supply (EXH/DXH)

Unit	A	B	C	D[a]	E	F x G	H	J	K	L NPTI	M NPTI	N	P	Q	R[b]	S
EXHF006-009	40	20	15	20	15	6-7/8 x 8	11-1/2	4-1/2	1-3/4	1/2	1/2	38-3/4	18-3/4	13-5/8	18-1/2	3-1/4
EXHF012-015	40	20	15	20	15	8-1/4 x 9-3/4	11-1/2	4-1/4	3/4	1/2	1/2	38-3/4	18-3/4	13-5/8	18-1/2	3-1/4
EXHF018, EXHF/ DXHF024	46	23	18	23	18	8-1/4 x 11-3/8	13-1/2	4-3/4	1-3/8	3/4	3/4	44-3/4	21-3/4	16-5/8	18-1/2	4-1/4
EXHF030, EXHF/ DXHF036	50	25	19	25	20	10-1/2 x 13-1/2	17	4	1	3/4	3/4	48-3/4	23-3/4	17-5/8	23-1/2	3-1/4
EXHF042-060, DXHF048-060	58	33	21	29-1/2	23-1/2	13-7/8 x 13-7/8	18	5-1/4	1-1/2	1	1	56-3/4	31-3/4	19-5/8	23-1/2	5-1/2
EXHF/ DXHF070	58	39	21	29-1/2	23-1/2	13-7/8 x 13-7/8	18	5-1/4	1-1/2	1	1	56-3/4	37-3/4	19-5/8	23-1/2	5-1/2

Notes:

1. When a horizontal model is ordered with the same side return and supply in a ducted application, bottom filter removal is required due to limited access on either side of the filter.
2. Equipment containing a same-side supply/return combination requires a 3 in. clearance on one side. Access to the TXV may not be possible with this 3 in. clearance.

[a] Return air opening dimension.
[b] Filter rack dimension.

Figure 29. Left return/top supply (EXVG/DXVG)

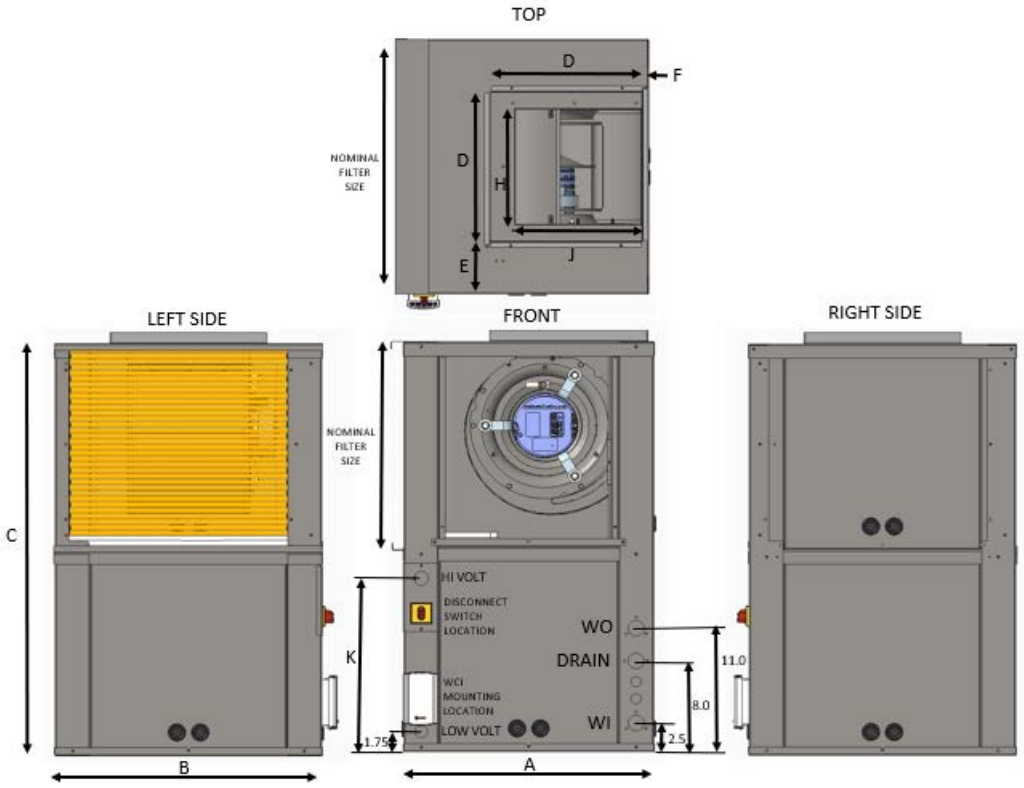


Table 187. Dimensional data left return/top supply (EXVG/DXVG)

	Cabinet			Duct Collar	Duct Collar Location			Blower Opening		Hi Volt	Nominal Filter Size	W.I. NPTI	W.O. NPTI	Drain NPTI
	Width	Depth	Height											
Unit	A	B	C	D	E	F	G	H	J	K				
EXVG009-012	21.50	21.50	34.00	13.25	4.00	1.00	3.50	10.50	9.60	14.25	16 x 19	1/2	1/2	3/4
EXVG015	21.50	23.00	36.00	13.25	4.75	0.63	3.50	10.50	11.30	15.25	17 x 20	3/4	3/4	3/4
EXVG018, EXVG/ DXVG024	21.50	26.00	38.00	13.25	6.25	0.63	3.50	11.80	11.30	16.25	18 x 23	3/4	3/4	3/4
EXVG030, EXVG/ DXVG036	24.00	32.50	42.00	17.75	7.25	0.75	3.50	13.70	13.50	18.25	20 x 30	1	1	3/4
EXVG042, EXVG/ DXVG048	25.40	32.50	49.00	17.75	7.25	0.75	3.50	13.70	13.50	18.25	27 x 30	1	1	3/4
EXVG/ DXVG060-070	25.40	32.50	55.00	17.75	7.25	0.75	3.50	13.70	13.50	18.25	30 x 33	1	1	3/4

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 30. Right return/top supply (EXVG/DXVG)

