



Packaged Rooftops

Precedent™ 3-5 Tons — 60 Hz
13 SEER R-22, R-410A
15 SEER R-410A



Packaged Cooling, Heat Pumps (T*C), (WSC)



Packaged Gas/Electric (Y*C)



Introduction

Packaged Rooftop Air Conditioners

Through the years, Trane has designed and developed the most complete line of Packaged Rooftop products available in the market today. Trane was the first to introduce the Micro—microelectronic unit controls—and has continued to improve and revolutionize this design concept.

Electromechanical controls are available for simpler applications, and for the more sophisticated, ReliaTel™ microprocessor controls.

The ReliaTel control platform offers the same great features and functionality as the original Micro, with additional benefits for greater application flexibility.

With its sleek, compact cabinet, rounded corners and beveled top Precedent continues to provide the highest standards in quality and reliability, comfort, ease of service, and the performance of Trane light commercial products.

Trane customers demand products that provide exceptional reliability, meet stringent performance requirements, and are competitively priced. Trane delivers with Precedent.

Precedent features cutting edge technologies: reliable compressors, Trane engineered ReliaTel controls, computer-aided run testing, and Integrated Comfort™ Systems. So, whether you're the contractor, the engineer, or the owner you can be certain Precedent Products are built to meet your needs.

It's Hard To Stop A Trane.®



Packaged Cooling and Heat Pumps



Packaged Gas/Electric



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Features and Benefits

Standard Features

- 1" throwaway filters provided on 3-5 ton Cooling/Gas and 3-4 ton Heat Pump units
- 2" throwaway filters provided on 5 ton Heat Pump units
- 5-year Limited Compressor Warranty
- 5-year Limited Heat Exchanger Warranty
- 1-year Limited Parts Warranty
- Anti-Short Cycle Timer (Standard with ReliaTel™)
- Colored and Numbered Wiring
- Convertible Airflow
- Easy Access Low Voltage Terminal Board (LTB)
- Electromechanical or ReliaTel Microprocessor Controls¹
- Foil-Faced and Edge Captured Insulation
- High Pressure Control
- IAQ Dual Sloped and Removable Drain Pans
- Liquid Line Refrigerant Drier
- Low Ambient Cooling to 0°F on Microprocessor Models
- Low Ambient Cooling to 40°F on Electromechanical Models
- Multispeed Direct Drive Motors
- Operating Charge of R-22²
- Operating Charge of R-410A³
- Patented Hybrid Condenser Coil for easy cleaning
- Progressive Tubular Aluminized Steel Heat Exchanger
- Provisions for Through-the-Base Gas and Condensate Drain Connections
- Quick Access Panels
- Quick Adjust Fan Motor Mounting Plate
- Single Point Power

- Single Side Service
- Standardized Components
- Thermal Expansion Valve
- Trane built Scroll Compressors

Options*

Factory Installed Options

- Belt Drive Motors (Three-phase)
- Black Epoxy Pre-Coated Coils
- CompleteCoat™ Condenser Coil
- Dehumidification Option⁴
- Hinged Access Doors
- Novar Return Air Sensor
- Novar Unit Controls
- Phase Monitor
- Powered or Unpowered Convenience Outlet
- Stainless Steel Heat Exchanger with 10-year warranty
- Supply and/or Return Air Smoke Detector
- Through the Base Electrical Access
- Through the Base Electrical with Circuit Breaker
- Through the Base Electrical with Disconnect Switch
- 2" Pleated Filters

Factory or Field Installed Options

- Barometric Relief
- Clogged Filter/Fan Failure Switch
- Crankcase Heaters
- Discharge Air Sensing Kit
- Economizer
- Electric Heaters
- Frostat
- LonTalk® Communications Interface (LCI)
- Reference or Comparative Enthalpy
- Tool-less Hail Guards

- Trane Communications Interface (TCI)

Field Installed Options

- CO₂ Sensing
- Digital Display Zone Sensor
- Dual Thermistor Remote Zone Sensor
- High Altitude Kit
- High Static Drive
- Humidity Sensor
- LP Conversion Kit
- Manual Outside Air Damper
- Motorized Outside Air Dampers
- Powered Exhaust
- Quick Adapt Curbs
- Quick Start Kit
- Remote Potentiometer
- Roof Curb
- Thermostat
- Ventilation Override Accessory
- Zone Sensor

**Refer to Model Number Description for option availability.*

Other Benefits

- Cabinet design ensures water integrity
- Ease of Service, Installation and Maintenance
- Mixed model build enables "fastest in the industry" ship cycle times
- Outstanding Airflow Distribution
- ReliaTel Controls

¹ Not available for 3-5 Tons, R-410A Heat Pumps

² Available for 3-5 Tons, R-22 units only

³ Standard for 3-5 Tons, R-410A units

⁴ Available for 3-5 Tons, R-22 units only



Features and Benefits

- Unmatched Product Support is one of our finest assets. Trane Sales Representatives are a Support Group that can assist you with:
 - Product
 - Application
 - Service
 - Training
 - Special Applications
 - Specifications
 - Computer Programs and much more

Standard Features

Anti-Short Cycle Timer (Standard with ReliaTel)

Provides a 3 minute minimum “ON” time and 3 minute “OFF” time for compressors to enhance compressor reliability by assuring proper oil return.

Direct Drive Motors (R-410A)

For additional static requirements, single-phase 13 SEER and three-phase 15 SEER R-410A units offer multi-speed, direct drive motors.

Colored And Numbered Wiring

Save time and money tracing wires and diagnosing the unit.

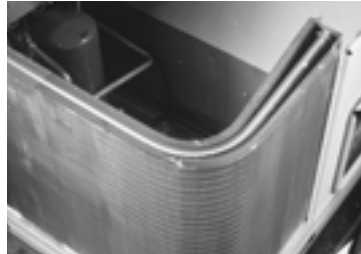
Compressors

Precedent contains the best compressor technology available to achieve the highest possible performance. Our compressor line includes Trane built scrolls.



Condenser Coil

Precedent boasts a patent-pending 1+1+1 condenser coil, permanently gapped for easy cleaning.



Controls – ReliaTel or Electromechanical

ReliaTel microprocessor controls provide unit control for heating, cooling and ventilating utilizing input from sensors that measure indoor and outdoor temperature and other zone sensors. ReliaTel also provides outputs for building automation systems and expanded diagnostics. For a complete list of ReliaTel offerings, refer to the “Other Benefits” section within the Features and Benefits section of this catalog.

For the simpler job that does not require a building automation system, or expanded diagnostics capabilities, Precedent offers electromechanical controls. This 24-volt control includes the control transformer and contactor pressure lugs for power wiring.

Convertible Units

The units ship in a downflow configuration. They can be easily converted to horizontal by simply moving two panels.

Units come complete with horizontal duct flanges so the contractor doesn’t have to field fabricate them. These duct flanges are a time and cost saver.



Cooling

Standard or High Efficiency Cooling available.

Dual Sloped Drain Pans

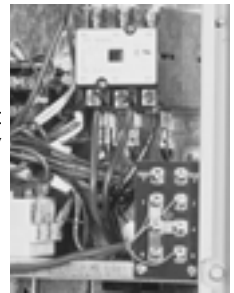
Every Precedent unit has a non-corrosive, removable, double-sloped drain pan that’s easy to clean and reversible to allow installation of drain trap on either side of the unit.



Easy Access Low Voltage Terminal Board

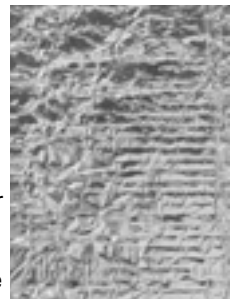
Precedent’s Low Voltage Terminal Board is external to the electrical control cabinet. It is extremely easy to locate and attach the thermostat wire and test operation of all unit functions.

This is another cost and time saving installation feature.



Foil Faced Insulation

All panels in the evaporator section of the unit have cleanable foil-faced insulation. All edges are either captured or sealed to ensure no insulation fibers get into the airstream.



Heat Exchanger

The compact cabinet features a progressive tubular heat exchanger in low, medium and high heat capacities.

The heat exchanger is fabricated using stainless steel burners and



Features and Benefits

corrosion-resistant aluminized steel tubes as standard on all models. It has an induced draft blower to pull the gas mixture through the burner tubes. The heater has a direct spark ignition system which doubles as a safety device to prove the flame.

Gas/Electric Precedent models exceed all California seasonal efficiency requirements. They also perform better than required to meet the California NOx emission requirements.

High Pressure Control

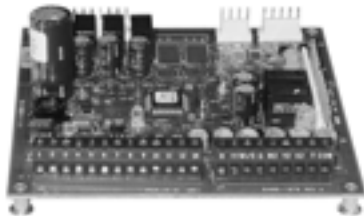
All units include High Pressure Control as standard.

Low Ambient Cooling

All Precedent microprocessor units have cooling capabilities down to 0°F as standard. Electromechanical models have cooling capabilities to 40°F as built, or to 0°F by adding the optional low ambient control (froststat).

Low Voltage Connections

The wiring of the low voltage connections to the unit and the zone sensors is as simple as 1-1, 2-2, and 3-3. This simplified system makes it easy for the installer to wire.



Quick-Access Panels

Remove two screws for access to the standardized internal components and wiring.

Quick-Adjust Idler Arm

With the Quick-Adjust Idler Arm, the belt and sheaves can be quickly adjusted without moving the mounted fan motor. The result is a major savings in time and money.

Single Point Power

A single electrical connection powers the unit.

Single Side Service

Single side service is standard on all units.

Standardized Components

Components are placed in the same location on all Precedent units. Familiarize yourself with one Precedent and you are familiar with every Precedent.

Due to standardized components throughout the Precedent line, contractors/owners can stock fewer parts.

Thermal Expansion Valve

Available for a wider range of applications. This feature is standard on all R-410A units.

Through the Base Condensate

Every unit includes provisions for through the base condensate drain connections. This allows the drain to be connected through the roof curb instead of a roof penetration.

Variety of Options*

Factory Installed Options

Belt Drive Motors (Three-phase)



For additional static requirements, Precedent 3-5 ton units offer an optional belt drive motor to meet a wide range of airflow needs.

Black Epoxy Pre-Coated Coils

The pre-coated coils are an economical option for protection in mildly corrosive environments.

CompleteCoat™ Condenser Coil

These coils provide excellent corrosion resistance as well as uniformity of coverage and coating thickness.

Disconnect Switch (Required with Through-the-Base Electrical)

Factory installed 3-pole, molded case, disconnect switch with provisions for through the base electrical connections are available.

Codes require a method of assured unit shutdown for servicing. Field-installed disconnects sometimes interfere with service access. Factory installation of unit disconnects reduces costs, assures proper mounting and provides the opportunity to upgrade to unit circuit breaker protection.

Circuit Breaker (Required with Through-the-Base Electrical)

This option is a factory installed thermal magnetic, molded case, HACR Circuit Breaker with provisions for through the base electrical connections.



Dehumidification (Hot Gas Reheat) Option⁵

This option allows for increased outdoor air ventilation. It reduces humidity levels while increasing comfort



level in the air space. Cooling can operate without a demand for dehumidification. The hot gas reheat coil is designed to deliver maximum reheat temperatures and pivot to allow for easy access cleaning.

**Refer to Model Number Description for option availability.*

⁵ Available for 3-5 Tons, R-22 units only.



Features and Benefits

Hinged Access Doors

These doors permit easy access to the filter, fan/heat, and compressor/control sections. They reduce the potential roof damage from screws or sharp access door corners.



Novar Unit Controls

Novar 3051 and 2024 are available for Precedent Gas and Electric Heat models.

Phase Monitor

Phase monitor shall provide 100% protection for motors and compressors against problems caused by phase loss, phase imbalance, and phase reversal. Phase monitor is equipped with an LED that provides an ON or FAULT indicator.

Powered or Unpowered Convenience Outlet

This option is a GFCI, 120v/15amp, 2 plug, convenience outlet, either powered or unpowered. This option can only be ordered when Through the Base Electrical with either the Disconnect Switch or Circuit Breaker option is ordered.



Stainless Steel Heat Exchanger

The optional stainless steel heat exchanger is constructed of 304 stainless steel. It is resistant to corrosion and oxidation and easy to clean.

The high strength to weight ratio allows for high ventilation rates with gas units. It is an excellent option to compliment the dehumidification option as a high outside air ventilation unit.

With this option, a 10-year stainless steel heat exchanger warranty is standard.

Supply and/or Return Air Smoke Detector



With this option installed, if smoke is detected, all unit operation will be shut down. Reset will be manual at the unit. Return Air Smoke Detectors require minimum allowable airflow when used with certain models.

Through-the-Base Electrical Utility Access

An electrical service entrance shall be provided allowing electrical access for both control and main power connections inside the curb and through the base of the unit. Option will allow for field installation of liquid-tight conduit and an external field installed disconnect switch.



Factory provided through the base openings simplify wiring and piping.

Because these utility openings frequently minimize the number of roof penetrations, the integrity of roofing materials is enhanced.



Two-Inch Pleated Filters

2" pleated media filters are offered as an option on all Precedent units for jobs with enhanced Indoor Air Quality (IAQ) requirements.

Factory or Field Installed Options*

Barometric Relief

Designed to be used on downflow units, barometric relief is an

unpowered means of relieving excess building pressure.

Clogged Filter/Fan Failure Switch

A dedicated differential pressure switch is available to achieve active fan failure indication and/or clogged filter indication.

These sensors allow a zone sensor service light or Integrated Comfort System to indicate a dirty filter or a fan that's not working. The field installation charges for these valuable feedback devices often eliminate them from consideration. Factory installation can make such features a good investment.

Crankcase Heaters

These band or insertion heaters provide improved compressor reliability by warming the oil to prevent migration during off-cycles or low ambient conditions.

Discharge Air Sensing Kit

Provides true discharge air sensing in heating models. The kit is functional only with the ReliaTel Options Module.

Electric Heaters

Electric heat modules are available within the basic unit. If ordering the Through the Base Electrical option with an Electrical Heater, the heater must be factory installed.

Fresh Air Options – Dampers and Economizer

0 - 25% manual or 0 - 50% motorized outside air hoods are available.

Economizers are equipped with either dry bulb or reference or comparative enthalpy sensing. These economizers provide free cooling as the outdoor temperature and/or humidity decreases. Correctly installed, they offer a valuable energy savings. Factory-installed economizers save time and ensure proper installation.

The economizers come with three control options — dry bulb is standard, enthalpy and differential enthalpy are optional.

***Refer to Model Number Description for option availability.**



Features and Benefits

Frostat

This capillary bulb embedded in the face of the evaporator coil monitors coil temperature to prevent evaporator icing and protect the compressor. Recommended for applications with low leaving air temperatures, low airflow and or high latent load applications.

LonTalk® Communications Interface

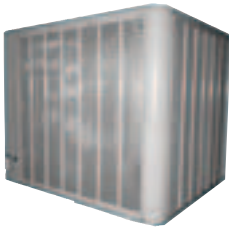
The LonTalk communications interface allows the unit to communicate as a Tracer™ LCI-V device or directly with generic LonTalkNetwork Building Automation System Controls.

Reference or Comparative Enthalpy

Measures and communicates humidity while maximizing comfort control.

Tool-less Hail Guards

Tool-less, hail protection quality coil guards shall be either factory or field-installed for condenser coil protection. This option protects the condenser coil from vandalism and/or hail damage.



Trane Communication Interface (TCI)

Available factory or field installed. This module when applied with the ReliaTel™ easily interfaces with Trane's Integrated Comfort™ System.

****Refer to Model Number Description for option availability.***

Field Installed Options

CO₂ Sensing

The CO₂ sensor has the ability to monitor space occupancy levels within the building by measuring the parts per million of CO₂ (Carbon Dioxide) in the air. As the CO₂ levels increase, the outside air damper modulates to meet the CO₂ space ventilation requirements. The CO₂ sensor kit is available as a field installed accessory.

Digital Display Zone Sensor

The Digital LCD (Liquid Crystal Display) zone sensor has the look and functionality of standard zone sensors. This sensor should be utilized with ReliaTel™ controls.

Dual Thermistor Remote Zone Sensor

This sensor will reduce the total number of remote sensors to obtain space temperature averaging. This sensor should be utilized with ReliaTel controls.

High Altitude Kit

Previously a Canadian Agency requirement for units applied about 2000 feet, it is not required by the U.S. Domestic contractors should consult with local authority on best practice. Deviates gas orifices by 10%.

High Static Drive

Available on many models, this high static drive accessory extends the capability of the standard motor. Avoid expensive motors and operating costs by installing this optimized sheave accessory.

Humidity Sensor/Humidistat

Used in conjunction with our Dehumidification (Hot Gas Reheat) units to provide outstanding humidity control and comfort. Humidity sensors can be wall or duct mounted and set for levels between 40% and 60%.

LP Conversion Kit

Provided for field conversion of gas/electric units from Natural gas to Propane.

Quick Adapt Curbs

Enables easy conversion of existing Voyager 3-10 ton units to Precedent units on replacement jobs.

Quick Start Kits

Single phase equipment to enable startup and prevent building lighting dimming during low voltage.

Roof Curbs

Available for downflow units. Only two roof curbs for the entire Precedent line simplifies curb selection.

Remote Potentiometer

When properly installed in the economizer control circuitry, this accessory provides a remote variable resistance to enable the operator to adjust the minimum damper position.

Ventilation Override Accessory

With the Ventilation Override Accessory installed, the unit can be set to transition to up to 3 different pre-programmed sequences for Smoke Purge, Pressurization, and Exhaust. The transition occurs when a binary input on the RTOM is closed (shorted). This would typically be a hard wired relay output from a smoke detector or fire control panel. The ventilation override kit is available as a field installed accessory.

Zone Sensors/Thermostats

Available in programmable, automatic and manual styles.

Other Benefits

Airflow Distribution

Airflow is outstanding. The Precedent can replace an older machine with old ductwork and, in many cases, improve the comfort through better air distribution.



Features and Benefits

Cabinet Integrity

For added water integrity, Precedent has a raised 1 1/8" lip around the supply and return of the downflow units to prevent water from blowing into the ductwork.



Easy to Install, Service and Maintain

Because today's owners are very cost-conscious when it comes to service and maintenance, the Trane Precedent was designed with direct input from service contractors. This valuable information helped to design a product that would get the serviceman off the job quicker and save the owner money. Precedent does this by offering outstanding standard features enhanced by a variety of factory and field installed options, multiple control options, rigorously tested proven designs and superior product and technical support.

Flexibility

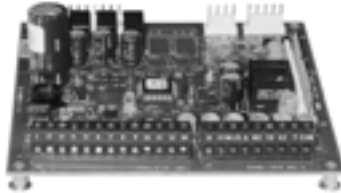
Precedent offers ultimate flexibility. Units are built to order in our standard "shortest in the industry" ship cycle time.

Unit Cabinet

The compact cabinet with rounded corners takes up less room and is less costly to ship. The beveled and ribbed top is not only aesthetically pleasing, it is designed to prevent water from pooling.

ReliaTel™ Controls

ReliaTel controls provide unit control for heating, cooling and ventilating utilizing input from sensors that measure outdoor and indoor temperature.



ReliaTel Control Logic Enhances Quality and Reliability

- — prevents the unit from short cycling, considerably improving compressor life.
- — ensures that the compressor will run for a specific amount of time which allows oil to return for better lubrication, enhancing the reliability of the compressor.

Precedent with ReliaTel reduces the number of components required to operate the unit, thereby reducing possibilities for component failure.

ReliaTel Makes Installing and Servicing Easy

ReliaTel eliminates the need for field installed anti-shortcycle timer and time delay relays. ReliaTel controls provide these functions as an integral part of the unit. The contractor no longer has to purchase these controls as options and pay to install them.



The wiring of the low voltage connections to the unit and the zone sensors is as easy as 1-1, 2-2, and 3-3. This simplified system makes wiring easier for the installer.

ReliaTel Makes Testing Easy

ReliaTel requires no special tools to run the Precedent unit through its paces. Simply place a jumper between Test 1 and Test 2 terminals on the Low Voltage Terminal Board and the unit will walk through its operational steps automatically.

The unit automatically returns control to the zone sensor after stepping through the test mode a single time, even if the jumper is left on the unit.

As long as the unit has power and the "system on" LED is lit, ReliaTel is operational. The light indicates that the controls are functioning properly.

ReliaTel features expanded diagnostic capabilities when utilized with Trane Integrated Comfort™ Systems.

Some zone sensor options have central control panel lights which indicate the mode the unit is in and possible diagnostic information (dirty filters for example).

Other ReliaTel Benefits

The ReliaTel built-in anti-shortcycle timer, time delay relay and minimum "on" time control functions are factory tested to assure proper operation.

ReliaTel softens electrical "spikes" by staging on fans, compressors and heaters.

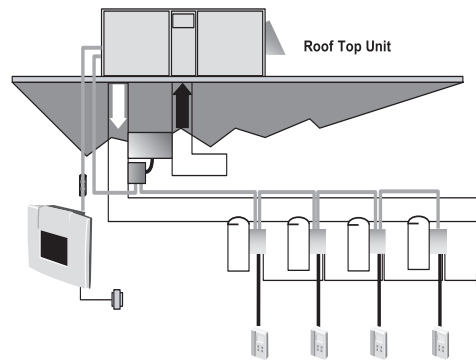
Intelligent Fallback is a benefit to the building occupant. If a component goes astray, the unit will continue to operate at predetermined temperature setpoint.

Intelligent Anticipation is a standard ReliaTel feature. It functions continuously as ReliaTel and zone sensor(s) work together in harmony to provide much tighter comfort control than conventional electro-mechanical thermostats.

The same ReliaTel Board fits all Precedent Packaged Gas/Electrics, Cooling with Electric Heat, and Heat Pump models. This provides standardization of parts for contractors. Less money is tied up in inventory with ReliaTel.

VariTrac – Building Automation System

When Trane's changeover VAV System for light commercial applications is coupled with Precedent, it provides the latest in technological advances for comfort management systems and can allow thermostat control in every zone served by VariTrac.



Rigorous Testing

All of Precedent's designs were rigorously rain tested at the factory to ensure water integrity.

Actual shipping tests were performed to determine packaging requirements. Units were test shipped around the country to determine the best packaging. Factory shake and drop tests were used as part of the package design process to help assure that the unit arrives at the job site in top condition.

Rigging tests include lifting a unit into the air and letting it drop one foot, assuring that the lifting lugs and rails hold up under stress.

We perform a 100% coil leak test at the factory. The evaporator and condenser coils are leak tested at 200 psig and pressure tested to 450 psig.

All parts are inspected at the point of final assembly. Sub-standard parts are identified and rejected immediately.

Every unit receives a 100% unit run test before leaving the production line to make sure it lives up to rigorous Trane requirements.



Application Considerations

Application of this product should be within the cataloged airflow and cooling considerations.

Barometric Relief

This product line offers an optional barometric relief damper for use in conjunction with economizer option. This accessory consists of gravity dampers which open with increased pressure. As the building air pressure increases, the pressure in the unit return air section also increases, opening the dampers and relieving the conditioned space.

Note: *The effectiveness of barometric relief damper during economizing operation is system related.*

Note: *Pressure drop of the return air system should be considered to control building pressurization.*

Black Epoxy Coil

The coils are manufactured with a thermoset, vinyl coating that is bonded to the aluminum fin stock prior to the fin stamping process. These coils are an economical option for protection in mildly corrosive environments.

Note: *Not to be used where seacoast applications exist.*

CompleteCoat™ Condenser Coil

The coils provide protection from corrosive environments and is ideal for seacoast applications.

Condensate Trap

The evaporator is a draw-thru configuration. A trap must be field provided prior to start-up on the cooling cycle.

Clearance Requirements

The recommended clearances identified with unit dimensions should be maintained to assure adequate service maximum capacity and peak operating efficiency. Actual clearances which appear inadequate should be reviewed with the local Trane sales personnel.

Heating Operation

The heat exchanger is manufactured with aluminized steel. To prevent condensation within the heat exchanger, do not exceed 50% outside air or a minimum mixed air temperature of 40°F.

Low Ambient Cooling

The Precedent™ line features, with ReliaTel™ microprocessor controls, low ambient cooling down to 0°F. With electromechanical controls, Precedent features low ambient cooling to 40°F. The following options need to be included/considered when low ambient applications are required: continuous fan operation, crankcase heaters, thermal expansion valves, froststat.

Contact your local Trane Representative for more assistance with low ambient cooling applications.

Optional Stainless Steel Heat Exchanger

The optional stainless steel heat exchanger is manufactured with 304 stainless steel. To prevent corrosion and prolong heat exchanger reliability, the minimum mixed air temperature allowed across the heat exchanger is 20°F.

The stainless steel heat exchanger option is an excellent option that compliments the dehumidification package. Whenever high outside air or outside applications exist, these options should be utilized.

Unit Pitch

These units have reversible sloped condensate drain pans. Units must be installed level. Any unit slope must be toward the side of unit where condensate drain is connected.



Selection Procedure

Cooling Capacity

Note: Cooling Capacity Procedure is the same for electric heat (T°C) and gas heat (Y°C).

Step 1.

Calculate the building's total and sensible cooling loads at design conditions. Use the Trane calculation methods or any other standard accepted method.

Factors used in unit selection:

Packaged Cooling with Optional Electric Heat

Total Cooling Load: 59 MBh

Sensible Cooling Load: 40 MBh

Airflow: 2000 cfm

Electrical Characteristics: 460/60/3

Summer Design Conditions:

Entering Evaporator Coil: 80 DB, 67

WB Outdoor Ambient: 95

External Static Pressure: 0.36 in. wg

Downflow Configuration

Efficiency: 13 SEER

Economizer

Step 2.

As a starting point, a rough determination must be made of the size of the unit. The final selection will be made after examining the performance at the given conditions. Divide the total cooling load by nominal BTUH per ton (12 MBh per ton); then round up to the nearest unit size.

59 MBh / 12 MBh = approx. 5 tons

Step 3.

Table 10 shows that a THC063A4 has a gross cooling capacity of 62.4 MBh and 47.3 MBh sensible capacity at 2000 cfm and 95 DB outdoor ambient with 80 DB, 67 WB air entering the evaporator.

To Find Capacity at Intermediate Conditions Not in the Table.

When the design conditions are between two numbers that are in the capacity table, interpolation is required to approximate the capacity.

Note: Extrapolation outside of the table conditions is not recommended.

Step 4.

In order to select the correct unit which meets the building's requirements, the fan motor heat must be deducted from the gross cooling capacity. The amount of heat that the fan motor generates is dependent on the effort by the motor - cfm and static pressure. To determine the total unit static pressure:

External Static Duct System	0.36 wg
Standard Filter 1 in. from Table 105	0.06 wg
Economizer from Table 105 (100% Outside Air) *worst case	0.18 wg
Electric Heater Size 6 kW from Table 105 (reference "Heating Capacity" section on this page for determination of heater size)	0.056 wg
Total Static Pressure	0.66 wg

Note: The Evaporator Fan Performance Table 41 has deducted the pressure drop for a 1 in. filter already in the unit (see note below Table 41). Therefore, the actual total static pressure is 0.66 - 0.06 (from Table 105) = 0.60 wg.

With 2000 cfm and 0.60 wg. Table 41 shows .90 bhp for this unit. Note below the table gives a formula to calculate Fan Motor Heat, 2.829 x bhp + .4024 = MBh. 2.829 x .90 + .4024 = 2.9485 MBh.

Now subtract the fan motor heat from the gross cooling capacity of the unit:

Net Total Cooling Capacity = 62.4 MBh - 2.95 = 59.45 MBh.

Net Sensible Cooling Capacity = 47.3 MBh - 2.95 = 44.35 MBh.

Subtracting Sensible from Total Capacity to find Latent Capacity

Net Latent Capacity = 59.45 - 44.35 = 15.1 MBh

Step 5.

Compare your resulting capacities to the building load. If the performance will not meet the required load of the building's total or sensible cooling load, try a selection at the next higher size unit.

Heating Capacity

Note: Heating capacity procedure DIFFERS for electric heat (T°C) and gas heat (Y°C) units.)

Step 1.

Calculate the building heating load using the Trane calculation form or other standard accepted method.

Step 2.

Size the system heating capacity to match the calculated building heating load. The following are building heating requirements: Total heating load of 15 MBh 2000 cfm

T°C units with optional electric heat: 460 volt/3 phase Power Supply

The electric heat accessory capacities are listed in Table Table 109. From the table, a 6 kW heater will deliver 20.48 MBh at 480 volts. In order to determine capacity at 460 volts, the heater voltage correction factor from Table 111 must be used. Therefore, 20.48 MBh x .9118 (voltage correction factor) = 18.67 MBh.

Y°C units with gas heat: Fuel- natural gas.

60 MBh, 80 MBh and 130 MBh input models shown in Table 107. The output capacities of these furnaces are 48 MBh, 64 MBh and 104 MBh respectively. The low heat model with 48 MBh best matches the building requirements.

Air Delivery Selection

Note: Air Delivery procedure is the same for electric heat and gas heat units.)

External static pressure drop through the air distribution system has been calculated to be 0.60 inches of water. Enter Table 41 for a THC063A4 at 2000 cfm and 0.60 static pressure. The standard belt drive motor will give the desired airflow at a rated bhp of 0.90 and 998 rpm.

Dehumidification Selection

Note: Dehumidification selection procedure is the same for both electric heat (THC) and gas heat (YHC) models.

Typical 5 ton THC063A

1000 cfm Total Supply airflow
 400 cfm Outside Air (40%)
 600 cfm Return Air
 0.34" External Static Pressure

OA Conditions

Part load day and raining

68°F db

67°F wb

95% RH

RA conditions

75°F db

63°F wb

Step 1:

Determine the mixed/entering air condition (MA)

$MA = (\% \text{ outside air} * \text{outside air dry-bulb temperature}) + (\% \text{ return air} * \text{return air dry-bulb temperature})$

$MA = (0.40 * 68^\circ F) + (0.60 * 75^\circ F)$

MA = 72.20°F db

Note: Repeat for wet-bulb temperature (wb).

Plot on psychrometric chart.

MA

72.2°F db

65°F wb

Step 2:

Determine the additional static pressure drop for a reheat unit

Table 105 shows a static pressure drop of 0.03" for the reheat coil and an additional 0.04 for the mandatory 2" pleated filters required when ordering the dehumidification option. Total static pressure =

.34 + 0.04 + 0.02 = 0.41

Do not forget to also add any additional static from other accessories. This selection does not include additional accessories.

Table 41 (airflow table for 5 ton downflow unit) indicates that a standard motor and drive is needed for this airflow and static pressure range.

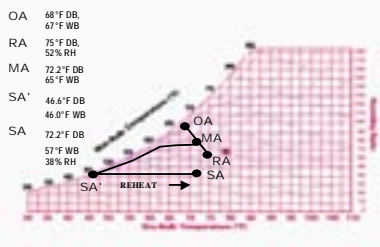


Figure 1. Psychrometric Chart

Step 3a:

Determine leaving evaporator temperature (SA')

Leaving Evaporator Temperature = SA'

Utilizing the manual **Cooling Capacity** selection method as previously described, find the leaving evaporator temperatures with the formula:

$$\Delta \text{Temp} = \frac{\text{gross sensible or gross latent cooling capacity in Btuh}}{(\text{cfm}) (1.085)}$$

Subtract your sensible Δ temp from the entering db and latent Δ temp from the entering wb to determine the leaving evaporator db & wb (temperatures without the addition of fan heat).

46.6 db

46.0 wb

45.4 dp

Connect MA and SA' on psychrometric chart with cooling curve.

Step 3b:

Determine leaving unit temperature in standard cooling mode

Repeat Step 3a substituting **net** sensible or latent capacity for **gross** sensible or latent capacity to find the leaving unit temperature including fan heat.

48.9 db

47.0 wb

Step 4:

Determine reheat temperature rise

Using the leaving evaporator temp (SA'), go to Table 114 and determine the reheat temperature rise for that particular cfm: $\approx 23.3^\circ F$ db

Note: Reheat temperature rise is based on **supply airflow** and leaving evaporator coil temperature.

Step 5:

Determine leaving unit sensible temperature with reheat active (SA)

Reheat temperature (obtained in step 4) + (SA' + fan heat) = SA

(SA' + fan heat) = leaving unit temperature in standard cooling mode from step 3b.

23.3°F db + 48.9°F = 72.2°F db

SA=72.2°F

Since reheat adds only sensible heat, the dewpoint temperature will remain constant so follow the dewpoint temperature line across the psychrometric chart to find the new wb temperature.

\approx 57°F wb
 45.4 dp
 38% RH

Consider the Psychrometric Chart. If the space relative humidity is equal to or above the space relative humidity setpoint, the Dehumidification option will:

- Energize compressor or both compressors (2 stage compressor units).
- Hot gas reheat valve is energized and hot gas is diverted to the reheat coil.
- Dehumidification/reheat is terminated when space humidity is reduced to 5% below relative humidity setpoint.

At MA air enters the RTU. The RTU filters, cools, and dehumidifies the air as it moves through the evaporator coil. Air leaves the evaporator coil saturated at the preset dew point condition (SA') and is reheated by the hot gas reheat coil to deliver 72°F (SA) supply air to the space.



Model Number Description

T	H	C	033	A	3	R	B	A	**	C	O	O	O	A	1	O	O	O	1	A	1
1	2	3	456	7	8	9	10	11	12,13	14	15	16	17	18	19	20	21	22	23	24	25
DIGIT 1 – UNIT TYPE			DIGIT 11 – MINOR DESIGN SEQUENCE							DIGIT 18 - THROUGH THE BASE PROVISIONS											
T	DX Cooling		A							Note: (Applicable to Digit 1, T or Y models)											
Y	DX Cooling, Gas Heat		A							0 No Through the Base Provisions											
W	Packaged Heat Pump ²		A							A Through the Base Electric ¹¹											
DIGIT 2 – EFFICIENCY			DIGIT 12,13 – SERVICE SEQUENCE							Note: (Applicable to Digit 1, Y models only)											
S	Standard Efficiency (13 SEER R-410A)		**							0 Factory Assigned											
H	High Efficiency (13 SEER R-22) (15 SEER R-410A)		DIGIT 14 – FRESH AIR SELECTION							B Through the Base Gas Piping											
DIGIT 3 – AIRFLOW			0							C Through the Base Electric and Gas Piping ¹⁹											
C	Convertible		A							DIGIT 19 - DISCONNECT/CIRCUIT BREAKER/PHASE MONITOR (THREE- PHASE ONLY)											
DIGIT 4,5,6 – NOMINAL GROSS COOLING CAPACITY (MBh)			0							0 No Disconnect/No Circuit Breaker No Phase Monitor											
033/036	3 Tons		A							1 Unit Mounted Non-Fused Disconnect ¹¹											
043/048	4 Tons		A							2 Unit Mounted Circuit Breaker ¹¹											
063/060	5 Tons		A							3 Phase Monitor ²³											
DIGIT 7 – MAJOR DESIGN SEQUENCE			B							4 Phase Monitor & Non-Fused Disconnect Switch ²³											
A	R-22 Refrigerant		C							5 Phase Monitor & Circuit Breaker ²³											
E	R-410A Refrigerant		C							DIGIT 20 - CONVENIENCE OUTLET											
DIGIT 8 – VOLTAGE SELECTION			C							0 No Convenience Outlet											
1	208/230/60/1		C							A Unpowered Convenience Outlet											
3	208-230/60/3		C							B Powered Convenience Outlet (three-phase only) ¹²											
4	460/60/3		C							DIGIT 21 - COMMUNICATIONS OPTIONS⁵											
W	575/60/3		C							0 No Communications Interface											
DIGIT 9 – UNIT CONTROLS			C							1 Trane Communications Interface											
E	Electromechanical ¹		C							2 LonTalk® Communications Interface											
R	ReliaTel™ Microprocessor		C							3 Novar 2024 Controls ¹											
DIGIT 10 – HEATING CAPACITY			C							4 Novar 3051 Controls ¹											
0	No Electric Heat		C							DIGIT 22 - REFRIGERATION SYSTEM OPTION											
A	5 kW (1 phase) ²		C							0 Standard Refrigeration System ¹³											
B	6 kW (3 phase)		C							A Thermal Expansion Valve (TXV)											
C	9 kW (3 phase) ⁴		C							B Dehumidification (Hot Gas Reheat Coil) ^{1,4,9,21}											
D	10 kW (1 phase) ²		C							E=12 kW (3 phase) F=14 kW (1 phase) ² G=18 kW (1&3 phase) J=23 kW (3 phase)											
Note: Applicable to Digit 1, Y models only.			DIGIT 15 - SUPPLY FAN/DRIVE TYPE/MOTOR							DIGIT 17 - CONDENSER COIL PROTECTION											
L	Low		0							0 Standard Coil											
M	Medium		0							1 Standard Coil with Hail Guard											
H	High		0							2 Black Epoxy Pre-Coated Condenser Coil											
X	Low, Stainless Steel Heat Exchanger		0							3 Black Epoxy Pre-Coated Condenser Coil with Hail Guard											
Y	Medium, Stainless Steel Heat Exchanger		0							4 CompleteCoat™ Condenser Coil											
Z	High, Stainless Steel Heat Exchanger		0							5 CompleteCoat™ Condenser Coil with Hail Guard											



Model Number Description

DIGIT 23 - REFRIGERATION CONTROLS

Note: Applicable to Digit 7 = A

- 0 No Refrigeration Control⁷
- 2 Froststat¹⁴
- 3 Crankcase Heater³
- 6 Froststat¹⁴ and Crankcase Heater³

Note: Applicable to Digit 7 = E

- 0 No Refrigeration Control⁷
- 1 Froststat¹⁴
- 2 Crankcase Heater³
- 3 Froststat¹⁴ and Crankcase Heater³

DIGIT 24 - SMOKE DETECTOR^{5,20}

- 0 No Smoke Detector
- A Return Air Smoke Detector^{15,16}
- B Supply Air Smoke Detector
- C Supply and Return Air Smoke Detectors^{15,16}

DIGIT 25 - MONITORING CONTROLS⁵

- 0 No Monitoring Control¹⁷
- 1 Clogged Filter Switch¹⁷
- 2 Fan Failure Switch¹⁷
- 3 Discharge Air Sensing Tube¹⁷
- 4 Clogged Filter Switch and Fan Fail Switch¹⁷
- 5 Clogged Filter Switch and Discharge Air Sensing Tube¹⁷
- 6 Fan Fail Switch and Discharge Air Sensing Tube¹⁷
- 7 Clogged Filter and Fan Fail Switches and Discharge Air Sensing Tube¹⁷
- 8 Novar Return Air Sensor¹⁸

Model Number Notes

- 1. Not available for 3-5 tons, R-410A Heat Pumps.
- 2. Available for R-410A units only.
- 3. Standard on 4 tons, 3-phase Heat Pumps and 5 ton Heat Pumps.
- 4. Available for R-22 units only.
- 5. Not available with electromechanical controls.
- 6. Manual outside air damper will ship factory supplied within the unit, but must be field installed.

- 7. High pressure control is standard on all units.
- 8. Multispeed direct drive standard on single-phase. Belt drive standard on three-phase R-22 and 13 SEER, R-410A units.
- 9. Requires the use of 2" pleated filters.
- 10. Economizer with Barometric Relief is for downflow configured units only. Order Economizer without Barometric Relief for horizontal configuration. Barometric Relief for horizontal configured units must be ordered as field installed accessory.
- 11. Through the base electric required when ordering disconnect/circuit breaker options.
- 12. Requires use of Disconnect or Circuit Breaker.
- 13. Standard metering devices are TXVs.
- 14. Froststat cannot be field installed in electro-mechanical units.
- 15. The return air smoke detector may not fit up or work properly on the Precedent units when used in conjunction with 3rd party accessories such as bolt on heat wheels, economizers and power exhaust. Do not order the return air smoke detectors when using this type of accessory.
- 16. Return Air Smoke Detector cannot be ordered with Novar Controls.
- 17. These options are standard when ordering Novar Controls.
- 18. This option is used when ordering Novar Controls.
- 19. Includes gas piping and shutoff (field assembly required).
- 20. Not available with high temperature stat accessory.
- 21. Requires hinged access panels.
- 22. Belt Drive Optional on three-phase 15 SEER, R-410A units.
- 23. Phase Monitor not offered on 7th digit = E (R-410A) models.