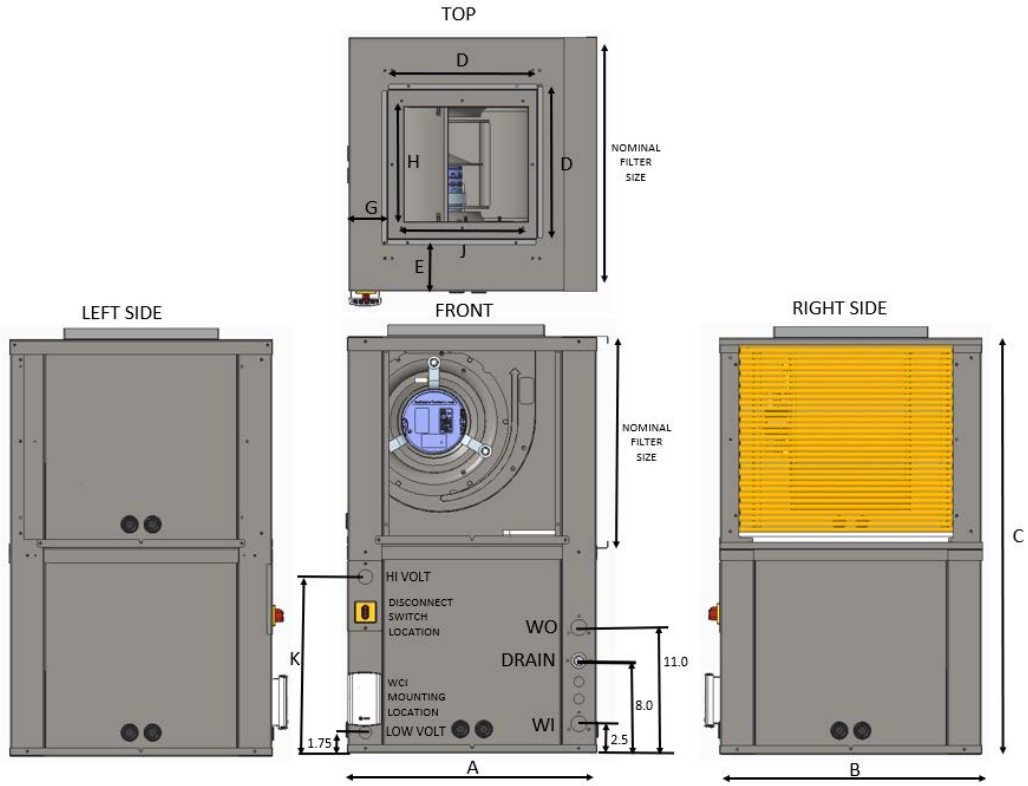


Table 188. Dimensional data right return/top supply (EXVG/DXVG)

	Cabinet			Duct Collar	Duct Collar Location			Blower Opening		Hi Volt	Nominal Filter Size	W.I. NPTI	W.O. NPTI	Drain NPTI
	Width	Depth	Height											
Unit	A	B	C	D	E	F	G	H	J	K				
EXVG009-012	21.50	21.50	34.00	13.25	4.00	1.00	3.50	10.50	9.60	14.25	16 x 19	1/2	1/2	3/4
EXVG015	21.50	23.00	36.00	13.25	4.75	0.63	3.50	10.50	11.30	15.25	17 x 20	3/4	3/4	3/4
EXVG018, EXVG/ DXVG024	21.50	26.00	38.00	13.25	6.25	0.63	3.50	11.80	11.30	16.25	18 x 23	3/4	3/4	3/4
EXVG030, EXVG/ DXVG036	24.00	32.50	42.00	17.75	7.25	0.75	3.50	13.70	13.50	18.25	20 x 30	1	1	3/4
EXVG042, EXVG/ DXVG048	25.40	32.50	49.00	17.75	7.25	0.75	3.50	13.70	13.50	18.25	27 x 30	1	1	3/4
EXVG/ DXVG060-070	25.40	32.50	55.00	17.75	7.25	0.75	3.50	13.70	13.50	18.25	30 x 33	1	1	3/4

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 31. Waterside economizer[2] (EXHF/DXHF)

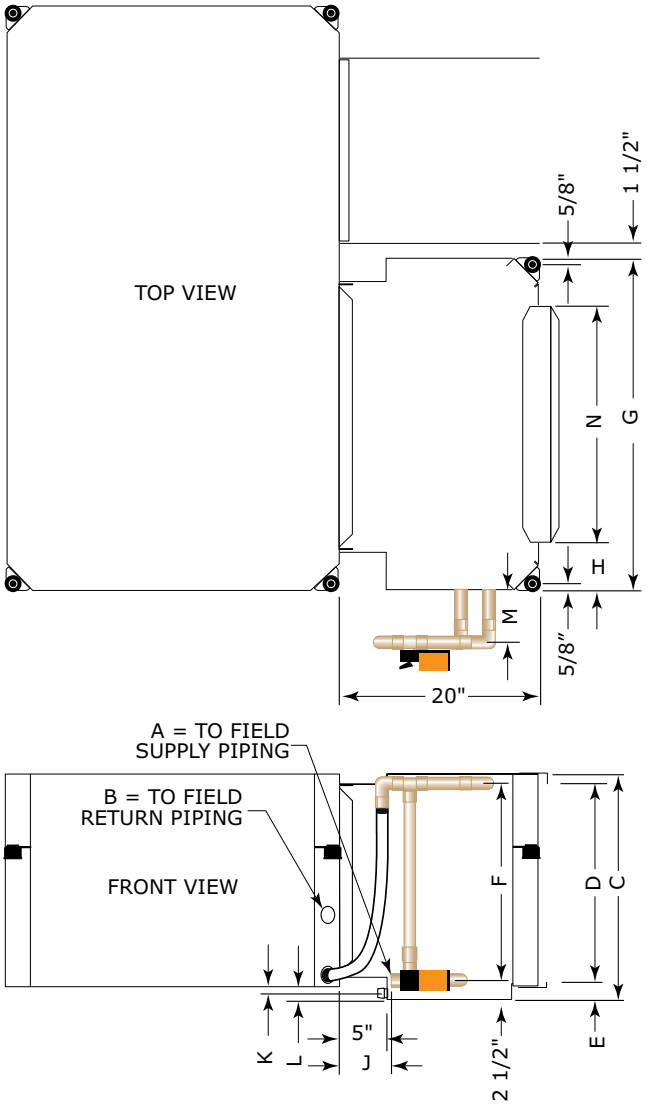


Table 189. Dimensional data waterside economizer (EXHF/DXHF)

Unit	A NPTI	B NPTI	C	D	E	F	G	H	J	K	L	M	N
EXHF006-015	1/2	1/2	16-7/8	13-1/2	2-3/4	10	23-1/2	2-1/2	6-4/8	1	1-7/8	4	18-1/2
EXHF018, EXHF/ DXHF024	3/4	3/4	20-7/8	16-5/8	3-1/4	14	25-1/2	3-1/2	6-3/8	2	3	4	18-1/2
EXHF030, EXHF/ DXHF036	3/4	3/4	20-7/8	17-1/2	2-1/4	14	29-1/2	2-1/4	6-3/8	1-1/8	2	4	23-1/2
EXHF042-060, DXHF048-060, EXHF/ DXHF070	1	1	22-7/8	19-5/8	2-3/4	16-1/2	33-1/2	5	6-1/8	1-1/8	2	4-3/8	23-1/2