General Data

Table 1. General Data — 3-5 Tons — R-22 Refrigerant

	3 Tons	4 Tons	5 Tons
	T/YHC033A3,4,W	T/YHC043A3,4,W	T/YHC063A3,4,W
Cooling Performance⁽¹⁾			
Gross Cooling Capacity	38,000	49,800	62,400
SEER ⁽²⁾	13.0	13.0	13.0
Nominal CFM / ARI Rated CFM	1,200/1,200	1,600/1,600	2,000/2,000
ARI Net Cooling Capacity	36,600	47,500	59,500
System Power (kW)	3.33	4.48	5.56
Compressor			
Number/Type	1/Scroll	1/Scroll	1/Scroll
Sound			
Outdoor Sound Rating (dB) ⁽³⁾	83	85	84
Outdoor Coil			
Type	Lanced	Lanced	Lanced
Tube Size (in.)	0.3125	0.3125	0.3125
Face Area (sq. ft.)	7.19	9.59	10.96
Rows/FPI	2/17	3/17	3/17
Indoor Coil			
Type	Lanced	Lanced	Lanced
Tube Size (in.)	0.3125	0.3125	0.3125
Face Area (sq. ft.)	6.68	6.68	7.71
Rows/FPI	3/16	4/16	4/16
Refrigerant Control	Thermal Expansion Valve	Thermal Expansion Valve	Thermal Expansion Valve
Drain Connection Number/Size (in.)	1¾ NPT	1¾ NPT	1¾ NPT
Outdoor Fan			
Type	Propeller	Propeller	Propeller
Number Used/Diameter (in.)	1/22	1/22	1/22
Drive Type/No. Speeds ⁽⁴⁾	Direct/1	Direct/1	Direct/1
CFM	2,550	3,050	3,370
Number Motors/HP	1/0.20	1/0.33	1/0.33
Motor RPM	1,115	1,115	1,115
Belt Drive Indoor Fan			
Type	FC Centrifugal	FC Centrifugal	FC Centrifugal
Number Used/Diameter (in.)	1/11x11	1/11x11	1/11x11
Drive Type/Number Speeds	Belt/Variable Sheave	Belt/Variable Sheave	Belt/Variable Sheave
Number Motors	1	1	1
Motor HP	1.00	1.00	1.00
Standard Motor RPM	1,750	1,750	1,750
Motor Frame Size	56	56	56
Filters^{(5), (6)}			
Type Furnished	Throwaway	Throwaway	Throwaway
Number Size Recommended	(2) 20x25x1	(2) 20x25x1	(2) 20x30x1 ⁽⁷⁾
Optional Hot Gas Reheat Coil			
Type	Lanced	Lanced	Lanced
Tube Size (in.) OD	0.375	0.375	0.375
Face Area (sq. ft.)	2.22	2.22	2.22
Rows/FPI	1/16	1/16	2/16
Refrigerant Charge (Lbs. of R-22)⁽⁸⁾			
Standard	5.3	7.7	8.4
Optional Hot Gas Reheat Coil	5.3	8.5	10.7



General Data

(3-5 Tons R-22 Refrigerant)

Table 1. (continued) General Data — 3-5 Tons — R-22 Refrigerant

	3 Tons	4 Tons	5 Tons
Heating Performance⁽⁹⁾			
(Gas/Electric Only)			
Heating Input			
Low Heat Input (Btu)	60,000	60,000	60,000
Mid Heat Input (Btu)	80,000	80,000	80,000
High Heat Input (Btu)	120,000	120,000	130,000
Heating Output			
Low Heat Input (Btu)	48,000	48,000	48,000
Mid Heat Input (Btu)	64,000	64,000	64,000
High Heat Input (Btu)	96,000	96,000	104,000
AFUE%⁽¹⁰⁾			
Low Heat Input (Btu)	81	81	81
Mid Heat Input (Btu)	81	81	81
High Heat Input (Btu)	81	81	80
Steady State Efficiency%			
Low Heat Input (Btu)	81	81	81
Mid Heat Input (Btu)	81	81	81
High Heat Input (Btu)	81	81	80
No. Burners			
Low Heat Input (Btu)	2	2	2
Mid Heat Input (Btu)	2	2	2
High Heat Input (Btu)	3	3	3
No. Stages			
Low Heat Input (Btu)	1	1	1
Mid Heat Input (Btu)	1	1	1
High Heat Input (Btu)	1	1	1
Gas Supply Line Pressure			
Natural (minimum/maximum)	4.5/14.0	4.5/14.0	4.5/14.0
LP (minimum/maximum)	10.0/14.0	10.0/14.0	10.0/14.0
Gas Connection Pipe Size (in.)			
Low Heat	1/2	1/2	1/2
Mid Heat	1/2	1/2	1/2
High Heat	1/2	1/2	1/2

(1) Cooling performance is rated at 95 F ambient, 80 F entering dry bulb, 67 F entering wet bulb. Gross capacity does not include the effect of fan motor heat. ARI capacity is net and includes the effect of fan motor heat. Units are suitable for operation to ±20% of nominal cfm. Units are certified in accordance with the Unitary Air-Conditioner Equipment certification program, which is based on ARI Standard 210/240 except AK (380V/60 Hz).

(2) EER and/or SEER are rated at ARI conditions and in accordance with DOE test procedures.

(3) Outdoor Sound Rating shown is tested in accordance with ARI Standard 270. For additional information refer to [Table 102](#).

(4) With Dehumidification (Hot Gas Reheat) option: Direct/2 speed.

(5) Optional 2" pleated filters also available.

(6) 20x25x1 filters standard on T/YHC033A & T/YHC043A Low, Medium Heat Models. 20x30x1 filters standard on YHC033 & YHC043A.

(7) 2" pleated filters is a factory installed option. 2" pleated filters is standard with the Dehumidification (Hot Gas Reheat) option.

(8) Refrigerant charge is an approximate value. For a more precise value, see unit nameplate and service instructions.

(9) Heating performance limit settings and rating data were established and approved under laboratory test conditions using American National Standards Institute standards. Ratings shown are for elevations up to 2000 feet. For elevations above 2000 feet, ratings should be reduced at the rate of 4% for each 1000 feet above sea level. Applicable to Gas/Electric units only.

(10) AFUE and Steady State Efficiency is rated in accordance with DOE test procedures.



General Data

(3-4 Tons R-410A Refrigerant)

Table 2. General Data — 3-4Tons — R-410A Refrigerant

	3 Tons		4 Tons	
	T/YSC036E1	T/YSC036E3,4,W	T/YSC048E1	T/YSC048E3,4,W
Cooling Performance⁽¹⁾				
Gross Cooling Capacity	35,620	37,150	49,210	49,450
SEER ⁽²⁾	13.0	13.0	13.0	13.0
Nominal CFM / ARI Rated CFM	1,200/1,200	1,200/1,200	1,600/1,600	1,600/1,600
ARI Net Cooling Capacity	35,000	35,800	48,000	48,000
System Power (kW)	3.04	3.20	4.32	4.39
Compressor				
Number/Type	1/Scroll	1/Scroll	1/Scroll	1/Scroll
Sound				
Outdoor Sound Rating (dB) ⁽³⁾	81	81	82	82
Outdoor Coil				
Type	Lanced	Lanced	Lanced	Lanced
Tube Size (in.) OD	0.3125	0.3125	0.3125	0.3125
Face Area (sq. ft.)	10.96	9.59	10.96	10.96
Rows/FPI	2/17	2/17	2/17	2/17
Indoor Coil				
Type	Lanced	Lanced	Lanced	Lanced
Tube Size (in.)	0.3125	0.3125	0.3125	0.3125
Face Area (sq. ft.)	7.71	7.71	7.71	7.71
Rows/FPI	3/16	3/16	4/16	4/16
Refrigerant Control	Thermal Expansion Valve	Thermal Expansion Valve	Thermal Expansion Valve	Thermal Expansion Valve
Drain Connection Number/Size (in.)	1¾ NPT	1¾ NPT	1¾ NPT	1¾ NPT
Outdoor Fan				
Type	Propeller	Propeller	Propeller	Propeller
Number Used/Diameter (in.)	1/22	1/22	1/22	1/22
Drive Type/No. Speeds	Direct/1	Direct/1	Direct/1	Direct/1
CFM	3,466	3,375	3,411	3,403
Motor HP	0.33	0.33	0.33	0.33
Motor RPM	1,075	1,075	1,075	1,075
Indoor Fan				
Type (Standard)	FC Centrifugal	FC Centrifugal	FC Centrifugal	FC Centrifugal
Number Used/Diameter (in.)	1/11x11	1/11x11	1/11x11	1/11x11
Drive Type/Number Speeds	Direct/5	Belt/Variable	Direct/5	Belt/Variable
Number Motors	1	1	1	1
Motor HP	0.75	1.0	1.0	1.0
Motor Frame Size	48	56	48	56
Filters⁽⁴⁾				
Type Furnished	Throwaway	Throwaway	Throwaway	Throwaway
Number Size Recommended	(2) 20x30x1	(2) 20x30x1	(2) 20x30x1	(2) 20x30x1
Refrigerant Charge (Lbs. of R-410A)⁽⁵⁾				
Pounds of R-410A	6.3	6.3	7.4	7.4



General Data

(3-4 Tons R-410A Refrigerant)

Table 2. (continued) General Data — 3-4Tons — R-410A Refrigerant

	3 Tons		4 Tons	
Heating Performance⁽⁶⁾				
(Gas/Electric Only)				
Heating Input				
Low Heat Input (Btu)	60,000	60,000	60,000	60,000
Mid Heat Input (Btu)	80,000	80,000	80,000	80,000
High Heat Input (Btu)	120,000	120,000	120,000	120,000
Heating Output				
Low Heat Input (Btu)	48,000	48,000	49,000	48,000
Mid Heat Input (Btu)	65,000	64,000	65,000	64,000
High Heat Input (Btu)	96,000	96,000	96,000	96,000
AFUE%⁽⁷⁾				
Low Heat Input (Btu)	78	80	79	80
Mid Heat Input (Btu)	78	80	79	80
High Heat Input (Btu)	78	80	79	80
Steady State Efficiency%				
Low Heat Input (Btu)	80	80	81	80
Mid Heat Input (Btu)	81	80	81	80
High Heat Input (Btu)	80	80	80	80
No. Burners				
Low Heat Input (Btu)	2	2	2	2
Mid Heat Input (Btu)	2	2	2	2
High Heat Input (Btu)	3	3	3	3
No. Stages				
Low Heat Input (Btu)	1	1	1	1
Mid Heat Input (Btu)	1	1	1	1
High Heat Input (Btu)	1	1	1	1
Gas Supply Line Pressure				
Natural (minimum/maximum)	4.5/10.5	4.5/10.5	4.5/10.5	4.5/10.5
LP (minimum/maximum)	10.0/13.0	10.0/13.0	10.0/13.0	10.0/13.0
Gas Connection Pipe Size (in)				
Low Heat	1/2	1/2	1/2	1/2
Mid Heat	1/2	1/2	1/2	1/2
High Heat	1/2	1/2	1/2	1/2

(1) Cooling performance is rated at 95 F ambient, 80 F entering dry bulb, 67 F entering wet bulb. Gross capacity does not include the effect of fan motor heat. ARI capacity is net and includes the effect of fan motor heat. Units are suitable for operation to $\pm 20\%$ of nominal cfm. Units are certified in accordance with the Unitary Air-Conditioner Equipment certification program, which is based on ARI Standard 210/240 except AK (380V/60 Hz).

(2) EER and/or SEER are rated at ARI conditions and in accordance with DOE test procedures.

(3) Outdoor Sound Rating shown is tested in accordance with ARI Standard 270. For additional information refer to [Table 102](#).

(4) Optional 2" pleated filters also available.

(5) Refrigerant charge is an approximate value. For a more precise value, see unit nameplate and service instructions.

(6) Heating performance limit settings and rating data were established and approved under laboratory test conditions using American National Standards Institute standards. Ratings shown are for elevations up to 2000 feet. For elevations above 2000 feet, ratings should be reduced at the rate of 4% for each 1000 feet above sea level. Applicable to Gas/Electric units only.

(7) AFUE is rated in accordance with DOE test procedures.



General Data

(3-4 Tons High Efficiency)

Table 3. General Data — 3-4Tons — High Efficiency

	3 Tons		4 Tons	
	T/YHC036E1	T/YHC036E3,4	T/YHC048E1	T/YHC048E3,4
Cooling Performance⁽¹⁾				
Gross Cooling Capacity	38,490	38,490	48,930	49,930
SEER ⁽²⁾	15.2	15.0	15.0	15.0
Nominal CFM / ARI Rated CFM	1,200/1,200	1,200/1,200	1,600/1,600	1,600/1,600
ARI Net Cooling Capacity	38,000	38,000	48,000	49,000
System Power (kW)	2.93	2.99	3.83	3.67
Compressor				
Number/Type	1/Scroll	1/Scroll	1/Scroll	1/Scroll
Sound				
Outdoor Sound Rating (dB) ⁽³⁾	81	81	87	87
Outdoor Coil				
Type	Lanced	Lanced	Lanced	Lanced
Tube Size (in.) OD	0.3125	0.3125	0.3125	0.3125
Face Area (sq. ft.)	10.96	10.96	17.00	17.00
Rows/FPI	3/17	3/17	3/17	3/17
Indoor Coil				
Type	Lanced	Lanced	Lanced	Lanced
Tube Size (in.)	0.3125	0.3125	0.3125	0.3125
Face Area (sq. ft.)	7.71	7.71	9.27	9.27
Rows/FPI	3/16	3/16	3/16	3/16
Refrigerant Control	Thermal Expansion Valve	Thermal Expansion Valve	Thermal Expansion Valve	Thermal Expansion Valve
Drain Connection Number/Size (in.)	1¾ NPT	1¾ NPT	1¾ NPT	1¾ NPT
Outdoor Fan				
Type	Propeller	Propeller	Propeller	Propeller
Number Used/Diameter (in.)	1/22	1/22	1/26	1/26
Drive Type/No. Speeds	Direct/1	Direct/1	Direct/1	Direct/1
CFM	3,064	3,064	3,986	3,982
Motor HP	0.2	0.2	0.4	0.4
Motor RPM	1,075	1,075	1,075	1,075
Indoor Fan				
Type (Standard)	FC Centrifugal	FC Centrifugal	FC Centrifugal	FC Centrifugal
Number Used/Diameter (in.)	1/11x11	1/11x11	1/11x11	1/11x11
Drive Type/Number Speeds	Direct/5	Direct/5	Direct/5	Direct/5
Number Motors	1	1	1	1
Motor HP (Standard/Oversized)	0.75	1.0	1.0	1.0
Motor Frame Size (Standard/Oversized)	48	48	48	48
Indoor Fan				
Type (Optional)	—	FC Centrifugal	—	FC Centrifugal
Number Used/Diameter (in.)	—	1/11x11	—	1/11x11
Drive Type/Number Speeds	—	Belt/Variable	—	Belt/Variable
Number Motors	—	1	—	1
Motor HP (Standard/Oversized)	—	1.0	—	1.0
Motor Frame Size (Standard/Oversized)	—	56	—	56
Filters⁽⁴⁾				
Type Furnished	Throwaway	Throwaway	Throwaway	Throwaway
Number Size Recommended	(2) 20x30x1	(2) 20x30x1	(4) 16x25x1	(4) 16x25x1
Refrigerant Charge (Lbs. of R-410A)⁽⁵⁾				
Pounds of R-410A	7.9	7.9	11.0	11.0



General Data

(3-4 Tons High Efficiency)

Table 3. (continued) General Data — 3-4Tons — High Efficiency

	3 Tons		4 Tons	
Heating Performance⁽⁶⁾				
(Gas/Electric Only)				
Heating Input				
Low Heat Input (Btu)	60,000	60,000	60,000	60,000
Mid Heat Input (Btu)	80,000	80,000	80,000	80,000
High Heat Input (Btu)	120,000	120,000	120,000	120,000
Heating Output				
Low Heat Input (Btu)	48,000	48,000	49,000	48,000
Mid Heat Input (Btu)	65,000	64,000	64,000	64,000
High Heat Input (Btu)	96,000	96,000	96,000	96,000
AFUE%⁽⁷⁾				
Low Heat Input (Btu)	78	78	80	80
Mid Heat Input (Btu)	78	78	79	79
High Heat Input (Btu)	78	78	79	79
Steady State Efficiency%				
Low Heat Input (Btu)	80	80	81	81
Mid Heat Input (Btu)	81	80	80	80
High Heat Input (Btu)	80	80	80	81
No. Burners				
Low Heat Input (Btu)	2	2	2	2
Mid Heat Input (Btu)	2	2	2	2
High Heat Input (Btu)	3	3	3	3
No. Stages				
Low Heat Input (Btu)	1	1	1	1
Mid Heat Input (Btu)	1	1	1	1
High Heat Input (Btu)	1	1	1	1
Gas Supply Line Pressure				
Natural (minimum/maximum)	4.5/10.5	4.5/10.5	4.5/10.5	4.5/10.5
LP (minimum/maximum)	10.0/13.0	10.0/13.0	10.0/13.0	10.0/13.0
Gas Connection Pipe Size (in)				
Low Heat	1/2	1/2	1/2	1/2
Mid Heat	1/2	1/2	1/2	1/2
High Heat	1/2	1/2	1/2	1/2

(1) Cooling performance is rated at 95 F ambient, 80 F entering dry bulb, 67 F entering wet bulb. Gross capacity does not include the effect of fan motor heat. ARI capacity is net and includes the effect of fan motor heat. Units are suitable for operation to $\pm 20\%$ of nominal cfm. Units are certified in accordance with the Unitary Air-Conditioner Equipment certification program, which is based on ARI Standard 210/240 except AK (380V/60 Hz).

(2) EER and/or SEER are rated at ARI conditions and in accordance with DOE test procedures.

(3) Outdoor Sound Rating shown is tested in accordance with ARI Standard 270. For additional information refer to [Table 102](#).

(4) Optional 2" pleated filters also available.

(5) Refrigerant charge is an approximate value. For a more precise value, see unit nameplate and service instructions.

(6) Heating performance limit settings and rating data were established and approved under laboratory test conditions using American National Standards Institute standards. Ratings shown are for elevations up to 2000 feet. For elevations above 2000 feet, ratings should be reduced at the rate of 4% for each 1000 feet above sea level. Applicable to Gas/Electric units only.

(7) AFUE is rated in accordance with DOE test procedures.



General Data

(5 Tons R-410A Refrigerant)

Table 4. General Data — 5 Tons — R-410A Refrigerant

	5 Tons	
	T/YSC060E1	T/YSC060E3,4,W
Cooling Performance⁽¹⁾		
Gross Cooling Capacity	59,900	62,270
SEER ⁽²⁾	13.0	13.0
Nominal CFM / ARI Rated CFM	2,000/2,000	2,000/2,000
ARI Net Cooling Capacity	58,000	60,000
System Power (kW)	5.25	5.46
Compressor		
Number/Type	1/Scroll	1/Scroll
Sound		
Outdoor Sound Rating (dB) ⁽³⁾	82	82
Outdoor Coil		
Type	Lanced	Lanced
Tube Size (in.)	0.3125	0.3125
Face Area (sq. ft.)	10.96	10.96
Rows/FPI	3/17	3/17
Indoor Coil		
Type	Lanced	Lanced
Tube Size (in.)	0.3125	0.3125
Face Area (sq. ft.)	7.71	7.71
Rows/FPI	4/16	4/16
Refrigerant Control	Thermal Expansion Valve	Thermal Expansion Valve
Drain Connection Number/Size (in.)	1¾ NPT	1¾ NPT
Outdoor Fan		
Type	Propeller	Propeller
Number Used/Diameter (in.)	1/22	1/22
Drive Type/No. Speeds	Direct/1	Direct/1
CFM	3,271	3,245
Number Motors/HP	0.40	0.40
Motor RPM	1,075	1,075
Indoor Fan		
Type (Standard)	FC Centrifugal	FC Centrifugal
Number Used/Diameter (in.)	1/11x11	1/11x11
Drive Type/Number Speeds	Direct/5	Belt/Variable
Motor HP	1.0	1.0
Motor Frame Size	48	56
Filters⁽⁴⁾		
Type Furnished	Throwaway	Throwaway
Number Size Recommended	(2) 20x30x1	(2) 20x30x1
Refrigerant Charge (Lbs. of R-410A)⁽⁵⁾		
Pounds of R-410A	9.5	9.4



General Data

(5 Tons R-410A Refrigerant)

Table 4. (continued) General Data — 5 Tons — R-410A Refrigerant

	5 Tons	
Heating Performance⁽⁶⁾		
(Gas/Electric Only)		
Heating Input		
Low Heat Input (Btu)	60,000	60,000
Mid Heat Input (Btu)	80,000	80,000
High Heat Input (Btu)	130,000	130,000
Heating Output		
Low Heat Input (Btu)	48,000	48,000
Mid Heat Input (Btu)	65,000	64,000
High Heat Input (Btu)	104,000	104,000
AFUE%⁽⁷⁾		
Low Heat Input (Btu)	78	80
Mid Heat Input (Btu)	79	80
High Heat Input (Btu)	78	80
Steady State Efficiency%		
Low Heat Input (Btu)	80	80
Mid Heat Input (Btu)	81	80
High Heat Input (Btu)	80	80
No. Burners		
Low Heat Input (Btu)	2	2
Mid Heat Input (Btu)	2	2
High Heat Input (Btu)	3	3
No. Stages		
Low Heat Input (Btu)	1	1
Mid Heat Input (Btu)	1	1
High Heat Input (Btu)	1	1
Gas Supply Line Pressure		
Natural (minimum/maximum)	4.5/10.5	4.5/10.5
LP (minimum/maximum)	10.0/13.0	10.0/13.0
Gas Connection Pipe Size (in)		
Low Heat	1/2	1/2
Mid Heat	1/2	1/2
High Heat	1/2	1/2

(1) Cooling performance is rated at 95 F ambient, 80 F entering dry bulb, 67 F entering wet bulb. Gross capacity does not include the effect of fan motor heat. ARI capacity is net and includes the effect of fan motor heat. Units are suitable for operation to $\pm 20\%$ of nominal cfm. Units are certified in accordance with the Unitary Air-Conditioner Equipment certification program, which is based on ARI Standard 210/240 except AK (380V/60 Hz).

(2) EER and/or SEER are rated at ARI conditions and in accordance with DOE test procedures.

(3) Outdoor Sound Rating shown is tested in accordance with ARI Standard 270. For additional information refer to [Table 102](#).

(4) Optional 2" pleated filters also available.

(5) Refrigerant charge is an approximate value. For a more precise value, see unit nameplate and service instructions.

(6) Heating performance limit settings and rating data were established and approved under laboratory test conditions using American National Standards Institute standards. Ratings shown are for elevations up to 2000 feet. For elevations above 2000 feet, ratings should be reduced at the rate of 4% for each 1000 feet above sea level. Applicable to Gas/Electric units only.

(7) AFUE is rated in accordance with DOE test procedures.



General Data

(5 Tons High Efficiency)

Table 5. General Data — 5 Tons — High Efficiency

	5 Tons	
	T/YH060E1	T/YHC060E3,4
Cooling Performance⁽¹⁾		
Gross Cooling Capacity	62,490	63,490
SEER ⁽²⁾	15.0	15.0
Nominal CFM / ARI Rated CFM	2,000/2,000	2,000/2,000
ARI Net Cooling Capacity	61,000	62,000
System Power (kW)	4.75	4.83
Compressor		
Number/Type	1/Scroll	1/Scroll
Sound		
Outdoor Sound Rating (dB) ⁽³⁾	87	87
Outdoor Coil		
Type	Lanced	Lanced
Tube Size (in.)	0.3125	0.3125
Face Area (sq. ft.)	17.00	17.00
Rows/FPI	3/17	3/17
Indoor Coil		
Type	Lanced	Lanced
Tube Size (in.)	0.3125	0.3125
Face Area (sq. ft.)	9.89	9.89
Rows/FPI	4/16	4/16
Refrigerant Control	Thermal Expansion Valve	Thermal Expansion Valve
Drain Connection Number/Size (in.)	1¾ NPT	1¾ NPT
Outdoor Fan		
Type	Propeller	Propeller
Number Used/Diameter (in.)	1/26	1/26
Drive Type/No. Speeds	Direct/1	Direct/1
CFM	3,953	3,953
Number Motors/HP	0.40	0.40
Motor RPM	1,075	1,075
Indoor Fan		
Type (Standard)	FC Centrifugal	FC Centrifugal
Number Used/Diameter (in.)	1/11x11	1/11x11
Drive Type/Number Speeds	Direct/5	Direct/5
Motor HP	1.0	1.0
Motor Frame Size	48	48
Indoor Fan		
Type (Optional)	—	FC Centrifugal
Number Used/Diameter (in.)	—	1/11x11
Drive Type/Number Speeds	—	Belt/Variable
Motor HP	—	1.0
Motor Frame Size	—	56
Filters⁽⁴⁾		
Type Furnished	Throwaway	Throwaway
Number Size Recommended	(4) 16x25x1	(4) 16x25x1
Refrigerant Charge (Lbs. of R-410A)⁽⁵⁾		
Pounds of R-410A	12.5	12.5



General Data

(5 Tons High Efficiency)

Table 5. (continued) General Data — 5 Tons — High Efficiency

	5 Tons	
Heating Performance⁽⁶⁾		
(Gas/Electric Only)		
Heating Input		
Low Heat Input (Btu)	60,000	60,000
Mid Heat Input (Btu)	80,000	80,000
High Heat Input (Btu)	130,000	130,000
Heating Output		
Low Heat Input (Btu)	49,000	48,000
Mid Heat Input (Btu)	64,000	64,000
High Heat Input (Btu)	104,000	104,000
AFUE%⁽⁷⁾		
Low Heat Input (Btu)	80	80
Mid Heat Input (Btu)	79	79
High Heat Input (Btu)	80	80
Steady State Efficiency%		
Low Heat Input (Btu)	81	81
Mid Heat Input (Btu)	80	80
High Heat Input (Btu)	80	80
No. Burners		
Low Heat Input (Btu)	2	2
Mid Heat Input (Btu)	2	2
High Heat Input (Btu)	3	3
No. Stages		
Low Heat Input (Btu)	1	1
Mid Heat Input (Btu)	1	1
High Heat Input (Btu)	1	1
Gas Supply Line Pressure		
Natural (minimum/maximum)	4.5/10.5	4.5/10.5
LP (minimum/maximum)	10.0/13.0	10.0/13.0
Gas Connection Pipe Size (in)		
Low Heat	1/2	1/2
Mid Heat	1/2	1/2
High Heat	1/2	1/2

(1) Cooling performance is rated at 95 F ambient, 80 F entering dry bulb, 67 F entering wet bulb. Gross capacity does not include the effect of fan motor heat. ARI capacity is net and includes the effect of fan motor heat. Units are suitable for operation to $\pm 20\%$ of nominal cfm. Units are certified in accordance with the Unitary Air-Conditioner Equipment certification program, which is based on ARI Standard 210/240 except AK (380V/60 Hz).

(2) EER and/or SEER are rated at ARI conditions and in accordance with DOE test procedures.

(3) Outdoor Sound Rating shown is tested in accordance with ARI Standard 270. For additional information refer to [Table 102](#).

(4) Optional 2" pleated filters also available.

(5) Refrigerant charge is an approximate value. For a more precise value, see unit nameplate and service instructions.

(6) Heating performance limit settings and rating data were established and approved under laboratory test conditions using American National Standards Institute standards. Ratings shown are for elevations up to 2000 feet. For elevations above 2000 feet, ratings should be reduced at the rate of 4% for each 1000 feet above sea level. Applicable to Gas/Electric units only.

(7) AFUE is rated in accordance with DOE test procedures.



General Data

(3-4 Tons R-410A Refrigerant)

Table 6. General Data — 3-4 Tons — R-410A Refrigerant

	3 Tons		4 Tons	
	WSC036E1	WSC036E3,4,W	WSC048E1	WSC048E3,4,W
Cooling Performance⁽¹⁾				
Gross Cooling Capacity	37,650	38,030	49,040	50,130
SEER ⁽²⁾	13.0	13.0	13.0	13.0
Nominal CFM / ARI Rated CFM	1,200/1,200	1,200/1,200	1,600/1,600	1,600/1,600
ARI Net Cooling Capacity	37,000	37,000	48,000	48,800
System Power (kW)	3.49	3.45	4.40	4.40
Heating Performance⁽³⁾				
High Temp. Btuh Rating	37,000	37,000	44,400	44,400
System Power kW/COP	3.31/3.30	3.21/3.40	3.91/3.30	3.86/3.40
Low Temp. Btuh Rating	21,200	20,700	25,000	24,900
System Power (kW)/COP	2.99/2.10	2.85/2.10	3.63/2.00	3.53/2.10
HSPF (Btu/Watts-hr)	8.00	8.00	7.80	7.80
Compressor				
Number/Type	1/Scroll	1/Scroll	1/Scroll	1/Scroll
Sound				
Outdoor Sound Rating (dB) ⁽⁴⁾	81	80	82	82
Outdoor Coil				
Type	Lanced	Lanced	Lanced	Lanced
Tube Size (in.)	0.3125	0.3125	0.3125	0.3125
Face Area (sq. ft.)	9.59	10.96	10.96	10.96
Rows/FPI	2/17	3/17	3/17	3/17
Refrigerant Control	Thermal Expansion Valve	Thermal Expansion Valve	Thermal Expansion Valve	Thermal Expansion Valve
Indoor Coil				
Type	Lanced	Lanced	Lanced	Lanced
Tube Size (in.)	0.3125	0.3125	0.3125	0.3125
Face Area (sq. ft.)	6.68	6.68	7.71	7.71
Rows/FPI	3/16	3/16	4/16	4/16
Refrigerant Control	Thermal Expansion Valve	Thermal Expansion Valve	Thermal Expansion Valve	Thermal Expansion Valve
Drain Connection Number/Size (in.)	1¾ NPT	1¾ NPT	1¾ NPT	1¾ NPT
Outdoor Fan				
Type	Propeller	Propeller	Propeller	Propeller
Number Used/Diameter (in.)	1/22	1/22	1/22	1/22
Drive Type/No. Speeds	Direct/1	Direct/1	Direct/1	Direct/1
CFM	3,323	2,823	3,276	3,279
Number Motors/HP	0.25	0.25	0.40	0.40
Motor RPM	1,075	1,075	1,075	1,075
Indoor Fan				
Type (Standard)	FC Centrifugal	FC Centrifugal	FC Centrifugal	FC Centrifugal
Number Used/Diameter (in.)	1/11x11	1/11x11	1/11x11	1/11x11
Drive Type/Number Speeds	Direct/5	Belt/Variable	Direct/5	Belt/Variable
Motor HP	0.75	1.0	1.0	1.0
Motor Frame Size (Standard/Oversized)	48	56	48	56
Filters⁽⁵⁾				
Type Furnished	Throwaway	Throwaway	Throwaway	Throwaway
Number Size Recommended	(2) 20x30x1	(2) 20x30x1	(2) 20x30x1	(2) 20x30x1
Refrigerant Charge (Lbs. of R-410A)⁽⁶⁾				
Pounds of R-410A	5.6	7.3	8.8	9.4

(1) Cooling performance is rated at 95 F ambient, 80 F entering dry bulb, 67 F entering wet bulb. Gross capacity does not include the effect of fan motor heat. ARI capacity is net and includes the effect of fan motor heat. Units are suitable for operation to ±20% of nominal cfm. Units are certified in accordance with the Unitary Air-Conditioner Equipment certification program, which is based on ARI Standard 210/240 except AK (380V/60 Hz).

(2) EER and/or SEER are rated at ARI conditions and in accordance with DOE test procedures.

(3) Cooling performance is rated at 95 F ambient, 80 F entering dry bulb, 67 F entering wet bulb. Gross capacity does not include the effect of fan motor heat. ARI capacity is net and includes the effect of fan motor heat. Units are suitable for operation to ±20% of nominal cfm. Units are certified in accordance with the Unitary Air-Conditioner Equipment certification program, which is based on ARI Standard 210/240 except AK (380V/60 Hz).

(4) Outdoor Sound Rating shown is tested in accordance with ARI Standard 270. For additional information refer to [Table 103](#).

(5) Optional 2" pleated filters also available.

(6) Refrigerant charge is an approximate value. For a more precise value, see unit nameplate and service instructions.



General Data

(5 Tons R-410A Refrigerant)

Table 7. General Data —5 Tons —R-410A

	5 Tons	
	WSC060E1	WSC060E3,4,W
Cooling Performance⁽¹⁾		
Gross Cooling Capacity	58,360	63,440
SEER ⁽²⁾	13.0	13.0
Nominal CFM / ARI Rated CFM	2,000/2,000	2,000/2,000
ARI Net Cooling Capacity	57,000	62,000
System Power (kW)	5.06	5.13
Heating Performance⁽³⁾		
High Temp. Btuh Rating	58,500	58,500
System Power kW/COP	4.86/3.50	4.94/3.50
Low Temp. Btuh Rating	34,500	34,400
System Power kW/COP	4.46/2.30	4.44/2.30
HSPF (Btu/Watts-hr)	8.00	8.00
Compressor		
Number/Type	1/Scroll	1/Scroll
Sound		
Outdoor Sound Rating (dB) ⁽⁴⁾	87	87
Outdoor Coil		
Type	Lanced	Lanced
Tube Size (in.)	0.3125	0.3125
Face Area (sq. ft.)	17.00	17.00
Rows/FPI	3/17	3/17
Refrigerant Control	Thermal Expansion Valve	Thermal Expansion Valve
Indoor Coil		
Type	Lanced	Lanced
Tube Size (in.)	0.3125	0.3125
Face Area (sq. ft.)	9.27	9.27
Rows/FPI	3/16	3/16
Refrigerant Control	Thermal Expansion Valve	Thermal Expansion Valve
Drain Connection Number/Size (in.)	1 $\frac{3}{4}$ NPT	1 $\frac{3}{4}$ NPT
Outdoor Fan		
Type	Propeller	Propeller
Number Used/Diameter (in.)	1/26	1/26
Drive Type/No. Speeds	Direct/1	Direct/1
CFM	5,145	5,138
Motor HP	0.40	0.40
Motor RPM	1,075	1,075
Indoor Fan		
Type (Standard)	FC Centrifugal	FC Centrifugal
Number Used/Diameter (in.)	1/11x11	1/11x11
Drive Type/Number Speeds	Direct/5	Belt/Variable
Motor HP	1.00	1.00
Motor Frame Size	48	56
Filters⁽⁵⁾		
Type Furnished	Throwaway	Throwaway
Number Size Recommended	(2) 20x30x1	(4) 16x25x2
Refrigerant Charge (Lbs. of R-410A)⁽⁶⁾		
Pounds of R-410A	10.0	10.6

(1) Cooling performance is rated at 95 F ambient, 80 F entering dry bulb, 67 F entering wet bulb. Gross capacity does not include the effect of fan motor heat. ARI capacity is net and includes the effect of fan motor heat. Units are suitable for operation to $\pm 20\%$ of nominal cfm. Units are certified in accordance with the Unitary Air-Conditioner Equipment certification program, which is based on ARI Standard 210/240 except AK (380V/60 Hz).

(2) EER and/or SEER are rated at ARI conditions and in accordance with DOE test procedures.

(3) Cooling performance is rated at 95 F ambient, 80 F entering dry bulb, 67 F entering wet bulb. Gross capacity does not include the effect of fan motor heat. ARI capacity is net and includes the effect of fan motor heat. Units are suitable for operation to $\pm 20\%$ of nominal cfm. Units are certified in accordance with the Unitary Air-Conditioner Equipment certification program, which is based on ARI Standard 210/240 except AK (380V/60 Hz).

(4) Outdoor Sound Rating shown is tested in accordance with ARI Standard 270. For additional information refer to [Table 103](#).

(5) Optional 2" pleated filters also available.

(6) Refrigerant charge is an approximate value. For a more precise value, see unit nameplate and service instructions.