2. *Waterside economizer installation requires field piping.*

Figure 32. Waterside economizer (EXVG/DXVG)

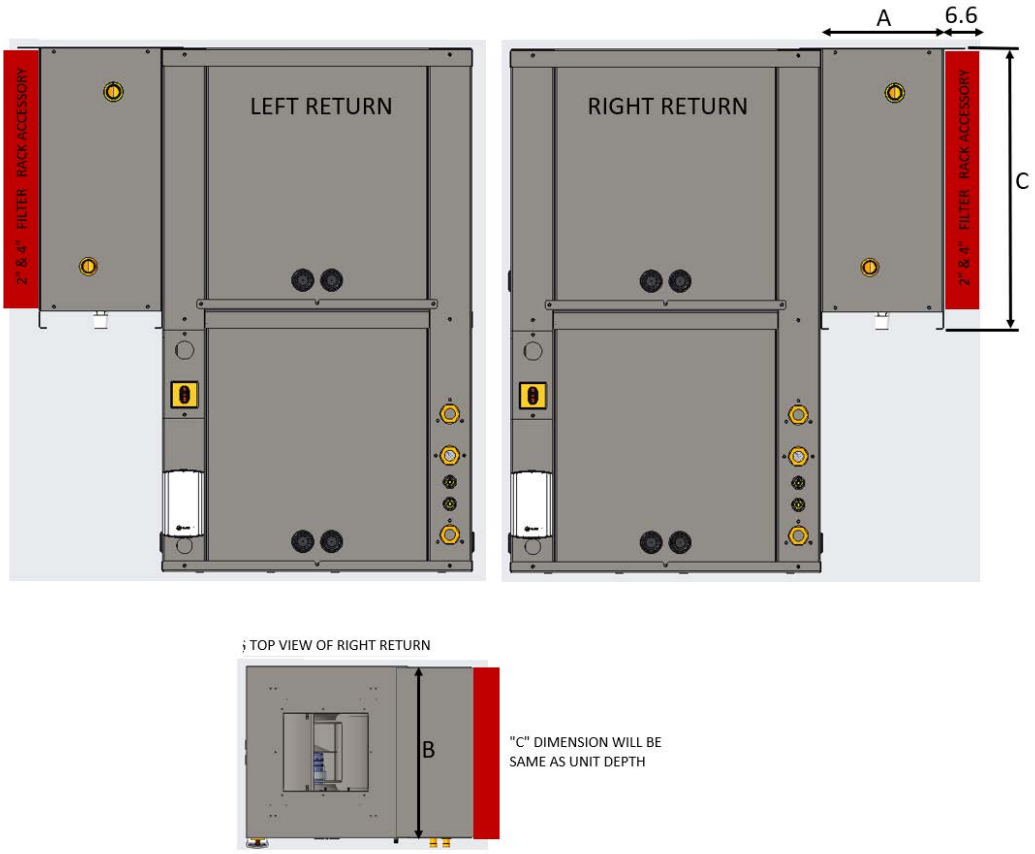


Table 190. Dimensional data waterside economizer (EXVG/DXVG)

Unit	Cabinet	WSE Dimensions		
		A (Width)	B (Depth)	C (Height)
EXVG009-012	B	8.5	21.5	18.25
EXVG015	C	8.5	23.0	19.25
EXVG018-024, DXVG024	D	8.5	26.0	22.25
EXVG030-036, DXVG036	E	8.5	32.5	22.25
EXVG042-048, DXVG048	F	8.5	32.5	29.25
EXVG/DXVG060-070	G	8.5	32.5	35.25

Figure 33. Waterside economizer (EXVG/DXVG)

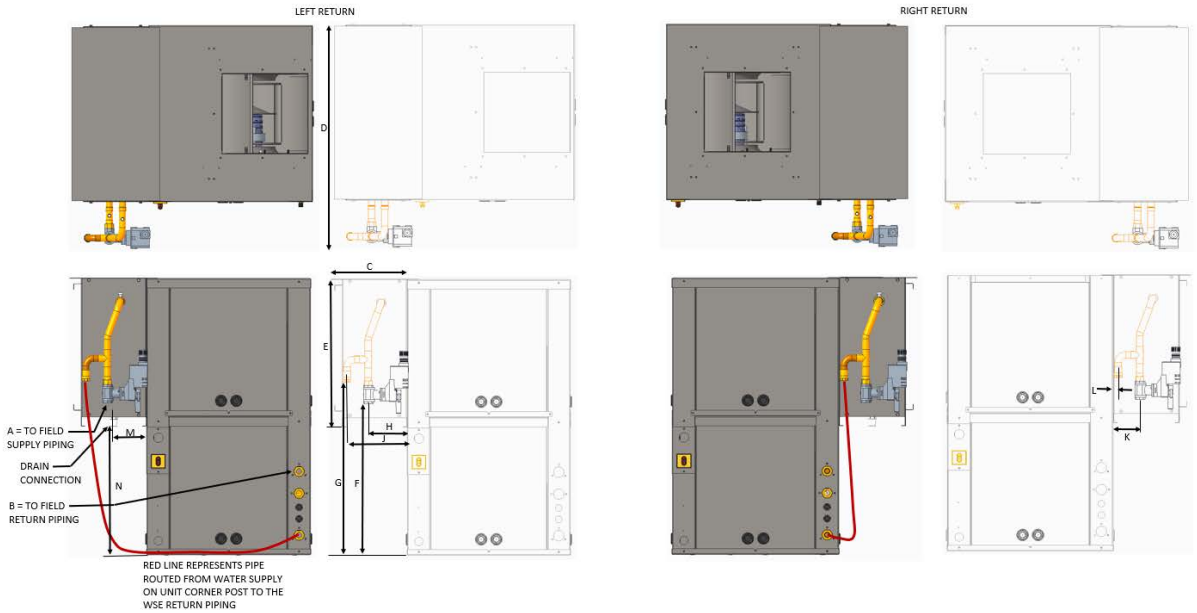


Table 191. Dimensional data waterside economizer (EXVG/DXVG)