Performance Data

Table 8. Gross Cooling Capacities 3 Tons T/YHC033A3,4,W Standard Refrigeration or Dehumidification (Hot Gas Reheat)

		Ambient Temperature																							
		85				95				105				115											
Air Flow CFM	Ent DB (F)	Entering Wet Bulb																							
		61		67		73		61		67		73		61		67		73							
		MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC				
600*	75	30.8	21.6	34.9	17.8	39.2	13.7	28.9	20.4	32.8	16.6	37.0	12.5	26.9	19.1	30.6	15.3	34.7	11.3	24.8	17.8	28.4	14.1	32.3	10.0
	80	30.9	25.0	35.0	21.2	39.3	17.2	29.0	23.8	32.9	19.9	37.1	16.0	26.9	22.5	30.8	18.7	34.8	14.8	24.9	21.1	28.6	17.4	32.4	13.5
	85	31.0	28.4	35.1	24.6	39.5	20.6	29.0	27.1	33.1	23.3	37.3	19.3	27.0	25.8	30.9	22.0	35.0	18.1	25.0	24.5	28.7	20.7	32.6	16.8
	90	31.2	31.2	35.2	27.9	39.6	23.9	29.6	29.6	33.1	26.6	37.4	22.7	28.0	28.0	31.0	25.4	35.1	21.4	26.3	26.3	28.8	24.0	32.7	20.1
780*	75	33.1	24.8	37.3	19.7	41.8	14.5	30.9	23.5	35.0	18.5	39.3	13.2	28.8	22.2	32.6	17.1	36.7	12.0	26.5	20.8	30.2	15.8	34.1	10.7
	80	33.2	29.2	37.4	24.1	41.9	18.9	31.1	27.9	35.1	22.8	39.5	17.6	29.0	26.6	32.8	21.5	36.9	16.3	26.7	25.2	30.4	20.1	34.3	15.0
	85	33.4	33.4	37.5	28.4	42.1	23.2	31.6	31.6	35.3	27.1	39.6	21.9	29.8	29.8	32.9	25.8	37.0	20.6	27.9	27.9	30.5	24.4	34.4	19.3
	90	35.4	35.4	37.7	32.7	42.2	27.5	33.6	33.6	35.5	31.4	39.8	26.2	31.8	31.8	33.1	30.1	37.2	24.9	29.8	29.8	30.8	28.7	34.6	23.6
960	75	34.6	27.8	38.9	21.5	43.4	15.1	32.4	26.5	36.5	20.2	40.9	13.8	30.1	25.1	34.0	18.9	38.1	12.6	27.7	23.7	31.4	17.5	35.3	11.2
	80	35.0	33.2	39.0	26.8	43.5	20.4	32.8	31.9	36.6	25.5	41.0	19.2	30.6	30.5	34.1	24.1	38.3	17.8	28.3	28.3	31.6	22.7	35.5	16.5
	85	36.4	36.4	39.2	32.0	43.7	25.6	34.5	34.5	36.8	30.7	41.2	24.4	32.5	32.5	34.4	29.4	38.5	23.0	30.4	30.4	31.9	28.0	35.7	21.7
	90	38.6	38.6	39.6	37.3	43.9	30.8	36.7	36.7	37.3	36.0	41.4	29.5	34.6	34.6	34.9	34.7	38.6	28.2	32.5	32.5	32.5	32.5	35.9	26.8
1080	75	35.5	29.7	39.7	22.9	44.1	15.4	33.2	28.4	37.2	21.6	41.6	14.2	30.8	27.0	34.6	20.3	38.8	12.9	28.4	25.6	32.0	18.9	35.9	11.6
	80	36.0	35.8	39.9	28.5	44.3	21.3	33.8	33.8	37.4	27.2	41.7	20.1	31.7	31.7	34.8	25.8	39.0	18.8	29.6	29.6	32.2	24.4	36.1	17.4
	85	38.1	38.1	40.1	34.4	44.5	27.2	36.0	36.0	37.7	33.1	41.9	25.9	33.9	33.9	35.2	31.7	39.2	24.6	31.8	31.8	32.6	30.3	36.3	23.2
	90	40.4	40.4	40.8	40.4	44.7	33.0	38.3	38.3	38.3	38.3	42.1	31.7	36.2	36.2	36.2	36.2	39.4	30.4	34.0	34.0	33.9	33.9	36.5	29.0
1200	75	36.2	31.6	40.4	23.7	44.8	15.7	33.8	30.2	37.8	22.4	42.2	14.5	31.4	28.8	35.2	21.0	39.4	13.2	29.0	27.4	32.5	19.6	36.4	11.9
	80	37.1	37.1	40.6	30.2	45.0	22.3	35.0	35.0	38.0	28.8	42.3	21.0	32.9	32.9	35.4	27.5	39.6	19.7	30.7	30.7	32.7	26.1	36.6	18.3
	85	39.5	39.5	41.0	36.7	45.1	28.7	37.4	37.4	38.4	35.4	42.5	27.4	35.2	35.2	35.9	34.0	39.8	26.1	33.0	33.0	33.3	32.7	36.8	24.7
	90	42.0	42.0	42.0	42.0	45.4	35.1	39.8	39.8	39.8	39.8	42.8	33.8	37.5	37.5	37.5	37.5	40.1	32.5	35.2	35.2	35.2	35.2	37.1	31.1
1320	75	36.8	33.4	40.9	24.8	45.3	16.1	34.4	32.1	38.3	23.4	42.6	14.8	32.0	30.7	35.6	22.0	39.9	13.5	29.6	29.3	32.9	20.6	36.9	12.2
	80	38.3	38.3	41.2	31.9	45.5	23.1	36.1	36.1	38.6	30.5	42.8	21.9	33.9	33.9	35.9	29.1	40.0	20.6	31.7	31.7	33.2	27.7	37.1	19.2
	85	40.8	40.8	41.7	39.0	45.7	30.2	38.6	38.6	39.2	37.7	43.0	28.9	36.3	36.3	36.6	36.3	40.2	27.5	34.0	34.0	34.0	34.0	37.3	26.2
	90	43.3	43.3	43.3	43.3	46.0	37.1	41.1	41.1	41.1	41.1	43.3	35.9	38.8	38.8	38.8	38.8	40.6	34.6	36.3	36.3	36.3	36.3	37.7	33.2
1440	75	37.4	35.2	41.4	25.8	45.8	16.4	35.0	33.9	38.7	24.4	43.0	15.1	32.6	32.5	36.0	23.0	40.2	13.8	30.1	30.1	33.2	21.6	37.2	12.5
	80	39.3	39.3	41.7	33.5	46.0	24.0	37.1	37.1	39.1	32.1	43.2	22.7	34.8	34.8	36.4	30.7	40.4	21.4	32.5	32.5	33.6	29.3	37.4	20.0
	85	41.9	41.9	42.4	41.3	46.1	31.6	39.7	39.7	39.6	39.6	43.4	30.3	37.3	37.3	37.3	37.3	40.6	29.0	34.9	34.9	34.9	34.9	37.7	27.6
	90	44.4	44.4	44.4	44.4	46.5	39.2	42.2	42.2	42.2	42.2	43.8	37.9	39.8	39.8	39.8	39.8	41.1	36.6	37.3	37.3	37.3	37.3	38.2	35.3

Notes:

- All capacities shown are gross and have not considered indoor fan heat. To obtain **NET** cooling capacity subtract indoor fan heat. For indoor fan heat formula, refer to appropriate airflow table notes.
 - MBH = Total Gross Capacity
 - SHC = Sensible Heat Capacity
- *Unit applications below 960 CFM
- All heat models (gas and electric) restricted on applications below 960 CFM.
 - Dehumidification (Hot Gas Reheat) or Frostat and Crankcase Heaters are required on applications below 960 CFM.



Performance Data

(4 Tons R-22 Refrigerant)

Table 9. Gross Cooling Capacities 4 Tons T/YHC043A3,4,W Standard Refrigeration or Dehumidification (Hot Gas Reheat)

Air Ent Flow DB CFM (F)		Ambient Temperature																							
		85			95			105			115														
		Entering Wet Bulb																							
		61	67	73	61	67	73	61	67	73	61	67	73												
		MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC						
800*	75	40.4	29.1	45.7	23.7	51.3	18.2	38.2	27.7	43.3	22.4	48.8	16.9	35.8	26.3	40.6	20.9	45.9	15.4	33.3	24.8	38.0	19.5	43.1	14.0
	80	40.5	33.8	45.8	28.4	51.5	22.8	38.3	32.4	43.4	27.0	48.9	21.5	35.9	31.0	40.8	25.5	46.0	20.0	33.4	29.5	38.1	24.1	43.2	18.6
	85	40.8	38.5	45.9	33.1	51.6	27.5	38.5	37.1	43.5	31.7	49.0	26.1	36.2	35.7	40.8	30.2	46.1	24.6	33.9	33.9	38.2	28.7	43.3	23.2
	90	42.0	42.0	46.1	37.7	51.7	32.1	40.1	40.1	43.7	36.3	49.1	30.7	38.1	38.1	41.0	34.8	46.2	29.2	36.1	36.1	38.4	33.3	43.4	27.8
1040*	75	43.3	33.5	48.8	26.4	54.6	19.2	40.8	32.1	46.2	25.0	51.8	17.8	38.2	30.6	43.2	23.5	48.6	16.3	35.5	29.1	40.4	22.0	45.5	14.9
	80	43.6	39.6	48.9	32.4	54.7	25.1	41.1	38.2	46.3	31.0	51.9	23.8	38.6	36.7	43.3	29.5	48.7	22.3	36.0	35.2	40.5	28.0	45.7	20.8
	85	44.7	44.7	49.1	38.4	54.9	31.1	42.6	42.6	46.5	37.0	52.1	29.7	40.4	40.4	43.6	35.4	48.8	28.2	38.2	38.2	40.7	33.9	45.8	26.7
	90	47.3	47.3	49.4	44.4	55.0	37.0	45.2	45.2	46.8	42.9	52.2	35.6	43.0	43.0	44.0	41.4	49.0	34.0	40.7	40.7	41.2	39.9	46.0	32.6
1280	75	45.3	37.7	50.8	28.9	56.7	20.0	42.7	36.2	48.0	27.5	53.8	18.6	40.0	34.7	44.9	25.9	50.3	17.0	37.2	33.1	41.9	24.4	47.1	15.6
	80	46.0	45.1	51.0	36.2	56.9	27.3	43.4	43.4	48.2	34.7	53.9	25.9	41.1	41.1	45.1	33.1	50.5	24.3	38.7	38.7	42.1	31.6	47.3	22.9
	85	48.5	48.5	51.3	43.5	57.0	34.5	46.2	46.2	48.6	42.0	54.1	33.1	43.9	43.9	45.5	40.4	50.6	31.5	41.4	41.4	42.6	38.9	47.5	30.0
	90	51.4	51.4	52.1	50.8	57.3	41.7	49.1	49.1	49.5	49.4	54.3	40.3	46.7	46.7	46.7	46.7	50.9	38.7	44.2	44.2	44.2	44.2	47.7	37.2
1440	75	46.3	40.3	51.5	30.3	57.4	20.3	43.7	38.8	48.7	28.9	54.3	18.9	41.0	37.3	45.7	27.4	51.2	17.5	38.1	35.8	42.7	25.9	47.9	16.0
	80	47.6	47.6	51.8	38.5	57.6	28.5	45.2	45.2	49.0	37.0	54.5	27.1	42.8	42.8	46.0	35.5	51.3	25.6	40.3	40.3	43.0	34.0	48.1	24.2
	85	50.6	50.6	52.3	46.6	57.7	36.5	48.2	48.2	49.5	45.2	54.7	35.1	45.7	45.7	46.6	43.7	51.5	33.7	43.2	43.2	43.7	42.2	48.3	32.2
	90	53.6	53.6	53.6	53.6	58.1	44.6	51.2	51.2	51.2	51.2	55.0	43.2	48.7	48.7	48.7	48.7	51.9	41.7	46.1	46.1	46.1	46.1	48.7	40.2
1600	75	47.3	42.9	52.4	31.8	58.2	20.7	44.6	41.4	49.4	30.4	55.1	19.3	41.8	39.9	46.4	28.9	51.9	17.9	39.0	38.4	43.3	27.4	48.6	16.4
	80	49.2	49.2	52.7	40.9	58.4	29.8	46.8	46.8	49.8	39.4	55.3	28.4	44.3	44.3	46.8	37.9	52.0	26.9	41.7	41.7	43.7	36.4	48.7	25.4
	85	52.4	52.4	53.4	49.9	58.6	38.7	49.9	49.9	50.6	48.5	55.5	37.3	47.4	47.4	47.7	47.0	52.3	35.8	44.7	44.7	44.7	44.7	49.0	34.3
	90	55.6	55.6	55.6	55.6	59.1	47.6	53.1	53.1	53.1	53.1	56.0	46.2	50.4	50.4	50.4	50.4	52.8	44.7	47.7	47.7	47.7	47.7	49.5	43.2
1760	75	48.2	45.5	53.0	33.3	59.0	21.2	45.5	44.0	50.1	31.8	55.8	19.8	42.7	42.5	47.0	30.3	52.5	18.3	39.9	39.9	43.8	28.8	49.1	16.8
	80	50.7	50.7	53.5	43.2	59.1	31.1	48.2	48.2	50.5	41.7	55.9	29.6	45.6	45.6	47.5	40.2	52.6	28.2	42.9	42.9	44.4	38.7	49.3	26.7
	85	54.0	54.0	54.4	53.1	59.4	40.8	51.4	51.4	51.4	51.4	56.2	39.4	48.8	48.8	48.8	48.8	52.9	37.9	46.0	46.0	46.0	46.0	49.6	36.4
	90	57.3	57.3	57.3	57.3	59.9	50.5	54.7	54.7	54.7	54.7	56.8	49.1	52.0	52.0	52.0	52.0	53.6	47.6	49.2	49.2	49.2	49.2	50.3	46.1
1920	75	49.0	48.1	53.6	34.7	59.6	21.6	46.1	46.1	50.6	33.3	56.3	20.2	43.6	43.6	47.5	31.8	53.0	18.7	40.9	40.9	44.3	30.2	49.5	17.2
	80	52.0	52.0	54.2	45.4	59.7	32.3	49.4	49.4	51.2	44.0	56.5	30.9	46.8	46.8	48.1	42.5	53.2	29.4	44.0	44.0	45.0	41.0	49.7	27.9
	85	55.4	55.4	55.3	55.3	60.0	42.9	52.7	52.7	52.7	52.7	56.9	41.5	50.0	50.0	50.0	50.0	53.5	40.0	47.2	47.2	47.2	47.2	50.1	38.5
	90	58.8	58.8	58.8	58.8	60.7	53.4	56.1	56.1	56.1	56.1	57.6	52.0	53.3	53.3	53.3	53.3	54.4	50.6	50.4	50.4	50.4	50.4	51.0	49.1

Notes:

- All capacities shown are gross and have not considered indoor fan heat. To obtain **NET** cooling capacity subtract indoor fan heat. For indoor fan heat formula, refer to appropriate airflow table notes.
 - MBH = Total Gross Capacity
 - SHC = Sensible Heat Capacity
- *Unit applications below 1280 CFM
- All heat models (gas and electric) restricted on applications below 1280 CFM.
 - Dehumidification (Hot Gas Reheat) or Frostat and Crankcase Heaters are required on applications below 1280 CFM.



Performance Data

(5 Tons R-22 Refrigerant)

Table 10. Gross Cooling Capacities 5 Tons T/YHC063A3,4,W Standard Refrigeration or Dehumidification (Hot Gas Reheat)

Air Ent Flow DB CFM (F)		Ambient Temperature																							
		85			95			105			115														
		Entering Wet Bulb																							
		61	67	73	61	67	73	61	67	73	61	67	73												
		MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC	MBH	SHC										
1000*	75	50.7	36.2	57.0	29.4	63.7	22.6	48.1	34.6	54.2	27.9	60.7	21.0	45.5	32.9	51.3	26.2	57.5	19.4	42.7	31.2	48.2	24.5	54.1	17.7
	80	50.8	41.8	57.1	35.1	63.8	28.2	48.3	40.2	54.4	33.5	60.8	26.6	45.6	38.6	51.5	31.9	57.6	25.0	42.9	36.8	48.4	30.1	54.2	23.3
	85	51.0	47.5	57.2	40.7	64.0	33.8	48.6	45.9	54.5	39.1	61.0	32.2	46.0	44.2	51.6	37.4	57.8	30.6	43.3	42.5	48.5	35.7	54.4	28.8
	90	52.2	52.2	57.4	46.3	64.1	39.4	50.1	50.1	54.6	44.7	61.1	37.8	47.8	47.8	51.7	43.0	57.9	36.1	45.5	45.5	48.7	41.3	54.5	34.4
1300*	75	54.3	41.5	60.7	32.7	67.6	23.8	51.5	39.9	57.7	31.0	64.3	22.1	48.6	38.1	54.5	29.3	60.8	20.4	45.5	36.4	51.1	27.5	57.0	18.7
	80	54.6	48.8	60.9	40.0	67.8	31.0	51.9	47.1	57.9	38.3	64.5	29.3	49.0	45.4	54.7	36.6	60.9	27.6	46.0	43.6	51.3	34.8	57.2	25.9
	85	55.6	55.6	61.1	47.2	67.9	38.2	53.2	53.2	58.1	45.5	64.6	36.5	50.7	50.7	54.9	43.7	61.1	34.8	48.1	48.1	51.5	41.9	57.4	33.0
	90	58.8	58.8	61.5	54.4	68.1	45.3	56.3	56.3	58.5	52.7	64.8	43.6	53.7	53.7	55.3	50.9	61.3	41.9	51.0	51.0	52.0	49.1	57.5	40.1
1600	75	56.8	46.5	63.2	35.6	70.2	24.7	53.9	44.9	60.0	33.9	66.6	23.0	50.8	43.1	56.6	32.2	62.9	21.3	47.5	41.3	53.0	30.4	58.9	19.5
	80	57.6	55.5	63.4	44.5	70.3	33.5	54.7	53.8	60.2	42.7	66.8	31.8	51.6	51.6	56.8	41.0	63.0	30.1	48.8	48.8	53.2	39.1	59.1	28.3
	85	60.3	60.3	63.8	53.2	70.5	42.2	57.7	57.7	60.6	51.5	67.0	40.5	54.9	54.9	57.3	49.7	63.2	38.8	52.0	52.0	53.7	47.9	59.3	36.9
	90	63.8	63.8	64.7	62.1	70.8	50.9	61.1	61.1	61.6	60.4	67.3	49.2	58.2	58.2	58.2	58.2	63.5	47.4	55.1	55.1	55.1	55.1	59.6	45.6
1800	75	58.1	49.6	64.5	37.5	71.4	25.2	55.1	48.2	61.1	35.8	67.8	23.5	51.9	46.3	57.6	34.0	63.9	21.8	48.6	44.5	53.9	32.2	59.8	20.0
	80	59.3	59.3	64.7	47.4	71.6	35.1	56.6	56.6	61.4	45.6	67.9	33.4	53.8	53.8	57.9	43.8	64.1	31.6	50.8	50.8	54.2	42.0	60.0	29.8
	85	62.9	62.9	65.3	57.2	71.8	44.9	60.1	60.1	62.0	55.4	68.2	43.1	57.2	57.2	58.6	53.6	64.3	41.3	54.1	54.1	55.0	51.8	60.2	39.5
	90	66.5	66.5	66.5	66.5	72.2	54.6	63.7	63.7	63.7	63.7	68.5	52.9	60.6	60.6	60.6	60.6	64.7	51.0	57.4	57.4	57.4	57.4	60.7	49.1
2000	75	59.3	51.6	65.9	38.8	73.0	25.8	55.9	49.6	62.1	36.9	69.0	23.9	52.3	47.6	58.3	34.8	64.9	22.0	48.7	45.5	54.4	32.8	60.8	20.1
	80	60.9	60.9	66.1	49.3	73.2	36.4	57.9	57.9	62.4	47.3	69.2	34.5	54.7	54.7	58.6	45.3	65.2	32.5	51.4	51.4	54.7	43.2	61.0	30.5
	85	64.8	64.8	66.9	59.8	73.5	46.9	61.6	61.6	63.2	57.8	69.5	44.9	58.4	58.4	59.5	55.8	65.4	42.9	55.0	55.0	55.7	53.8	61.3	40.9
	90	68.6	68.6	68.6	68.6	73.8	57.1	65.4	65.4	65.3	65.3	69.9	55.1	62.1	62.1	62.0	62.0	65.9	53.2	58.7	58.7	58.7	58.7	61.8	51.2
2200	75	60.4	54.5	66.7	40.5	73.8	26.4	56.9	52.4	62.9	38.5	69.8	24.5	53.3	50.4	59.0	36.5	65.7	22.5	49.6	48.3	55.1	34.4	61.5	20.5
	80	62.7	62.7	67.1	51.8	74.1	37.8	59.5	59.5	63.3	49.8	70.0	35.9	56.3	56.3	59.4	47.8	65.9	33.9	52.9	52.9	55.5	45.8	61.7	31.9
	85	66.7	66.7	68.0	63.3	74.4	49.2	63.4	63.4	64.3	61.3	70.3	47.2	60.1	60.1	60.6	59.3	66.2	45.2	56.7	56.7	56.6	56.6	62.0	43.2
	90	70.6	70.6	70.6	70.6	74.9	60.3	67.3	67.3	67.3	67.3	70.8	58.3	63.9	63.9	63.9	63.9	66.8	56.4	60.4	60.4	60.4	60.4	62.7	54.4
2400	75	61.3	57.2	67.5	42.1	74.6	26.9	57.8	55.2	63.6	40.1	70.5	24.9	54.2	53.2	59.7	38.0	66.3	22.9	50.4	50.4	55.7	36.0	62.1	21.0
	80	64.3	64.3	67.9	54.3	74.9	39.2	61.0	61.0	64.1	52.3	70.7	37.2	57.7	57.7	60.2	50.3	66.6	35.2	54.2	54.2	56.2	48.2	62.3	33.2
	85	68.4	68.4	69.1	66.7	75.1	51.4	65.0	65.0	65.4	64.8	71.0	49.4	61.6	61.6	61.6	61.6	66.8	47.4	58.1	58.1	58.1	58.1	62.6	45.4
	90	72.4	72.4	72.4	72.4	75.8	63.5	69.0	69.0	69.0	69.0	71.7	61.5	65.5	65.5	65.5	65.5	67.6	59.5	61.9	61.9	61.9	61.9	63.5	57.5

Notes:

- All capacities shown are gross and have not considered indoor fan heat. To obtain **NET** cooling capacity subtract indoor fan heat. For indoor fan heat formula, refer to appropriate airflow table notes.
 - MBH = Total Gross Capacity
 - SHC = Sensible Heat Capacity
- *Unit applications below 1600 CFM
- All heat models (gas and electric) restricted on applications below 1600 CFM.
 - Dehumidification (Hot Gas Reheat) or Frost/and Crankcase Heaters are required on applications below 1600 CFM.



Performance Data

(4 Tons High Efficiency, R-410A Refrigerant)

Table 17. Gross Cooling Capacities 4 Tons Three Phase T/YHC048E1

Table with columns for Ambient Temperature (85, 95, 105, 115), Air Ent Flow DB (61, 67, 73), CFM (F) (1440, 1600, 1760, 1920), and MBH SHC MBH SHC MBH SHC.

- Notes:
1. All capacities shown are gross and have not considered indoor fan heat. To obtain NET cooling capacity subtract indoor fan heat. For indoor fan heat formula, refer to appropriate airflow table notes.
2. MBH = Total Gross Capacity
3. SHC = Sensible Heat Capacity

Table 18. Gross Cooling Capacities 4 Tons Three Phase T/YHC048E,3,4

Table with columns for Ambient Temperature (85, 95, 105, 115), Air Ent Flow DB (61, 67, 73), CFM (F) (1440, 1600, 1760, 1920), and MBH SHC MBH SHC MBH SHC.

- Notes:
1. All capacities shown are gross and have not considered indoor fan heat. To obtain NET cooling capacity subtract indoor fan heat. For indoor fan heat formula, refer to appropriate airflow table notes.
2. MBH = Total Gross Capacity
3. SHC = Sensible Heat Capacity



Performance Data

Table 29. Belt Drive Evaporator Fan Performance 3 Tons THC033A3,4,W Downflow Airflow

CFM	External Static Pressure (Inches of Water)																			
	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Low Static Drive Accessory Kit⁽ⁱ⁾													1-HP Standard Motor & Drive							
600*	—	—	449	0.06	525	0.09	593	0.12	653	0.16	707	0.20	757	0.23	802	0.27	845	0.31	885	0.36
720*	—	—	475	0.08	547	0.11	612	0.14	669	0.18	724	0.22	774	0.26	821	0.31	864	0.35	905	0.40
840*	—	—	501	0.10	572	0.13	634	0.17	690	0.21	742	0.25	791	0.29	837	0.34	881	0.39	922	0.44
960	—	—	528	0.12	599	0.16	658	0.20	713	0.24	763	0.29	810	0.33	855	0.38	898	0.43	939	0.49
1080	—	—	557	0.15	625	0.19	685	0.24	738	0.28	786	0.33	832	0.38	876	0.43	917	0.48	957	0.54
1200	—	—	588	0.19	652	0.23	712	0.28	764	0.33	811	0.38	856	0.43	898	0.48	939	0.54	978	0.59
1320	552	0.18	622	0.23	681	0.27	738	0.32	790	0.38	838	0.44	882	0.49	923	0.55	962	0.60	1000	0.66
1440	588	0.23	657	0.28	713	0.33	765	0.37	817	0.43	865	0.50	909	0.56	949	0.62	987	0.68	1024	0.74

Continued

CFM	External Static Pressure (Inches of Water)									
	1.10		1.20		1.30		1.40		1.50	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Drive										
600*	924	0.40	962	0.45	997	0.49	1031	0.54	1065	0.59
720*	943	0.45	980	0.50	1016	0.55	1050	0.60	1082	0.65
840*	962	0.50	999	0.55	1034	0.60	1068	0.66	1103	0.71
960	978	0.54	1016	0.60	1052	0.66	1086	0.72	1120	0.78
1080	995	0.59	1033	0.65	1069	0.71	1103	0.78	1136	0.84
1200	1015	0.65	1051	0.71	1086	0.77	1120	0.84	1154	0.91
1320	1036	0.72	1072	0.78	1106	0.85	1138	0.91	1171	0.98
1440	1060	0.80	1094	0.86	1128	0.93	1160	1.00	1192	1.07
1-HP Standard Motor & Field Supplied High Static Drive⁽ⁱⁱ⁾										

For Standard Evaporator Fan Speed (RPM), reference [Table 96](#).

Notes: Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data. Data does not include pressure drop due to reheat coil. Refer to [Table 105](#) to determine additional static pressure drop due to other options/accessories.

1-HP Fan Motor Heat (MBH) = 2.829 x Fan BHP + .4024.

Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

Table includes Dehumidification (Hot Gas Reheat Option).

*Unit applications below 960 CFM

- Electric heaters restricted on applications below 960 CFM/Ton.
- Dehumidification (Hot Gas Reheat) or TXV with Froststat and Crank-case Heaters are required on applications below 960 CFM/Ton.

⁽ⁱ⁾ BAYLSDR006 required.

⁽ⁱⁱ⁾ Field Supplied Fan Sheave AK41 required. Field Supplied Belt may be necessary.



Performance Data

(3 Tons R-22 Refrigerant)

Table 30. Belt Drive Evaporator Fan Performance 3 Tons THC033A3,4,W Horizontal Airflow

CFM	External Static Pressure (Inches of Water)																			
	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Low Static Drive Accessory Kit⁽ⁱ⁾											1-HP Standard Motor & Drive									
600*	—	—	493	0.07	567	0.11	628	0.14	683	0.18	737	0.22	786	0.26	832	0.30	876	0.35	918	0.40
720*	427	0.06	523	0.09	599	0.13	662	0.17	716	0.21	766	0.25	811	0.29	856	0.34	899	0.39	940	0.44
840*	460	0.08	555	0.12	631	0.16	694	0.21	750	0.25	799	0.30	844	0.35	886	0.39	925	0.44	965	0.49
960	493	0.10	588	0.15	661	0.19	725	0.24	782	0.29	832	0.35	878	0.40	919	0.46	958	0.51	996	0.56
1080	531	0.13	622	0.18	694	0.24	756	0.29	813	0.34	864	0.40	910	0.46	954	0.52	993	0.59	1031	0.65
1200	570	0.17	654	0.23	727	0.28	787	0.34	843	0.40	895	0.46	942	0.52	986	0.59	1026	0.66	1064	0.73
1320	610	0.22	687	0.28	760	0.34	821	0.40	875	0.46	925	0.53	973	0.59	1017	0.66	1058	0.73	1095	0.81
1440	651	0.27	723	0.33	793	0.40	855	0.47	908	0.53	956	0.60	1003	0.67	1047	0.75	1088	0.82	1127	0.89
1-HP Standard Motor & Field Supplied High Static Drive⁽ⁱⁱ⁾																				

Continued

CFM	External Static Pressure (Inches of Water)									
	1.10		1.20		1.30		1.40		1.50	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Drive										
600*	958	0.45	996	0.50	1032	0.55	1068	0.60	1102	0.66
720*	978	0.49	1016	0.55	1053	0.61	1087	0.66	1121	0.72
840*	1002	0.55	1039	0.60	1076	0.67	1109	0.72	1143	0.79
960	1032	0.62	1066	0.67	1101	0.73	1133	0.79	1166	0.86
1080	1065	0.70	1099	0.76	1132	0.82	1164	0.89	1194	0.95
1200	1099	0.80	1133	0.86	1166	0.93	1197	0.99	1227	1.06
1320	1132	0.88	1167	0.96	1200	1.04	1230	1.11	1261	1.19
1440	1164	0.97	1199	1.05	1232	1.14	1263	1.22	1294	1.30
1-HP Standard Motor & Field Supplied High Static Drive⁽ⁱⁱⁱ⁾										

For Standard Evaporator Fan Speed (RPM), reference [Table 96](#).
 Notes: Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data. Data does not include pressure drop due to reheat coil. Refer to [Table 105](#) to determine additional static pressure drop due to other options/accessories.
 1-HP Fan Motor Heat (MBH) = 2.829 x Fan BHP + .4024.
 Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.
 Table includes Dehumidification (Hot Gas Reheat Option).
 *Unit applications below 960 CFM
 • Electric heaters restricted on applications below 960 CFM/Ton.
 • Dehumidification (Hot Gas Reheat) or TXV with Froststat and Crank-case Heaters are required on applications below 960 CFM/Ton.

(i) BAYLSDR006 required.
 (ii) Field Supplied Fan Sheave AK41 required. Field Supplied Belt may be necessary.
 (iii) Field Supplied Fan Sheave AK41 required. Field Supplied Belt may be necessary.



Performance Data

(3 Tons R-22 Refrigerant)

Table 31. Belt Drive Evaporator Fan Performance 3 Tons YHC033A3,4,W*L,M Low & Medium Heat Downflow Airflow

CFM	External Static Pressure (Inches of Water)																			
	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Field Supplied Low Static Drive⁽ⁱ⁾										1-HP Standard Motor & Drive										
960	—	—	570	0.14	634	0.18	690	0.22	741	0.27	791	0.31	836	0.36	879	0.41	922	0.46	961	0.52
1080	537	0.14	606	0.18	669	0.23	724	0.27	773	0.32	819	0.36	864	0.41	906	0.47	946	0.52	985	0.58
1200	581	0.18	645	0.22	705	0.27	759	0.33	807	0.38	851	0.42	894	0.48	935	0.53	973	0.59	1011	0.65
1320	627	0.23	686	0.28	742	0.33	795	0.39	842	0.44	885	0.50	927	0.55	966	0.61	1003	0.67	1040	0.73
1440	673	0.29	728	0.34	780	0.39	831	0.45	878	0.52	921	0.58	960	0.64	998	0.69	1034	0.76	1070	0.82

Continued

CFM	External Static Pressure (Inches of Water)									
	1.10		1.20		1.30		1.40		1.50	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Drive										
960	1000	0.57	1037	0.63	1072	0.69	1106	0.75	1139	0.81
1080	1022	0.64	1058	0.70	1093	0.76	1127	0.82	1161	0.89
1200	1047	0.71	1083	0.77	1117	0.83	1150	0.90	1183	0.97
1320	1075	0.79	1108	0.85	1141	0.92	1174	0.99	1206	1.06
1440	1104	0.88	1137	0.95	1170	1.02	1201	1.09	1231	1.16
1-HP Standard Motor & Field Supplied High Static Drive⁽ⁱⁱ⁾										

For Standard Evaporator Fan Speed (RPM), reference [Table 96](#).
 Notes: Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data. Data does not include pressure drop due to reheat coil. Refer to [Table 105](#) to determine additional static pressure drop due to other options/accessories.
 1-HP Fan Motor Heat (MBH) = 2.829 x Fan BHP + .4024.
 Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

(i) Field Supplied Fan Sheave AK69 required. Field Supplied Belt may be necessary.
 (ii) Field Supplied Fan Sheave AK41 required. Field Supplied Belt may be necessary.

Table 32. Belt Drive Evaporator Fan Performance 3 Tons YHC033A3,4,W*H High Heat Downflow Airflow

CFM	External Static Pressure (Inches of Water)																			
	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Field Supplied Low Static Drive⁽ⁱ⁾										1-HP Standard Motor & Drive										
960	503	0.11	578	0.15	641	0.19	696	0.23	747	0.27	796	0.32	841	0.36	884	0.42	926	0.47	966	0.52
1080	548	0.15	616	0.19	678	0.23	731	0.28	780	0.32	826	0.37	870	0.42	912	0.47	952	0.53	991	0.59
1200	593	0.19	657	0.23	716	0.28	768	0.33	815	0.38	859	0.43	901	0.49	942	0.54	980	0.60	1017	0.66
1320	640	0.24	698	0.29	754	0.34	806	0.40	852	0.45	895	0.51	935	0.56	974	0.62	1012	0.68	1048	0.74
1440	688	0.31	742	0.35	794	0.41	844	0.47	890	0.53	931	0.59	970	0.65	1009	0.71	1045	0.77	1080	0.84

Continued

CFM	External Static Pressure (Inches of Water)									
	1.10		1.20		1.30		1.40		1.50	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Drive										
960	1005	0.58	1041	0.64	1076	0.70	1110	0.76	1142	0.82
1080	1029	0.65	1064	0.71	1099	0.77	1133	0.83	1166	0.90
1200	1053	0.72	1089	0.78	1123	0.85	1156	0.91	1189	0.98
1320	1082	0.80	1116	0.87	1150	0.93	1182	1.00	1214	1.07
1440	1113	0.90	1146	0.97	1178	1.04	1209	1.11	1240	1.18
1-HP Standard Motor & Field Supplied High Static Drive⁽ⁱⁱ⁾										

For Standard Evaporator Fan Speed (RPM), reference [Table 96](#).
 Notes: Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data. Data does not include pressure drop due to reheat coil. Refer to [Table 105](#) to determine additional static pressure drop due to other options/accessories.
 1-HP Fan Motor Heat (MBH) = 2.829 x Fan BHP + .4024.
 Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

(i) Field Supplied Fan Sheave AK69 required. Field Supplied Belt may be necessary.
 (ii) Field Supplied Fan Sheave AK41 required. Field Supplied Belt may be necessary.



Performance Data

(3 Tons R-22 Refrigerant)

Table 33. Belt Drive Evaporator Fan Performance 3 Tons YHC033A3,4,W*L,M Low & Medium Heat Horizontal Airflow

External Static Pressure (Inches of Water)																					
		.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
CFM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	
1-HP Standard Motor & Field Supplied Low Static Drive⁽ⁱ⁾											1-HP Standard Motor & Drive										
960	552	0.13	631	0.17	699	0.22	759	0.27	811	0.33	858	0.38	902	0.44	943	0.49	980	0.54	1017	0.60	
1080	598	0.17	675	0.22	739	0.27	798	0.33	850	0.38	898	0.44	941	0.50	982	0.57	1020	0.63	1056	0.69	
1200	645	0.22	720	0.28	781	0.33	837	0.39	889	0.45	937	0.51	981	0.58	1021	0.65	1059	0.72	1095	0.79	
1320	693	0.28	766	0.34	825	0.40	879	0.47	929	0.53	976	0.60	1020	0.67	1061	0.74	1099	0.81	1135	0.89	
1440	743	0.35	811	0.42	871	0.49	922	0.55	970	0.62	1016	0.69	1059	0.77	1099	0.84	1138	0.92	1174	1.00	
Continued											1-HP Standard Motor & Field Supplied High Static Drive⁽ⁱⁱ⁾										
External Static Pressure (Inches of Water)																					
		1.10		1.20		1.30		1.40		1.50											
CFM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP									
1-HP Standard Motor & Drive																					
960	1052	0.65	1086	0.71	1120	0.77	1152	0.83	1185	0.90											
1080	1090	0.75	1123	0.81	1154	0.87	1185	0.93	1215	0.99											
1200	1130	0.86	1162	0.92	1193	0.99	1224	1.05	1253	1.12											
1320	1169	0.96	1203	1.04	1233	1.12	1263	1.19	1292	1.26											
1440	1208	1.08	1241	1.16	1273	1.25	1303	1.33	1332	1.41											
1-HP Standard Motor & Field Supplied High Static Drive⁽ⁱⁱⁱ⁾																					

For Standard Evaporator Fan Speed (RPM), reference [Table 96](#).
 Notes: Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data. Data does not include pressure drop due to reheat coil. Refer to [Table 105](#) to determine additional static pressure drop due to other options/accessories.
 1-HP Fan Motor Heat (MBH) = 2.829 x Fan BHP+.4024.
 Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

(i) Field Supplied Fan Sheave AK69 required. Field Supplied Belt may be necessary.
 (ii) Field Supplied Fan Sheave AK41 required. Field Supplied Belt may be necessary.
 (iii) Field Supplied Fan Sheave AK41 required. Field Supplied Belt may be necessary.

Table 34. Belt Drive Evaporator Fan Performance 3 Tons YHC033A3,4,W*H High Heat Horizontal Airflow

External Static Pressure (Inches of Water)																					
		.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
CFM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	
1-HP Standard Motor & Field Supplied Low Static Drive⁽ⁱ⁾											1-HP Standard Motor & Drive										
960	563	0.13	639	0.18	707	0.23	766	0.28	817	0.33	864	0.39	908	0.44	947	0.49	985	0.55	1020	0.60	
1080	611	0.18	685	0.23	748	0.28	806	0.34	858	0.39	905	0.45	947	0.51	988	0.58	1026	0.64	1061	0.70	
1200	660	0.23	732	0.29	792	0.34	847	0.40	899	0.46	945	0.53	989	0.59	1029	0.66	1066	0.73	1102	0.80	
1320	711	0.29	781	0.36	838	0.42	890	0.48	940	0.55	986	0.61	1029	0.68	1070	0.76	1106	0.83	1142	0.90	
1440	762	0.37	829	0.44	885	0.51	935	0.57	983	0.64	1028	0.71	1070	0.79	1111	0.86	1148	0.94	1183	1.02	
Continued											1-HP Standard Motor & Field Supplied High Static Drive⁽ⁱⁱ⁾										
External Static Pressure (Inches of Water)																					
		1.10		1.20		1.30		1.40		1.50											
CFM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP									
1-HP Standard Motor & Drive																					
960	1056	0.66	1090	0.71	1123	0.78	1156	0.84	1188	0.90											
1080	1096	0.76	1128	0.82	1159	0.88	1190	0.94	1220	1.00											
1200	1135	0.87	1168	0.93	1199	1.00	1229	1.07	1259	1.13											
1320	1177	0.98	1209	1.06	1241	1.14	1270	1.21	1299	1.28											
1440	1217	1.10	1250	1.18	1281	1.27	1311	1.35	1339	1.43											
1-HP Standard Motor & Field Supplied High Static Drive⁽ⁱⁱⁱ⁾																					

For Standard Evaporator Fan Speed (RPM), reference [Table 96](#).
 Notes: Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data. Data does not include pressure drop due to reheat coil. Refer to [Table 105](#) to determine additional static pressure drop due to other options/accessories.
 1-HP Fan Motor Heat (MBH) = 2.829 x Fan BHP+.4024.
 Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

(i) Field Supplied Fan Sheave AK69 required. Field Supplied Belt may be necessary.
 (ii) Field Supplied Fan Sheave AK41 required. Field Supplied Belt may be necessary.
 (iii) Field Supplied Fan Sheave AK41 required. Field Supplied Belt may be necessary.



Performance Data

(4 Tons R-22 Refrigerant)

Table 35. Belt Drive Evaporator Fan Performance 4 Tons THC043A3,4,W Downflow Airflow

CFM	External Static Pressure (Inches of Water)																				
	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00		
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	
1-HP Standard Motor & Low Static Drive Accessory Kit⁽ⁱ⁾													1-HP Standard Motor & Drive								
800*	—	—	501	0.09	571	0.13	633	0.16	690	0.20	742	0.25	792	0.29	838	0.34	882	0.39	923	0.44	
960*	459	0.09	539	0.13	609	0.17	668	0.21	721	0.25	771	0.29	819	0.34	864	0.39	906	0.44	947	0.50	
1120*	509	0.13	580	0.17	646	0.21	706	0.26	758	0.31	805	0.36	850	0.41	893	0.46	934	0.51	973	0.57	
1280	559	0.18	626	0.23	686	0.27	744	0.32	796	0.38	843	0.43	885	0.49	927	0.54	967	0.60	1005	0.66	
1440	609	0.24	674	0.30	730	0.34	783	0.39	834	0.45	882	0.52	924	0.58	964	0.64	1002	0.70	1038	0.76	
1600	661	0.32	724	0.38	776	0.44	825	0.49	872	0.54	919	0.61	962	0.68	1002	0.75	1039	0.82	1076	0.89	
1760	716	0.42	775	0.48	825	0.54	870	0.60	915	0.66	958	0.72	999	0.79	1040	0.87	1078	0.95	1113	1.03	
1920	771	0.53	825	0.59	875	0.66	918	0.73	959	0.79	1000	0.86	1039	0.92	1078	1.00	1116	1.09	1151	1.17	

Continued

CFM	External Static Pressure (Inches of Water)									
	1.10		1.20		1.30		1.40		1.50	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Drive										
800*	963	0.49	999	0.54	1034	0.59	1068	0.65	1101	0.70
960*	986	0.55	1023	0.61	1060	0.67	1095	0.73	1127	0.79
1120*	1012	0.63	1048	0.69	1084	0.75	1118	0.81	1151	0.88
1280	1041	0.72	1076	0.78	1110	0.84	1143	0.91	1176	0.98
1440	1074	0.83	1108	0.89	1141	0.96	1174	1.03	1205	1.10
1600	1109	0.95	1142	1.02	1175	1.09	1207	1.17	1236	1.24
1760	1147	1.10	1179	1.17	1211	1.25	1241	1.32	—	—
1920	1186	1.26	1218	1.34	1249	1.42	—	—	—	—

For Standard Evaporator Fan Speed (RPM), reference [Table 96](#).

Notes: Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data. Data does not include pressure drop due to reheat coil.

Refer to [Table 105](#) to determine additional static pressure drop due to other options/accessories.

1-HP Fan Motor Heat (MBH) = 2.829 x Fan BHP + .4024.

Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

Table includes Dehumidification (Hot Gas Reheat Option).

*Unit applications below 1280 CFM

- Electric heaters restricted on applications below 1280 CFM/Ton.
- Dehumidification (Hot Gas Reheat) or TXV with Froststat and Crank-case Heaters are required on applications below 1280 CFM/Ton.

⁽ⁱ⁾ BAYLSDR007A required.