Unit	Cabi-net	Pipe Size		WSE Size			Piping Location						Drain	
		A NPTI	B NPTI	C Width	D Depth	E Height	F Height	G Height	H Width	J Width	K Width	L Width	M Width	N Height
EXVG009-012	B	1/2	1/2	8.5	27.5	18.25	17.75	20.75	5.0	7.88	3.5	0.63	4.25	15.75
EXVG015	C	3/4	3/4	8.5	29.0	19.25	19.75	22.75	5.0	7.88	3.5	0.63	4.25	16.75
EXVG018-024, DXVG024	D	3/4	3/4	8.5	32.0	21.75	21.75	24.75	5.0	7.88	3.5	0.63	4.25	15.75
EXVG030-036, DXVG036	E	1	1	8.5	38.5	22.75	22.75	25.75	5.0	8	3.5	0.5	4.25	19.75
EXVG042-048, DXVG048	F	1	1	8.5	38.5	22.75	22.75	25.75	5.0	8	3.5	0.5	4.25	19.75
EXVG/ DXVG060-070	G	1	1	8.5	38.5	22.75	22.75	25.75	5.0	8	3.5	0.5	4.25	19.75

Figure 34. Hanging unit waterside economizer (EXHF/DXHF)

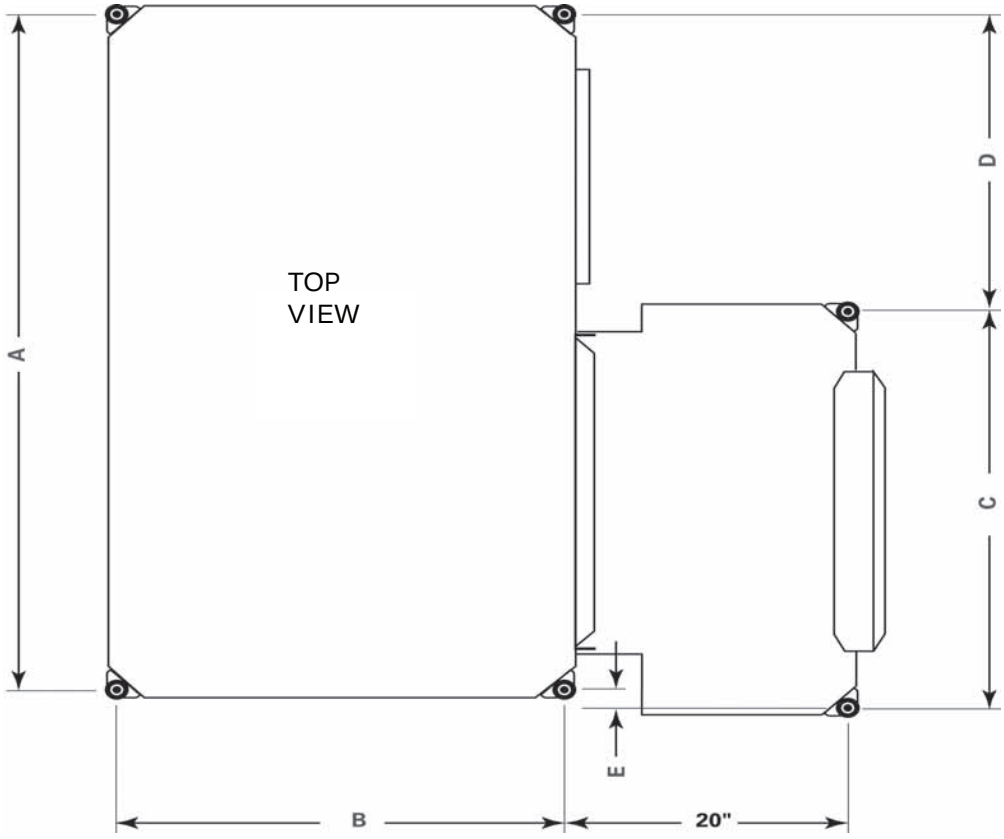


Table 192. Dimensional data hanging unit waterside economizer (EXHF/DXHF)

Unit	A	B	C	D	E	Hanging Weight	Shipping Weight
EXHF006-015	38-3/4	18-3/4	22-1/8	17-1/2	7/8	44 lbs	95 lbs
EXHF018, EXHF/ DXHF024	44-3/4	21-3/4	24-1/8	20-3/4	0	52 lbs	103 lbs
EXHF030, EXHF/ DXHF036	48-3/4	23-3/4	28-1/8	20-5/8	0	56 lbs	107 lbs
EXHF042-060, DXHF048-060, EXHF/ DXHF070	56-3/4	31-3/4	32-1/8	24-3/4	1/8	64 lbs	113 lbs

Electrical Data

Table 193. Electrical data - 0.5 to 6 tons, EX*006-070

Model No.	Unit Volts	Total Unit FLA	Comp RLA	Comp LRA	Blower Motor FLA	Blower Motor HP	Minimum Circuit Ampacity	Maximum Overcurrent Protective Device	Electric Heat kW	Electric Heat Amps
EXHF006	208/60/1	3.70	3.3	14.0	0.40	1/3	4.53	15	0.0	0.0
EXHF006	208/60/1	4.34	3.3	14.0	0.40	1/3	5.43	15	0.8	3.9
EXHF006	230/60/1	3.60	3.2	15.0	0.40	1/3	4.40	15	0.0	0.0
EXHF006	230/60/1	4.75	3.2	15.0	0.40	1/3	5.93	15	1.0	4.3
EXHF006	265/60/1	2.90	2.5	11.0	0.40	1/3	3.53	15	0.0	0.0
EXHF006	265/60/1	5.42	2.5	11.0	0.40	1/3	6.77	15	1.3	5.0
EXHF009	208/60/1	4.30	3.7	16.0	0.60	1/3	5.23	15	0.0	0.0
EXHF009	208/60/1	6.51	3.7	16.0	0.60	1/3	8.14	15	1.2	5.9
EXHF009	230/60/1	4.10	3.5	17.0	0.60	1/3	4.98	15	0.0	0.0
EXHF009	230/60/1	7.12	3.5	17.0	0.60	1/3	8.90	15	1.5	6.5
EXHF009	265/60/1	3.40	2.8	13.0	0.60	1/3	4.10	15	0.0	0.0
EXHF009	265/60/1	8.15	2.8	13.0	0.60	1/3	10.18	15	2.0	7.5
EXHF012	208/60/1	7.02	6.3	30.0	0.72	1/3	8.60	15	0.0	0.0
EXHF012	208/60/1	8.56	6.3	27.0	0.72	1/3	10.70	15	1.6	7.8
EXHF012	230/60/1	7.02	6.3	30.0	0.72	1/3	8.60	15	0.0	0.0
EXHF012	230/60/1	9.42	6.3	30.0	0.72	1/3	11.77	15	2.0	8.7
EXHF012	265/60/1	5.72	5.0	23.0	0.72	1/3	6.97	15	0.0	0.0
EXHF012	265/60/1	10.72	5.0	23.0	0.72	1/3	13.40	15	2.7	10.0
EXHF015	208/60/1	8.79	7.9	36.0	0.89	1/3	10.77	15	0.0	0.0
EXHF015	208/60/1	10.51	7.9	36.0	0.89	1/3	13.13	15	2.0	9.6
EXHF015	230/60/1	8.79	7.9	36.0	0.89	1/3	10.77	15	0.0	0.0
EXHF015	230/60/1	11.76	7.9	36.0	0.89	1/3	14.70	15	2.5	10.9
EXHF015	265/60/1	7.29	6.4	30.0	0.89	1/3	8.89	15	0.0	0.0
EXHF015	265/60/1	13.34	6.4	30.0	0.89	1/3	16.68	20	3.3	12.5
EXHF018	208/60/1	11.10	9.6	42.0	1.50	1/2	13.50	20	0.0	0.0
EXHF018	208/60/1	13.33	9.6	42.0	1.50	1/2	16.66	20	2.5	11.8
EXHF018	230/60/1	11.10	9.6	42.0	1.50	1/2	13.50	20	0.0	0.0
EXHF018	230/60/1	14.54	9.6	42.0	1.50	1/2	18.18	20	3.0	13.0
EXHF018	265/60/1	9.00	7.7	35.0	1.30	1/2	10.93	15	0.0	0.0
EXHF018	265/60/1	16.39	7.7	35.0	1.30	1/2	20.49	25	4.0	15.1
EXHF024	208/60/1	15.70	13.5	58.3	2.20	1/2	19.08	30	0.0	0.0
EXHF024	208/60/1	17.87	13.5	58.3	2.20	1/2	22.34	30	3.3	15.7
EXHF024	230/60/1	15.70	13.5	58.3	2.20	1/2	19.08	30	0.0	0.0
EXHF024	230/60/1	19.59	13.5	58.3	2.20	1/2	24.49	30	4.0	17.4
EXHF024	265/60/1	10.10	9.0	54.0	1.10	1/2	12.35	20	0.0	0.0
EXHF024	265/60/1	21.10	9.0	54.0	1.10	1/2	26.38	30	5.3	20.0
EXHF030	208/60/1	17.30	14.1	77.0	3.20	1/2	20.83	30	0.0	0.0
EXHF030	208/60/1	26.76	14.1	77.0	3.20	1/2	33.45	35	4.9	23.6

Table 193. Electrical data - 0.5 to 6 tons, EX*006-070 (continued)

Model No.	Unit Volts	Total Unit FLA	Comp RLA	Comp LRA	Blower Motor FLA	Blower Motor HP	Minimum Circuit Ampacity	Maximum Overcurrent Protective Device	Electric Heat kW	Electric Heat Amps
EXHF030	230/60/1	17.30	14.1	77.0	3.20	1/2	20.83	30	0.0	0.0
EXHF030	230/60/1	29.29	14.1	77.0	3.20	1/2	36.61	40	6.0	26.1
EXHF030	265/60/1	13.70	10.9	60.0	2.80	1/2	16.43	25	0.0	0.0
EXHF030	265/60/1	32.80	10.9	60.0	2.80	1/2	41.00	45	8.0	30.0
EXHF036	208/60/1	18.10	14.1	77.0	4.00	3/4	21.63	35	0.0	0.0
EXHF036	208/60/1	27.56	14.1	77.0	4.00	3/4	34.45	35	4.9	23.6
EXHF036	230/60/1	18.10	14.1	77.0	4.00	3/4	21.63	35	0.0	0.0
EXHF036	230/60/1	30.09	14.1	77.0	4.00	3/4	37.61	40	6.0	26.1
EXHF036	265/60/1	15.70	12.2	72.0	3.50	3/4	18.75	30	0.0	0.0
EXHF036	265/60/1	33.50	12.2	72.0	3.50	3/4	41.88	45	8.0	30.0
EXHF036	208/60/3	13.00	9.0	71.0	4.00	3/4	15.25	20	0.0	0.0
EXHF036	208/60/3	17.60	9.0	71.0	4.00	3/4	22.00	25	4.9	13.6
EXHF036	230/60/3	13.00	9.0	71.0	4.00	3/4	15.25	20	0.0	0.0
EXHF036	230/60/3	19.06	9.0	71.0	4.00	3/4	23.83	25	6.0	15.1
EXHF036	460/60/3	9.10	5.6	38.0	3.50	3/4	10.50	15	0.0	0.0
EXHF036	460/60/3	13.48	5.6	38.0	3.50	3/4	16.85	20	8.0	10.0
EXHF042	208/60/1	22.30	17.9	112.0	4.40	3/4	26.78	40	0.0	0.0
EXHF042	208/60/1	35.65	17.9	112.0	4.40	3/4	44.56	45	6.5	31.3
EXHF042	230/60/1	22.30	17.9	112.0	4.40	3/4	26.78	40	0.0	0.0
EXHF042	230/60/1	39.18	17.9	112.0	4.40	3/4	48.98	50	8.0	34.8
EXHF042	208/60/3	17.60	13.2	88.0	4.40	3/4	20.90	30	0.0	0.0
EXHF042	208/60/3	22.44	13.2	88.0	4.40	3/4	28.05	30	6.5	18.0
EXHF042	230/60/3	17.60	13.2	88.0	4.40	3/4	20.90	30	0.0	0.0
EXHF042	230/60/3	24.48	13.2	88.0	4.40	3/4	30.60	35	8.0	20.1
EXHF042	460/60/3	9.80	6.0	44.0	3.80	3/4	11.30	15	0.0	0.0
EXHF042	460/60/3	17.10	6.0	44.0	3.80	3/4	21.38	25	10.6	13.3
EXHF048	208/60/1	25.00	19.9	109.0	5.10	3/4	29.98	45	0.0	0.0
EXHF048	208/60/1	36.35	19.9	109.0	5.10	3/4	45.44	50	6.5	31.3
EXHF048	230/60/1	25.00	19.9	109.0	5.10	3/4	29.98	45	0.0	0.0
EXHF048	230/60/1	39.88	19.9	109.0	5.10	3/4	49.85	50	8.0	34.8
EXHF048	208/60/3	18.20	13.1	83.1	5.10	3/4	21.48	30	0.0	0.0
EXHF048	208/60/3	23.14	13.1	83.1	5.10	3/4	28.93	30	6.5	18.0
EXHF048	230/60/3	18.20	13.1	83.1	5.10	3/4	21.48	30	0.0	0.0
EXHF048	230/60/3	25.18	13.1	83.1	5.10	3/4	31.48	35	8.0	20.1
EXHF048	460/60/3	10.50	6.1	41.0	4.40	3/4	12.03	15	0.0	0.0
EXHF048	460/60/3	17.70	6.1	41.0	4.40	3/4	22.13	25	10.6	13.3
EXHF060	208/60/1	34.40	26.4	134.0	8.00	1	41.00	60	0.0	0.0
EXHF060	208/60/1	39.25	26.4	134.0	8.00	1	49.06	60	6.5	31.3
EXHF060	230/60/1	34.40	26.4	134.0	8.00	1	41.00	60	0.0	0.0
EXHF060	230/60/1	42.78	26.4	134.0	8.00	1	53.48	60	8.0	34.8