Table 36. Belt Drive Evaporator Fan Performance 4 Tons THC043A3,4,W Horizontal Airflow

CFM	External Static Pressure (Inches of Water)																				
	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00		
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	
1-HP Standard Motor & Low Static Drive Accessory Kit⁽ⁱ⁾												1-HP Standard Motor & Drive									
800*	461	0.08	553	0.11	629	0.16	692	0.20	745	0.25	794	0.29	838	0.34	881	0.38	922	0.43	962	0.48	
960*	509	0.11	600	0.16	672	0.20	736	0.25	791	0.30	841	0.36	887	0.42	927	0.47	966	0.52	1004	0.58	
1120*	561	0.16	649	0.21	719	0.26	779	0.32	836	0.37	886	0.43	932	0.50	975	0.56	1014	0.63	1052	0.69	
1280	617	0.21	696	0.27	767	0.34	826	0.40	879	0.46	930	0.52	976	0.59	1020	0.66	1060	0.73	1098	0.80	
1440	674	0.29	745	0.35	815	0.42	874	0.49	925	0.56	974	0.63	1020	0.70	1064	0.77	1104	0.85	1142	0.92	
1600	733	0.38	799	0.45	862	0.53	922	0.60	975	0.68	1020	0.75	1065	0.83	1107	0.91	1147	0.99	1186	1.07	
1760	793	0.49	854	0.56	911	0.65	969	0.73	1023	0.82	1069	0.90	1112	0.98	1152	1.07	1191	1.15	1230	1.24	
1920	853	0.62	911	0.70	964	0.79	1018	0.88	1069	0.97	1118	1.06	1161	1.15	1201	1.25	1239	1.34	1275	1.43	

Continued

CFM	External Static Pressure (Inches of Water)									
	1.10		1.20		1.30		1.40		1.50	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor										
800*	1001	0.54	1038	0.60	1072	0.65	1108	0.71	1142	0.78
960*	1040	0.63	1073	0.68	1108	0.75	1141	0.81	1175	0.88
1120*	1087	0.75	1119	0.81	1152	0.88	1183	0.94	1213	1.00
1280	1132	0.88	1167	0.95	1199	1.03	1231	1.10	1260	1.17
1440	1179	1.01	1213	1.09	1245	1.17	1277	1.26	1307	1.34
1600	1223	1.15	1258	1.24	1291	1.33	1322	1.42	—	—
1760	1267	1.33	1301	1.42	—	—	—	—	—	—
1920	—	—	—	—	—	—	—	—	—	—
1-HP Standard Motor & Field Supplied High Static Drive⁽ⁱⁱⁱ⁾										

For Standard Evaporator Fan Speed (RPM), reference [Table 96](#).

Notes: Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data. Data does not include pressure drop due to reheat coil.

Refer to [Table 105](#) to determine additional static pressure drop due to other options/accessories.

1-HP Fan Motor Heat (MBH) = 2.829 x Fan BHP + .4024.

Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

Table includes Dehumidification (Hot Gas Reheat Option).

*Unit applications below 1280 CFM

- Electric heaters restricted on applications below 1280 CFM/Ton.
- Dehumidification (Hot Gas Reheat) or TXV with Froststat and Crank-case Heaters are required on applications below 1280 CFM/Ton.

⁽ⁱ⁾ BAYLSDR007A required.

⁽ⁱⁱ⁾ Field Supplied Fan Sheave AK41 required. Field Supplied Belt may be necessary.

⁽ⁱⁱⁱ⁾ Field Supplied Fan Sheave AK41 required. Field Supplied Belt may be necessary.



Performance Data

(4 Tons R-22 Refrigerant)

Table 37. Belt Drive Evaporator Fan Performance 4 Tons YHC043A3,4,W*L,M Low & Medium Heat Downflow Airflow

CFM	External Static Pressure (Inches of Water)																			
	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Low Static Drive Accessory Kit⁽ⁱ⁾										1-HP Standard Motor & Drive										
1280	614	0.22	675	0.26	733	0.31	787	0.37	834	0.42	878	0.48	919	0.53	959	0.59	997	0.65	1034	0.71
1440	676	0.30	731	0.34	784	0.39	835	0.46	883	0.52	925	0.58	965	0.64	1003	0.70	1039	0.76	1075	0.83
1600	739	0.40	789	0.45	838	0.50	885	0.56	931	0.63	973	0.70	1012	0.77	1049	0.84	1085	0.91	1118	0.97
1760	803	0.51	850	0.57	894	0.63	938	0.69	981	0.76	1021	0.83	1061	0.92	1097	0.99	1131	1.07	1164	1.14
1920	867	0.65	911	0.72	952	0.78	993	0.84	1033	0.91	1071	0.99	1110	1.07	1145	1.16	1180	1.25	1213	1.33

Continued

CFM	External Static Pressure (Inches of Water)									
	1.10		1.20		1.30		1.40		1.50	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Drive										
1280	1069	0.77	1104	0.83	1138	0.90	1170	0.97	1203	1.04
1440	1109	0.89	1141	0.96	1175	1.03	1205	1.10	1236	1.17
1600	1151	1.04	1183	1.11	1215	1.19	1246	1.26	1275	1.33
1760	1197	1.21	1227	1.29	1258	1.36	1287	1.44	—	—
1920	1243	1.41	1274	1.49	—	—	—	—	—	—
1-HP Standard Motor & Field Supplied High Static Drive⁽ⁱⁱ⁾										

For Standard Evaporator Fan Speed (RPM), reference [Table 96](#).
 Notes: Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data. Data does not include pressure drop due to reheat coil. Refer to [Table 105](#) to determine additional static pressure drop due to other options/accessories.
 1-HP Fan Motor Heat (MBH) = 2.829 x Fan BHP + .4024.
 Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

⁽ⁱ⁾ Field Supplied Fan Sheave AK61 required. Field Supplied Belt may be necessary.
⁽ⁱⁱ⁾ Field Supplied Fan Sheave AK41 required. Field Supplied Belt may be necessary.

Table 38. Belt Drive Evaporator Fan Performance 4 Tons YHC043A3,4,W*H High Heat Downflow Airflow

CFM	External Static Pressure (Inches of Water)																			
	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Field Supplied Low Static Drive⁽ⁱ⁾										1-HP Standard Motor & Drive										
1280	627	0.23	688	0.27	745	0.32	797	0.38	844	0.43	887	0.49	928	0.54	967	0.60	1006	0.66	1042	0.72
1440	691	0.31	746	0.36	798	0.41	848	0.47	894	0.54	936	0.60	975	0.66	1012	0.72	1049	0.78	1085	0.85
1600	756	0.41	806	0.47	854	0.52	901	0.58	945	0.66	987	0.73	1025	0.79	1061	0.86	1096	0.93	1129	1.00
1760	822	0.54	868	0.60	912	0.65	955	0.71	997	0.79	1038	0.87	1076	0.95	1111	1.02	1145	1.10	1178	1.17
1920	889	0.69	931	0.75	972	0.81	1012	0.88	1051	0.95	1090	1.03	1127	1.11	1162	1.20	1196	1.29	1228	1.37

Continued

CFM	External Static Pressure (Inches of Water)									
	1.10		1.20		1.30		1.40		1.50	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Drive										
1280	1077	0.78	1112	0.85	1145	0.91	1178	0.98	1210	1.05
1440	1118	0.91	1150	0.98	1183	1.05	1214	1.12	1244	1.19
1600	1162	1.06	1193	1.13	1225	1.21	1255	1.28	1285	1.36
1760	1208	1.24	1239	1.32	1268	1.39	1297	1.47	—	—
1920	1258	1.45	—	—	—	—	—	—	—	—
1-HP Standard Motor & Field Supplied High Static Drive⁽ⁱⁱ⁾										

For Standard Evaporator Fan Speed (RPM), reference [Table 96](#).
 Notes: Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data. Data does not include pressure drop due to reheat coil. Refer to [Table 105](#) to determine additional static pressure drop due to other options/accessories.
 1-HP Fan Motor Heat (MBH) = 2.829 x Fan BHP + .4024.
 Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

⁽ⁱ⁾ Field Supplied Fan Sheave AK61 required. Field Supplied Belt may be necessary.
⁽ⁱⁱ⁾ Field Supplied Fan Sheave AK41 required. Field Supplied Belt may be necessary.



Performance Data

(4 Tons R-22 Refrigerant)

Table 39. Belt Drive Evaporator Fan Performance 4 Tons YHC043A3,4,W*L,M Low & Medium Heat Horizontal Airflow

CFM	External Static Pressure (Inches of Water)																			
	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Field Supplied Low Static Drive⁽ⁱ⁾										1-HP Standard Motor & Drive										
1280	681	0.26	755	0.32	816	0.38	870	0.45	921	0.51	968	0.58	1013	0.65	1053	0.72	1091	0.79	1127	0.86
1440	748	0.36	817	0.43	876	0.49	927	0.56	976	0.63	1022	0.70	1065	0.78	1106	0.85	1144	0.93	1180	1.01
1600	816	0.47	879	0.55	937	0.62	987	0.70	1033	0.78	1076	0.85	1119	0.93	1158	1.01	1197	1.10	1233	1.18
1760	885	0.61	943	0.69	999	0.78	1049	0.86	1093	0.94	1135	1.03	1174	1.11	1213	1.20	1250	1.29	1286	1.38
1920	956	0.77	1009	0.86	1062	0.96	1110	1.05	1154	1.14	1195	1.23	1232	1.32	1269	1.41	1304	1.50	—	—
1-HP Standard Motor & Field Supplied High Static Drive⁽ⁱⁱ⁾																				
Continued																				
CFM	External Static Pressure (Inches of Water)																			
	1.10		1.20		1.30		1.40		1.50											
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP										
1-HP Standard Motor & Drive																				
1280	1162	0.94	1193	1.01	1225	1.09	1255	1.16	1284	1.23										
1440	1214	1.09	1247	1.18	1278	1.26	1309	1.35	1337	1.43										
1600	1268	1.27	1300	1.35	1332	1.45	—	—	—	—										
1760	1320	1.47	—	—	—	—	—	—	—	—										
1920	—	—	—	—	—	—	—	—	—	—										
1-HP Standard Motor & Field Supplied High Static Drive⁽ⁱⁱⁱ⁾																				

For Standard Evaporator Fan Speed (RPM), reference [Table 96](#).
 Notes: Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data. Data does not include pressure drop due to reheat coil. Refer to [Table 105](#) to determine additional static pressure drop due to other options/accessories.
 1-HP Fan Motor Heat (MBH) = 2.829 x Fan BHP+.4024.
 Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

(i) Field Supplied Fan Sheave AK61 required. Field Supplied Belt may be necessary.
 (ii) Field Supplied Fan Sheave AK41 required. Field Supplied Belt may be necessary.
 (iii) Field Supplied Fan Sheave AK41 required. Field Supplied Belt may be necessary.

Table 40. Belt Drive Evaporator Fan Performance 4 Tons YHC043A3,4,W*H High Heat Horizontal Airflow

CFM	External Static Pressure (Inches of Water)																			
	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Field Supplied Low Static Drive⁽ⁱ⁾										1-HP Standard Motor & Drive										
1280	698	0.28	769	0.34	828	0.40	881	0.46	932	0.52	978	0.59	1021	0.66	1061	0.73	1099	0.81	1134	0.88
1440	767	0.37	834	0.44	890	0.51	941	0.58	988	0.65	1034	0.72	1077	0.80	1116	0.87	1153	0.95	1190	1.03
1600	837	0.50	899	0.57	955	0.65	1003	0.72	1048	0.80	1091	0.88	1132	0.96	1171	1.04	1209	1.12	1245	1.21
1760	908	0.64	966	0.73	1020	0.81	1067	0.89	1110	0.98	1151	1.06	1190	1.15	1228	1.23	1264	1.32	1300	1.41
1920	981	0.82	1035	0.91	1085	1.00	1133	1.09	1174	1.18	1213	1.27	1250	1.37	1286	1.46	—	—	—	—
1-HP Standard Motor & Field Supplied High Static Drive⁽ⁱⁱ⁾										1-HP Standard Motor & Field Supplied High Static Drive⁽ⁱⁱ⁾										
Continued																				
CFM	External Static Pressure (Inches of Water)																			
	1.10		1.20		1.30		1.40		1.50											
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP										
1-HP Standard Motor & Drive																				
1280	1169	0.96	1201	1.03	1231	1.10	1262	1.17	1290	1.24										
1440	1222	1.11	1256	1.20	1286	1.28	1317	1.37	1346	1.45										
1600	1278	1.29	1311	1.38	1342	1.48	—	—	—	—										
1760	—	—	—	—	—	—	—	—	—	—										
1920	—	—	—	—	—	—	—	—	—	—										
1-HP Standard Motor & Field Supplied High Static Drive⁽ⁱⁱⁱ⁾																				

For Standard Evaporator Fan Speed (RPM), reference [Table 96](#).
 Notes: Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data. Data does not include pressure drop due to reheat coil. Refer to [Table 105](#) to determine additional static pressure drop due to other options/accessories.
 1-HP Fan Motor Heat (MBH) = 2.829 x Fan BHP+.4024.
 Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

(i) Field Supplied Fan Sheave AK61 required. Field Supplied Belt may be necessary.
 (ii) Field Supplied Fan Sheave AK41 required. Field Supplied Belt may be necessary.
 (iii) Field Supplied Fan Sheave AK41 required. Field Supplied Belt may be necessary.



Performance Data

(5 Tons R-22 Refrigerant)

Table 41. Belt Drive Evaporator Fan Performance 5 Tons THC063A3,4,W Downflow Airflow

CFM	External Static Pressure (Inches of Water)																			
	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Low Static Drive Accessory Kit⁽¹⁾																1-HP Standard Motor & Drive				
1000*	—	—	537	0.13	608	0.17	667	0.21	721	0.25	770	0.30	817	0.35	861	0.39	905	0.45	944	0.50
1200*	517	0.15	588	0.19	652	0.23	712	0.28	764	0.33	811	0.38	856	0.43	898	0.48	939	0.54	978	0.59
1400*	576	0.21	645	0.26	702	0.31	756	0.36	808	0.41	856	0.48	900	0.54	941	0.59	979	0.65	1017	0.71
1600	640	0.31	703	0.36	757	0.41	806	0.47	854	0.52	899	0.58	944	0.65	985	0.73	1023	0.79	1060	0.86
1800	706	0.42	760	0.47	815	0.54	861	0.60	904	0.66	947	0.72	988	0.78	1028	0.86	1067	0.94	1104	1.02
2000	773	0.57	821	0.62	873	0.69	918	0.76	958	0.83	998	0.90	1036	0.96	1073	1.02	1111	1.10	1147	1.19
2200	840	0.75	885	0.80	930	0.87	977	0.95	1016	1.03	1053	1.10	1089	1.17	1124	1.24	1158	1.31	1191	1.39
2400	909	0.96	950	1.02	990	1.08	1034	1.16	1074	1.25	1110	1.00	1143	1.42	1177	1.50	—	—	—	—

Continued

CFM	External Static Pressure (Inches of Water)									
	1.10		1.20		1.30		1.40		1.50	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Drive										
1000*	985	0.56	1021	0.62	1058	0.68	1093	0.74	1126	0.80
1200*	1015	0.65	1051	0.71	1086	0.77	1120	0.84	1154	0.91
1400*	1052	0.77	1088	0.84	1121	0.90	1153	0.97	1185	1.04
1600	1093	0.92	1126	0.99	1160	1.06	1190	1.13	1222	1.20
1800	1138	1.10	1171	1.17	1203	1.25	1232	1.32	1262	1.39
2000	1182	1.28	1215	1.37	1246	1.46	—	—	—	—
2200	1226	1.48	—	—	—	—	—	—	—	—
2400	—	—	—	—	—	—	—	—	—	—

For Standard Evaporator Fan Speed (RPM), reference [Table 96](#).
 Notes: Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data. Data does not include pressure drop due to reheat coil. Refer to [Table 105](#) to determine additional static pressure drop due to other options/accessories.
 1-HP Fan Motor Heat (MBH) = 2.829 x Fan BHP+.4024.
 Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.
 Table includes Dehumidification (Hot Gas Reheat Option).
 *Unit applications below 1600 CFM
 • Electric heaters restricted on applications below 1600 CFM/Ton.
 • Dehumidification (Hot Gas Reheat) or TXV with Froststat and Crank-case Heaters are required on applications below 1600 CFM/Ton.

⁽¹⁾ BAYLSDR007A required.



Performance Data

(5 Tons R-22 Refrigerant)

Table 42. Belt Drive Evaporator Fan Performance 5 Tons THC063A3,4,W Horizontal Airflow

CFM	External Static Pressure (Inches of Water)																			
	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	1-HP Standard Motor & Low Static Drive Accessory Kit⁽¹⁾										1-HP Standard Motor & Drive									
1000*	507	0.11	599	0.16	671	0.21	735	0.26	792	0.31	843	0.37	889	0.42	931	0.48	971	0.54	1007	0.59
1200*	570	0.17	654	0.23	727	0.28	787	0.34	843	0.40	895	0.46	942	0.52	986	0.59	1026	0.66	1064	0.73
1400*	638	0.25	711	0.31	782	0.38	844	0.44	896	0.51	946	0.58	993	0.65	1037	0.72	1078	0.79	1117	0.86
1600	707	0.35	774	0.42	837	0.50	898	0.57	953	0.65	1001	0.72	1045	0.80	1087	0.87	1129	0.95	1168	1.03
1800	778	0.48	840	0.56	897	0.64	953	0.72	1008	0.81	1058	0.89	1102	0.98	1143	1.06	1181	1.15	1219	1.23
2000	850	0.65	908	0.73	961	0.81	1012	0.90	1062	1.00	1111	1.09	1157	1.19	1198	1.28	1237	1.37	1274	1.47
2200	923	0.84	978	0.93	1028	1.02	1075	1.12	1120	1.22	1166	1.32	1211	1.43	—	—	—	—	—	—
2400	997	1.07	1049	1.17	1096	1.27	1140	1.37	1183	1.48	—	—	—	—	—	—	—	—	—	—

Continued

CFM	External Static Pressure (Inches of Water)									
	1.10		1.20		1.30		1.40		1.50	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	1-HP Standard Motor & Drive									
1000*	1042	0.65	1078	0.70	1110	0.76	1142	0.82	1175	0.89
1200*	1099	0.80	1133	0.86	1166	0.93	1197	0.99	1227	1.06
1400*	1153	0.94	1188	1.02	1221	1.10	1253	1.18	1284	1.27
1600	1206	1.12	1241	1.20	1275	1.28	1306	1.37	1338	1.46
1800	1256	1.32	1291	1.41	1326	1.50	—	—	—	—
2000	—	—	—	—	—	—	—	—	—	—
2200	—	—	—	—	—	—	—	—	—	—
2400	—	—	—	—	—	—	—	—	—	—

For Standard Evaporator Fan Speed (RPM), reference [Table 96](#).
 Notes: Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data. Data does not include pressure drop due to reheat coil. Refer to [Table 105](#) to determine additional static pressure drop due to other options/accessories.
 1-HP Fan Motor Heat (MBH) = 2.829 x Fan BHP+.4024.
 Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.
 Table includes Dehumidification (Hot Gas Reheat Option).
 *Unit applications below 1600 CFM

- Electric heaters restricted on applications below 1600 CFM/Ton.
- Dehumidification (Hot Gas Reheat) or TXV with Froststat and Crank-case Heaters are required on applications below 1600 CFM/Ton.

⁽¹⁾ BAYLSDR008A required.



Performance Data

(5 Tons R-22 Refrigerant)

Table 43. Belt Drive Evaporator Fan Performance 5 Tons YHC063A3,4,W*L,M Low & Medium Heat Downflow Airflow

CFM	External Static Pressure (Inches of Water)																			
	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Field Supplied Low Static Drive⁽¹⁾										1-HP Standard Motor & Drive										
1600	704	0.36	757	0.41	806	0.47	853	0.52	899	0.58	942	0.65	984	0.72	1021	0.79	1058	0.85	1092	0.92
1800	777	0.49	828	0.56	872	0.62	915	0.67	957	0.73	998	0.80	1038	0.88	1076	0.96	1112	1.04	1146	1.11
2000	851	0.66	900	0.73	942	0.80	981	0.87	1019	0.93	1057	0.99	1094	1.07	1130	1.15	1165	1.24	1199	1.33
2200	927	0.86	973	0.94	1012	1.02	1049	1.09	1084	1.17	1119	1.23	1153	1.30	1188	1.38	1220	1.46	—	—
2400	1003	1.10	1045	1.19	1084	1.28	1119	1.36	1152	1.44	—	—	—	—	—	—	—	—	—	—

Continued

CFM	External Static Pressure (Inches of Water)									
	1.10		1.20		1.30		1.40		1.50	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Drive										
1600	1125	0.98	1158	1.06	1190	1.13	1220	1.20	1250	1.27
1800	1178	1.19	1209	1.26	1239	1.33	1269	1.41	1296	1.48
2000	1232	1.42	1263	1.50	—	—	—	—	—	—
2200	—	—	—	—	—	—	—	—	—	—
2400	—	—	—	—	—	—	—	—	—	—

For Standard Evaporator Fan Speed (RPM), reference [Table 96](#).
 Notes: Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data. Data does not include pressure drop due to reheat coil. Refer to [Table 105](#) to determine additional static pressure drop due to other options/accessories.
 1-HP Fan Motor Heat (MBH) = 2.829 x Fan BHP + .4024.
 Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

⁽¹⁾ Field Supplied Fan Sheave AK61 required. Field Supplied Belt may be necessary.

Table 44. Belt Drive Evaporator Fan Performance 5 Tons YHC063A3,4,W*H High Heat Downflow Airflow

CFM	External Static Pressure (Inches of Water)																			
	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Field Supplied Low Static Drive⁽¹⁾										1-HP Standard Motor & Drive										
1600	723	0.38	774	0.43	822	0.48	869	0.54	914	0.60	957	0.68	997	0.75	1035	0.81	1070	0.88	1104	0.94
1800	801	0.52	847	0.58	891	0.64	933	0.70	975	0.76	1015	0.83	1054	0.91	1091	0.99	1126	1.07	1160	1.15
2000	878	0.70	922	0.77	962	0.84	1001	0.90	1039	0.96	1076	1.03	1113	1.11	1149	1.20	1183	1.28	1217	1.38
2200	957	0.91	999	0.99	1036	1.07	1072	1.14	1107	1.21	1142	1.28	1176	1.35	1209	1.43	—	—	—	—
2400	1036	1.17	1076	1.26	1111	1.34	1144	1.42	1177	1.50	—	—	—	—	—	—	—	—	—	—

Continued

CFM	External Static Pressure (Inches of Water)									
	1.10		1.20		1.30		1.40		1.50	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Drive										
1600	1137	1.01	1168	1.08	1199	1.15	1230	1.22	1260	1.29
1800	1191	1.22	1222	1.29	1252	1.37	1281	1.44	1310	1.50
2000	1248	1.46	—	—	—	—	—	—	—	—
2200	—	—	—	—	—	—	—	—	—	—
2400	—	—	—	—	—	—	—	—	—	—

For Standard Evaporator Fan Speed (RPM), reference [Table 96](#).
 Notes: Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data. Data does not include pressure drop due to reheat coil. Refer to [Table 105](#) to determine additional static pressure drop due to other options/accessories.
 1-HP Fan Motor Heat (MBH) = 2.829 x Fan BHP + .4024.
 Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

⁽¹⁾ Field Supplied Fan Sheave AK61 required. Field Supplied Belt may be necessary.



Performance Data

(5 Tons R-22 Refrigerant)

Table 45. Belt Drive Evaporator Fan Performance 5 Tons YHC063A3,4,W*L,M Low & Medium Heat Horizontal Airflow

CFM	External Static Pressure (Inches of Water)																			
	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Field Supplied Low Static Drive⁽¹⁾										1-HP Standard Motor & Drive										
1600	775	0.42	837	0.50	898	0.57	952	0.65	1000	0.72	1044	0.79	1086	0.87	1127	0.95	1166	1.03	1203	1.11
1800	856	0.58	912	0.66	967	0.74	1020	0.83	1069	0.91	1112	1.00	1152	1.08	1189	1.16	1227	1.25	1263	1.34
2000	939	0.77	990	0.86	1040	0.96	1089	1.05	1136	1.14	1180	1.24	1219	1.33	1256	1.42	1292	1.50	—	—
2200	1023	1.01	1070	1.11	1115	1.21	1160	1.31	1205	1.41	—	—	—	—	—	—	—	—	—	—
2400	1108	1.29	1151	1.39	1193	1.50	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Continued

CFM	External Static Pressure (Inches of Water)							
	1.10		1.20		1.30		1.40	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Drive								
1600	1239	1.19	1272	1.28	1304	1.37	1336	1.46
1800	1299	1.43	—	—	—	—	—	—
2000	—	—	—	—	—	—	—	—
2200	—	—	—	—	—	—	—	—
2400	—	—	—	—	—	—	—	—

For Standard Evaporator Fan Speed (RPM), reference [Table 96](#).
 Notes: Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data. Data does not include pressure drop due to reheat coil. Refer to [Table 105](#) to determine additional static pressure drop due to other options/accessories.
 1-HP Fan Motor Heat (MBH) = 2.829 x Fan BHP + .4024.
 Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

⁽¹⁾ Field Supplied Fan Sheave AK61 required. Field Supplied Belt may be necessary.

Table 46. Belt Drive Evaporator Fan Performance 5 Tons YHC063A3,4,W*H High Heat Horizontal Airflow

CFM	External Static Pressure (Inches of Water)																			
	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Field Supplied Low Static Drive⁽¹⁾										1-HP Standard Motor & Drive										
1600	796	0.45	858	0.52	917	0.60	969	0.67	1015	0.75	1059	0.82	1100	0.90	1141	0.98	1178	1.06	1216	1.14
1800	881	0.61	935	0.70	991	0.78	1042	0.87	1087	0.95	1129	1.03	1168	1.12	1206	1.20	1244	1.29	1279	1.38
2000	967	0.82	1016	0.91	1066	1.01	1115	1.10	1160	1.19	1201	1.28	1239	1.38	1275	1.47	—	—	—	—
2200	1054	1.07	1099	1.17	1144	1.27	1189	1.38	1233	1.48	—	—	—	—	—	—	—	—	—	—
2400	1141	1.37	1183	1.48	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Continued

CFM	External Static Pressure (Inches of Water)							
	1.10		1.20		1.30		1.40	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Drive								
1600	1251	1.22	1283	1.31	1315	1.40	1345	1.49
1800	1313	1.47	—	—	—	—	—	—
2000	—	—	—	—	—	—	—	—
2200	—	—	—	—	—	—	—	—
2400	—	—	—	—	—	—	—	—

For Standard Evaporator Fan Speed (RPM), reference [Table 96](#).
 Notes: Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data. Data does not include pressure drop due to reheat coil. Refer to [Table 105](#) to determine additional static pressure drop due to other options/accessories.
 1-HP Fan Motor Heat (MBH) = 2.829 x Fan BHP + .4024.
 Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

⁽¹⁾ Field Supplied Fan Sheave AK61 required. Field Supplied Belt may be necessary.



Performance Data

Table 47. Multispeed Direct Drive Evaporator Fan Performance 3 – 5 Tons — No Electric Heat — TSC036, 048, 060E1 - R-410A Refrigerant

		External Static Pressure (Inches of Water) & Motor Power (Bhp) ⁽¹⁾																
Tons	Unit Model Number	CFM	Rated Speed Set 1			Standard Low Speed Speed Set 2			Mid Speed Speed Set 3			Standard High Speed Speed Set 4			OS High Speed Speed Set 5			
			ESP	RPM	BHP	ESP	RPM	BHP	ESP	RPM	BHP	ESP	RPM	BHP	ESP	RPM	BHP	
3	TSC036E1	960	0.45	715	0.21	0.74	851	0.31	0.92	929	0.38	1.07	993	0.44	1.25	1053	0.52	
	Downflow	1020	0.39	695	0.20	0.66	826	0.30	0.84	905	0.37	0.99	969	0.43	1.17	1030	0.50	
	Airflow	1080	0.33	675	0.20	0.59	800	0.29	0.77	880	0.36	0.91	945	0.42	1.08	1007	0.49	
		1140	0.27	654	0.19	0.51	774	0.28	0.69	855	0.35	0.83	921	0.41	1.00	985	0.48	
		1200	0.21	634	0.18	0.43	749	0.27	0.61	831	0.34	0.75	898	0.40	0.91	962	0.47	
		1260	0.15	614	0.18	0.35	723	0.26	0.53	806	0.33	0.67	874	0.39	0.83	939	0.46	
		1320	0.09	593	0.17	0.28	697	0.25	0.45	782	0.32	0.59	850	0.38	0.74	916	0.45	
		1380	0.03	573	0.17	0.20	671	0.24	0.37	757	0.31	0.51	826	0.37	0.66	893	0.44	
		1440	—	—	—	0.12	646	0.23	0.29	732	0.30	0.43	802	0.36	0.57	871	0.43	
		TSC036E1	960	0.45	711	0.21	0.70	835	0.30	0.89	913	0.37	1.04	978	0.44	1.21	1037	0.51
	Horizontal	1020	0.39	689	0.20	0.63	811	0.29	0.81	890	0.36	0.96	957	0.43	1.13	1016	0.50	
	Airflow	1080	0.32	667	0.19	0.56	787	0.28	0.73	868	0.35	0.88	935	0.42	1.04	996	0.49	
		1140	0.26	644	0.19	0.48	763	0.28	0.65	845	0.34	0.80	913	0.41	0.95	975	0.48	
		1200	0.20	622	0.18	0.41	739	0.27	0.57	823	0.33	0.72	892	0.40	0.87	955	0.47	
		1260	0.13	599	0.17	0.33	715	0.26	0.50	800	0.32	0.64	870	0.39	0.78	934	0.46	
		1320	0.07	577	0.17	0.26	691	0.25	0.42	777	0.32	0.56	848	0.38	0.69	913	0.45	
		1380	0.01	555	0.16	0.18	667	0.24	0.34	755	0.31	0.48	826	0.37	0.61	893	0.44	
		1440	—	—	—	0.11	642	0.23	0.26	732	0.30	0.40	805	0.36	0.52	872	0.43	
		4	TSC048E1	1280	0.60	865	0.36	0.84	977	0.47	1.02	1044	0.55	1.17	1090	0.63	—	—
	Downflow		1360	0.48	833	0.35	0.72	944	0.45	0.90	1012	0.54	1.04	1062	0.61	—	—	—
Airflow	1440		0.37	802	0.34	0.60	912	0.44	0.77	980	0.52	0.92	1033	0.60	—	—	—	
	1520		0.25	770	0.32	0.48	879	0.42	0.65	948	0.50	0.80	1005	0.58	1.06	1100	0.69	
	1600		0.14	739	0.31	0.36	846	0.41	0.52	915	0.49	0.68	976	0.56	0.92	1069	0.67	
	1680		0.02	707	0.30	0.24	814	0.39	0.39	883	0.47	0.56	948	0.55	0.78	1038	0.65	
	1760		—	—	—	0.13	781	0.38	0.27	851	0.45	0.43	920	0.53	0.64	1006	0.63	
	1840		—	—	—	0.01	748	0.36	0.14	819	0.43	0.31	891	0.52	0.50	975	0.62	
	1920		—	—	—	—	—	—	0.02	787	0.42	0.19	863	0.50	0.37	944	0.60	
	TSC048E1		1280	0.61	864	0.36	0.84	967	0.47	1.00	1038	0.55	1.16	1115	0.65	—	—	—
Horizontal	1360		0.51	831	0.35	0.73	935	0.45	0.88	1006	0.53	1.05	1084	0.63	—	—	—	
Airflow	1440		0.40	798	0.33	0.62	904	0.44	0.77	974	0.52	0.94	1052	0.61	1.10	1114	0.70	
	1520		0.30	766	0.32	0.51	873	0.42	0.66	943	0.50	0.82	1020	0.59	0.99	1084	0.68	
	1600		0.19	733	0.31	0.40	842	0.41	0.55	911	0.48	0.71	989	0.57	0.87	1054	0.66	
	1680		0.09	701	0.29	0.29	810	0.39	0.44	879	0.47	0.60	957	0.55	0.75	1023	0.65	
	1760		—	—	—	0.18	779	0.38	0.32	848	0.45	0.48	925	0.54	0.64	993	0.63	
	1840		—	—	—	0.08	748	0.36	0.21	816	0.43	0.37	893	0.52	0.52	963	0.61	
	1920		—	—	—	—	—	—	0.10	784	0.42	0.26	861	0.50	0.40	932	0.59	
	5		TSC060E1	1600	0.75	1006	0.60	0.91	1065	0.69	—	—	—	—	—	—	—	—
Downflow		1700	0.60	969	0.58	0.75	1024	0.66	0.96	1101	0.77	—	—	—	—	—		
Airflow		1800	0.45	933	0.56	0.58	982	0.63	0.78	1059	0.74	—	—	—	—	—		
		1900	0.30	896	0.54	0.42	941	0.61	0.61	1017	0.71	0.82	1105	0.83	—	—		
		2000	0.14	860	0.52	0.25	899	0.58	0.43	975	0.68	0.64	1062	0.80	0.70	1083	0.85	
		2100	0.00	826	0.50	0.09	858	0.55	0.25	933	0.65	0.46	1019	0.77	0.54	1045	0.82	
		2200	—	—	—	—	—	—	0.08	891	0.62	0.28	975	0.74	0.37	1007	0.79	
		2300	—	—	—	—	—	—	—	—	—	0.10	932	0.70	0.20	969	0.76	
		2400	—	—	—	—	—	—	—	—	—	—	—	—	0.03	931	0.73	
		TSC060E1	1600	0.73	1003	0.60	0.90	1075	0.69	—	—	—	—	—	—	—	—	
Horizontal		1700	0.60	968	0.58	0.74	1034	0.67	0.89	1104	0.77	—	—	—	—	—		
Airflow		1800	0.46	934	0.56	0.59	993	0.64	0.74	1064	0.74	—	—	—	—	—		
		1900	0.33	899	0.54	0.44	952	0.62	0.59	1023	0.71	0.75	1095	0.83	—	—		
		2000	0.19	864	0.52	0.28	911	0.59	0.43	983	0.69	0.60	1053	0.79	0.69	1090	0.86	
		2100	0.05	829	0.50	0.13	870	0.56	0.28	942	0.66	0.44	1012	0.76	0.53	1051	0.83	
		2200	—	—	—	0.00	837	0.54	0.13	902	0.63	0.28	971	0.73	0.37	1012	0.80	
		2300	—	—	—	—	—	—	0.00	868	0.61	0.12	930	0.70	0.21	972	0.77	
		2400	—	—	—	—	—	—	—	—	—	0.00	897	0.68	0.06	933	0.74	

For 036 Models, fan motor heat (MBH) = 2.72 x Fan Bhp + 0.16.
 For 048 & 060 Models, fan motor heat (MBH) = 2.87 x Fan Bhp + 0.15.
 Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

⁽¹⁾ Data includes pressure drop due to wet coil and filters.

Performance Data

(3-5 Tons High Efficiency)

Table 48. Multispeed Direct Drive Evaporator Fan Performance 3 – 5 Tons — No Electric Heat — THC036, 048, 060E1,3,4

Tons	Unit Model Number	CFM	External Static Pressure (Inches of Water) & Motor Power (Bhp) ⁽¹⁾																
			Rated Speed Set 1			Standard Low Speed Speed Set 2			Mid Speed Speed Set 3			Standard High Speed Speed Set 4			OS High Speed Speed Set 5				
			ESP	RPM	BHP	ESP	RPM	BHP	ESP	RPM	BHP	ESP	RPM	BHP	ESP	RPM	BHP		
3	THC036E1,3,4 Downflow Airflow	960	0.45	715	0.21	0.74	851	0.31	0.92	929	0.38	1.07	993	0.44	1.25	1053	0.52		
		1020	0.39	695	0.20	0.66	826	0.30	0.84	905	0.37	0.99	969	0.43	1.17	1030	0.50		
		1080	0.33	675	0.20	0.59	800	0.29	0.77	880	0.36	0.91	945	0.42	1.08	1007	0.49		
		1140	0.27	654	0.19	0.51	774	0.28	0.69	855	0.35	0.83	921	0.41	1.00	985	0.48		
		1200	0.21	634	0.18	0.43	749	0.27	0.61	831	0.34	0.75	898	0.40	0.91	962	0.47		
		1260	0.15	614	0.18	0.35	723	0.26	0.53	806	0.33	0.67	874	0.39	0.83	939	0.46		
		1320	0.09	593	0.17	0.28	697	0.25	0.45	782	0.32	0.59	850	0.38	0.74	916	0.45		
		1380	0.03	573	0.17	0.20	671	0.24	0.37	757	0.31	0.51	826	0.37	0.66	893	0.44		
		1440	—	—	—	0.12	646	0.23	0.29	732	0.30	0.43	802	0.36	0.57	871	0.43		
		3	THC036E1,3,4 Horizontal Airflow	960	0.45	711	0.21	0.70	835	0.30	0.89	913	0.37	1.04	978	0.44	1.21	1037	0.51
				1020	0.39	689	0.20	0.63	811	0.29	0.81	890	0.36	0.96	957	0.43	1.13	1016	0.50
				1080	0.32	667	0.19	0.56	787	0.28	0.73	868	0.35	0.88	935	0.42	1.04	996	0.49
				1140	0.26	644	0.19	0.48	763	0.28	0.65	845	0.34	0.80	913	0.41	0.95	975	0.48
				1200	0.20	622	0.18	0.41	739	0.27	0.57	823	0.33	0.72	892	0.40	0.87	955	0.47
				1260	0.13	599	0.17	0.33	715	0.26	0.50	800	0.32	0.64	870	0.39	0.78	934	0.46
1320	0.07			577	0.17	0.26	691	0.25	0.42	777	0.32	0.56	848	0.38	0.69	913	0.45		
1380	0.01			555	0.16	0.18	667	0.24	0.34	755	0.31	0.48	826	0.37	0.61	893	0.44		
1440	—			—	—	0.11	642	0.23	0.26	732	0.30	0.40	805	0.36	0.52	872	0.43		
4	THC048E1,3,4 Downflow Airflow			1280	0.65	805	0.31	0.86	902	0.40	1.04	966	0.48	1.27	1042	0.58	—	—	—
				1360	0.55	769	0.30	0.76	866	0.38	0.94	934	0.46	1.17	1010	0.56	1.43	1113	0.68
				1440	0.46	733	0.28	0.66	830	0.37	0.84	902	0.44	1.06	977	0.54	1.31	1078	0.66
				1520	0.36	696	0.27	0.56	794	0.35	0.74	869	0.43	0.95	944	0.52	1.20	1043	0.64
				1600	0.27	660	0.25	0.46	758	0.33	0.63	837	0.41	0.85	912	0.50	1.08	1009	0.62
				1680	0.17	624	0.24	0.36	722	0.32	0.53	805	0.40	0.74	879	0.49	0.97	974	0.60
		1760	—	—	—	0.26	686	0.30	0.43	772	0.38	0.63	847	0.47	0.85	939	0.58		
		1840	—	—	—	0.16	650	0.29	0.33	740	0.36	0.53	814	0.45	0.74	905	0.55		
		1920	—	—	—	0.06	614	0.27	0.23	707	0.35	0.42	782	0.43	0.62	870	0.53		
		4	THC048E1,3,4 Horizontal Airflow	1280	0.56	795	0.31	0.77	880	0.39	0.95	967	0.48	1.16	1040	0.57	—	—	—
				1360	0.48	760	0.29	0.67	847	0.37	0.86	935	0.46	1.06	1010	0.56	1.26	1105	0.68
				1440	0.39	725	0.28	0.58	814	0.36	0.76	903	0.44	0.96	980	0.54	1.16	1075	0.66
				1520	0.30	690	0.27	0.48	780	0.34	0.66	871	0.43	0.86	951	0.53	1.06	1045	0.64
				1600	0.22	655	0.25	0.39	747	0.33	0.57	838	0.41	0.76	921	0.51	0.96	1016	0.62
				1680	0.13	619	0.24	0.30	714	0.31	0.47	806	0.40	0.66	891	0.49	0.86	986	0.60
1760	—			—	—	0.20	681	0.30	0.37	774	0.38	0.56	861	0.48	0.76	956	0.59		
1840	—			—	—	0.11	647	0.29	0.28	742	0.37	0.46	831	0.46	0.66	926	0.57		
1920	—			—	—	0.01	614	0.27	0.18	710	0.35	0.36	802	0.44	0.56	896	0.55		
5	THC060E1,3,4 Downflow Airflow			1600	0.82	918	0.50	1.04	1002	0.60	1.26	1087	0.72	—	—	—	—	—	—
				1700	0.67	873	0.47	0.89	957	0.58	1.11	1043	0.69	—	—	—	—	—	—
				1800	0.53	828	0.45	0.74	913	0.55	0.96	1000	0.66	1.16	1083	0.78	—	—	—
				1900	0.39	782	0.42	0.59	869	0.52	0.82	957	0.63	1.02	1041	0.75	1.17	1099	0.85
				2000	0.25	737	0.40	0.45	824	0.50	0.67	914	0.60	0.87	999	0.72	1.02	1056	0.82
				2100	0.11	692	0.37	0.30	780	0.47	0.52	870	0.58	0.72	957	0.69	0.87	1014	0.78
		2200	—	—	—	0.15	735	0.44	0.37	827	0.55	0.57	914	0.66	0.71	971	0.75		
		2300	—	—	—	0.00	691	0.42	0.22	784	0.52	0.42	872	0.63	0.56	929	0.72		
		2400	—	—	—	—	—	—	0.07	741	0.49	0.27	830	0.60	0.41	886	0.68		
		5	THC060E1,3,4 Horizontal Airflow	1600	0.71	918	0.50	0.91	1001	0.60	1.09	1070	0.71	—	—	—	—	—	—
				1700	0.59	875	0.47	0.78	959	0.58	0.96	1029	0.68	1.11	1102	0.79	—	—	—
				1800	0.46	832	0.45	0.65	916	0.55	0.82	987	0.65	0.97	1063	0.77	—	—	—
				1900	0.33	788	0.43	0.51	874	0.53	0.68	945	0.62	0.84	1023	0.74	1.01	1093	0.85
				2000	0.21	745	0.40	0.38	831	0.50	0.54	903	0.60	0.71	984	0.71	0.87	1052	0.81
				2100	0.08	701	0.38	0.25	788	0.47	0.41	861	0.57	0.57	944	0.68	0.73	1010	0.78
2200	—			—	—	0.12	746	0.45	0.27	819	0.54	0.44	904	0.65	0.59	968	0.75		
2300	—			—	—	—	—	—	0.13	778	0.51	0.31	865	0.62	0.45	926	0.72		
2400	—			—	—	—	—	—	—	—	—	0.17	825	0.59	0.31	884	0.68		

For 036 Models, fan motor heat (MBH) = 2.72 x Fan Bhp + 0.16.