Table 193. Electrical data - 0.5 to 6 tons, EX*006-070 (continued)

Model No.	Unit Volts	Total Unit FLA	Comp RLA	Comp LRA	Blower Motor FLA	Blower Motor HP	Minimum Circuit Ampacity	Maximum Overcurrent Protective Device	Electric Heat kW	Electric Heat Amps
EXHF060	208/60/3	24.00	16.0	110.0	8.00	1	28.00	40	0.0	0.0
EXHF060	208/60/3	26.04	16.0	110.0	8.00	1	32.55	40	6.5	18.0
EXHF060	230/60/3	24.00	16.0	110.0	8.00	1	28.00	40	0.0	0.0
EXHF060	230/60/3	28.08	16.0	110.0	8.00	1	35.10	40	8.0	20.1
EXHF060	460/60/3	14.70	7.8	52.0	6.90	1	16.65	20	0.0	0.0
EXHF060	460/60/3	20.20	7.8	52.0	6.90	1	25.26	30	10.6	13.3
EXHF070	208/60/1	37.10	30.1	158.0	7.00	1	44.63	70	0.0	0.0
EXHF070	208/60/1	38.25	30.1	158.0	7.00	1	47.81	70	6.5	31.3
EXHF070	230/60/1	37.10	30.1	158.0	7.00	1	44.63	70	0.0	0.0
EXHF070	230/60/1	41.78	30.1	158.0	7.00	1	52.23	70	8.0	34.8
EXHF070	208/60/3	27.50	20.5	155.0	7.00	1	32.63	50	0.0	0.0
EXHF070	208/60/3	27.50	20.5	155.0	7.00	1	32.63	50	6.5	18.0
EXHF070	230/60/3	27.50	20.5	155.0	7.00	1	32.63	50	0.0	0.0
EXHF070	230/60/3	27.50	20.5	155.0	7.00	1	33.85	50	8.0	20.1
EXHF070	460/60/3	15.70	9.6	75.0	6.10	1	18.10	25	0.0	0.0
EXHF070	460/60/3	19.40	9.6	75.0	6.10	1	24.26	25	10.6	13.3
EXVG009	208-230/60/1	4.2	3.6	27.0	0.6	1/3	6/6	15/15	0.0	0.0
EXVG009	265/60/1	3.5	3.0	22.0	0.5	1/3	5	15	0.0	0.0
EXVG012	208-230/60/1	6.6	5.7	27.0	0.9	1/3	8/8	15/15	0.0	0.0
EXVG012	265/60/1	5.3	4.5	32.0	0.8	1/3	7	15	0.0	0.0
EXVG015	208-230/60/1	8.1	7.3	36.0	0.8	1/3	10/10	15/15	0.0	0.0
EXVG015	265/60/1	5.5	4.8	30.0	0.7	1/3	7	15	0.0	0.0
EXVG018	208-230/60/1	9.8	8.5	38.0	1.3	1/2	12/12	20/20	0.0	0.0
EXVG018	265/60/1	7.9	6.8	35.0	1.1	1/2	10	15	0.0	0.0
EXVG024	208-230/60/1	15.2	13.5	58.3	1.7	1/2	19/19	30/30	0.0	0.0
EXVG024	265/60/1	10.5	9.0	54.0	1.5	1/2	13	20	0.0	0.0
EXVG024	208-230/60/3	8.8	7.1	55.4	1.7	1/2	11/11	15/15	0.0	0.0
EXVG024	460/60/3	4.4	3.5	28.0	0.9	1/2	6	15	0.0	0.0
EXVG030	208-230/60/1	15.6	14.1	73.0	1.5	3/4	20/20	30/30	0.0	0.0
EXVG030	265/60/1	12.5	11.2	60.0	1.3	3/4	16	25	0.0	0.0
EXVG030	208-230/60/3	10.4	8.9	58.0	1.5	3/4	13/13	20/20	0.0	0.0
EXVG030	460/60/3	5.0	4.2	28.0	0.8	3/4	7	15	0.0	0.0
EXVG036	208-230/60/1	18.0	16.0	77.0	2.0	3/4	23/23	35/35	0.0	0.0
EXVG036	265/60/1	13.9	12.2	72.0	1.7	3/4	17	25	0.0	0.0
EXVG036	208-230/60/3	12.0	10.0	71.0	2.0	3/4	15/15	20/20	0.0	0.0
EXVG036	460/60/3	5.7	4.7	38.0	1.0	1	7	15	0.0	0.0
EXVG042	208-230/60/1	19.9	16.7	79.0	3.2	3/4	25/25	40/40	0.0	0.0
EXVG042	208-230/60/3	13.6	10.4	73.0	3.2	3/4	17/17	25/25	0.0	0.0
EXVG042	460/60/3	7.4	5.8	38.0	1.6	1	9	15	0.0	0.0

Table 193. Electrical data - 0.5 to 6 tons, EX*006-070 (continued)

Model No.	Unit Volts	Total Unit FLA	Comp RLA	Comp LRA	Blower Motor FLA	Blower Motor HP	Minimum Circuit Ampacity	Maximum Overcurrent Protective Device	Electric Heat kW	Electric Heat Amps
EXVG048	208-230/60/1	20.5	17.9	112.0	2.6	1	25/25	40/40	0.0	0.0
EXVG048	208-230/60/3	16.1	13.5	88.0	2.6	1	20/20	30/30	0.0	0.0
EXVG048	460/60/3	7.3	6.0	44.0	1.3	1	9	15	0.0	0.0
EXVG060	208-230/60/1	25.2	21.4	135.0	3.8	1	31/31	50/50	0.0	0.0
EXVG060	208-230/60/3	18.3	14.5	98.0	3.8	1	22/22	35/35	0.0	0.0
EXVG060	460/60/3	8.2	6.3	55.0	1.9	1	10	15	0.0	0.0
EXVG070	208-230/60/1	31.4	26.4	134.0	5.0	1	39/39	60/60	0.0	0.0
EXVG070	208-230/60/3	21.0	16.0	110.0	5.0	1	26/26	40/40	0.0	0.0
EXVG070	460/60/3	10.3	7.8	52.0	2.5	1	13	20	0.0	0.0

Table 194. Electrical data - 2 to 6 tons, DX*024-070

Model No.	Unit Volts	Total Unit FLA	Comp RLA	Comp LRA	Blower Motor FLA	Blower Motor HP	Minimum Circuit Ampacity	Maximum Overcurrent Protective Device	Electric Heat kW	Electric Heat Amps
DXHF024	208/60/1	15.0	13.0	58.3	2.0	1/3	18.25	30	0.0	0.0
DXHF024	208/60/1	17.7	13.0	58.3	2.0	1/3	22.09	30	3.3	15.7
DXHF024	230/60/1	15.0	13.0	58.3	2.0	1/3	18.25	30	0.0	0.0
DXHF024	230/60/1	19.4	13.0	58.3	2.0	1/3	24.24	30	4.0	17.4
DXHF024	265/60/1	12.1	10.1	54.0	2.0	1/3	14.63	20	0.0	0.0
DXHF024	265/60/1	22.0	10.1	54.0	2.0	1/3	27.50	30	5.3	20.0
DXHF024	208/60/3	9.2	7.2	55.4	2.0	1/3	11.00	15	0.0	0.0
DXHF024	208/60/3	11.0	7.2	55.4	2.0	1/3	13.81	15	3.3	9.0
DXHF024	230/60/3	9.2	7.2	55.4	2.0	1/3	11.00	15	0.0	0.0
DXHF024	230/60/3	12.0	7.2	55.4	2.0	1/3	15.05	20	4.0	10.0
DXHF024	460/60/3	5.9	3.9	28.0	2.0	1/3	6.88	15	0.0	0.0
DXHF024	460/60/3	8.7	3.9	28.0	2.0	1/3	10.82	15	5.3	6.7
DXHF036	208/60/1	19.7	17.0	83.0	2.7	3/4	23.95	40	0.0	0.0
DXHF036	208/60/1	26.3	17.0	83.0	2.7	3/4	32.82	40	4.9	23.6
DXHF036	230/60/1	19.7	17.0	83.0	2.7	3/4	23.95	40	0.0	0.0
DXHF036	230/60/1	28.8	17.0	83.0	2.7	3/4	35.98	40	6.0	26.1
DXHF036	265/60/1	17.2	14.5	72.0	2.7	3/4	20.83	35	0.0	0.0
DXHF036	265/60/1	32.7	14.5	72.0	2.7	3/4	40.88	45	8.0	30.0
DXHF036	208/60/3	15.6	12.9	73.0	2.7	3/4	18.83	30	0.0	0.0
DXHF036	208/60/3	16.3	12.9	73.0	2.7	3/4	20.38	30	4.9	13.6
DXHF036	230/60/3	15.6	12.9	73.0	2.7	3/4	18.83	30	0.0	0.0
DXHF036	230/60/3	17.8	12.9	73.0	2.7	3/4	22.20	30	6.0	15.1
DXHF036	460/60/3	9.1	6.4	38.0	2.7	3/4	10.70	15	0.0	0.0
DXHF036	460/60/3	12.7	6.4	38.0	2.7	3/4	15.85	20	8.0	10.0
DXHF048	208/60/1	26.5	23.6	104.0	2.9	3/4	32.40	50	0.0	0.0
DXHF048	208/60/1	34.2	23.6	104.0	2.9	3/4	42.69	50	6.5	31.3

Table 194. Electrical data - 2 to 6 tons, DX*024-070 (continued)

Model No.	Unit Volts	Total Unit FLA	Comp RLA	Comp LRA	Blower Motor FLA	Blower Motor HP	Minimum Circuit Ampacity	Maximum Overcurrent Protective Device	Electric Heat kW	Electric Heat Amps
DXHF048	230/60/1	26.5	23.6	104.0	2.9	3/4	32.40	50	0.0	0.0
DXHF048	230/60/1	37.7	23.6	104.0	2.9	3/4	47.10	50	8.0	34.8
DXHF048	208/60/3	18.5	15.6	83.1	2.9	3/4	22.40	35	0.0	0.0
DXHF048	208/60/3	20.9	15.6	83.1	2.9	3/4	26.18	35	6.5	18.0
DXHF048	230/60/3	18.5	15.6	83.1	2.9	3/4	22.40	35	0.0	0.0
DXHF048	230/60/3	23.0	15.6	83.1	2.9	3/4	28.73	35	8.0	20.1
DXHF048	460/60/3	10.0	7.1	41.0	2.9	3/4	11.78	15	0.0	0.0
DXHF048	460/60/3	16.2	7.1	41.0	2.9	3/4	20.26	25	10.6	13.3
DXHF060	208/60/1	36.2	30.2	152.9	6.0	1	43.75	70	0.0	0.0
DXHF060	208/60/1	37.3	30.2	152.9	6.0	1	46.56	70	6.5	31.3
DXHF060	230/60/1	36.2	30.2	152.9	6.0	1	43.75	70	0.0	0.0
DXHF060	230/60/1	40.8	30.2	152.9	6.0	1	50.98	70	8.0	34.8
DXHF060	208/60/3	24.4	18.4	110.0	6.0	1	29.00	45	0.0	0.0
DXHF060	208/60/3	24.4	18.4	110.0	6.0	1	30.05	45	6.5	18.0
DXHF060	230/60/3	24.4	18.4	110.0	6.0	1	29.00	45	0.0	0.0
DXHF060	230/60/3	26.1	18.4	110.0	6.0	1	32.60	45	8.0	20.1
DXHF060	460/60/3	14.1	8.1	52.0	6.0	1	16.13	20	0.0	0.0
DXHF060	460/60/3	19.3	8.1	52.0	6.0	1	24.13	25	10.6	13.3
DXHF070	208/60/1	39.8	33.1	179.2	6.7	1	48.08	80	0.0	0.0
DXHF070	208/60/1	39.8	33.1	179.2	6.7	1	48.08	80	6.5	31.3
DXHF070	230/60/1	39.8	33.1	179.2	6.7	1	48.08	80	0.0	0.0
DXHF070	230/60/1	41.5	33.1	179.2	6.7	1	51.85	80	8.0	34.8
DXHF070	208/60/3	26.3	19.6	136.0	6.7	1	31.20	50	0.0	0.0
DXHF070	208/60/3	26.3	19.6	136.0	6.7	1	31.20	50	6.5	18.0
DXHF070	230/60/3	26.3	19.6	136.0	6.7	1	31.20	50	0.0	0.0
DXHF070	230/60/3	26.8	19.6	136.0	6.7	1	33.48	50	8.0	20.1
DXHF070	460/60/3	16.1	9.4	66.1	6.7	1	18.45	25	0.0	0.0
DXHF070	460/60/3	20.0	9.4	66.1	6.7	1	25.01	30	10.6	13.3
DXVG024	208-230/60/1	13.3	11.7	58.3	1.6	1/2	17/17	25/25	0.0	0.0
DXVG024	265/60/1	10.5	9.1	54.0	1.4	1/2	13	20	0.0	0.0
DXVG024	208-230/60/3	8.1	6.5	55.4	1.6	1/2	10/10	15/15	0.0	0.0
DXVG024	460/60/3	4.3	3.5	28.0	0.8	1/2	6	15	0.0	0.0
DXVG036	208-230/60/1	15.1	13.1	73.0	2.0	3/4	19/19	30/30	0.0	0.0
DXVG036	265/60/1	11.9	10.2	60.0	1.7	3/4	15	20	0.0	0.0
DXVG036	208-230/60/3	10.7	8.7	58.0	2.0	3/4	13/13	20/20	0.0	0.0
DXVG036	460/60/3	5.3	4.3	28.0	1.0	1	7	15	0.0	0.0
DXVG048	208-230/60/1	20.4	17.9	96.0	2.5	1	25/25	40/40	0.0	0.0
DXVG048	208-230/60/3	16.7	14.2	88.0	2.5	1	21/21	30/30	0.0	0.0
DXVG048	460/60/3	7.5	6.2	44.0	1.3	1	10	15	0.0	0.0