For 048 & 060 Models, fan motor heat (MBH) = 2.87 x Fan Bhp + 0.15.

Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

⁽¹⁾ Data includes pressure drop due to wet coil and filters.



Performance Data

(3-5 Tons R-410A Refrigerant)

Table 49. Multispeed Direct Drive Evaporator Fan Performance 3 – 5 Tons – Low & Medium Gas Heat – YSC036, 048, 060E1

Tons	Unit Model Number	CFM	External Static Pressure (Inches of Water) & Motor Power (Bhp) ⁽¹⁾															
			Rated Speed Set 1			Standard Low Speed Speed Set 2			Mid Speed Speed Set 3			Standard High Speed Speed Set 4			OS High Speed Speed Set 5			
			ESP	RPM	BHP	ESP	RPM	BHP	ESP	RPM	BHP	ESP	RPM	BHP	ESP	RPM	BHP	
3	YSC036E1**L,M Downflow Airflow	960	0.43	718	0.19	0.64	825	0.27	0.88	923	0.35	1.12	1017	0.46	1.28	1074	0.52	
		1020	0.37	696	0.18	0.57	800	0.26	0.80	900	0.35	1.04	997	0.45	1.20	1053	0.51	
		1080	0.30	675	0.18	0.49	775	0.26	0.72	877	0.34	0.96	977	0.44	1.11	1033	0.50	
		1140	0.24	654	0.17	0.42	749	0.25	0.64	854	0.33	0.87	957	0.43	1.03	1013	0.49	
		1200	0.18	633	0.17	0.34	724	0.24	0.56	832	0.32	0.79	938	0.42	0.94	992	0.48	
		1260	0.11	612	0.16	0.26	698	0.23	0.48	809	0.31	0.71	918	0.41	0.86	972	0.47	
		1320	0.05	590	0.16	0.19	673	0.22	0.39	786	0.30	0.63	898	0.40	0.77	951	0.46	
		1380	—	—	—	0.11	647	0.21	0.31	763	0.29	0.55	878	0.39	0.68	931	0.45	
		1440	—	—	—	0.03	622	0.21	0.23	740	0.28	0.47	859	0.38	0.60	910	0.44	
	YSC036E1**L,M Horizontal Airflow	960	0.42	715	0.19	0.67	842	0.28	0.90	937	0.36	1.15	1037	0.46	1.25	1062	0.51	
		1020	0.37	695	0.18	0.61	819	0.27	0.83	916	0.35	1.07	1014	0.45	1.18	1047	0.50	
		1080	0.31	675	0.18	0.54	796	0.26	0.75	895	0.34	0.99	992	0.44	1.11	1032	0.50	
		1140	0.26	654	0.17	0.47	772	0.26	0.68	874	0.34	0.91	970	0.43	1.04	1017	0.49	
		1200	0.20	634	0.17	0.41	749	0.25	0.61	853	0.33	0.83	948	0.42	0.97	1002	0.48	
		1260	0.14	614	0.16	0.34	725	0.24	0.54	832	0.32	0.75	926	0.41	0.90	987	0.48	
		1320	0.09	594	0.16	0.27	702	0.23	0.47	811	0.31	0.67	903	0.40	0.83	972	0.47	
		1380	0.03	574	0.15	0.20	678	0.22	0.40	789	0.30	0.59	881	0.39	0.76	957	0.46	
		1440	—	—	—	0.14	654	0.22	0.33	768	0.29	0.51	859	0.38	0.69	942	0.45	
	4	YSC048E1**L,M Downflow Airflow	1280	0.71	933	0.42	0.89	1003	0.49	1.11	1094	0.59	—	—	—	—	—	
			1360	0.59	903	0.41	0.76	973	0.48	0.97	1061	0.57	1.14	1116	0.64	—	—	—
			1440	0.47	874	0.39	0.63	943	0.46	0.84	1027	0.56	1.00	1085	0.62	—	—	—
1520			0.34	845	0.38	0.50	913	0.45	0.70	993	0.54	0.86	1053	0.61	1.05	1122	0.70	
1600			0.22	815	0.37	0.38	883	0.43	0.56	959	0.52	0.72	1021	0.59	0.90	1089	0.68	
1680			0.10	786	0.36	0.25	852	0.42	0.42	926	0.50	0.58	990	0.57	0.76	1057	0.66	
1760			—	—	—	0.12	822	0.41	0.28	892	0.48	0.45	958	0.55	0.61	1024	0.64	
1840			—	—	—	—	—	—	0.15	858	0.46	0.31	926	0.53	0.47	992	0.62	
1920			—	—	—	—	—	—	0.01	824	0.45	0.17	895	0.51	0.32	960	0.60	
YSC048E1**L,M Horizontal Airflow		1280	0.66	894	0.40	0.81	967	0.48	1.01	1051	0.57	1.14	1101	0.63	—	—	—	
		1360	0.54	863	0.39	0.70	935	0.46	0.88	1016	0.55	1.01	1069	0.61	—	—	—	
		1440	0.43	831	0.38	0.58	904	0.45	0.76	982	0.53	0.89	1037	0.60	1.05	1101	0.69	
		1520	0.31	799	0.36	0.47	872	0.43	0.63	947	0.51	0.77	1006	0.58	0.93	1069	0.67	
		1600	0.20	768	0.35	0.35	840	0.41	0.51	912	0.49	0.64	974	0.56	0.80	1037	0.65	
		1680	0.08	736	0.33	0.24	809	0.40	0.38	877	0.47	0.52	942	0.54	0.67	1005	0.63	
		1760	—	—	—	0.12	777	0.38	0.26	842	0.46	0.40	911	0.52	0.55	973	0.61	
		1840	—	—	—	0.01	745	0.37	0.13	807	0.44	0.28	879	0.51	0.42	941	0.59	
		1920	—	—	—	—	—	—	0.00	773	0.42	0.15	847	0.49	0.29	909	0.57	
5	YSC060E1**L,M Downflow Airflow	1600	0.97	1110	0.71	—	—	—	—	—	—	—	—	—	—	—		
		1700	0.79	1068	0.68	0.91	1120	0.77	—	—	—	—	—	—	—	—	—	
		1800	0.60	1026	0.66	0.73	1079	0.74	—	—	—	—	—	—	—	—	—	
		1900	0.42	984	0.63	0.54	1038	0.71	0.69	1093	0.78	—	—	—	—	—	—	
		2000	0.24	942	0.60	0.36	997	0.68	0.50	1050	0.74	0.60	1079	0.82	—	—	—	
		2100	0.06	900	0.57	0.18	956	0.65	0.31	1006	0.71	0.42	1040	0.79	0.52	1078	0.86	
		2200	—	—	—	0.00	916	0.63	0.12	963	0.68	0.24	1001	0.76	0.32	1036	0.83	
		2300	—	—	—	—	—	—	0.00	936	0.66	0.05	962	0.73	0.13	994	0.79	
		2400	—	—	—	—	—	—	—	—	—	—	—	—	0.00	965	0.77	
	YSC060E1**L,M Horizontal Airflow	1600	0.83	1054	0.67	—	—	—	—	—	—	—	—	—	—	—	—	
		1700	0.67	1013	0.65	0.83	1084	0.74	—	—	—	—	—	—	—	—	—	
		1800	0.51	971	0.62	0.65	1039	0.71	0.75	1075	0.76	—	—	—	—	—	—	
		1900	0.36	930	0.59	0.48	995	0.68	0.57	1031	0.73	0.72	1086	0.82	—	—	—	
		2000	0.20	888	0.57	0.30	951	0.65	0.39	987	0.70	0.54	1045	0.79	0.67	1092	0.87	
		2100	0.04	847	0.54	0.12	907	0.62	0.21	942	0.67	0.36	1004	0.76	0.48	1051	0.84	
2200	—	—	—	0.00	877	0.60	0.02	898	0.64	0.17	963	0.73	0.29	1010	0.81			
2300	—	—	—	—	—	—	—	—	—	0.00	924	0.70	0.10	968	0.77			
2400	—	—	—	—	—	—	—	—	—	—	—	—	0.00	946	0.76			

For 036 Models, fan motor heat (MBH) = 2.72 x Fan Bhp + 0.16.

For 048 & 060 Models, fan motor heat (MBH) = 2.87 x Fan Bhp + 0.15.

Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

(1) Data includes pressure drop due to wet coil and filters.

Table 52. Multispeed Direct Drive Evaporator Fan Performance 3 – 5 Tons – High Heat – YHC036,048, 060E1,3,4

Tons	Unit Model Number	CFM	External Static Pressure (Inches of Water) & Motor Power (Bhp) ⁽¹⁾															
			Rated Speed Set 1			Standard Low Speed Speed Set 2			Mid Speed Speed Set 3			Standard High Speed Speed Set 4			OS High Speed Speed Set 5			
			ESP	RPM	BHP	ESP	RPM	BHP	ESP	RPM	BHP	ESP	RPM	BHP	ESP	RPM	BHP	
3	YHC036E1,3,4**H Downflow Airflow	960	0.43	718	0.19	0.64	825	0.26	0.88	923	0.34	1.12	1017	0.44	1.28	1074	0.51	
		1020	0.37	696	0.19	0.57	800	0.26	0.80	900	0.34	1.04	997	0.43	1.20	1053	0.50	
		1080	0.30	675	0.18	0.49	775	0.25	0.72	877	0.33	0.96	977	0.42	1.11	1033	0.49	
		1140	0.24	654	0.18	0.42	749	0.24	0.64	854	0.32	0.87	957	0.42	1.03	1013	0.48	
		1200	0.18	633	0.17	0.34	724	0.23	0.56	832	0.31	0.79	938	0.41	0.94	992	0.47	
		1260	0.11	612	0.16	0.26	698	0.22	0.48	809	0.30	0.71	918	0.40	0.86	972	0.46	
		1320	0.05	590	0.16	0.19	673	0.21	0.39	786	0.29	0.63	898	0.39	0.77	951	0.45	
		1380	—	—	—	0.11	647	0.21	0.31	763	0.28	0.55	878	0.38	0.68	931	0.44	
	1440	—	—	—	0.03	622	0.20	0.23	740	0.28	0.47	859	0.37	0.60	910	0.43		
	YHC036E1,3,4**H Horizontal Airflow	960	0.44	732	0.20	0.65	836	0.27	0.87	935	0.35	1.12	1033	0.45	1.25	1078	0.51	
		1020	0.37	708	0.19	0.58	811	0.26	0.80	911	0.34	1.03	1010	0.44	1.17	1059	0.50	
		1080	0.31	684	0.18	0.51	787	0.25	0.72	886	0.33	0.95	987	0.43	1.09	1040	0.49	
		1140	0.24	660	0.18	0.43	762	0.24	0.64	862	0.32	0.87	964	0.42	1.01	1021	0.48	
		1200	0.18	636	0.17	0.36	737	0.24	0.56	838	0.31	0.79	941	0.41	0.93	1002	0.47	
		1260	0.11	612	0.16	0.29	712	0.23	0.48	814	0.30	0.70	918	0.40	0.85	983	0.47	
		1320	0.05	588	0.16	0.21	688	0.22	0.40	789	0.29	0.62	895	0.39	0.77	964	0.46	
		1380	—	—	—	0.14	663	0.21	0.32	765	0.28	0.54	872	0.38	0.69	945	0.45	
	1440	—	—	—	0.07	638	0.20	0.24	741	0.28	0.45	849	0.37	0.61	926	0.44		
	4	YHC048E1,3,4**H Downflow Airflow	1280	0.69	833	0.35	0.90	924	0.43	1.07	989	0.51	1.07	989	0.51	1.27	1066	0.61
			1360	0.60	796	0.33	0.80	889	0.42	0.97	956	0.50	0.97	956	0.50	1.17	1033	0.59
1440			0.50	759	0.32	0.71	855	0.40	0.87	922	0.48	0.87	922	0.48	1.06	1000	0.57	
1520			0.40	722	0.30	0.61	820	0.39	0.77	889	0.46	0.77	889	0.46	0.96	966	0.56	
1600			0.31	684	0.29	0.51	785	0.37	0.67	855	0.44	0.67	855	0.44	0.85	933	0.54	
1680			0.21	647	0.27	0.41	751	0.35	0.57	822	0.43	0.57	822	0.43	0.75	900	0.52	
1760			0.12	610	0.26	0.31	716	0.34	0.47	788	0.41	0.47	788	0.41	0.64	867	0.50	
1840			—	—	—	0.22	681	0.32	0.37	755	0.39	0.37	755	0.39	0.54	834	0.48	
1920		—	—	—	0.12	647	0.30	0.27	721	0.37	0.27	721	0.37	0.43	801	0.46		
YHC048E1,3,4**H Horizontal Airflow		1280	0.60	822	0.34	0.81	912	0.43	0.97	986	0.51	0.97	986	0.51	1.18	1063	0.61	
		1360	0.51	787	0.33	0.70	876	0.41	0.87	952	0.49	0.87	952	0.49	1.07	1031	0.59	
		1440	0.41	752	0.31	0.60	840	0.40	0.76	918	0.48	0.76	918	0.48	0.96	998	0.57	
		1520	0.31	718	0.30	0.49	805	0.38	0.66	885	0.46	0.66	885	0.46	0.84	966	0.56	
		1600	0.22	683	0.29	0.38	769	0.36	0.55	851	0.44	0.55	851	0.44	0.73	933	0.54	
		1680	0.12	648	0.27	0.28	733	0.34	0.45	818	0.42	0.45	818	0.42	0.62	901	0.52	
		1760	0.03	613	0.26	0.17	697	0.33	0.34	784	0.41	0.34	784	0.41	0.51	868	0.50	
	1840	—	—	—	0.07	661	0.31	0.23	750	0.39	0.23	750	0.39	0.40	836	0.48		
1920	—	—	—	—	—	—	0.13	717	0.37	0.13	717	0.37	0.29	803	0.46			
5	YHC060E1,3,4**H Downflow Airflow	1600	0.90	955	0.57	1.06	1022	0.66	1.25	1095	0.77	—	—	—	—	—	—	
		1700	0.76	910	0.54	0.92	977	0.63	1.11	1052	0.74	1.28	1113	0.85	—	—	—	
		1800	0.62	865	0.52	0.77	932	0.60	0.96	1009	0.71	1.13	1072	0.82	—	—	—	
		1900	0.47	819	0.49	0.63	888	0.57	0.82	966	0.68	0.98	1031	0.79	1.18	1105	0.91	
		2000	0.33	774	0.46	0.49	843	0.54	0.67	922	0.65	0.83	990	0.75	1.02	1062	0.87	
		2100	0.19	729	0.44	0.34	798	0.52	0.52	879	0.62	0.68	949	0.72	0.87	1019	0.84	
		2200	0.04	683	0.41	0.20	754	0.49	0.38	836	0.59	0.54	908	0.69	0.71	976	0.80	
		2300	—	—	—	0.05	709	0.46	0.23	793	0.56	0.39	867	0.66	0.55	933	0.77	
	2400	—	—	—	—	—	—	0.09	750	0.53	0.24	826	0.63	0.40	890	0.73		
	YHC060E1,3,4**H Horizontal Airflow	1600	0.77	948	0.57	0.95	1016	0.66	1.10	1093	0.77	—	—	—	—	—	—	
		1700	0.63	903	0.54	0.80	973	0.63	0.96	1052	0.74	—	—	—	—	—	—	
		1800	0.48	859	0.51	0.66	930	0.60	0.81	1012	0.71	1.00	1084	0.83	—	—	—	
		1900	0.34	814	0.49	0.51	888	0.57	0.67	971	0.68	0.85	1042	0.79	1.01	1106	0.91	
		2000	0.20	770	0.46	0.36	845	0.55	0.52	931	0.65	0.70	1000	0.76	0.86	1063	0.87	
		2100	0.06	725	0.43	0.22	803	0.52	0.38	890	0.62	0.55	959	0.73	0.70	1021	0.84	
		2200	—	—	—	0.07	760	0.49	0.23	850	0.60	0.39	917	0.70	0.54	979	0.80	
2300		—	—	—	—	—	—	0.09	809	0.57	0.24	875	0.67	0.39	937	0.77		
2400	—	—	—	—	—	—	—	0.00	0.09	833	0.63	0.23	894	0.73	—	—		

For 036 Models, fan motor heat (MBH) = 2.72 x Fan Bhp + 0.16.

For 048 & 060 Models, fan motor heat (MBH) = 2.87 x Fan Bhp + 0.15.

Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

⁽¹⁾ Data includes pressure drop due to wet coil and filters.



Performance Data

(3-5 Tons R-410A Refrigerant)

Table 53. Multispeed Direct Drive Evaporator Fan Performance 3 – 5 Tons — WSC036, 048, 060E1

		External Static Pressure (Inches of Water) & Motor Power (Bhp) ⁽¹⁾															
Tons	Unit Model Number	CFM	Rated Speed Set 1			Standard Low Speed Speed Set 2			Mid Speed Speed Set 3			Standard High Speed Speed Set 4			OS High Speed Speed Set 5		
			ESP	RPM	BHP	ESP	RPM	BHP	ESP	RPM	BHP	ESP	RPM	BHP	ESP	RPM	BHP
3	WSC036E1 Downflow Airflow	960	0.43	707	0.21	0.70	843	0.38	0.88	919	0.38	1.02	979	0.36	1.15	1027	0.50
		1020	0.37	687	0.20	0.62	818	0.37	0.80	896	0.37	0.94	956	0.35	1.07	1006	0.49
		1080	0.31	668	0.19	0.55	792	0.36	0.73	872	0.36	0.87	933	0.34	0.99	985	0.48
		1140	0.25	648	0.19	0.47	766	0.35	0.65	849	0.35	0.79	911	0.33	0.91	964	0.47
		1200	0.19	628	0.18	0.39	740	0.34	0.57	826	0.34	0.71	888	0.32	0.83	943	0.46
		1260	0.13	609	0.18	0.31	715	0.32	0.50	803	0.33	0.63	866	0.32	0.75	922	0.45
		1320	0.07	589	0.17	0.24	689	0.31	0.42	780	0.32	0.56	843	0.31	0.68	901	0.44
		1380	0.01	569	0.17	0.16	663	0.30	0.34	757	0.31	0.48	820	0.30	0.60	880	0.43
		1440	—	—	—	0.08	637	0.29	0.26	734	0.30	0.40	798	0.29	0.52	859	0.42
	WSC036E1 Horizontal Airflow	960	0.40	707	0.21	0.69	856	0.31	0.88	941	0.39	1.03	987	0.45	1.16	1034	0.50
		1020	0.35	688	0.20	0.62	831	0.30	0.80	916	0.38	0.95	967	0.44	1.08	1011	0.49
		1080	0.30	669	0.19	0.55	806	0.29	0.73	891	0.37	0.87	947	0.43	1.00	989	0.48
		1140	0.24	650	0.19	0.48	781	0.28	0.65	866	0.36	0.79	927	0.42	0.92	966	0.47
		1200	0.19	631	0.18	0.41	756	0.28	0.58	841	0.35	0.71	906	0.41	0.84	943	0.46
		1260	0.14	612	0.18	0.34	731	0.27	0.50	816	0.34	0.63	886	0.40	0.76	920	0.45
		1320	0.09	593	0.17	0.26	706	0.26	0.43	791	0.33	0.55	866	0.39	0.68	898	0.44
		1380	0.04	574	0.17	0.19	681	0.25	0.35	766	0.32	0.47	846	0.38	0.60	875	0.43
		1440	—	—	—	0.12	655	0.24	0.28	741	0.30	0.40	826	0.37	0.52	852	0.42
	4	WSC048E1 Downflow Airflow	1280	0.60	865	0.36	0.84	977	0.47	1.02	1044	0.55	1.17	1090	0.63	—	—
1360			0.48	833	0.35	0.72	944	0.45	0.90	1012	0.54	1.04	1062	0.61	—	—	—
1440			0.37	802	0.34	0.60	912	0.44	0.77	980	0.52	0.92	1033	0.60	—	—	—
1520			0.25	770	0.32	0.48	879	0.42	0.65	948	0.50	0.80	1005	0.58	1.06	1100	0.69
1600			0.14	739	0.31	0.36	846	0.41	0.52	915	0.49	0.68	976	0.56	0.92	1069	0.67
1680			0.02	707	0.30	0.24	814	0.39	0.39	883	0.47	0.56	948	0.55	0.78	1038	0.65
1760			—	—	—	0.13	781	0.38	0.27	851	0.45	0.43	920	0.53	0.64	1006	0.63
1840			—	—	—	0.01	748	0.36	0.14	819	0.43	0.31	891	0.52	0.50	975	0.62
1920			—	—	—	—	—	—	0.02	787	0.42	0.19	863	0.50	0.37	944	0.60
WSC048E1 Horizontal Airflow		1280	0.61	864	0.36	0.84	967	0.47	1.00	1038	0.55	1.16	1115	0.65	—	—	—
		1360	0.51	831	0.35	0.73	935	0.45	0.88	1006	0.53	1.05	1084	0.63	—	—	—
		1440	0.40	798	0.33	0.62	904	0.44	0.77	974	0.52	0.94	1052	0.61	1.10	1114	0.70
		1520	0.30	766	0.32	0.51	873	0.42	0.66	943	0.50	0.82	1020	0.59	0.99	1084	0.68
		1600	0.19	733	0.31	0.40	842	0.41	0.55	911	0.48	0.71	989	0.57	0.87	1054	0.66
		1680	0.09	701	0.29	0.29	810	0.39	0.44	879	0.47	0.60	957	0.55	0.75	1023	0.65
		1760	—	—	—	0.18	779	0.38	0.32	848	0.45	0.48	925	0.54	0.64	993	0.63
		1840	—	—	—	0.08	748	0.36	0.21	816	0.43	0.37	893	0.52	0.52	963	0.61
		1920	—	—	—	—	—	—	0.10	784	0.42	0.26	861	0.50	0.40	932	0.59
5		WSC060E1 Downflow Airflow	1600	0.83	888	0.49	0.95	948	0.56	1.19	1048	0.67	—	—	—	—	—
	1700		0.69	847	0.46	0.82	908	0.53	1.04	1004	0.64	1.33	1110	0.78	—	—	—
	1800		0.56	806	0.44	0.69	867	0.51	0.90	959	0.62	1.18	1063	0.75	—	—	—
	1900		0.43	764	0.42	0.56	826	0.48	0.76	915	0.59	1.02	1016	0.71	—	—	—
	2000		0.30	723	0.40	0.43	785	0.46	0.62	870	0.56	0.87	969	0.68	1.18	1089	0.88
	2100		0.16	681	0.37	0.30	744	0.44	0.47	826	0.53	0.71	922	0.65	1.03	1044	0.84
	2200		0.03	640	0.35	0.17	703	0.41	0.33	781	0.50	0.56	876	0.61	0.87	999	0.81
	2300		—	—	—	0.04	663	0.39	0.19	737	0.47	0.41	829	0.58	0.72	954	0.77
	2400		—	—	—	—	—	—	0.05	693	0.44	0.25	782	0.55	0.56	909	0.73
	WSC060E1 Horizontal Airflow	1600	0.76	884	0.48	0.82	932	0.55	0.98	1022	0.66	1.13	1104	0.77	—	—	—
		1700	0.63	842	0.46	0.69	893	0.52	0.85	981	0.63	1.00	1061	0.74	—	—	—
		1800	0.50	801	0.44	0.57	854	0.50	0.72	941	0.60	0.87	1018	0.71	—	—	—
		1900	0.36	759	0.42	0.45	815	0.48	0.60	900	0.58	0.74	975	0.68	—	—	—
		2000	0.23	718	0.39	0.32	776	0.46	0.47	859	0.55	0.61	932	0.65	0.87	1069	0.86
		2100	0.10	676	0.37	0.20	737	0.43	0.34	818	0.53	0.49	890	0.62	0.74	1025	0.83
		2200	—	—	—	0.07	699	0.41	0.22	778	0.50	0.36	847	0.59	0.61	980	0.79
		2300	—	—	—	—	—	—	0.09	737	0.47	0.23	804	0.56	0.48	936	0.75
		2400	—	—	—	—	—	—	—	—	—	0.10	761	0.53	0.35	892	0.72

For 036 Models, fan motor heat (MBH) = 2.72 x Fan Bhp + 0.16.

For 048 & 060 Models, fan motor heat (MBH) = 2.87 x Fan Bhp + 0.15.

Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

⁽¹⁾ Data includes pressure drop due to wet coil and filters.



Performance Data

Table 54. Belt Drive Evaporator Fan Performance — 3 Tons — TSC036E3,E4,EW No Electric Heat Downflow Airflow

CFM	External Static Pressure (Inches of Water)																			
	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Field Supplied Low Static Drive⁽ⁱ⁾										1-HP Standard Motor & Drive										
960	—	—	—	—	608	0.17	676	0.22	734	0.27	785	0.32	833	0.37	878	0.42	922	0.47	963	0.53
1080	—	—	557	0.15	629	0.20	697	0.25	757	0.30	809	0.36	857	0.42	901	0.47	944	0.53	983	0.59
1200	—	—	588	0.18	653	0.23	718	0.29	777	0.35	832	0.41	881	0.47	925	0.53	967	0.59	1006	0.66
1320	553	0.17	621	0.22	681	0.27	741	0.33	799	0.39	854	0.46	903	0.53	948	0.59	990	0.66	1030	0.73
1440	591	0.21	655	0.27	712	0.32	766	0.38	821	0.44	873	0.51	923	0.58	970	0.66	1014	0.73	1053	0.80

Continued

CFM	External Static Pressure (Inches of Water)									
	1.10		1.20		1.30		1.40		1.50	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Drive										
960	1002	0.59	1039	0.65	1073	0.70	1107	0.76	1138	0.82
1080	1022	0.65	1059	0.71	1095	0.78	1129	0.84	1162	0.91
1200	1044	0.72	1081	0.79	1115	0.85	1149	0.92	1183	0.99
1320	1068	0.80	1104	0.87	1138	0.94	1172	1.01	1205	1.08
1440	1091	0.88	1127	0.95	1161	1.03	1195	1.10	1227	1.18
1-HP Standard Motor & Field Supplied High Static Drive⁽ⁱⁱ⁾										

For Standard Evaporator Fan Speed (RPM), reference [Table 96](#).
 Notes: Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data. Data does not include pressure drop due to reheat coil. Refer to [Table 105](#) to determine additional static pressure drop due to other options/accessories.
 1-HP Fan Motor Heat (MBH) = 2.7672 x Fan BHP + 0.4705.
 Factory supplied motors, in equipment, are definite purpose motors, specifically designed and tested to operate at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

⁽ⁱ⁾ Field Supplied Fan Sheave AK71x3/4" required. Field Supplied Belt may be necessary.
⁽ⁱⁱ⁾ Field Supplied Fan Sheave AK41x3/4" required. Field Supplied Belt may be necessary.

Table 55. Belt Drive Evaporator Fan Performance — 3 Tons — TSC036E3,E4,EW No Electric Heat Horizontal Airflow

CFM	External Static Pressure (Inches of Water)																			
	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Field Supplied Low Static Drive⁽ⁱ⁾										1-HP Standard Motor & Drive										
960	—	—	—	—	619	0.16	680	0.20	738	0.25	791	0.30	840	0.35	885	0.39	927	0.44	968	0.49
1080	—	—	570	0.14	647	0.19	708	0.24	762	0.29	814	0.34	863	0.39	908	0.45	950	0.50	991	0.55
1200	—	—	595	0.17	674	0.23	736	0.28	789	0.33	839	0.39	885	0.44	931	0.50	973	0.56	1013	0.62
1320	551	0.16	622	0.20	698	0.26	764	0.33	817	0.38	866	0.44	911	0.50	954	0.56	997	0.62	1036	0.68
1440	588	0.20	653	0.24	722	0.30	789	0.37	846	0.44	894	0.50	938	0.56	980	0.63	1020	0.69	1060	0.76

Continued

CFM	External Static Pressure (Inches of Water)									
	1.10		1.20		1.30		1.40		1.50	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Drive										
960	1005	0.54	1040	0.59	1074	0.64	1107	0.69	1139	0.74
1080	1029	0.61	1066	0.67	1100	0.72	1134	0.77	1165	0.83
1200	1052	0.68	1088	0.74	1124	0.80	1157	0.86	1190	0.92
1320	1074	0.75	1112	0.82	1147	0.88	1181	0.95	1213	1.02
1440	1098	0.83	1134	0.90	1169	0.97	1203	1.04	1237	1.11
1-HP Standard Motor & Field Supplied High Static Drive⁽ⁱⁱ⁾										

For Standard Evaporator Fan Speed (RPM), reference [Table 96](#).
 Notes: Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data. Data does not include pressure drop due to reheat coil. Refer to [Table 105](#) to determine additional static pressure drop due to other options/accessories.
 1-HP Fan Motor Heat (MBH) = 2.7672 x Fan BHP + 0.4705.
 Factory supplied motors, in equipment, are definite purpose motors, specifically designed and tested to operate at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

⁽ⁱ⁾ Field Supplied Fan Sheave AK71x3/4" required. Field Supplied Belt may be necessary.
⁽ⁱⁱ⁾ Field Supplied Fan Sheave AK41x3/4" required. Field Supplied Belt may be necessary.



Performance Data

(3 Tons High Efficiency)

Table 56. Belt Drive Evaporator Fan Performance — 3 Tons — THC036E3,E4 No Electric Heat Downflow Airflow

External Static Pressure (Inches of Water)																				
CFM	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Field Supplied Low Static Drive⁽ⁱ⁾										1-HP Standard Motor & Drive										
960	—	—	—	—	608	0.17	676	0.22	734	0.27	785	0.32	833	0.37	878	0.42	922	0.47	963	0.53
1080	—	—	557	0.15	629	0.20	697	0.25	757	0.30	809	0.36	857	0.42	901	0.47	944	0.53	983	0.59
1200	—	—	588	0.18	653	0.23	718	0.29	777	0.35	832	0.41	881	0.47	925	0.53	967	0.59	1006	0.66
1320	553	0.17	621	0.22	681	0.27	741	0.33	799	0.39	854	0.46	903	0.53	948	0.59	990	0.66	1030	0.73
1440	591	0.21	655	0.27	712	0.32	766	0.38	821	0.44	873	0.51	923	0.58	970	0.66	1014	0.73	1053	0.80
Continued																				
External Static Pressure (Inches of Water)																				
CFM	1.10		1.20		1.30		1.40		1.50											
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP										
1-HP Standard Motor & Drive																				
960	1002	0.59	1039	0.65	1073	0.70	1107	0.76	1138	0.82										
1080	1022	0.65	1059	0.71	1095	0.78	1129	0.84	1162	0.91										
1200	1044	0.72	1081	0.79	1115	0.85	1149	0.92	1183	0.99										
1320	1068	0.80	1104	0.87	1138	0.94	1172	1.01	1205	1.08										
1440	1091	0.88	1127	0.95	1161	1.03	1195	1.10	1227	1.18										
1-HP Standard Motor & Field Supplied High Static Drive⁽ⁱⁱ⁾																				

For Standard Evaporator Fan Speed (RPM), reference [Table 96](#).
 Notes: Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data. Data does not include pressure drop due to reheat coil. Refer to [Table 105](#) to determine additional static pressure drop due to other options/accessories.
 1-HP Fan Motor Heat (MBH) = 2.7672 x Fan BHP+0.4705.
 Factory supplied motors, in equipment, are definite purpose motors, specifically designed and tested to operate at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

(i) Field Supplied Fan Sheave AK71x3/4" required. Field Supplied Belt may be necessary.
 (ii) Field Supplied Fan Sheave AK41x3/4" required. Field Supplied Belt may be necessary.

Table 57. Belt Drive Evaporator Fan Performance — 3 Tons — THC036E3,E4 No Electric Heat Horizontal Airflow

External Static Pressure (Inches of Water)																				
CFM	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Field Supplied Low Static Drive⁽ⁱ⁾										1-HP Standard Motor & Drive										
960	—	—	—	—	619	0.16	680	0.20	738	0.25	791	0.30	840	0.35	885	0.39	927	0.44	968	0.49
1080	—	—	570	0.14	647	0.19	708	0.24	762	0.29	814	0.34	863	0.39	908	0.45	950	0.50	991	0.55
1200	—	—	595	0.17	674	0.23	736	0.28	789	0.33	839	0.39	885	0.44	931	0.50	973	0.56	1013	0.62
1320	551	0.16	622	0.20	698	0.26	764	0.33	817	0.38	866	0.44	911	0.50	954	0.56	997	0.62	1036	0.68
1440	588	0.20	653	0.24	722	0.30	789	0.37	846	0.44	894	0.50	938	0.56	980	0.63	1020	0.69	1060	0.76
Continued																				
External Static Pressure (Inches of Water)																				
CFM	1.10		1.20		1.30		1.40		1.50											
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP										
1-HP Standard Motor & Drive																				
960	1005	0.54	1040	0.59	1074	0.64	1107	0.69	1139	0.74										
1080	1029	0.61	1066	0.67	1100	0.72	1134	0.77	1165	0.83										
1200	1052	0.68	1088	0.74	1124	0.80	1157	0.86	1190	0.92										
1320	1074	0.75	1112	0.82	1147	0.88	1181	0.95	1213	1.02										
1440	1098	0.83	1134	0.90	1169	0.97	1203	1.04	1237	1.11										
1-HP Standard Motor & Field Supplied High Static Drive⁽ⁱⁱ⁾																				

For Standard Evaporator Fan Speed (RPM), reference [Table 96](#).
 Notes: Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data. Data does not include pressure drop due to reheat coil. Refer to [Table 105](#) to determine additional static pressure drop due to other options/accessories.
 1-HP Fan Motor Heat (MBH) = 2.7672 x Fan BHP+0.4705.
 Factory supplied motors, in equipment, are definite purpose motors, specifically designed and tested to operate at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

(i) Field Supplied Fan Sheave AK71x3/4" required. Field Supplied Belt may be necessary.
 (ii) Field Supplied Fan Sheave AK41x3/4" required. Field Supplied Belt may be necessary.



Performance Data

(3 Tons R-410A Refrigerant)

Table 58. Belt Drive Evaporator Fan Performance — 3 Tons — YSC036E3,E4,EW*L,M Low & Medium Gas Heat Downflow Airflow

CFM	External Static Pressure (Inches of Water)																			
	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Field Supplied Low Static Drive⁽ⁱ⁾										1-HP Standard Motor & Drive										
960	—	—	—	—	600	0.15	664	0.19	722	0.23	774	0.27	824	0.31	870	0.36	913	0.41	952	0.45
1080	—	—	560	0.14	625	0.17	687	0.22	743	0.26	795	0.31	844	0.36	890	0.40	933	0.45	973	0.51
1200	—	—	593	0.17	655	0.21	712	0.25	767	0.30	817	0.35	865	0.40	910	0.45	952	0.51	993	0.56
1320	—	—	626	0.20	685	0.25	740	0.29	791	0.34	841	0.40	887	0.45	931	0.51	974	0.56	1014	0.62
1440	592	0.20	660	0.25	718	0.29	769	0.34	818	0.39	866	0.45	911	0.51	955	0.57	996	0.63	1034	0.69

Continued

CFM	External Static Pressure (Inches of Water)									
	1.10		1.20		1.30		1.40		1.50	
RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	
1-HP Standard Motor & Drive										
960	990	0.50	1025	0.55	1058	0.59	1091	0.64	1120	0.69
1080	1012	0.56	1047	0.61	1083	0.66	1116	0.72	1148	0.77
1200	1032	0.62	1069	0.67	1104	0.73	1138	0.79	1171	0.85
1320	1051	0.68	1088	0.74	1124	0.80	1159	0.86	1191	0.93
1440	1072	0.75	1108	0.81	1145	0.88	1179	0.94	1212	1.01
1-HP Standard Motor & Field Supplied High Static Drive⁽ⁱⁱ⁾										

For Standard Evaporator Fan Speed (RPM), reference [Table 96](#).

Notes: Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data. Data does not include pressure drop due to reheat coil.

Refer to [Table 105](#) to determine additional static pressure drop due to other options/accessories.

1-HP Fan Motor Heat (MBH) = 2.7672 x Fan BHP + 0.4705.

Factory supplied motors, in equipment, are definite purpose motors, specifically designed and tested to operate at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

⁽ⁱ⁾ Field Supplied Fan Sheave AK71x3/4" required. Field Supplied Belt may be necessary.

⁽ⁱⁱ⁾ Field Supplied Fan Sheave AK41x3/4" required. Field Supplied Belt may be necessary.

Table 59. Belt Drive Evaporator Fan Performance — 3 Tons — YSC036E3,E4,EW*L,M Low & Medium Gas Heat Horizontal Airflow

CFM	External Static Pressure (Inches of Water)																			
	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Field Supplied Low Static Drive⁽ⁱ⁾										1-HP Standard Motor & Drive										
960	—	—	—	—	605	0.15	670	0.19	726	0.24	776	0.28	824	0.32	871	0.37	915	0.42	955	0.47
1080	—	—	556	0.14	628	0.18	693	0.23	750	0.27	801	0.32	847	0.37	891	0.42	932	0.47	975	0.52
1200	—	—	584	0.17	653	0.21	717	0.26	773	0.31	825	0.37	872	0.42	915	0.47	955	0.52	994	0.58
1320	—	—	614	0.20	679	0.25	740	0.30	796	0.36	848	0.41	896	0.47	940	0.53	980	0.59	1018	0.65
1440	582	0.19	646	0.24	708	0.29	767	0.35	820	0.40	871	0.47	920	0.53	963	0.59	1005	0.66	1043	0.72

Continued

CFM	External Static Pressure (Inches of Water)									
	1.10		1.20		1.30		1.40		1.50	
RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	
1-HP Standard Motor & Drive										
960	994	0.52	1031	0.58	1066	0.63	1101	0.69	1131	0.74
1080	1013	0.58	1051	0.63	1087	0.69	1122	0.75	1155	0.81
1200	1032	0.63	1069	0.69	1105	0.75	1140	0.82	1175	0.88
1320	1056	0.70	1090	0.76	1125	0.82	1159	0.89	1193	0.96
1440	1079	0.78	1114	0.84	1148	0.91	1181	0.97	1211	1.04
1-HP Standard Motor & Field Supplied High Static Drive⁽ⁱⁱ⁾										

For Standard Evaporator Fan Speed (RPM), reference [Table 96](#).

Notes: Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data. Data does not include pressure drop due to reheat coil.

Refer to [Table 105](#) to determine additional static pressure drop due to other options/accessories.

1-HP Fan Motor Heat (MBH) = 2.7672 x Fan BHP + 0.4705.

Factory supplied motors, in equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

⁽ⁱ⁾ Field Supplied Fan Sheave AK71x3/4" required. Field Supplied Belt may be necessary.

⁽ⁱⁱ⁾ Field Supplied Fan Sheave AK41x3/4" required. Field Supplied Belt may be necessary.



Performance Data

(3 Tons High Efficiency)

Table 60. Belt Drive Evaporator Fan Performance — 3 Tons — YHC036E3,E4*L,M Low & Medium Gas Heat Downflow Airflow

CFM	External Static Pressure (Inches of Water)																			
	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Field Supplied Low Static Drive⁽ⁱ⁾										1-HP Standard Motor & Drive										
960	—	—	—	—	600	0.15	664	0.19	722	0.23	774	0.27	824	0.31	870	0.36	913	0.41	952	0.45
1080	—	—	560	0.14	625	0.17	687	0.22	743	0.26	795	0.31	844	0.36	890	0.40	933	0.45	973	0.51
1200	—	—	593	0.17	655	0.21	712	0.25	767	0.30	817	0.35	865	0.40	910	0.45	952	0.51	993	0.56
1320	—	—	626	0.20	685	0.25	740	0.29	791	0.34	841	0.40	887	0.45	931	0.51	974	0.56	1014	0.62
1440	592	0.20	660	0.25	718	0.29	769	0.34	818	0.39	866	0.45	911	0.51	955	0.57	996	0.63	1034	0.69

Continued

CFM	External Static Pressure (Inches of Water)									
	1.10		1.20		1.30		1.40		1.50	
RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	
1-HP Standard Motor & Drive										
960	990	0.50	1025	0.55	1058	0.59	1091	0.64	1120	0.69
1080	1012	0.56	1047	0.61	1083	0.66	1116	0.72	1148	0.77
1200	1032	0.62	1069	0.67	1104	0.73	1138	0.79	1171	0.85
1320	1051	0.68	1088	0.74	1124	0.80	1159	0.86	1191	0.93
1440	1072	0.75	1108	0.81	1145	0.88	1179	0.94	1212	1.01
1-HP Standard Motor & Field Supplied High Static Drive⁽ⁱⁱ⁾										

For Standard Evaporator Fan Speed (RPM), reference [Table 96](#).

Notes: Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data. Data does not include pressure drop due to reheat coil.

Refer to [Table 105](#) to determine additional static pressure drop due to other options/accessories.

1-HP Fan Motor Heat (MBH) = 2.7672 x Fan BHP + 0.4705.

Factory supplied motors, in equipment, are definite purpose motors, specifically designed and tested to operate at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

⁽ⁱ⁾ Field Supplied Fan Sheave AK71x3/4" required. Field Supplied Belt may be necessary.

⁽ⁱⁱ⁾ Field Supplied Fan Sheave AK41x3/4" required. Field Supplied Belt may be necessary.

Table 61. Belt Drive Evaporator Fan Performance — 3 Tons — YHC036E3,E4*L,M Low & Medium Gas Heat Horizontal Airflow

CFM	External Static Pressure (Inches of Water)																			
	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Field Supplied Low Static Drive⁽ⁱ⁾										1-HP Standard Motor & Drive										
960	—	—	—	—	605	0.15	670	0.19	726	0.24	776	0.28	824	0.32	871	0.37	915	0.42	955	0.47
1080	—	—	556	0.14	628	0.18	693	0.23	750	0.27	801	0.32	847	0.37	891	0.42	932	0.47	975	0.52
1200	—	—	584	0.17	653	0.21	717	0.26	773	0.31	825	0.37	872	0.42	915	0.47	955	0.52	994	0.58
1320	—	—	614	0.20	679	0.25	740	0.30	796	0.36	848	0.41	896	0.47	940	0.53	980	0.59	1018	0.65
1440	582	0.19	646	0.24	708	0.29	767	0.35	820	0.40	871	0.47	920	0.53	963	0.59	1005	0.66	1043	0.72

Continued

CFM	External Static Pressure (Inches of Water)									
	1.10		1.20		1.30		1.40		1.50	
RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	
1-HP Standard Motor & Drive										
960	994	0.52	1031	0.58	1066	0.63	1101	0.69	1131	0.74
1080	1013	0.58	1051	0.63	1087	0.69	1122	0.75	1155	0.81
1200	1032	0.63	1069	0.69	1105	0.75	1140	0.82	1175	0.88
1320	1056	0.70	1090	0.76	1125	0.82	1159	0.89	1193	0.96
1440	1079	0.78	1114	0.84	1148	0.91	1181	0.97	1211	1.04
1-HP Standard Motor & Field Supplied High Static Drive⁽ⁱⁱ⁾										

For Standard Evaporator Fan Speed (RPM), reference [Table 96](#).

Notes: Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data. Data does not include pressure drop due to reheat coil.

Refer to [Table 105](#) to determine additional static pressure drop due to other options/accessories.

1-HP Fan Motor Heat (MBH) = 2.7672 x Fan BHP + 0.4705.

Factory supplied motors, in equipment, are definite purpose motors, specifically designed and tested to operate at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

⁽ⁱ⁾ Field Supplied Fan Sheave AK71x3/4" required. Field Supplied Belt may be necessary.

⁽ⁱⁱ⁾ Field Supplied Fan Sheave AK41x3/4" required. Field Supplied Belt may be necessary.



Performance Data

(3 Tons R-410A Refrigerant)

Table 62. Belt Drive Evaporator Fan Performance — 3 Tons — YSC036E3,E4,EW*HH High Gas Heat Downflow Airflow

External Static Pressure (Inches of Water)																				
CFM	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Field Supplied Low Static Drive⁽ⁱ⁾											1-HP Standard Motor & Drive									
960	—	—	—	—	603	0.15	664	0.19	722	0.24	775	0.28	824	0.33	869	0.37	912	0.42	953	0.47
1080	—	—	568	0.14	632	0.18	690	0.23	744	0.27	796	0.32	844	0.37	889	0.42	933	0.47	973	0.53
1200	—	—	602	0.18	663	0.22	718	0.27	770	0.31	819	0.36	865	0.42	911	0.47	953	0.53	993	0.58
1320	572	0.17	638	0.22	695	0.26	748	0.31	798	0.36	845	0.41	889	0.47	932	0.53	974	0.58	1015	0.65
1440	611	0.21	674	0.27	729	0.31	779	0.36	827	0.42	872	0.47	915	0.53	957	0.59	997	0.65	1036	0.72
Continued																				
External Static Pressure (Inches of Water)																				
CFM	1.10		1.20		1.30		1.40		1.50											
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP										
1-HP Standard Motor & Drive																				
960	990	0.52	1026	0.58	1060	0.63	1092	0.68	1123	0.73										
1080	1011	0.58	1047	0.63	1083	0.69	1115	0.75	1148	0.81										
1200	1033	0.64	1069	0.70	1105	0.76	1138	0.82	1170	0.88										
1320	1053	0.71	1089	0.77	1124	0.83	1159	0.90	1191	0.96										
1440	1074	0.78	1109	0.84	1145	0.91	1178	0.98	1212	1.05										
1-HP Standard Motor & Field Supplied High Static Drive⁽ⁱⁱ⁾																				

For Standard Evaporator Fan Speed (RPM), reference [Table 96](#).
 Notes: Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data. Data does not include pressure drop due to reheat coil. Refer to [Table 105](#) to determine additional static pressure drop due to other options/accessories.
 1-HP Fan Motor Heat (MBH) = 2.7672 x Fan BHP + 0.4705.
 Factory supplied motors, in equipment, are definite purpose motors, specifically designed and tested to operate at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

(i) Field Supplied Fan Sheave AK71x3/4" required. Field Supplied Belt may be necessary.
 (ii) Field Supplied Fan Sheave AK41x3/4" required. Field Supplied Belt may be necessary.

Table 63. Belt Drive Evaporator Fan Performance — 3 Tons — YSC036E3,E4,EW*HH High Gas Heat Horizontal Airflow

External Static Pressure (Inches of Water)																				
CFM	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Field Supplied Low Static Drive⁽ⁱ⁾											1-HP Standard Motor & Drive									
960	—	—	—	—	615	0.16	678	0.20	737	0.24	789	0.29	838	0.33	883	0.38	923	0.42	962	0.47
1080	—	—	576	0.14	643	0.19	704	0.23	760	0.28	812	0.32	861	0.38	906	0.43	949	0.48	988	0.53
1200	—	—	608	0.18	673	0.22	732	0.27	785	0.32	836	0.37	883	0.42	928	0.48	971	0.53	1012	0.59
1320	571	0.17	642	0.22	705	0.26	761	0.31	813	0.37	862	0.42	908	0.48	952	0.53	995	0.59	1034	0.66
1440	609	0.21	677	0.26	737	0.31	791	0.37	841	0.42	889	0.48	934	0.54	977	0.60	1017	0.66	1057	0.72
Continued																				
External Static Pressure (Inches of Water)																				
CFM	1.10		1.20		1.30		1.40		1.50											
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP										
1-HP Standard Motor & Drive																				
960	999	0.52	1034	0.57	1068	0.62	1100	0.67	1132	0.72										
1080	1024	0.58	1061	0.64	1094	0.69	1126	0.74	1156	0.79										
1200	1050	0.65	1086	0.71	1120	0.77	1153	0.83	1183	0.88										
1320	1072	0.72	1109	0.78	1145	0.85	1177	0.91	1209	0.98										
1440	1095	0.79	1132	0.86	1167	0.93	1201	1.00	1234	1.07										
1-HP Standard Motor & Field Supplied High Static Drive⁽ⁱⁱ⁾																				

For Standard Evaporator Fan Speed (RPM), reference [Table 96](#).
 Notes: Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data. Data does not include pressure drop due to reheat coil. Refer to [Table 105](#) to determine additional static pressure drop due to other options/accessories.
 1-HP Fan Motor Heat (MBH) = 2.7672 x Fan BHP + 0.4705.
 Factory supplied motors, in equipment, are definite purpose motors, specifically designed and tested to operate at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

(i) Field Supplied Fan Sheave AK71x3/4" required. Field Supplied Belt may be necessary.
 (ii) Field Supplied Fan Sheave AK41x3/4" required. Field Supplied Belt may be necessary.



Performance Data

(3 Tons High Efficiency)

Table 64. Belt Drive Evaporator Fan Performance — 3 Tons — YHC036E3,E4*HH High Gas Heat Downflow Airflow

External Static Pressure (Inches of Water)																					
CFM	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00		
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	
1-HP Standard Motor & Field Supplied Low Static Drive⁽ⁱ⁾											1-HP Standard Motor & Drive										
960	—	—	—	—	603	0.15	664	0.19	722	0.24	775	0.28	824	0.33	869	0.37	912	0.42	953	0.47	
1080	—	—	568	0.14	632	0.18	690	0.23	744	0.27	796	0.32	844	0.37	889	0.42	933	0.47	973	0.53	
1200	—	—	602	0.18	663	0.22	718	0.27	770	0.31	819	0.36	865	0.42	911	0.47	953	0.53	993	0.58	
1320	572	0.17	638	0.22	695	0.26	748	0.31	798	0.36	845	0.41	889	0.47	932	0.53	974	0.58	1015	0.65	
1440	611	0.21	674	0.27	729	0.31	779	0.36	827	0.42	872	0.47	915	0.53	957	0.59	997	0.65	1036	0.72	
Continued																					
External Static Pressure (Inches of Water)																					
CFM	1.10		1.20		1.30		1.40		1.50												
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP											
1-HP Standard Motor & Drive																					
960	990	0.52	1026	0.58	1060	0.63	1092	0.68	1123	0.73											
1080	1011	0.58	1047	0.63	1083	0.69	1115	0.75	1148	0.81											
1200	1033	0.64	1069	0.70	1105	0.76	1138	0.82	1170	0.88											
1320	1053	0.71	1089	0.77	1124	0.83	1159	0.90	1191	0.96											
1440	1074	0.78	1109	0.84	1145	0.91	1178	0.98	1212	1.05											
1-HP Standard Motor & Field Supplied High Static Drive⁽ⁱⁱ⁾																					

For Standard Evaporator Fan Speed (RPM), reference [Table 96](#).
 Notes: Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data. Data does not include pressure drop due to reheat coil. Refer to [Table 105](#) to determine additional static pressure drop due to other options/accessories.
 1-HP Fan Motor Heat (MBH) = 2.7672 x Fan BHP+0.4705.
 Factory supplied motors, in equipment, are definite purpose motors, specifically designed and tested to operate at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

⁽ⁱ⁾ Field Supplied Fan Sheave AK71x3/4" required. Field Supplied Belt may be necessary.
⁽ⁱⁱ⁾ Field Supplied Fan Sheave AK41x3/4" required. Field Supplied Belt may be necessary.

Table 65. Belt Drive Evaporator Fan Performance — 3 Tons — YHC036E3,E4*HH High Gas Heat Horizontal Airflow

External Static Pressure (Inches of Water)																					
CFM	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00		
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	
1-HP Standard Motor & Field Supplied Low Static Drive⁽ⁱ⁾											1-HP Standard Motor & Drive										
960	—	—	—	—	615	0.16	678	0.20	737	0.24	789	0.29	838	0.33	883	0.38	923	0.42	962	0.47	
1080	—	—	576	0.14	643	0.19	704	0.23	760	0.28	812	0.32	861	0.38	906	0.43	949	0.48	988	0.53	
1200	—	—	608	0.18	673	0.22	732	0.27	785	0.32	836	0.37	883	0.42	928	0.48	971	0.53	1012	0.59	
1320	571	0.17	642	0.22	705	0.26	761	0.31	813	0.37	862	0.42	908	0.48	952	0.53	995	0.59	1034	0.66	
1440	609	0.21	677	0.26	737	0.31	791	0.37	841	0.42	889	0.48	934	0.54	977	0.60	1017	0.66	1057	0.72	
Continued																					
External Static Pressure (Inches of Water)																					
CFM	1.10		1.20		1.30		1.40		1.50												
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP											
1-HP Standard Motor & Drive																					
960	999	0.52	1034	0.57	1068	0.62	1100	0.67	1132	0.72											
1080	1024	0.58	1061	0.64	1094	0.69	1126	0.74	1156	0.79											
1200	1050	0.65	1086	0.71	1120	0.77	1153	0.83	1183	0.88											
1320	1072	0.72	1109	0.78	1145	0.85	1177	0.91	1209	0.98											
1440	1095	0.79	1132	0.86	1167	0.93	1201	1.00	1234	1.07											
1-HP Standard Motor & Field Supplied High Static Drive⁽ⁱⁱ⁾																					

For Standard Evaporator Fan Speed (RPM), reference [Table 96](#).
 Notes: Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data. Data does not include pressure drop due to reheat coil. Refer to [Table 105](#) to determine additional static pressure drop due to other options/accessories.
 1-HP Fan Motor Heat (MBH) = 2.7672 x Fan BHP+0.4705.
 Factory supplied motors, in equipment, are definite purpose motors, specifically designed and tested to operate at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

⁽ⁱ⁾ Field Supplied Fan Sheave AK71x3/4" required. Field Supplied Belt may be necessary.
⁽ⁱⁱ⁾ Field Supplied Fan Sheave AK41x3/4" required. Field Supplied Belt may be necessary.



Performance Data

(3 Tons R-410A Refrigerant)

Table 66. Belt Drive Evaporator Fan Performance — 3 Tons — WSC036E3,E4,EW Downflow Airflow

CFM	External Static Pressure (Inches of Water)																			
	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Field Supplied Low Static Drive⁽ⁱ⁾										1-HP Standard Motor & Drive										
960	—	—	570	0.14	635	0.19	697	0.23	756	0.28	809	0.34	858	0.39	900	0.44	939	0.49	976	0.54
1080	—	—	606	0.18	669	0.23	726	0.27	780	0.33	834	0.38	883	0.44	929	0.50	970	0.56	1008	0.62
1200	572	0.18	644	0.23	705	0.28	758	0.33	809	0.38	858	0.44	907	0.50	953	0.57	997	0.63	1037	0.70
1320	613	0.22	682	0.28	741	0.33	793	0.39	842	0.44	889	0.50	933	0.56	977	0.63	1020	0.70	1062	0.78
1440	655	0.27	722	0.34	779	0.40	830	0.46	877	0.52	921	0.58	963	0.64	1004	0.71	1045	0.78	1086	0.86

Continued

CFM	External Static Pressure (Inches of Water)									
	1.10		1.20		1.30		1.40		1.50	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Drive										
960	1011	0.59	1046	0.64	1081	0.69	1113	0.74	1146	0.80
1080	1042	0.67	1077	0.73	1109	0.79	1141	0.84	1173	0.90
1200	1074	0.76	1108	0.83	1141	0.89	1172	0.95	1202	1.02
1320	1100	0.85	1137	0.92	1172	1.00	1203	1.06	1233	1.13
1440	1124	0.94	1161	1.01	1196	1.09	1231	1.18	—	—
1-HP Standard Motor & Field Supplied High Static Drive⁽ⁱⁱ⁾										

For Standard Evaporator Fan Speed (RPM), reference [Table 96](#).

Notes: Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data. Data does not include pressure drop due to reheat coil. Refer to [Table 105](#) to determine additional static pressure drop due to other options/accessories.

1-HP Fan Motor Heat (MBH) = 2.7672 x Fan BHP + 0.4705. Factory supplied motors, in equipment, are definite purpose motors, specifically designed and tested to operate at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

⁽ⁱ⁾ Field Supplied Fan Sheave AK71x3/4" required. Field Supplied Belt may be necessary.

⁽ⁱⁱ⁾ Field Supplied Fan Sheave AK41x3/4" required. Field Supplied Belt may be necessary.

Table 67. Belt Drive Evaporator Fan Performance — 3 Tons — WSC036E3,E4,EW Horizontal Airflow

CFM	External Static Pressure (Inches of Water)																			
	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Field Supplied Low Static Drive⁽ⁱ⁾										1-HP Standard Motor & Drive										
960	—	—	555	0.13	635	0.17	703	0.22	761	0.27	812	0.32	858	0.37	900	0.42	939	0.46	977	0.51
1080	—	—	585	0.16	659	0.21	727	0.26	787	0.31	841	0.37	888	0.42	930	0.47	969	0.53	1007	0.58
1200	549	0.15	618	0.19	685	0.24	751	0.30	811	0.36	866	0.42	915	0.48	960	0.54	1001	0.60	1037	0.66
1320	590	0.19	654	0.24	716	0.29	777	0.35	836	0.41	890	0.47	940	0.54	986	0.60	1028	0.67	1068	0.74
1440	633	0.24	692	0.29	749	0.34	805	0.40	860	0.46	914	0.53	964	0.60	1010	0.67	1054	0.75	1094	0.82

Continued

CFM	External Static Pressure (Inches of Water)									
	1.10		1.20		1.30		1.40		1.50	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Drive										
960	1014	0.57	1049	0.62	1082	0.67	1115	0.73	1149	0.78
1080	1044	0.64	1077	0.70	1110	0.75	1144	0.81	1175	0.87
1200	1073	0.72	1108	0.78	1140	0.84	1172	0.90	1203	0.97
1320	1104	0.80	1139	0.87	1171	0.94	1203	1.01	1233	1.07
1440	1133	0.89	1169	0.97	1202	1.04	1234	1.11	—	—
1-HP Standard Motor & Field Supplied High Static Drive⁽ⁱⁱ⁾										

For Standard Evaporator Fan Speed (RPM), reference [Table 96](#).

Notes: Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data. Data does not include pressure drop due to reheat coil. Refer to [Table 105](#) to determine additional static pressure drop due to other options/accessories.

1-HP Fan Motor Heat (MBH) = 2.7672 x Fan BHP + 0.4705. Factory supplied motors, in equipment, are definite purpose motors, specifically designed and tested to operate at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

⁽ⁱ⁾ Field Supplied Fan Sheave AK71x3/4" required. Field Supplied Belt may be necessary.

⁽ⁱⁱ⁾ Field Supplied Fan Sheave AK41x3/4" required. Field Supplied Belt may be necessary.



Performance Data

(4 Tons R-410A Refrigerant)

Table 68. Belt Drive Evaporator Fan Performance — 4 Tons — TSC048E3,E4,EW No Electric Heat Downflow Airflow

CFM	External Static Pressure (Inches of Water)																				
	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00		
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	
1-HP Standard Motor & Field Supplied Low Static Drive⁽ⁱ⁾										1-HP Standard Motor & Drive											
1280	—	—	613	0.20	672	0.24	725	0.29	778	0.34	830	0.39	879	0.45	923	0.51	965	0.56	1005	0.63	
1440	592	0.20	657	0.25	716	0.30	765	0.35	812	0.40	859	0.46	906	0.52	952	0.58	995	0.65	1034	0.71	
1600	644	0.26	703	0.32	760	0.37	809	0.43	853	0.49	895	0.54	936	0.60	980	0.67	1023	0.74	1062	0.81	
1760	696	0.34	751	0.39	804	0.46	853	0.52	897	0.58	936	0.64	975	0.71	1012	0.77	1052	0.84	1091	0.91	
1920	750	0.43	801	0.49	850	0.55	897	0.62	941	0.70	980	0.76	1017	0.83	1052	0.89	1087	0.96	1122	1.04	
Continued																					
CFM	External Static Pressure (Inches of Water)																				
	1.10		1.20		1.30		1.40		1.50												
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP											
1-HP Standard Motor & Drive																					
1280	1043	0.69	1080	0.75	1117	0.81	1152	0.88	1185	0.94											
1440	1071	0.78	1107	0.84	1142	0.91	1176	0.98	1208	1.05											
1600	1101	0.88	1137	0.95	1171	1.03	1205	1.10	1237	1.17											
1760	1129	0.99	1165	1.07	1200	1.14	1234	1.23	1266	1.31											
1920	1157	1.11	1193	1.19	1227	1.27	1262	1.36	—	—											
1-HP Standard Motor & Field Supplied High Static Drive⁽ⁱⁱ⁾																					

For Standard Evaporator Fan Speed (RPM), reference [Table 96](#).
 Notes: Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data. Data does not include pressure drop due to reheat coil. Refer to [Table 105](#) to determine additional static pressure drop due to other options/accessories.
 1-HP Fan Motor Heat (MBH) = 2.7672 x Fan BHP + 0.4705.
 Factory supplied motors, in equipment, are definite purpose motors, specifically designed and tested to operate at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

(i) Field Supplied Fan Sheave AK71x3/4" required. Field Supplied Belt may be necessary.
 (ii) Field Supplied Fan Sheave AK41x3/4" required. Field Supplied Belt may be necessary.

Table 69. Belt Drive Evaporator Fan Performance — 4 Tons — TSC048E3,E4,EW No Electric Heat Horizontal Airflow

CFM	External Static Pressure (Inches of Water)																				
	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00		
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	
1-HP Standard Motor & Field Supplied Low Static Drive⁽ⁱ⁾										1-HP Standard Motor & Drive											
1280	—	—	627	0.20	696	0.26	757	0.31	810	0.37	859	0.42	902	0.48	943	0.54	981	0.60	1019	0.66	
1440	601	0.20	670	0.26	736	0.32	794	0.38	848	0.44	896	0.50	941	0.57	982	0.63	1020	0.70	1056	0.76	
1600	653	0.27	715	0.32	776	0.39	834	0.45	886	0.52	935	0.59	979	0.66	1020	0.73	1059	0.80	1095	0.87	
1760	706	0.34	763	0.40	820	0.47	874	0.54	925	0.61	972	0.69	1017	0.77	1058	0.84	1096	0.92	1134	1.00	
1920	759	0.43	813	0.50	865	0.57	916	0.64	965	0.72	1011	0.80	1054	0.88	1096	0.97	1135	1.05	1172	1.13	
										1-HP Standard Motor & Field Supplied Low Static Drive⁽ⁱⁱ⁾											
Continued																					
CFM	External Static Pressure (Inches of Water)																				
	1.10		1.20		1.30		1.40		1.50												
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP											
1-HP Standard Motor & Drive																					
1280	1054	0.71	1089	0.77	1122	0.83	1156	0.90	1187	0.97											
1440	1090	0.82	1125	0.89	1157	0.96	1189	1.02	1220	1.09											
1600	1130	0.95	1162	1.02	1195	1.09	1225	1.16	1255	1.23											
1760	1168	1.08	1201	1.15	1233	1.24	1263	1.31	1292	1.39											
1920	1206	1.22	1239	1.30	1272	1.39	1302	1.47	—	—											
1-HP Standard Motor & Field Supplied High Static Drive⁽ⁱⁱⁱ⁾																					

For Standard Evaporator Fan Speed (RPM), reference [Table 96](#).
 Notes: Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data. Data does not include pressure drop due to reheat coil. Refer to [Table 105](#) to determine additional static pressure drop due to other options/accessories.
 1-HP Fan Motor Heat (MBH) = 2.7672 x Fan BHP + 0.4705.
 Factory supplied motors, in equipment, are definite purpose motors, specifically designed and tested to operate at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

(i) Field Supplied Fan Sheave AK71x3/4" required. Field Supplied Belt may be necessary.
 (ii) Field Supplied Fan Sheave AK41x3/4" required. Field Supplied Belt may be necessary.
 (iii) Field Supplied Fan Sheave AK41x3/4" required. Field Supplied Belt may be necessary.



Performance Data

(4 Tons High Efficiency)

Table 70. Belt Drive Evaporator Fan Performance — 4 Tons — THC048E3,E4 No Electric Heat Downflow Airflow

External Static Pressure (Inches of Water)																					
		.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
CFM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Field Supplied Low Static Drive⁽ⁱ⁾											1-HP Standard Motor & Drive										
1280	—	—	—	—	574	0.17	635	0.21	692	0.26	745	0.30	795	0.35	842	0.40	886	0.45	930	0.51	
1440	—	—	533	0.17	598	0.21	657	0.26	711	0.30	762	0.35	811	0.40	857	0.45	900	0.51	943	0.57	
1600	—	—	563	0.21	625	0.26	681	0.31	734	0.36	782	0.41	828	0.46	874	0.51	917	0.57	957	0.63	
1760	526	0.20	594	0.26	652	0.31	706	0.36	757	0.42	804	0.47	849	0.53	891	0.58	933	0.64	974	0.70	
1920	561	0.25	624	0.31	682	0.37	734	0.43	783	0.49	829	0.55	871	0.60	913	0.66	953	0.72	992	0.79	

Continued

External Static Pressure (Inches of Water)											
		1.10		1.20		1.30		1.40		1.50	
CFM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	
1-HP Standard Motor & Drive											
1280	971	0.56	1010	0.62	1049	0.68	1083	0.74	1118	0.80	
1440	981	0.62	1020	0.68	1058	0.74	1096	0.81	1131	0.87	
1600	997	0.69	1034	0.75	1070	0.82	1106	0.88	1140	0.95	
1760	1012	0.77	1049	0.83	1086	0.90	1119	0.96	1153	1.03	
1920	1029	0.85	1064	0.92	1100	0.99	1135	1.06	1168	1.13	
1-HP Standard Motor & Field Supplied High Static Drive⁽ⁱⁱ⁾											

For Standard Evaporator Fan Speed (RPM), reference [Table 96](#).
 Notes: Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data. Data does not include pressure drop due to reheat coil. Refer to [Table 105](#) to determine additional static pressure drop due to other options/accessories.
 1-HP Fan Motor Heat (MBH) = 2.7672 x Fan BHP+0.4705.
 Factory supplied motors, in equipment, are definite purpose motors, specifically designed and tested to operate at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

⁽ⁱ⁾ Field Supplied Fan Sheave AK74x3/4" required. Field Supplied Belt may be necessary.
⁽ⁱⁱ⁾ Field Supplied Fan Sheave AK41x3/4" required. Field Supplied Belt may be necessary.

Table 71. Belt Drive Evaporator Fan Performance — 4 Tons — THC048E3,E4 No Electric Heat Horizontal Airflow

External Static Pressure (Inches of Water)																					
		.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
CFM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Field Supplied Low Static Drive⁽ⁱ⁾											1-HP Standard Motor & Drive										
1280	—	—	537	0.16	619	0.21	692	0.27	754	0.33	807	0.39	855	0.46	899	0.52	937	0.58	973	0.64	
1440	—	—	564	0.19	639	0.25	710	0.31	774	0.38	830	0.45	881	0.52	926	0.59	968	0.66	1007	0.73	
1600	—	—	593	0.24	663	0.30	729	0.36	793	0.44	851	0.51	903	0.59	950	0.67	993	0.74	1034	0.82	
1760	555	0.23	623	0.29	690	0.35	751	0.42	812	0.50	869	0.58	922	0.66	972	0.74	1017	0.83	1059	0.91	
1920	593	0.28	656	0.35	719	0.42	777	0.49	833	0.57	889	0.65	942	0.74	991	0.83	1038	0.92	1080	1.01	

Continued

External Static Pressure (Inches of Water)											
		1.10		1.20		1.30		1.40		1.50	
CFM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	
1-HP Standard Motor & Drive											
1280	1008	0.70	1041	0.76	1074	0.82	1106	0.89	1138	0.95	
1440	1042	0.80	1074	0.86	1105	0.93	1135	1.00	1166	1.07	
1600	1072	0.90	1107	0.97	1139	1.05	1170	1.12	1198	1.20	
1760	1097	1.00	1133	1.08	1169	1.17	1201	1.25	1233	1.34	
1920	1121	1.10	1158	1.19	1194	1.29	1228	1.38	1260	1.47	
1-HP Standard Motor & Field Supplied High Static Drive⁽ⁱⁱⁱ⁾											

For Standard Evaporator Fan Speed (RPM), reference [Table 96](#).
 Notes: Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data. Data does not include pressure drop due to reheat coil. Refer to [Table 105](#) to determine additional static pressure drop due to other options/accessories.
 1-HP Fan Motor Heat (MBH) = 2.7672 x Fan BHP+0.4705.
 Factory supplied motors, in equipment, are definite purpose motors, specifically designed and tested to operate at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

⁽ⁱ⁾ Field Supplied Fan Sheave AK74x3/4" required. Field Supplied Belt may be necessary.
⁽ⁱⁱ⁾ Field Supplied Fan Sheave AK41x3/4" required. Field Supplied Belt may be necessary.
⁽ⁱⁱⁱ⁾ Field Supplied Fan Sheave AK41x3/4" required. Field Supplied Belt may be necessary.



Performance Data

(4 Tons R-410A Refrigerant)

Table 72. Belt Drive Evaporator Fan Performance — 4 Tons — YSC048E3,E4,EW*L,M Low & Medium Gas Heat Downflow Airflow

External Static Pressure (Inches of Water)																				
CFM	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Field Supplied Low Static Drive⁽ⁱ⁾											1-HP Standard Motor & Drive									
1280	—	—	635	0.22	693	0.26	746	0.31	796	0.36	846	0.42	893	0.49	938	0.55	981	0.61	1020	0.67
1440	621	0.23	684	0.28	740	0.33	790	0.39	837	0.44	881	0.50	926	0.56	969	0.63	1011	0.70	1052	0.78
1600	675	0.30	734	0.35	787	0.41	836	0.47	880	0.53	923	0.59	963	0.66	1002	0.72	1042	0.80	1082	0.88
1760	731	0.38	786	0.44	836	0.51	883	0.58	927	0.64	967	0.71	1005	0.77	1043	0.84	1079	0.91	1114	0.99
1920	788	0.48	839	0.55	886	0.62	931	0.69	973	0.76	1012	0.84	1049	0.91	1085	0.98	1119	1.05	1153	1.13
Continued																				
External Static Pressure (Inches of Water)																				
CFM	1.10		1.20		1.30		1.40		1.50											
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP										
1-HP Standard Motor & Drive																				
1280	1057	0.73	1094	0.79	1128	0.85	1161	0.92	1192	0.98										
1440	1089	0.85	1125	0.91	1160	0.98	1192	1.05	1224	1.11										
1600	1120	0.96	1156	1.04	1191	1.12	1223	1.19	1255	1.27										
1760	1150	1.07	1186	1.16	1222	1.25	1255	1.34	1288	1.43										
1920	1186	1.21	1219	1.29	1253	1.38	1285	1.48	—	—										
1-HP Standard Motor & Field Supplied High Static Drive⁽ⁱⁱ⁾																				

For Standard Evaporator Fan Speed (RPM), reference [Table 96](#).
 Notes: Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data. Data does not include pressure drop due to reheat coil. Refer to [Table 105](#) to determine additional static pressure drop due to other options/accessories.
 1-HP Fan Motor Heat (MBH) = 2.7672 x Fan BHP + 0.4705.
 Factory supplied motors, in equipment, are definite purpose motors, specifically designed and tested to operate at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

(i) Field Supplied Fan Sheave AK71x3/4" required. Field Supplied Belt may be necessary.
 (ii) Field Supplied Fan Sheave AK41x3/4" required. Field Supplied Belt may be necessary.

Table 73. Belt Drive Evaporator Fan Performance — 4 Tons — YSC048E3,E4,EW*L,M Low & Medium Gas Heat Horizontal Airflow

External Static Pressure (Inches of Water)																				
CFM	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Field Supplied Low Static Drive⁽ⁱ⁾											1-HP Standard Motor & Drive									
1280	—	—	632	0.21	696	0.26	756	0.31	812	0.37	862	0.42	908	0.48	952	0.54	993	0.60	1033	0.66
1440	618	0.22	679	0.26	738	0.32	794	0.38	847	0.44	897	0.50	944	0.56	987	0.63	1027	0.70	1066	0.76
1600	673	0.29	729	0.34	783	0.39	835	0.45	885	0.52	933	0.59	980	0.66	1023	0.73	1063	0.80	1101	0.87
1760	729	0.37	781	0.42	831	0.48	879	0.55	926	0.62	972	0.69	1015	0.76	1058	0.84	1098	0.92	1136	0.99
1920	785	0.47	834	0.53	880	0.59	926	0.66	970	0.73	1012	0.80	1055	0.88	1095	0.96	1135	1.05	1172	1.13
1-HP Standard Motor & Field Supplied High Static Drive⁽ⁱⁱ⁾																				
Continued																				
External Static Pressure (Inches of Water)																				
CFM	1.10		1.20		1.30		1.40		1.50											
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP										
1-HP Standard Motor & Drive																				
1280	1073	0.73	1109	0.79	1144	0.85	1179	0.92	1212	0.99										
1440	1103	0.83	1139	0.90	1174	0.97	1210	1.04	1242	1.11										
1600	1138	0.95	1173	1.02	1206	1.09	1240	1.17	1273	1.25										
1760	1173	1.07	1208	1.15	1241	1.23	1273	1.31	1304	1.40										
1920	1208	1.21	1244	1.30	1278	1.39	1309	1.47	—	—										
1-HP Standard Motor & Field Supplied High Static Drive⁽ⁱⁱⁱ⁾																				

For Standard Evaporator Fan Speed (RPM), reference [Table 96](#).
 Notes: Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data. Data does not include pressure drop due to reheat coil. Refer to [Table 105](#) to determine additional static pressure drop due to other options/accessories.
 1-HP Fan Motor Heat (MBH) = 2.7672 x Fan BHP + 0.4705.
 Factory supplied motors, in equipment, are definite purpose motors, specifically designed and tested to operate at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

(i) Field Supplied Fan Sheave AK71x3/4" required. Field Supplied Belt may be necessary.
 (ii) Field Supplied Fan Sheave AK41x3/4" required. Field Supplied Belt may be necessary.
 (iii) Field Supplied Fan Sheave AK41x3/4" required. Field Supplied Belt may be necessary.



Performance Data

(4 Tons High Efficiency)

Table 74. Belt Drive Evaporator Fan Performance — 4 Tons — YHC048E3,E4*L,M Low & Medium Gas Heat Downflow Airflow

CFM	External Static Pressure (Inches of Water)																			
	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Field Supplied Low Static Drive⁽ⁱ⁾										1-HP Standard Motor & Drive										
1280	—	—	—	—	583	0.18	644	0.23	700	0.27	752	0.32	799	0.37	845	0.42	891	0.47	933	0.53
1440	—	—	542	0.18	608	0.22	667	0.27	721	0.32	772	0.37	818	0.42	863	0.48	906	0.53	946	0.59
1600	—	—	572	0.22	636	0.27	692	0.32	744	0.37	793	0.43	839	0.49	883	0.55	924	0.60	964	0.66
1760	538	0.21	603	0.27	664	0.32	719	0.38	768	0.44	817	0.50	861	0.56	904	0.62	945	0.68	983	0.75
1920	574	0.27	636	0.32	692	0.38	746	0.45	795	0.51	841	0.57	885	0.63	927	0.70	966	0.77	1004	0.84

Continued

CFM	External Static Pressure (Inches of Water)									
	1.10		1.20		1.30		1.40		1.50	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Drive										
1280	975	0.58	1014	0.64	1052	0.70	1087	0.76	1121	0.82
1440	986	0.65	1025	0.71	1063	0.77	1098	0.83	1134	0.90
1600	1002	0.72	1038	0.78	1075	0.85	1112	0.92	1145	0.98
1760	1020	0.81	1057	0.88	1091	0.94	1126	1.01	1158	1.08
1920	1041	0.91	1076	0.98	1110	1.05	1144	1.12	1176	1.19
1-HP Standard Motor & Field Supplied High Static Drive⁽ⁱⁱ⁾										

For Standard Evaporator Fan Speed (RPM), reference [Table 96](#).

Notes: Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data. Data does not include pressure drop due to reheat coil.

Refer to [Table 105](#) to determine additional static pressure drop due to other options/accessories.

1-HP Fan Motor Heat (MBH) = 2.7672 x Fan BHP+0.4705.

Factory supplied motors, in equipment, are definite purpose motors, specifically designed and tested to operate at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

⁽ⁱ⁾ Field Supplied Fan Sheave AK74x3/4" required. Field Supplied Belt may be necessary.

⁽ⁱⁱ⁾ Field Supplied Fan Sheave AK41x3/4" required. Field Supplied Belt may be necessary.