Table 194. Electrical data - 2 to 6 tons, DX*024-070 (continued)

Model No.	Unit Volts	Total Unit FLA	Comp RLA	Comp LRA	Blower Motor FLA	Blower Motor HP	Minimum Circuit Ampacity	Maximum Overcurrent Protective Device	Electric Heat kW	Electric Heat Amps
DXVG060	208-230/60/1	25.0	21.2	104.0	3.8	1	31/31	50/50	0.0	0.0
DXVG060	208-230/60/3	17.8	14.0	83.1	3.8	1	22/22	35/35	0.0	0.0
DXVG060	460/60/3	8.3	6.4	41.0	1.9	1	10	15	0.0	0.0
DXVG070	208-230/60/1	31.9	26.9	139.9	5.0	1	39/39	60/60	0.0	0.0
DXVG070	208-230/60/3	21.5	16.5	110.0	5.0	1	26/26	40/40	0.0	0.0
DXVG070	460/60/3	9.7	7.2	52.0	2.5	1	12	15	0.0	0.0

Table 195. Electrical data - minimum and maximum

Digit 8	Rated Voltage	Hz	Ph	Minimum Utilization Voltage	Maximum Utilization Voltage
1	208	60	1	197	229
2	230	60	1	207	253
3	208	60	3	187	229
4	460	60	3	414	506
7	265	60	1	239	292
8	230	60	3	207	253
A	208-230	60	1	197	253
B	208-230	60	3	187	253

Mechanical Specifications

General

Equipment shall be completely assembled, piped, internally wired, fully charged with R-410A 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 either copper or a bronze option. 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.

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 650 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 UC400(B) and ZN524 controller shall utilize factory furnished and mounted DDC controls. The DDC control package shall include a 75 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 EXHV/DXHV product line, the discharge air sensor and leaving water sensor are standard for the ZN524 and UC400(B) 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 50 VA transformer (fused) or 75 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. Hot gas reheat (option for EX models only) 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.

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.

Four rubber grommets are enclosed with every horizontal unit. These grommets are to be used in conjunction with unit hanging rods to isolate vibration.

Procedures for proper access inspection and cleaning of the unit shall be included in the maintenance manual.

Compressor

The unit will contain a high efficiency rotary (EX models only) or scroll compressor. External vibration isolation shall be provided by rubber mounting devices located underneath the mounting base of the compressor. 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.

Unit Drain Pan

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.

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 [50 VA (minimum) transformer.
- 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 650 psig.
- Factory installed wire harness shall be available for the Deluxe, ZN524 and UC400(B) control packages.

Nameplate information shall provide MOP ratings for branch circuit protection from the primary source of power.

Electric Heat (Option)

For horizontal units, internal boilerless control electric heat shall be factory wired and tested. It shall be composed of a nichrome open wire coil designed for 2-kW per unit ton. 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 equipment's control box.

Filters

One-inch or two-inch, throwaway filters are standard and factory installed. Two-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 for EX Units Only)

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" copper tubes mechanically expanded into evenly spaced aluminum fins. All coils are leak tested to 450 PSIG and pressure tested to 650 PSIG at the factory..

Motorized Water Valve (Accessory)

A two-position motorized water valve may be applied to each water source heat pump as part of the hose kit accessory. The motorized valve shall stop flow to the unit, causing pressures to rise. This rise in pressure can be utilized to reduce pump usage and provide greater energy savings of the entire system.

Indoor Fan

0.5 to 6 Tons

The blower is a forward-curved style wheel with multiple speed combinations available. All direct drive motors have sealed bearings that do not require field lubrication. An internally protected electronically commutated motor is provided. The motor contains a quick disconnect plug. 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.

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.

Dual Point Power Connection

Dual point power is required to power the medium and large electric heater options while the heat pump has its own separate power connection. It can also be used for the low electric heat option.

Dual point power is not to be confused with the fan motor having its own power supply from the compressor circuit.

ON/OFF Switch (Option)

The switch is mounted on the left hand front corner of the unit and shall be sized per requirements of UL1995 to handle the unit load. The field power connections shall be made at the ON/OFF switch when this option is ordered. The switch shall be mounted on a NEMA compliant junction box. The junction box shall be UL 514 compliant. The junction box shall have knock outs on all four sides to provide access for field wiring to the switch. The switch shall be UL508 compliant and the body shall be constructed of glass reinforced thermoplastic.

Unit Mounted Disconnect (0.5 to 6T Vertical 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.

Orifice Ring

Removal of the motor and fan wheel shall be made with the assistance of a factory provided orifice ring device. This device shall attach the wheel and motor to the fan housing in one assembly providing single side service access.

Pump Module (Field Installed Accessory)

The pump module shall consist of either a single or dual 1/6 HP cast iron pump and a brass 3-way shut-off valve. The pump module kits shall contain the necessary components for the installation, operation and maintenance of the water circuit of a closed-loop distributed pumping application.

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.

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 6 ton units, the sound reduction package shall include vibration isolation to the compressor and water-to-refrigerant coil, unit base stiffeners, insulated metal compressor enclosure, 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 650 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" and 3/4" valves. The 1" 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 - 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 - 1 1/4 inch, 200 PSI for 1 1/2 inch, and 150 PSI for 2 inch" - 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 one-inch or two-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.

Notes

The AHRI Certified mark indicates Trane U.S. Inc. participation in the AHRI Certification program. For verification of individual certified products, go to ahridirectory.org.

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