Table 75. Belt Drive Evaporator Fan Performance — 4 Tons — YHC048E3,E4*L,M Low & Medium Gas Heat Horizontal Airflow

CFM	External Static Pressure (Inches of Water)																			
	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Field Supplied Low Static Drive⁽ⁱ⁾										1-HP Standard Motor & Drive										
1280	-	-	552	0.16	619	0.21	680	0.26	735	0.31	785	0.36	833	0.42	878	0.47	921	0.53	962	0.59
1440	-	-	589	0.21	649	0.26	708	0.31	762	0.36	811	0.42	857	0.48	901	0.54	943	0.60	982	0.66
1600	560	0.21	627	0.26	684	0.31	738	0.37	789	0.43	838	0.49	883	0.55	926	0.61	967	0.68	1006	0.75
1760	602	0.27	666	0.33	721	0.38	770	0.44	819	0.50	866	0.57	911	0.63	953	0.70	993	0.77	1031	0.84
1920	644	0.33	705	0.40	759	0.46	806	0.52	851	0.59	895	0.66	939	0.73	980	0.80	1019	0.87	1057	0.95

Continued

CFM	External Static Pressure (Inches of Water)									
	1.10		1.20		1.30		1.40		1.50	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Drive										
1280	1000	0.65	1038	0.72	1076	0.78	1113	0.85	1149	0.91
1440	1021	0.73	1058	0.80	1093	0.86	1128	0.94	1162	1.01
1600	1043	0.82	1079	0.89	1114	0.96	1148	1.03	1182	1.11
1760	1068	0.91	1103	0.99	1137	1.06	1172	1.14	1203	1.22
1920	1094	1.02	1128	1.10	1161	1.18	1195	1.26	1227	1.34
1-HP Standard Motor & Field Supplied High Static Drive⁽ⁱⁱ⁾										

For Standard Evaporator Fan Speed (RPM), reference [Table 96](#).

Notes: Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data. Data does not include pressure drop due to reheat coil.

Refer to [Table 105](#) to determine additional static pressure drop due to other options/accessories.

1-HP Fan Motor Heat (MBH) = 2.7672 x Fan BHP+0.4705.

Factory supplied motors, in equipment, are definite purpose motors, specifically designed and tested to operate at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

⁽ⁱ⁾ Field Supplied Fan Sheave AK74x3/4" required. Field Supplied Belt may be necessary.

⁽ⁱⁱ⁾ Field Supplied Fan Sheave AK41x3/4" required. Field Supplied Belt may be necessary.



Performance Data

(4 Tons R-410A Refrigerant)

Table 76. Belt Drive Evaporator Fan Performance — 4 Tons — YSC048E3,E4,EW*HH High Gas Heat Downflow Airflow

CFM	External Static Pressure (Inches of Water)																			
	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Field Supplied Low Static Drive⁽ⁱ⁾										1-HP Standard Motor & Drive										
1280	583	0.17	647	0.21	705	0.26	758	0.31	809	0.36	859	0.41	907	0.47	951	0.53	993	0.59	1033	0.65
1440	639	0.23	699	0.28	753	0.33	803	0.38	851	0.43	895	0.49	940	0.55	983	0.61	1025	0.68	1064	0.74
1600	696	0.30	752	0.36	803	0.41	850	0.47	895	0.53	937	0.58	979	0.65	1019	0.71	1058	0.78	1097	0.85
1760	754	0.39	807	0.45	855	0.51	900	0.57	942	0.63	982	0.70	1021	0.76	1059	0.83	1096	0.90	1132	0.97
1920	813	0.49	862	0.56	908	0.63	951	0.69	991	0.76	1029	0.82	1067	0.89	1102	0.96	1138	1.04	1172	1.11
Continued										1-HP Standard Motor & Field Supplied High Static Drive⁽ⁱⁱ⁾										
CFM	External Static Pressure (Inches of Water)																			
	1.10		1.20		1.30		1.40		1.50											
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP										
1-HP Standard Motor & Drive																				
1280	1071	0.71	1105	0.77	1139	0.83	1173	0.89	1202	0.94										
1440	1103	0.81	1139	0.88	1174	0.94	1207	1.01	1238	1.08										
1600	1135	0.92	1171	0.99	1207	1.07	1239	1.14	1271	1.21										
1760	1167	1.04	1203	1.12	1238	1.20	1271	1.28	1303	1.36										
1920	1204	1.19	1238	1.27	1271	1.35	1303	1.43	—	—										
1-HP Standard Motor & Field Supplied High Static Drive⁽ⁱⁱⁱ⁾																				

For Standard Evaporator Fan Speed (RPM), reference [Table 96](#).
 Notes: Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data. Data does not include pressure drop due to reheat coil. Refer to [Table 105](#) to determine additional static pressure drop due to other options/accessories.
 1-HP Fan Motor Heat (MBH) = 2.7672 x Fan BHP + 0.4705.
 Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

(i) Field Supplied Fan Sheave AK71x3/4" required. Field Supplied Belt may be necessary.
 (ii) Field Supplied Fan Sheave AK41x3/4" required. Field Supplied Belt may be necessary.
 (iii) Field Supplied Fan Sheave AK41x3/4" required. Field Supplied Belt may be necessary.

Table 77. Belt Drive Evaporator Fan Performance — 4 Tons — YSC048E3,E4,EW*HH High Gas Heat Horizontal Airflow

CFM	External Static Pressure (Inches of Water)																			
	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Field Supplied Low Static Drive⁽ⁱ⁾										1-HP Standard Motor & Drive										
1280	583	0.18	653	0.23	715	0.28	772	0.33	825	0.39	874	0.45	919	0.51	962	0.57	1002	0.64	1041	0.70
1440	637	0.24	703	0.29	762	0.35	815	0.41	866	0.47	913	0.53	958	0.60	1000	0.67	1040	0.74	1077	0.81
1600	693	0.31	755	0.37	810	0.44	861	0.50	909	0.56	955	0.63	998	0.70	1039	0.78	1078	0.85	1115	0.92
1760	749	0.40	808	0.47	861	0.54	909	0.61	954	0.68	997	0.75	1039	0.82	1079	0.90	1117	0.98	1154	1.06
1920	807	0.50	861	0.58	912	0.66	959	0.73	1002	0.81	1043	0.88	1083	0.96	1121	1.04	1158	1.12	1194	1.21
Continued										1-HP Standard Motor & Field Supplied High Static Drive⁽ⁱⁱ⁾										
CFM	External Static Pressure (Inches of Water)																			
	1.10		1.20		1.30		1.40		1.50											
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP										
1-HP Standard Motor & Drive																				
1280	1079	0.76	1114	0.83	1149	0.89	1181	0.95	1213	1.02										
1440	1114	0.88	1148	0.95	1182	1.02	1216	1.09	1248	1.16										
1600	1151	1.00	1186	1.08	1218	1.16	1251	1.24	1281	1.31										
1760	1189	1.14	1224	1.22	1256	1.31	1287	1.39	1319	1.48										
1920	1229	1.29	1263	1.38	1295	1.47	—	—	—	—										
1-HP Standard Motor & Field Supplied High Static Drive⁽ⁱⁱⁱ⁾																				

For Standard Evaporator Fan Speed (RPM), reference [Table 96](#).
 Notes: Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data. Data does not include pressure drop due to reheat coil. Refer to [Table 105](#) to determine additional static pressure drop due to other options/accessories.
 1-HP Fan Motor Heat (MBH) = 2.7672 x Fan BHP + 0.4705.
 Factory supplied motors, in commercial equipment, are definite purpose motors, specifically designed and tested to operate reliably and continuously at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

(i) Field Supplied Fan Sheave AK71x3/4" required. Field Supplied Belt may be necessary.
 (ii) Field Supplied Fan Sheave AK41x3/4" required. Field Supplied Belt may be necessary.
 (iii) Field Supplied Fan Sheave AK41x3/4" required. Field Supplied Belt may be necessary.



Performance Data

(4 Tons High Efficiency)

Table 78. Belt Drive Evaporator Fan Performance — 4 Tons — YHC048E3,E4*HH High Gas Heat Downflow Airflow

CFM	External Static Pressure (Inches of Water)																			
	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Field Supplied Low Static Drive⁽ⁱ⁾										1-HP Standard Motor & Drive										
1280	—	—	524	0.15	595	0.19	653	0.23	708	0.28	760	0.33	809	0.38	856	0.43	901	0.48	945	0.54
1440	—	—	553	0.18	621	0.23	680	0.28	732	0.33	781	0.38	828	0.43	873	0.49	917	0.55	959	0.61
1600	—	—	584	0.22	647	0.28	706	0.34	759	0.39	805	0.44	849	0.50	892	0.55	935	0.61	975	0.68
1760	554	0.22	617	0.28	676	0.33	733	0.39	786	0.46	832	0.52	876	0.58	916	0.63	955	0.69	994	0.76
1920	593	0.28	652	0.34	707	0.39	760	0.46	811	0.53	859	0.60	903	0.66	942	0.73	980	0.79	1016	0.85

Continued

CFM	External Static Pressure (Inches of Water)									
	1.10		1.20		1.30		1.40		1.50	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Drive										
1280	987	0.60	1027	0.66	1064	0.71	1100	0.77	1135	0.83
1440	998	0.67	1037	0.73	1076	0.79	1114	0.86	1149	0.92
1600	1014	0.74	1053	0.81	1089	0.87	1124	0.94	1160	1.01
1760	1033	0.82	1069	0.89	1105	0.96	1139	1.03	1173	1.11
1920	1052	0.92	1088	0.99	1122	1.06	1156	1.14	1190	1.21
1-HP Standard Motor & Field Supplied High Static Drive⁽ⁱⁱ⁾										

For Standard Evaporator Fan Speed (RPM), reference [Table 96](#).
 Notes: Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data. Data does not include pressure drop due to reheat coil. Refer to [Table 105](#) to determine additional static pressure drop due to other options/accessories.
 1-HP Fan Motor Heat (MBH) = 2.7672 x Fan BHP + 0.4705.
 Factory supplied motors, in equipment, are definite purpose motors, specifically designed and tested to operate at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

(i) Field Supplied Fan Sheave AK74x3/4" required. Field Supplied Belt may be necessary.
 (ii) Field Supplied Fan Sheave AK41x3/4" required. Field Supplied Belt may be necessary.

Table 79. Belt Drive Evaporator Fan Performance — 4 Tons — YHC048E3,E4*HH High Gas Heat Horizontal Airflow

CFM	External Static Pressure (Inches of Water)																			
	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Field Supplied Low Static Drive⁽ⁱ⁾										1-HP Standard Motor & Drive										
1280	—	—	558	0.16	621	0.20	678	0.25	732	0.29	783	0.34	831	0.39	879	0.45	922	0.50	965	0.56
1440	—	—	592	0.20	656	0.25	710	0.30	759	0.35	808	0.40	853	0.45	898	0.51	941	0.57	982	0.63
1600	561	0.20	627	0.25	691	0.31	744	0.36	792	0.41	836	0.47	880	0.52	922	0.58	963	0.64	1003	0.71
1760	603	0.26	664	0.31	724	0.37	778	0.43	825	0.49	868	0.54	909	0.60	949	0.67	988	0.73	1027	0.80
1920	647	0.32	704	0.38	759	0.44	813	0.52	859	0.58	902	0.63	942	0.70	980	0.76	1017	0.83	1053	0.90

Continued

CFM	External Static Pressure (Inches of Water)									
	1.10		1.20		1.30		1.40		1.50	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Drive										
1280	1004	0.62	1042	0.68	1079	0.75	1114	0.81	1148	0.87
1440	1023	0.69	1060	0.76	1097	0.82	1132	0.89	1166	0.96
1600	1043	0.77	1079	0.84	1116	0.91	1149	0.98	1184	1.05
1760	1064	0.86	1100	0.93	1135	1.00	1169	1.07	1203	1.15
1920	1088	0.97	1123	1.04	1158	1.11	1191	1.19	1223	1.26
1-HP Standard Motor & Field Supplied High Static Drive⁽ⁱⁱ⁾										

For Standard Evaporator Fan Speed (RPM), reference [Table 96](#).
 Notes: Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data. Data does not include pressure drop due to reheat coil. Refer to [Table 105](#) to determine additional static pressure drop due to other options/accessories.
 1-HP Fan Motor Heat (MBH) = 2.7672 x Fan BHP + 0.4705.
 Factory supplied motors, in equipment, are definite purpose motors, specifically designed and tested to operate at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

(i) Field Supplied Fan Sheave AK74x3/4" required. Field Supplied Belt may be necessary.
 (ii) Field Supplied Fan Sheave AK41x3/4" required. Field Supplied Belt may be necessary.



Performance Data

(4 Tons R-410A Refrigerant)

Table 80. Belt Drive Evaporator Fan Performance — 4 Tons — WSC048E3,E4,EW Downflow Airflow

CFM	External Static Pressure (Inches of Water)																			
	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Field Supplied Low Static Drive⁽ⁱ⁾										1-HP Standard Motor & Drive										
1280	—	—	613	0.20	672	0.24	725	0.29	778	0.34	830	0.39	879	0.45	923	0.51	965	0.56	1005	0.63
1440	592	0.20	657	0.25	716	0.30	765	0.35	812	0.40	859	0.46	906	0.52	952	0.58	995	0.65	1034	0.71
1600	644	0.26	703	0.32	760	0.37	809	0.43	853	0.49	895	0.54	936	0.60	980	0.67	1023	0.74	1062	0.81
1760	696	0.34	751	0.39	804	0.46	853	0.52	897	0.58	936	0.64	975	0.71	1012	0.77	1052	0.84	1091	0.91
1920	750	0.43	801	0.49	850	0.55	897	0.62	941	0.70	980	0.76	1017	0.83	1052	0.89	1087	0.96	1122	1.04

Continued

CFM	External Static Pressure (Inches of Water)									
	1.10		1.20		1.30		1.40		1.50	
RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	
1-HP Standard Motor & Drive										
1280	1043	0.69	1080	0.75	1117	0.81	1152	0.88	1185	0.94
1440	1071	0.78	1107	0.84	1142	0.91	1176	0.98	1208	1.05
1600	1101	0.88	1137	0.95	1171	1.03	1205	1.10	1237	1.17
1760	1129	0.99	1165	1.07	1200	1.14	1234	1.23	1266	1.31
1920	1157	1.11	1193	1.19	1227	1.27	1262	1.36	—	—
1-HP Standard Motor & Field Supplied High Static Drive⁽ⁱⁱ⁾										

For Standard Evaporator Fan Speed (RPM), reference [Table 96](#).
 Notes: Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data. Data does not include pressure drop due to reheat coil. Refer to [Table 105](#) to determine additional static pressure drop due to other options/accessories.
 1-HP Fan Motor Heat (MBH) = 2.7672 x Fan BHP + 0.4705.
 Factory supplied motors, in equipment, are definite purpose motors, specifically designed and tested to operate at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

⁽ⁱ⁾ Field Supplied Fan Sheave AK71x3/4" required. Field Supplied Belt may be necessary.

⁽ⁱⁱ⁾ Field Supplied Fan Sheave AK41x3/4" required. Field Supplied Belt may be necessary.

Table 81. Belt Drive Evaporator Fan Performance — 4 Tons — WSC048E3,E4,EW Horizontal Airflow

CFM	External Static Pressure (Inches of Water)																			
	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Field Supplied Low Static Drive⁽ⁱ⁾										1-HP Standard Motor & Drive										
1280	—	—	627	0.20	696	0.26	757	0.31	810	0.37	859	0.42	902	0.48	943	0.54	981	0.60	1019	0.66
1440	601	0.20	670	0.26	736	0.32	794	0.38	848	0.44	896	0.50	941	0.57	982	0.63	1020	0.70	1056	0.76
1600	653	0.27	715	0.32	776	0.39	834	0.45	886	0.52	935	0.59	979	0.66	1020	0.73	1059	0.80	1095	0.87
1760	706	0.34	763	0.40	820	0.47	874	0.54	925	0.61	972	0.69	1017	0.77	1058	0.84	1096	0.92	1134	1.00
1920	759	0.43	813	0.50	865	0.57	916	0.64	965	0.72	1011	0.80	1054	0.88	1096	0.97	1135	1.05	1172	1.13

Continued

CFM	External Static Pressure (Inches of Water)									
	1.10		1.20		1.30		1.40		1.50	
RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	
1-HP Standard Motor & Drive										
1280	1054	0.71	1089	0.77	1122	0.83	1156	0.90	1187	0.97
1440	1090	0.82	1125	0.89	1157	0.96	1189	1.02	1220	1.09
1600	1130	0.95	1162	1.02	1195	1.09	1225	1.16	1255	1.23
1760	1168	1.08	1201	1.15	1233	1.24	1263	1.31	1292	1.39
1920	1206	1.22	1239	1.30	1272	1.39	1302	1.47	—	—
1-HP Standard Motor & Field Supplied High Static Drive⁽ⁱⁱⁱ⁾										

For Standard Evaporator Fan Speed (RPM), reference [Table 96](#).
 Notes: Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data. Data does not include pressure drop due to reheat coil. Refer to [Table 105](#) to determine additional static pressure drop due to other options/accessories.
 1-HP Fan Motor Heat (MBH) = 2.7672 x Fan BHP + 0.4705.
 Factory supplied motors, in equipment, are definite purpose motors, specifically designed and tested to operate at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

⁽ⁱ⁾ Field Supplied Fan Sheave AK71x3/4" required. Field Supplied Belt may be necessary.

⁽ⁱⁱ⁾ Field Supplied Fan Sheave AK41x3/4" required. Field Supplied Belt may be necessary.

⁽ⁱⁱⁱ⁾ Field Supplied Fan Sheave AK41x3/4" required. Field Supplied Belt may be necessary.



Performance Data

(5 Tons R-410A Refrigerant)

Table 82. Belt Drive Evaporator Fan Performance — 5 Tons — TSC060E3,E4,EW No Electric Heat Downflow Airflow

CFM	External Static Pressure (Inches of Water)																			
	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Field Supplied Low Static Drive⁽ⁱ⁾										1-HP Standard Motor & Drive										
1600	—	—	697	0.31	751	0.37	800	0.42	846	0.48	888	0.53	929	0.59	967	0.64	1005	0.71	1041	0.77
1800	704	0.35	758	0.41	808	0.47	854	0.53	898	0.59	938	0.66	977	0.72	1015	0.78	1050	0.85	1085	0.91
2000	771	0.46	820	0.53	866	0.60	910	0.67	951	0.73	991	0.80	1028	0.87	1064	0.94	1098	1.01	1131	1.08
2200	838	0.60	883	0.68	926	0.75	968	0.83	1007	0.90	1044	0.97	1081	1.05	1115	1.12	1148	1.20	1180	1.28
2400	906	0.77	948	0.85	989	0.93	1027	1.01	1065	1.09	1101	1.17	1135	1.25	1168	1.34	1200	1.42	1232	1.50

Continued

CFM	External Static Pressure (Inches of Water)									
	1.10		1.20		1.30		1.40		1.50	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Drive										
1600	1075	0.83	1110	0.90	1142	0.96	1176	1.03	1208	1.10
1800	1118	0.98	1151	1.05	1182	1.12	1212	1.19	1243	1.26
2000	1163	1.15	1194	1.22	1225	1.30	1255	1.37	1283	1.45
2200	1211	1.35	1241	1.43	—	—	—	—	—	—
2400	—	—	—	—	—	—	—	—	—	—
1-HP Standard Motor & Field Supplied High Static Drive⁽ⁱⁱ⁾										

For Standard Evaporator Fan Speed (RPM), reference [Table 101](#).
 Notes: Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data. Data does not include pressure drop due to reheat coil. Refer to [Table 106](#) to determine additional static pressure drop due to other options/accessories.
 1-HP Fan Motor Heat (MBH) = 2.7672 x Fan BHP + 0.4705.
 Factory supplied motors, in equipment, are definite purpose motors, specifically designed and tested to operate at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

⁽ⁱ⁾ Field Supplied Fan Sheave AK71x3/4" required. Field Supplied Belt may be necessary.

⁽ⁱⁱ⁾ Field Supplied Fan Sheave AK41x3/4" required. Field Supplied Belt may be necessary.

Table 83. Belt Drive Evaporator Fan Performance — 5 Tons — TSC060E3,E4,EW No Electric Heat Horizontal Airflow

CFM	External Static Pressure (Inches of Water)																			
	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Field Supplied Low Static Drive⁽ⁱ⁾										1-HP Standard Motor & Drive										
1600	—	—	707	0.31	763	0.37	815	0.42	862	0.48	905	0.54	946	0.60	984	0.65	1020	0.71	1056	0.78
1800	715	0.36	768	0.41	819	0.47	868	0.54	914	0.60	957	0.67	996	0.73	1034	0.79	1068	0.86	1103	0.92
2000	783	0.47	831	0.54	878	0.60	924	0.67	967	0.74	1009	0.81	1049	0.89	1085	0.96	1119	1.03	1152	1.10
2200	852	0.61	896	0.68	939	0.75	982	0.83	1023	0.90	1063	0.98	1100	1.06	1137	1.14	1172	1.22	1203	1.30
2400	921	0.78	963	0.86	1002	0.94	1041	1.01	1080	1.09	1118	1.18	1153	1.26	1189	1.35	1222	1.43	—	—

Continued

CFM	External Static Pressure (Inches of Water)									
	1.10		1.20		1.30		1.40		1.50	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Drive										
1600	1091	0.84	1124	0.90	1156	0.97	1189	1.04	1220	1.11
1800	1135	0.99	1168	1.06	1199	1.13	1230	1.20	1260	1.27
2000	1184	1.17	1215	1.24	1245	1.32	1273	1.39	1302	1.47
2200	1235	1.38	1264	1.45	—	—	—	—	—	—
2400	—	—	—	—	—	—	—	—	—	—

For Standard Evaporator Fan Speed (RPM), reference [Table 96](#).
 Notes: Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data. Data does not include pressure drop due to reheat coil. Refer to [Table 105](#) to determine additional static pressure drop due to other options/accessories.
 1-HP Fan Motor Heat (MBH) = 2.7672 x Fan BHP + 0.4705.
 Factory supplied motors, in equipment, are definite purpose motors, specifically designed and tested to operate at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

⁽ⁱ⁾ Field Supplied Fan Sheave AK71x3/4" required. Field Supplied Belt may be necessary.



Performance Data

(5 Tons High Efficiency)

Table 84. Belt Drive Evaporator Fan Performance — 5 Tons — THC060E3,E4 No Electric Heat Downflow Airflow

CFM	External Static Pressure (Inches of Water)																				
	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00		
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	
1-HP Standard Motor & Field Supplied Low Static Drive⁽ⁱ⁾											1-HP Standard Motor & Drive										
1600	—	—	563	0.21	622	0.25	678	0.31	730	0.36	778	0.41	823	0.46	867	0.52	908	0.57	948	0.63	
1800	—	—	604	0.27	659	0.32	710	0.37	760	0.43	808	0.49	851	0.55	892	0.61	932	0.67	970	0.73	
2000	588	0.29	645	0.35	698	0.40	746	0.46	791	0.52	837	0.58	880	0.65	921	0.71	959	0.78	995	0.84	
2200	636	0.37	689	0.43	739	0.50	784	0.56	827	0.62	868	0.68	909	0.75	951	0.83	988	0.90	1024	0.97	
2400	683	0.47	734	0.54	780	0.61	824	0.68	865	0.74	904	0.81	942	0.88	980	0.95	1017	1.03	1054	1.11	
Continued																					
CFM	External Static Pressure (Inches of Water)																				
	1.10		1.20		1.30		1.40		1.50												
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP											
1-HP Standard Motor & Drive																					
1600	987	0.70	1024	0.76	1061	0.83	1095	0.89	1128	0.96											
1800	1008	0.79	1043	0.86	1078	0.92	1113	1.00	1145	1.06											
2000	1031	0.90	1066	0.97	1100	1.05	1134	1.12	1167	1.19											
2200	1059	1.04	1092	1.11	1124	1.18	1157	1.26	1187	1.33											
2400	1088	1.19	1120	1.27	1152	1.34	1183	1.42	—	—											
1-HP Standard Motor & Field Supplied High Static Drive⁽ⁱⁱ⁾																					

For Standard Evaporator Fan Speed (RPM), reference [Table 96](#).
 Notes: Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data. Data does not include pressure drop due to reheat coil. Refer to [Table 105](#) to determine additional static pressure drop due to other options/accessories.
 1-HP Fan Motor Heat (MBH) = 2.7672 x Fan BHP + 0.4705.
 Factory supplied motors, in equipment, are definite purpose motors, specifically designed and tested to operate at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

(i) Field Supplied Fan Sheave AK69x3/4" required. Field Supplied Belt may be necessary.
 (ii) Field Supplied Fan Sheave AK41x3/4" required. Field Supplied Belt may be necessary.

Table 85. Belt Drive Evaporator Fan Performance — 5 Tons — THC060E3,E4 No Electric Heat Horizontal Airflow

CFM	External Static Pressure (Inches of Water)																			
	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Field Supplied Low Static Drive⁽ⁱ⁾											1-HP Standard Motor & Drive									
1600	-	-	619	0.24	681	0.29	745	0.35	810	0.42	868	0.48	916	0.55	959	0.62	998	0.68	1034	0.75
1800	597	0.25	664	0.31	723	0.37	777	0.42	834	0.49	893	0.57	947	0.64	996	0.72	1037	0.80	1075	0.87
2000	648	0.33	711	0.39	767	0.46	818	0.52	867	0.58	918	0.66	971	0.74	1021	0.83	1068	0.91	1110	1.00
2200	700	0.42	759	0.50	812	0.57	861	0.63	907	0.70	951	0.77	997	0.85	1045	0.94	1093	1.04	1137	1.13
2400	752	0.54	808	0.61	859	0.69	906	0.77	949	0.84	991	0.92	1032	0.99	1072	1.08	1117	1.17	1161	1.27
Continued											1-HP Standard Motor & Field Supplied High Static Drive⁽ⁱⁱ⁾									
CFM	External Static Pressure (Inches of Water)																			
	1.10		1.20		1.30		1.40		1.50											
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP										
1-HP Standard Motor & Drive																				
1600	1068	0.81	1101	0.88	1132	0.94	1161	1.00	1190	1.07										
1800	1111	0.95	1143	1.02	1175	1.09	1205	1.16	1233	1.23										
2000	1147	1.08	1182	1.17	1215	1.25	1246	1.33	1276	1.41										
2200	1179	1.23	1219	1.33	1252	1.42	-	-	-	-										
2400	1205	1.38	-	-	-	-	-	-	-	-										
1-HP Standard Motor & Field Supplied High Static Drive⁽ⁱⁱⁱ⁾																				

For Standard Evaporator Fan Speed (RPM), reference [Table 96](#).
 Notes: Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data. Data does not include pressure drop due to reheat coil. Refer to [Table 105](#) to determine additional static pressure drop due to other options/accessories.
 1-HP Fan Motor Heat (MBH) = 2.7672 x Fan BHP + 0.4705.
 Factory supplied motors, in equipment, are definite purpose motors, specifically designed and tested to operate at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

(i) Field Supplied Fan Sheave AK69x3/4" required. Field Supplied Belt may be necessary.
 (ii) Field Supplied Fan Sheave AK41x3/4" required. Field Supplied Belt may be necessary.
 (iii) Field Supplied Fan Sheave AK41x3/4" required. Field Supplied Belt may be necessary.



Performance Data

(5 Tons R-410A Refrigerant)

Table 86. Belt Drive Evaporator Fan Performance — 5 Tons — YSC060E3,E4,EW*L,M Low & Medium Gas Heat Downflow Airflow

CFM	External Static Pressure (Inches of Water)																			
	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Field Supplied Low Static Drive⁽¹⁾										1-HP Standard Motor & Drive										
1600	699	0.31	755	0.36	805	0.42	849	0.47	891	0.53	932	0.58	971	0.64	1008	0.70	1046	0.76	1081	0.82
1800	773	0.42	823	0.48	871	0.54	914	0.60	953	0.67	991	0.73	1027	0.79	1063	0.86	1097	0.92	1131	0.98
2000	847	0.56	894	0.63	938	0.70	979	0.77	1018	0.83	1053	0.90	1087	0.97	1120	1.04	1153	1.11	1185	1.18
2200	923	0.73	966	0.81	1007	0.88	1046	0.96	1083	1.03	1118	1.10	1151	1.18	1182	1.26	1212	1.34	1242	1.41
2400	999	0.93	1039	1.01	1077	1.10	1114	1.18	1150	1.26	1183	1.34	1215	1.42	1245	1.50	—	—	—	—

Continued

CFM	External Static Pressure (Inches of Water)									
	1.10		1.20		1.30		1.40		1.50	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Drive										
1600	1115	0.88	1149	0.95	1182	1.01	1213	1.08	1246	1.15
1800	1163	1.05	1196	1.12	1228	1.19	1257	1.26	1288	1.33
2000	1215	1.25	1246	1.32	1276	1.40	—	—	—	—
2200	1271	1.49	—	—	—	—	—	—	—	—
2400	—	—	—	—	—	—	—	—	—	—

For Standard Evaporator Fan Speed (RPM), reference [Table 96](#).
 Notes: Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data. Data does not include pressure drop due to reheat coil. Refer to [Table 105](#) to determine additional static pressure drop due to other options/accessories.
 1-HP Fan Motor Heat (MBH) = 2.7672 x Fan BHP + 0.4705.
 Factory supplied motors, in equipment, are definite purpose motors, specifically designed and tested to operate at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

⁽¹⁾ Field Supplied Fan Sheave AK71x3/4" required. Field Supplied Belt may be necessary.

Table 87. Belt Drive Evaporator Fan Performance — 5 Tons — YSC060E3,E4,EW*L,M Low & Medium Gas Heat Horizontal Airflow

CFM	External Static Pressure (Inches of Water)																			
	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Field Supplied Low Static Drive⁽¹⁾										1-HP Standard Motor & Drive										
1600	667	0.27	724	0.33	778	0.38	829	0.43	877	0.49	923	0.55	966	0.61	1006	0.68	1046	0.74	1082	0.80
1800	737	0.38	788	0.43	837	0.49	885	0.55	930	0.61	973	0.68	1014	0.74	1054	0.81	1092	0.88	1127	0.95
2000	807	0.50	854	0.57	900	0.63	943	0.69	986	0.76	1026	0.83	1066	0.90	1103	0.97	1140	1.05	1174	1.12
2200	879	0.65	922	0.72	963	0.79	1004	0.86	1044	0.94	1083	1.01	1119	1.08	1155	1.16	1191	1.24	1225	1.32
2400	951	0.83	991	0.91	1029	0.99	1067	1.06	1104	1.14	1141	1.22	1176	1.30	1210	1.38	1243	1.46	—	—

Continued

CFM	External Static Pressure (Inches of Water)									
	1.10		1.20		1.30		1.40		1.50	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Drive										
1600	1117	0.87	1152	0.94	1185	1.00	1218	1.07	1247	1.14
1800	1162	1.02	1196	1.10	1228	1.17	1259	1.24	1290	1.32
2000	1209	1.20	1242	1.28	1274	1.36	—	—	—	—
2200	1257	1.40	1290	1.49	—	—	—	—	—	—
2400	—	—	—	—	—	—	—	—	—	—

For Standard Evaporator Fan Speed (RPM), reference [Table 96](#).
 Notes: Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data. Data does not include pressure drop due to reheat coil. Refer to [Table 105](#) to determine additional static pressure drop due to other options/accessories.
 1-HP Fan Motor Heat (MBH) = 2.7672 x Fan BHP + 0.4705.
 Factory supplied motors, in equipment, are definite purpose motors, specifically designed and tested to operate at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

⁽¹⁾ Field Supplied Fan Sheave AK71x3/4" required. Field Supplied Belt may be necessary.



Performance Data

(5 Tons High Efficiency)

Table 88. Belt Drive Evaporator Fan Performance — 5 Tons — YHC060E3,E4*L,M Low & Medium Gas Heat Downflow Airflow

CFM	External Static Pressure (Inches of Water)																			
	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Field Supplied Low Static Drive⁽ⁱ⁾											1-HP Standard Motor & Drive									
1600	—	—	577	0.22	639	0.27	694	0.32	743	0.37	790	0.42	835	0.47	879	0.53	920	0.59	961	0.65
1800	557	0.23	618	0.28	676	0.34	729	0.40	778	0.45	822	0.50	864	0.56	905	0.62	945	0.68	984	0.74
2000	604	0.30	662	0.36	715	0.42	766	0.48	813	0.55	857	0.61	897	0.67	935	0.73	974	0.79	1010	0.86
2200	653	0.39	707	0.45	756	0.51	803	0.58	849	0.65	892	0.72	933	0.79	969	0.85	1005	0.92	1040	0.99
2400	702	0.49	753	0.56	799	0.63	843	0.70	887	0.77	928	0.85	968	0.93	1006	1.00	1041	1.07	1074	1.14

Continued

CFM	External Static Pressure (Inches of Water)									
	1.10		1.20		1.30		1.40		1.50	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Drive										
1600	999	0.71	1037	0.77	1072	0.83	1107	0.90	1141	0.96
1800	1021	0.81	1058	0.88	1093	0.94	1126	1.01	1161	1.08
2000	1046	0.93	1081	1.00	1115	1.07	1149	1.14	1181	1.22
2200	1075	1.06	1108	1.13	1140	1.21	1173	1.29	1204	1.36
2400	1106	1.21	1138	1.29	1168	1.37	1200	1.45	—	—
1-HP Standard Motor & Field Supplied Low Static Drive⁽ⁱⁱ⁾										

For Standard Evaporator Fan Speed (RPM), reference [Table 96](#).

Notes: Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data. Data does not include pressure drop due to reheat coil. Refer to [Table 105](#) to determine additional static pressure drop due to other options/accessories.

1-HP Fan Motor Heat (MBH) = 2.7672 x Fan BHP + 0.4705. Factory supplied motors, in equipment, are definite purpose motors, specifically designed and tested to operate at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

⁽ⁱ⁾ Field Supplied Fan Sheave AK69x3/4" required. Field Supplied Belt may be necessary.

⁽ⁱⁱ⁾ Field Supplied Fan Sheave AK41x3/4" required. Field Supplied Belt may be necessary.

Table 89. Belt Drive Evaporator Fan Performance — 5 Tons — YHC060E3,E4*L,M Low & Medium Gas Heat Horizontal Airflow

CFM	External Static Pressure (Inches of Water)																			
	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Field Supplied Low Static Drive⁽ⁱ⁾											1-HP Standard Motor & Drive									
1600	565	0.21	630	0.26	689	0.31	740	0.36	791	0.41	839	0.47	884	0.52	927	0.58	968	0.65	1007	0.71
1800	620	0.28	678	0.33	735	0.39	784	0.45	830	0.51	875	0.57	918	0.63	960	0.69	1000	0.76	1038	0.82
2000	677	0.37	729	0.43	781	0.49	831	0.56	874	0.62	915	0.69	956	0.75	996	0.82	1034	0.89	1072	0.96
2200	733	0.48	782	0.54	830	0.61	876	0.68	921	0.75	959	0.82	997	0.90	1035	0.97	1071	1.04	1106	1.12
2400	791	0.61	837	0.68	880	0.75	923	0.82	966	0.90	1006	0.98	1042	1.06	1076	1.14	1110	1.22	1144	1.30

Continued

CFM	External Static Pressure (Inches of Water)									
	1.10		1.20		1.30		1.40		1.50	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Drive										
1600	1045	0.78	1082	0.85	1117	0.91	1151	0.98	1183	1.05
1800	1074	0.89	1110	0.96	1145	1.04	1178	1.11	1211	1.19
2000	1108	1.03	1142	1.10	1176	1.18	1207	1.26	1239	1.34
2200	1141	1.19	1175	1.27	1208	1.35	1240	1.43	—	—
2400	1178	1.38	1210	1.46	—	—	—	—	—	—
1-HP Standard Motor & Field Supplied High Static Drive⁽ⁱⁱ⁾										

For Standard Evaporator Fan Speed (RPM), reference [Table 96](#).

Notes: Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data. Data does not include pressure drop due to reheat coil. Refer to [Table 105](#) to determine additional static pressure drop due to other options/accessories.

1-HP Fan Motor Heat (MBH) = 2.7672 x Fan BHP + 0.4705. Factory supplied motors, in equipment, are definite purpose motors, specifically designed and tested to operate at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

⁽ⁱ⁾ Field Supplied Fan Sheave AK69x3/4" required. Field Supplied Belt may be necessary.

⁽ⁱⁱ⁾ Field Supplied Fan Sheave AK41x3/4" required. Field Supplied Belt may be necessary.



Performance Data

(5 Tons R-410A Refrigerant)

Table 90. Belt Drive Evaporator Fan Performance — 5 Tons — YSC060E3,E4,EW*HH High Gas Heat Downflow Airflow

CFM	External Static Pressure (Inches of Water)																			
	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Field Supplied Low Static Drive⁽¹⁾										1-HP Standard Motor & Drive										
1600	709	0.32	766	0.37	818	0.43	862	0.48	902	0.54	944	0.60	985	0.66	1025	0.72	1063	0.79	1100	0.86
1800	784	0.44	835	0.50	885	0.56	928	0.62	967	0.68	1003	0.75	1040	0.81	1077	0.88	1113	0.95	1149	1.02
2000	859	0.58	907	0.65	952	0.72	995	0.79	1034	0.86	1069	0.93	1101	0.99	1134	1.07	1168	1.14	1201	1.22
2200	936	0.76	980	0.84	1022	0.92	1062	0.99	1101	1.07	1136	1.14	1167	1.21	1198	1.29	1228	1.37	1257	1.44
2400	1013	0.97	1054	1.05	1093	1.14	1131	1.22	1168	1.31	1202	1.39	1234	1.47	—	—	—	—	—	—

Continued

CFM	External Static Pressure (Inches of Water)									
	1.10		1.20		1.30		1.40		1.50	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Drive										
1600	1134	0.92	1168	0.99	1200	1.06	1232	1.12	1262	1.19
1800	1184	1.10	1217	1.17	1247	1.24	1279	1.32	—	—
2000	1233	1.29	1265	1.37	1297	1.46	—	—	—	—
2200	—	—	—	—	—	—	—	—	—	—
2400	—	—	—	—	—	—	—	—	—	—

For Standard Evaporator Fan Speed (RPM), reference [Table 96](#).
 Notes: Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data. Data does not include pressure drop due to reheat coil. Refer to [Table 105](#) to determine additional static pressure drop due to other options/accessories.
 1-HP Fan Motor Heat (MBH) = 2.7672 x Fan BHP+0.4705.
 Factory supplied motors, in equipment, are definite purpose motors, specifically designed and tested to operate at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

⁽¹⁾ Field Supplied Fan Sheave AK71x3/4" required. Field Supplied Belt may be necessary.

Table 91. Belt Drive Evaporator Fan Performance — 5 Tons — YSC060E3,E4,EW*H,H High Gas Heat Horizontal Airflow

CFM	External Static Pressure (Inches of Water)																			
	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Field Supplied Low Static Drive⁽¹⁾										1-HP Standard Motor & Drive										
1600	706	0.30	762	0.36	813	0.41	862	0.47	908	0.53	951	0.59	993	0.65	1031	0.71	1068	0.78	1104	0.84
1800	780	0.42	832	0.48	879	0.54	924	0.60	968	0.67	1009	0.73	1049	0.80	1086	0.87	1121	0.94	1156	1.01
2000	855	0.56	903	0.63	947	0.69	989	0.76	1028	0.83	1068	0.90	1106	0.97	1143	1.05	1177	1.12	1210	1.20
2200	930	0.72	976	0.80	1017	0.88	1056	0.95	1093	1.03	1130	1.10	1166	1.18	1200	1.26	1235	1.34	1268	1.42
2400	1006	0.92	1049	1.01	1088	1.09	1126	1.17	1160	1.25	1194	1.33	1228	1.42	1261	1.50	—	—	—	—

Continued

CFM	External Static Pressure (Inches of Water)									
	1.10		1.20		1.30		1.40		1.50	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Drive										
1600	1140	0.91	1173	0.98	1207	1.05	1240	1.12	1270	1.19
1800	1189	1.08	1221	1.15	1253	1.22	1284	1.30	—	—
2000	1243	1.28	1274	1.35	—	—	—	—	—	—
2200	—	—	—	—	—	—	—	—	—	—
2400	—	—	—	—	—	—	—	—	—	—

For Standard Evaporator Fan Speed (RPM), reference [Table 96](#).
 Notes: Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data. Data does not include pressure drop due to reheat coil. Refer to [Table 105](#) to determine additional static pressure drop due to other options/accessories.
 1-HP Fan Motor Heat (MBH) = 2.7672 x Fan BHP+0.4705.
 Factory supplied motors, in equipment, are definite purpose motors, specifically designed and tested to operate at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

⁽¹⁾ Field Supplied Fan Sheave AK71x3/4" required. Field Supplied Belt may be necessary.



Performance Data

(5 Tons High Efficiency)

Table 92. Belt Drive Evaporator Fan Performance — 5 Tons — YHC060E3,E4*H,H High Gas Heat Downflow Airflow

External Static Pressure (Inches of Water)																					
		.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
CFM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	
1-HP Standard Motor & Field Supplied Low Static Drive⁽ⁱ⁾											1-HP Standard Motor & Drive										
1600	-	-	590	0.22	651	0.27	706	0.32	755	0.37	802	0.42	848	0.47	891	0.53	933	0.59	974	0.65	
1800	571	0.23	632	0.29	690	0.34	742	0.40	791	0.45	836	0.51	878	0.56	919	0.62	959	0.68	999	0.75	
2000	620	0.31	676	0.36	731	0.42	782	0.49	828	0.55	871	0.61	913	0.67	952	0.73	988	0.79	1026	0.86	
2200	671	0.39	723	0.46	773	0.52	822	0.59	866	0.66	908	0.72	948	0.79	987	0.86	1023	0.93	1058	1.00	
2400	722	0.50	771	0.57	818	0.64	863	0.71	907	0.78	947	0.86	985	0.93	1023	1.00	1059	1.08	1093	1.15	
Continued																					
External Static Pressure (Inches of Water)																					
		1.10		1.20		1.30		1.40		1.50											
CFM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP											
1-HP Standard Motor & Drive																					
1600	1013	0.72	1051	0.78	1087	0.85	1122	0.91	1157	0.98											
1800	1036	0.82	1072	0.88	1108	0.95	1143	1.02	1176	1.09											
2000	1062	0.93	1097	1.00	1132	1.08	1164	1.15	1199	1.23											
2200	1091	1.07	1124	1.14	1157	1.21	1190	1.29	1222	1.37											
2400	1125	1.23	1157	1.30	1188	1.38	1219	1.46	-	-											
1-HP Standard Motor & Field Supplied High Static Drive⁽ⁱⁱ⁾																					

For Standard Evaporator Fan Speed (RPM), reference [Table 96](#).
 Notes: Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data. Data does not include pressure drop due to reheat coil. Refer to [Table 105](#) to determine additional static pressure drop due to other options/accessories.
 1-HP Fan Motor Heat (MBH) = 2.7672 x Fan BHP + 0.4705.
 Factory supplied motors, in equipment, are definite purpose motors, specifically designed and tested to operate at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

(i) Field Supplied Fan Sheave AK69x3/4" required. Field Supplied Belt may be necessary.
 (ii) Field Supplied Fan Sheave AK41x3/4" required. Field Supplied Belt may be necessary.

Table 93. Belt Drive Evaporator Fan Performance — 5 Tons — YHC060E3,E4*H,H High Gas Heat Horizontal Airflow

External Static Pressure (Inches of Water)																					
		.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
CFM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	
1-HP Standard Motor & Field Supplied Low Static Drive⁽ⁱ⁾											1-HP Standard Motor & Drive										
1600	569	0.21	636	0.26	697	0.32	752	0.37	800	0.41	842	0.46	881	0.52	922	0.58	963	0.64	1002	0.70	
1800	620	0.28	686	0.34	741	0.40	795	0.46	843	0.52	887	0.57	925	0.62	961	0.68	997	0.75	1033	0.81	
2000	672	0.36	739	0.44	788	0.50	838	0.57	886	0.64	930	0.71	970	0.76	1006	0.82	1040	0.88	1072	0.95	
2200	724	0.46	789	0.55	839	0.62	884	0.69	929	0.77	973	0.85	1013	0.92	1050	0.99	1084	1.05	1117	1.11	
2400	778	0.58	840	0.68	892	0.76	933	0.84	974	0.91	1015	1.00	1055	1.09	1094	1.17	1129	1.25	1161	1.31	
1-HP Standard Motor & Field Supplied High Static Drive⁽ⁱⁱ⁾																					
Continued																					
External Static Pressure (Inches of Water)																					
		1.10		1.20		1.30		1.40		1.50											
CFM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP											
1-HP Standard Motor & Drive																					
1600	1041	0.76	1078	0.83	1113	0.90	1147	0.96	1180	1.03											
1800	1069	0.88	1104	0.95	1139	1.02	1173	1.09	1206	1.17											
2000	1103	1.02	1137	1.09	1170	1.17	1201	1.24	1233	1.32											
2200	1147	1.18	1177	1.25	1205	1.33	1234	1.41	-	-											
2400	1192	1.38	1221	1.45	-	-	-	-	-	-											
1-HP Standard Motor & Field Supplied High Static Drive⁽ⁱⁱⁱ⁾																					

For Standard Evaporator Fan Speed (RPM), reference [Table 96](#).
 Notes: Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data. Data does not include pressure drop due to reheat coil. Refer to [Table 105](#) to determine additional static pressure drop due to other options/accessories.
 1-HP Fan Motor Heat (MBH) = 2.7672 x Fan BHP + 0.4705.
 Factory supplied motors, in equipment, are definite purpose motors, specifically designed and tested to operate at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

(i) Field Supplied Fan Sheave AK69x3/4" required. Field Supplied Belt may be necessary.
 (ii) Field Supplied Fan Sheave AK41x3/4" required. Field Supplied Belt may be necessary.
 (iii) Field Supplied Fan Sheave AK41x3/4" required. Field Supplied Belt may be necessary.



Performance Data

(5 Tons R-410A Refrigerant)

Table 94. Belt Drive Evaporator Fan Performance — 5 Tons — WSC060E3,E4,EW Downflow Airflow

External Static Pressure (Inches of Water)																				
CFM	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Field Supplied Low Static Drive⁽ⁱ⁾											1-HP Standard Motor & Drive									
1600	—	—	—	—	606	0.26	660	0.31	710	0.36	757	0.41	802	0.46	846	0.52	889	0.58	930	0.65
1800	—	—	582	0.27	640	0.32	692	0.38	740	0.43	785	0.49	827	0.55	868	0.60	908	0.67	947	0.73
2000	564	0.28	622	0.34	675	0.40	725	0.46	772	0.52	815	0.58	856	0.64	895	0.71	933	0.77	969	0.84
2200	608	0.36	663	0.42	712	0.49	760	0.55	805	0.62	847	0.69	886	0.76	924	0.82	961	0.89	995	0.96
2400	653	0.45	705	0.52	752	0.59	796	0.66	839	0.74	880	0.81	919	0.88	955	0.96	990	1.03	1024	1.11
Continued																				
External Static Pressure (Inches of Water)																				
CFM	1.10		1.20		1.30		1.40		1.50											
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP										
1-HP Standard Motor & Drive																				
1600	968	0.71	1005	0.78	1040	0.84	1076	0.91	1108	0.98										
1800	986	0.80	1022	0.87	1058	0.94	1092	1.02	1124	1.09										
2000	1005	0.91	1041	0.98	1075	1.05	1110	1.13	1142	1.21										
2200	1030	1.03	1063	1.11	1095	1.18	1127	1.26	1160	1.34										
2400	1057	1.18	1089	1.26	1120	1.34	1151	1.42	1180	1.49										
1-HP Standard Motor & Field Supplied Low Static Drive⁽ⁱⁱ⁾																				

For Standard Evaporator Fan Speed (RPM), reference [Table 96](#).
 Notes: Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data. Data does not include pressure drop due to reheat coil. Refer to [Table 105](#) to determine additional static pressure drop due to other options/accessories.
 1-HP Fan Motor Heat (MBH) = 2.7672 x Fan BHP + 0.4705.
 Factory supplied motors, in equipment, are definite purpose motors, specifically designed and tested to operate at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

⁽ⁱ⁾ Field Supplied Fan Sheave AK71x3/4" required. Field Supplied Belt may be necessary.
⁽ⁱⁱ⁾ Field Supplied Fan Sheave AK41x3/4" required. Field Supplied Belt may be necessary.

Table 95. Belt Drive Evaporator Fan Performance — 5 Tons — WSC060E3,E4,EW Horizontal Airflow

External Static Pressure (Inches of Water)																				
CFM	.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1-HP Standard Motor & Field Supplied Low Static Drive⁽ⁱ⁾											1-HP Standard Motor & Drive									
1600	—	—	573	0.23	642	0.29	705	0.35	764	0.42	821	0.49	873	0.56	919	0.64	963	0.71	1004	0.79
1800	—	—	611	0.29	674	0.36	733	0.43	790	0.49	843	0.57	894	0.65	943	0.73	988	0.81	1030	0.90
2000	593	0.31	651	0.37	710	0.44	766	0.52	819	0.59	869	0.66	917	0.74	965	0.83	1010	0.92	1053	1.01
2200	641	0.40	694	0.46	747	0.54	799	0.62	850	0.70	898	0.78	945	0.86	988	0.95	1032	1.04	1075	1.14
2400	690	0.50	738	0.57	787	0.65	836	0.74	884	0.82	929	0.91	974	1.00	1016	1.09	1057	1.18	1096	1.27
Continued																				
External Static Pressure (Inches of Water)																				
CFM	1.10		1.20		1.30		1.40		1.50											
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP										
1-HP Standard Motor & Drive																				
1600	1042	0.86	1076	0.93	1109	1.01	1141	1.08	1171	1.16										
1800	1069	0.98	1106	1.06	1140	1.15	1173	1.23	1205	1.31										
2000	1094	1.10	1131	1.20	1168	1.29	1203	1.38	1235	1.48										
2200	1116	1.24	1154	1.34	1191	1.44	—	—	—	—										
2400	1136	1.38	1175	1.48	—	—	—	—	—	—										
1-HP Standard Motor & Field Supplied Low Static Drive⁽ⁱⁱ⁾																				

For Standard Evaporator Fan Speed (RPM), reference [Table 96](#).
 Notes: Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data. Data does not include pressure drop due to reheat coil. Refer to [Table 105](#) to determine additional static pressure drop due to other options/accessories.
 1-HP Fan Motor Heat (MBH) = 2.7672 x Fan BHP + 0.4705.
 Factory supplied motors, in equipment, are definite purpose motors, specifically designed and tested to operate at all cataloged conditions. Using the full horsepower range of our fan motors as shown in our tabular data will not result in nuisance tripping or premature motor failure. Our product's warranty will not be affected.

⁽ⁱ⁾ Field Supplied Fan Sheave AK71x3/4" required. Field Supplied Belt may be necessary.
⁽ⁱⁱ⁾ Field Supplied Fan Sheave AK41x3/4" required. Field Supplied Belt may be necessary.



Performance Data

Table 96. Standard Motor & Sheave/Fan Speed (Rpm)

Tons	Unit Model Number	Fan Sheave	6 Turns Open	5 Turns Open	4 Turns Open	3 Turns Open	2 Turns Open	1 Turn Open	Closed
R-22 Refrigerant									
3	T/YHC033A	N/A	N/A	745	819	894	968	1043	1117
4	T/YHC043A	N/A	N/A	833	916	1000	1083	1167	1250
5	T/YHC063A	N/A	N/A	897	987	1077	1166	1256	1346
R-410A Refrigerant									
3	T/YSC036E3	AK51x3/4"	N/A	765	835	905	975	1045	1115
4	T/YSC048E3	AK49x3/4"	N/A	804	876	948	1020	1091	1163
5	T/YSC060E3	AK44x3/4"	N/A	885	966	1049	1131	1212	1295
3	WSC036E3	AK51x3/4"	N/A	761	835	909	982	1057	1125
4	WSC048E3	AK49x3/4"	N/A	801	874	946	1019	1091	1164
5	WSC060E3	AK49x3/4"	N/A	798	868	939	1010	1081	1152

Factory set at 3 turns open.

Table 97. Standard Motor & Low Static Drive Accessory Sheave/Fan Speed (Rpm)

Tons	Unit Model Number	Fan Sheave	6 Turns Open	5 Turns Open	4 Turns Open	3 Turns Open	2 Turns Open	1 Turn Open	Closed
R-22 Refrigerant									
3	T/YHC033A	AK84x3/4"	N/A	427	470	512	555	597	640
		AK69x3/4"	N/A	522	574	627	679	732	784
4	T/YHC043A	AK79x3/4"	N/A	455	500	546	591	637	682
		AK61x3/4"	N/A	593	652	712	771	831	890
5	T/YHC063A	AK71x3/4"	N/A	507	558	609	659	710	761
		AK59x3/4"	N/A	614	675	737	798	860	921
R-410A Refrigerant									
3	T/YSC036E3	AK71x3/4"	N/A	556	606	657	707	757	808
4	T/YSC048E3	AK69x3/4"	N/A	N/A	624	675	727	779	832
5	T/YSC060E3	AK61x3/4"	N/A	N/A	708	765	823	880	938
3	WSC036E3	AK71x3/4"	N/A	549	600	650	701	751	802
4	WSC048E3	AK69x3/4"	N/A	567	619	671	723	775	828
5	WSC060E3	AK69x3/4"	N/A	566	617	668	719	770	821

Factory set at 3 turns open.

Table 98. Standard Motor & High Static Drive Accessory Sheave/Fan Speed (Rpm)

Tons	Unit Model Number	6 Turns Open	5 Turns Open	4 Turns Open	3 Turns Open	2 Turns Open	1 Turn Open	Closed
R-410A Refrigerant								
3	T/YSC036E3	AK41x3/4"	N/A	967	1040	1113	1187	N/A
4	T/YSC048E3	AK41x3/4"	N/A	957	1033	1110	1187	1263
5	T/YSC060E3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
3	WSC036E3	AK41 x 3/4"	N/A	966	1041	1115	1190	N/A
4	WSC048E3	AK41 x 3/4"	N/A	958	1034	1110	1186	1261
5	WSC060E3	AK41 x 3/4"	N/A	970	1034	1097	1161	1224

Factory set at 3 turns open.



Performance Data

Table 99. Standard Motor & Sheave/Fan Speed (Rpm)

Tons	Unit Model Number	Fan Sheave	6 Turns Open	5 Turns Open	4 Turns Open	3 Turns Open	2 Turns Open	1 Turn Open	Closed
15 SEER High Efficiency									
3	T/YHC036E	AK51x3/4"	N/A	765	835	905	975	1045	1115
4	T/YHC048E	AK54x3/4"	N/A	729	794	860	926	991	1057
5	T/YHC060E	AK49x3/4"	N/A	801	871	942	1012	1083	1154

Factory set at 3 turns open.

Table 100. Standard Motor & Low Static Drive Accessory Sheave/Fan Speed (Rpm)

Tons	Unit Model Number	Fan Sheave	6 Turns Open	5 Turns Open	4 Turns Open	3 Turns Open	2 Turns Open	1 Turn Open	Closed
15 SEER High Efficiency									
3	T/YHC036E	AK71x3/4"	N/A	556	606	657	707	757	808
4	T/YHC048E	AK74x3/4"	N/A	528	576	625	673	722	770
5	T/YHC060E	AK69x3/4"	N/A	565	617	669	721	773	825

Factory set at 3 turns open.

Table 101. Standard Motor & High Static Drive Accessory Sheave/Fan Speed (Rpm)

Tons	Unit Model Number	6 Turns Open	5 Turns Open	4 Turns Open	3 Turns Open	2 Turns Open	1 Turn Open	Closed
15 SEER High Efficiency								
3	T/YHC036E	AK41x3/4"	N/A	967	1040	1113	1187	N/A
4	T/YHC048E	AK41x3/4"	N/A	966	1048	1132	1215	N/A
5	T/YHC060E	AK41x3/4"	N/A	961	1041	1122	1203	N/A

Factory set at 3 turns open.



Performance Data

Table 102. Outdoor Sound Power Level - dB (ref. 10 - 12 Watts)

Tons	Unit Model	Octave Center Frequency								Overall
	Number	63	125	250	500	1000	2000	4000	8000	dB(A)
R-22 Refrigerant										
3	T/YHC033A	86	83	81	80	78	74	69	68	83
4	T/YHC043A	92	86	83	82	81	75	72	69	85
5	T/YHC063A	94	87	82	81	78	74	72	69	84
R-410A Refrigerant										
3	T/YSC036E1, E3, E4, EW	79	85	79	79	77	71	67	58	81
4	T/YSC048E1, E3, E4, EW	82	84	83	80	76	72	66	58	82
5	T/YSC060E1, E3, E4, EW	85	82	81	81	77	72	67	61	82

Tests follow ARI270-95.

Table 103. Outdoor Sound Power Level - dB (ref. 10 - 12 Watts)

Tons	Unit Model	Octave Center Frequency								Overall
	Number	63	125	250	500	1000	2000	4000	8000	dB(A)
R-410A Refrigerant										
3	WSC036E1	79	85	80	79	77	72	67	59	81
	WSC036E3, E4, EW	77	85	79	78	75	71	66	59	80
4	WSC048E1, E3, E4, EW	81	82	83	81	77	72	66	59	82
5	WSC060E1, E3, E4, EW	81	87	84	85	83	78	73	67	87

Tests follow ARI270-95.

Table 104. Outdoor Sound Power Level - dB (ref. 10 - 12 Watts)

Tons	Unit Model	Octave Center Frequency								Overall
	Number	63	125	250	500	1000	2000	4000	8000	dB(A)
15 SEER High Efficiency										
3	YHC036E1,E3	79	85	79	79	77	71	67	58	81
4	YHC048E1,E3	80	86	84	85	83	79	73	67	87
5	YHC060E1,E3	80	86	84	85	83	79	73	67	87

Tests follow ARI270-95.



Performance Data

Table 105. Static Pressure Drop Through Accessories (Inches Water Column) —3-5 Tons

Tons	Unit Model Number	CFM	Standard Filters ^(iv)	Through Reheat Coil (WC)	2" Pleated Filter	Economizer with OA/RA Dampers ⁽ⁱ⁾				Electric Heater Accessory (kW) ^{(ii), (iii)}			
						100% OA	100% RA	100% OA	100% RA	5-6	9-15	17-36	54
						Downflow		Horizontal					
R-22 Refrigerant													
3	T/YHC033A	600	0.01	.01	0.03	0.03	0.01	0.03	0.00	—	—	—	—
		960	0.02	.03	0.04	0.05	0.01	0.05	0.00	.013	.016	.019	—
		1200	0.03	.04	0.05	0.07	0.02	0.07	0.01	.020	.025	.030	—
		1440	0.04	.06	0.07	0.10	0.03	0.10	0.01	.029	.036	.043	—
4	T/YHC043A	800	0.02	.02	0.03	0.04	0.01	0.04	0.00	—	—	—	—
		1280	0.04	.05	0.06	0.08	0.03	0.08	0.01	.023	.029	.034	—
		1600	0.05	.07	0.09	0.12	0.04	0.12	0.01	.036	.045	.053	—
		1920	0.08	.09	0.12	0.17	0.06	0.17	0.02	.052	.064	.077	—
5	T/YHC063A	1000	0.02	.03	0.04	0.06	0.01	0.06	0.01	—	—	—	—
		1600	0.04	.07	0.07	0.12	0.04	0.12	0.01	.036	.045	.053	—
		2000	0.06	.10	0.10	0.18	0.07	0.18	0.02	.056	.070	.083	—
		2400	0.09	.14	0.14	0.26	0.10	0.26	0.04	.081	.100	.120	—
R-410A Refrigerant													
3	T/YSC036E1	960	0.01	—	0.03	0.04	0.01	0.04	0.01	0.01	0.01	0.01	—
		1200	0.02	—	0.04	0.06	0.01	0.06	0.01	0.02	0.02	0.02	—
		1440	0.03	—	0.05	0.08	0.02	0.08	0.01	0.02	0.03	0.03	—
T/YSC036E3	960	0.01	—	0.03	0.04	0.01	0.04	0.01	0.01	0.01	0.01	—	
	1200	0.02	—	0.04	0.06	0.01	0.06	0.01	0.02	0.02	0.02	—	
	1440	0.03	—	0.05	0.08	0.02	0.08	0.01	0.02	0.03	0.03	—	
4	T/YSC048E1	1280	0.03	—	0.05	0.09	0.02	0.09	0.01	0.02	0.03	0.03	—
		1600	0.04	—	0.07	0.13	0.04	0.13	0.02	0.04	0.05	0.05	—
		1920	0.06	—	0.10	0.17	0.06	0.17	0.02	0.05	0.06	0.08	—
T/YSC048E3	1280	0.03	—	0.05	0.09	0.02	0.09	0.01	0.02	0.03	0.03	—	
	1600	0.04	—	0.07	0.13	0.04	0.13	0.02	0.04	0.05	0.05	—	
	1920	0.06	—	0.10	0.17	0.06	0.17	0.02	0.05	0.06	0.08	—	
5	T/YSC060E1	1600	0.04	—	0.07	0.13	0.04	0.13	0.02	0.04	0.05	0.05	—
		2000	0.06	—	0.10	0.18	0.07	0.18	0.02	0.06	0.07	0.08	—
		2400	0.08	—	0.13	0.25	0.11	0.25	0.03	0.08	0.10	0.12	—
T/YSC060E3	1600	0.04	—	0.07	0.13	0.04	0.13	0.02	0.04	0.05	0.05	—	
	2000	0.06	—	0.10	0.18	0.07	0.18	0.02	0.06	0.07	0.08	—	
	2400	0.08	—	0.13	0.25	0.11	0.25	0.03	0.08	0.10	0.12	—	
3	WSC036E1	960	0.02	—	0.03	0.05	0.01	0.05	0.01	0.01	0.02	0.02	—
		1200	0.03	—	0.05	0.07	0.02	0.07	0.01	0.02	0.03	0.03	—
		1440	0.03	—	0.06	0.10	0.03	0.10	0.01	0.03	0.04	0.04	—
WSC036E3	960	0.02	—	0.03	0.05	0.01	0.05	0.01	0.01	0.02	0.02	—	
	1200	0.03	—	0.05	0.07	0.02	0.07	0.01	0.02	0.03	0.03	—	
	1440	0.03	—	0.06	0.10	0.03	0.10	0.01	0.03	0.04	0.04	—	
4	WSC048E1	1280	0.03	—	0.05	0.09	0.02	0.09	0.01	0.02	0.03	0.03	—
		1600	0.04	—	0.07	0.13	0.04	0.13	0.02	0.04	0.05	0.05	—
		1920	0.06	—	0.10	0.17	0.06	0.17	0.02	0.05	0.06	0.08	—
WSC048E3	1280	0.03	—	0.05	0.09	0.02	0.09	0.01	0.02	0.03	0.03	—	
	1600	0.04	—	0.07	0.13	0.04	0.13	0.02	0.04	0.05	0.05	—	
	1920	0.06	—	0.10	0.17	0.06	0.17	0.02	0.05	0.06	0.08	—	
5	WSC060E1	1600	0.03	—	0.06	0.09	0.01	0.05	0.01	0.01	0.01	0.02	—
		2000	0.05	—	0.08	0.11	0.01	0.07	0.02	0.02	0.01	0.03	—
		2400	0.07	—	0.10	0.12	0.03	0.09	0.03	0.03	0.02	0.04	—
WSC060E3	1600	0.03	—	0.06	0.09	0.01	0.05	0.01	0.01	0.01	0.02	—	
	2000	0.05	—	0.08	0.11	0.01	0.07	0.02	0.02	0.01	0.03	—	
	2400	0.07	—	0.10	0.12	0.03	0.09	0.03	0.03	0.02	0.04	—	

(i) OA = Outside Air and RA = Return Air.

(ii) Nominal kW ratings at 240, 480, 600 volts.

(iii) Electric heaters restricted on applications below 320 CFM/Ton.

(iv) Tested with standard filters (3-5 tons 1" filters, 6-10 tons 2" filters). Difference in pressure drop should be considered when utilizing optional 2" pleated filters.



Performance Data

Table 106. Static Pressure Drop Through Accessories (Inches Water Column) —3-5 Tons

Tons	Unit Model Number	CFM	Standard Filters ⁽ⁱⁱⁱ⁾	2" Pleated Filter	Economizer with OA/RA Dampers ⁽ⁱ⁾				Electric Heater Accessory (kW) ⁽ⁱⁱ⁾		
					100% OA	100% RA	100% OA	100% RA	5-6	9-15	17-36
					Downflow		Horizontal				
15 SEER High Efficiency											
3	T/YHC036E1	960	0.013	0.027	0.041	0.007	0.041	0.006	0.010	0.012	0.014
		1200	0.020	0.037	0.059	0.013	0.059	0.008	0.015	0.019	0.022
		1440	0.027	0.048	0.080	0.021	0.080	0.010	0.022	0.027	0.032
	T/YHC036E3	960	0.013	0.027	0.041	0.007	0.041	0.006	0.010	0.012	0.014
		1200	0.020	0.037	0.059	0.013	0.059	0.008	0.015	0.019	0.022
		1440	0.027	0.048	0.080	0.021	0.080	0.010	0.022	0.027	0.032
4	T/YHC048E1	1280	0.015	0.042	0.081	0.000	0.038	0.009	0.009	0.001	0.006
		1600	0.031	0.059	0.092	0.006	0.052	0.015	0.015	0.008	0.016
		1920	0.046	0.076	0.102	0.014	0.066	0.020	0.020	0.014	0.025
	T/YHC048E3	1280	0.015	0.042	0.081	0.000	0.038	0.009	0.009	0.001	0.006
		1600	0.031	0.059	0.092	0.006	0.052	0.015	0.015	0.008	0.016
		1920	0.046	0.076	0.102	0.014	0.066	0.020	0.020	0.014	0.025
5	T/YHC060E1	1600	0.031	0.059	0.091	0.007	0.052	0.015	0.015	0.008	0.016
		2000	0.049	0.079	0.105	0.014	0.069	0.021	0.021	0.015	0.026
		2400	0.070	0.101	0.118	0.026	0.086	0.029	0.029	0.024	0.040
	T/YHC060E3	1600	0.031	0.059	0.091	0.007	0.052	0.015	0.015	0.008	0.016
		2000	0.049	0.079	0.105	0.014	0.069	0.021	0.021	0.015	0.026
		2400	0.070	0.101	0.118	0.026	0.086	0.029	0.029	0.024	0.040

⁽ⁱ⁾ OA = Outside Air and RA = Return Air.

⁽ⁱⁱ⁾ Nominal kW ratings at 240, 480, 600 volts. Heaters only available on T_C units.

⁽ⁱⁱⁱ⁾ Tested with standard filters (1" filters). Difference in pressure drop should be considered when utilizing optional 2" pleated filters.

Unit applications below 320 CFM/Ton are not applicable with Gas Heat or Electric Heaters.



Performance Data

Table 107. Gas Fired Heating Capacities

Tons	Unit Model Number	Heating Input MBH ⁽¹⁾	Heating Output MBH	Air Temp. Rise, F
R-22 Refrigerant				
3	YHC033A3, A4, AW*(L,X)	60	48	25-55
	YHC033A3, A4, AW*(M,Y)	80	64	35-65
	YHC033A3, A4, AW*(H,Z)	120	96	55-85
4	YHC043A3, A4, AW*(L,X)	60	48	15-45
	YHC043A3, A4, AW*(M,Y)	80	64	20-50
	YHC043A3, A4, AW*(H,Z)	120	96	40-70
5	YHC063A3, A4, AW, AK*(L,X)	60	48	10-40
	YHC063A3, A4, AW*(M,Y)	80	64	15-45
	YHC063A3, A4, AW, AK*(H,Z)	130	104	35-65
R-410A Refrigerant - 13 SEER Standard Efficiency				
3	YSC036E1*(L,X)	60	48	25-55
	YSC036E1*(M,Y)	80	65	35-65
	YSC036E1*(H,Z)	120	96	55-85
	YSC036E(3,4,W)*(L,X)	60	48	25-55
	YSC036E(3,4,W)*(M,Y)	80	64	35-65
	YSC036E(3,4,W)*(H,Z)	120	96	55-85
4	YSC048E1*(L,X)	60	49	15-45
	YSC048E1*(M,Y)	80	65	20-50
	YSC048E1*(H,Z)	120	96	40-70
	YSC048E(3,4,W)*(L,X)	60	48	15-45
	YSC048E(3,4,W)*(M,Y)	80	64	20-50
	YSC048E(3,4,W)*(H,Z)	120	96	40-70
5	YSC060E1*(L,X)	60	48	10-40
	YSC060E1*(M,Y)	80	65	15-45
	YSC060E1*(H,Z)	130	104	35-65
	YSC060E(3,4,W)*(L,X)	60	48	10-40
	YSC060E(3,4,W)*(M,Y)	80	64	15-45
	YSC060E(3,4,W)*(H,Z)	130	104	35-65

Ratings shown are for elevations up to 2,000 ft. For higher elevations, reduce ratings at a rate of 4% per 1,000 ft. elevation.

⁽¹⁾ For two stage heaters (input or output), Second stage is total heating capacity. Second Stage/First Stage.

Table 108. Gas Fired Heating Capacities

Tons	Unit Model Number	Heating Input MBH	Heating Output MBH	Air Temp. Rise, F
15 SEER High Efficiency - R-410A Refrigerant				
3	YHC036E1*(L,X)	60	48	25 - 55
	YHC036E1*(M,Y)	80	65	35 - 65
	YHC036E1*(H,Z)	120	96	55 - 85
	YHC036E(3,4)*(L,X)	60	48	25 - 55
	YHC036E(3,4)*(M,Y)	80	64	35 - 65
	YHC036E(3,4)*(H,Z)	120	96	55 - 85
4	YHC048E1*(L,X)	60	49	10 - 40
	YHC048E1*(M,Y)	80	64	20 - 50
	YHC048E1*(H,Z)	120	96	40 - 70
	YHC048E(3,4)*(L,X)	60	48	10 - 40
	YHC048E(3,4)*(M,Y)	80	64	20 - 50
	YHC048E(3,4)*(H,Z)	120	96	40 - 70
5	YHC060E1*(L,X)	60	49	10 - 40
	YHC060E1*(M,Y)	80	64	15 - 45
	YHC060E1*(H,Z)	130	104	35 - 65
	YHC060E(3,4)*(L,X)	60	48	10 - 40
	YHC060E(3,4)*(M,Y)	80	64	15 - 45
	YHC060E(3,4)*(H,Z)	130	104	35 - 65

Ratings shown are for elevations up to 2,000 ft. For higher elevations, reduce ratings at a rate of 4% per 1,000 ft. elevation.



Performance Data

Table 109. Auxiliary Electric Heat Capacity - R-22

Tons	Unit Model Number	Total ⁽ⁱ⁾			Stage1		Stage 2	
		kW Input ⁽ⁱⁱ⁾	MBH Output	No. of Stages	kW Input	MBH Output	kW Input	MBH Output
3	THC033A3, A4, AW	6.00	20.48	1	6.00	20.48	—	—
		12.00	40.97	2	6.00	20.48	6.00	20.48
		17.40	59.40	2	8.70	29.70	8.70	29.69
4	THC043A3, A4, AW	5.00	17.07	1	5.00	17.07	—	—
		6.00	20.48	1	6.00	20.48	—	—
		12.00	40.97	2	6.00	20.48	6.00	20.48
5	THC063A3, A4, AW	6.00	20.48	1	6.00	20.48	—	—
		12.00	40.97	2	6.00	20.48	6.00	20.48
		17.40	59.40	2	8.70	29.70	8.70	29.70
		23.00	78.52	2	14.30	48.82	8.70	29.70

⁽ⁱ⁾ Heaters are rated at 240v, 380v, 480v and 600v. For other than rated voltage, CAP= (voltage/rated voltage)² x rated cap.

⁽ⁱⁱ⁾ All input/output does not include indoor fan power or heat.

Table 110. Auxiliary Electric Heat Capacity - R-410A

Tons	Unit Model Number	Total ⁽ⁱ⁾			Stage1		Stage 2	
		kW Input ⁽ⁱⁱ⁾	MBH Output	No. of Stages	kW Input	MBH Output	kW Input	MBH Output
3	T*CO36E1	5.00	17.07	1	5.00	17.07	—	—
		10.00	34.14	2	5.00	17.07	5.00	17.07
		13.80	47.11	2	5.00	17.07	8.80	30.04
	T*CO36E3, E4, EW ⁽ⁱⁱⁱ⁾	6.00	20.48	1	6.00	20.48	—	—
		12.00	40.97	2	6.00	20.48	6.00	20.48
		17.40	59.40	2	8.70	29.70	8.70	29.70
4	T*CO48E1	5.00	17.07	1	5.00	17.07	—	—
		10.00	34.14	2	5.00	17.07	5.00	17.07
		13.80	47.11	2	5.00	17.07	8.80	30.04
	T*CO48E3, E4, EW ⁽ⁱⁱⁱ⁾	6.00	20.48	1	6.00	20.48	—	—
		12.00	40.97	2	6.00	20.48	6.00	20.48
		17.40	59.40	2	8.70	29.70	8.70	29.70
5	T*CO60E1	5.00	17.07	1	5.00	17.07	—	—
		10.00	34.14	2	5.00	17.07	5.00	17.07
		13.80	47.11	2	5.00	17.07	8.80	30.04
	T*CO60E3, E4, EW ⁽ⁱⁱⁱ⁾	6.00	20.48	1	6.00	20.48	—	—
		12.00	40.97	2	6.00	20.48	6.00	20.48
		17.40	59.40	2	8.70	29.70	8.70	29.70
		23.00	78.52	2	8.70	29.70	14.30	48.82

⁽ⁱ⁾ Heaters are rated at 240v, 380v, 480v and 600v. For other than rated voltage, CAP= (voltage/rated voltage)² x rated cap.

⁽ⁱⁱ⁾ All input/output does not include indoor fan power or heat.

⁽ⁱⁱⁱ⁾ 600v is not available on high efficiency units.



Performance Data

**Table 111. Electric Heater Voltage Correction Factors
(Applicable to Auxiliary Heat Capacity)**

Nominal Voltage	Distribution Voltage	Capacity Multiplier
240	208	0.751
	230	0.918
	240	1.000
480	440	0.840
	460	0.918
	480	1.000
600	540	0.810
	575	0.918
	600	1.000

Table 112. Air Temperature Rise Across Electric Heaters (Degrees F) - R-22

kW	Stages	3 Tons	4 Tons	5 Tons
		1200 CFM	1600 CFM ⁽ⁱ⁾	2000 CFM
		Three Phase THC033A3,A4,AW	Three Phase THC043A3,A4,AW	Three Phase THC063A3,A4,AW
5.00	1	15.8	11.9	—
6.00	1	—	—	9.5
7.50	2	—	—	—
10.00	2	—	—	—
10.90	2	—	—	—
12.00	2	31.6	23.7	19.0
13.80	2	—	—	—
14.40	2	—	—	—
17.40	2	45.8	34.4	27.5
17.60	2	—	—	—
23.00	2	—	—	36.4

For minimum design airflow, see airflow performance table for each unit. To calculate temp rise at different airflow, use the following formula:
Temp. rise across Electric Heater = kWx3414/1.08xCFM.

⁽ⁱ⁾ Minimum allowable airflow with a 17.4 or 17.6 kW heater is 1440 cfm.

Table 113. Air Temperature Rise Across Electric Heaters (Degrees F) - R-410A

kW	Stages	3 Tons ⁽ⁱ⁾		4 Tons		5 Tons ⁽ⁱⁱ⁾	
		1200 CFM		1600 CFM		2000 CFM	
		Single Phase T*C036E1 WSC036E1	Three Phase T*C036E3, E4, EW ⁽ⁱⁱⁱ⁾ WSC036E3, E4, EW	Single Phase T*C048E1 WSC048E1	Three Phase T*C048E3, E4, EW ⁽ⁱⁱⁱ⁾ WSC048E3, E4, EW	Single Phase T*C060E1 WSC060E1	Three Phase T*C060E3, E4, EW ⁽ⁱⁱⁱ⁾ WSC060E3, E4, EW
5.00	1	13.8	—	10.5	—	8.5	—
6.00	1	—	18.5	—	10.5	—	11.4
10.00	2	26.8	—	20.3	—	16.3	—
12.00	2	—	36.2	—	22.3	—	21.5
13.80	2	36.9	—	27.8	—	22.3	—
17.40	2	—	48.2	—	33.0	—	30.0
17.60	2	—	—	35.5	—	28.3	—
23.0	2	—	—	—	—	—	38.8

For minimum design airflow, see airflow performance table for each unit. To calculate temp rise at different airflow, use the following formula:
Temp. rise across Electric Heater = kWx3414/1.08xCFM.

⁽ⁱ⁾ The minimum allowable airflow for a 3 ton with a 17.4 kW heater is 1080 CFM.

⁽ⁱⁱ⁾ The minimum allowable airflow for a 5 ton unit with a 23.0 kW heater is 1900 CFM.

⁽ⁱⁱⁱ⁾ 600v is not available on high efficiency units.



Performance Data

Table 114. Hot Gas Reheat Temperature Rise^{(i),(ii), (iii)} - R-22

Tons	SCFM	Leaving Evaporator Dry Bulb [F]						
		35	40	45	50	55	60	65
3	600	20.3	20.0	19.6	19.2	18.8	18.4	18.0
	720	19.4	19.1	18.7	18.3	17.9	17.6	17.2
	840	18.5	18.2	17.9	17.5	17.1	16.7	16.3
	960	17.6	17.3	17.0	16.6	16.2	15.8	15.5
	1080	16.7	16.4	16.1	15.7	15.4	15.0	14.6
	1200	15.8	15.5	15.2	14.9	14.5	14.1	13.8
	1320	14.9	14.6	14.3	14.0	13.6	13.3	12.9
	1440	14.0	13.8	13.5	13.1	12.8	12.4	12.0
4	800	22.0	21.8	21.5	21.2	20.9	20.6	20.3
	960	21.0	20.7	20.5	20.2	19.9	19.6	19.3
	1120	20.0	19.7	19.5	19.2	18.9	18.6	18.2
	1280	19.0	18.7	18.4	18.1	17.9	17.5	17.2
	1440	17.9	17.7	17.4	17.1	16.9	16.5	16.2
	1600	16.9	16.6	16.4	16.1	15.8	15.5	15.2
	1760	15.9	15.6	15.4	15.1	14.8	14.5	14.2
	1920	14.8	14.6	14.4	14.1	13.8	13.5	13.2
5	1000	23.7	23.6	23.4	23.2	23.0	22.8	22.5
	1200	22.6	22.4	22.2	22.0	21.8	21.6	21.3
	1400	21.4	21.2	21.0	20.9	20.7	20.4	20.2
	1600	20.3	20.1	19.9	19.7	19.5	19.3	19.0
	1800	19.1	18.9	18.7	18.5	18.4	18.1	17.8
	2000	17.9	17.8	17.6	17.4	17.2	16.9	16.6
	2200	16.8	16.6	16.4	16.2	16.0	15.7	15.4
	2400	15.6	15.4	15.2	15.1	14.9	14.6	14.3

- (i) Temperature rise does not account for indoor fan heat.
(ii) 70 deg OD Ambient Temperature.
(iii) For units with the Dehumidification (Hot Gas Reheat) option.



Performance Data

Table 115. 3 Tons Single Phase Heating Capacities (Net) WSC036E1 at 1200 CFM

Outdoor Temp.	Integrated Heating Capacity (Btuh/1000) at Indicated Indoor Dry Bulb Temp ⁽¹⁾				Total Power in Kilowatts at at Indicated Indoor Dry Bulb Temp			
	F.	60	70	75	80	60	70	75
-8	12.3	11.4	11.0	10.5	2.54	2.82	2.96	3.11
-3	14.3	13.5	13.0	12.5	2.58	2.85	3.00	3.17
2	16.5	15.7	15.2	14.8	2.61	2.89	3.05	3.21
7	17.6	16.6	16.0	15.4	2.62	2.90	3.05	3.21
12	20.0	18.9	18.2	17.7	2.67	2.96	3.10	3.26
17	22.4	21.2	20.6	20.0	2.71	2.99	3.14	3.30
22	25.0	23.7	23.1	22.5	2.75	3.03	3.19	3.36
27	27.7	26.4	25.6	25.0	2.80	3.10	3.26	3.43
32	30.3	28.8	28.2	27.4	2.84	3.13	3.30	3.47
37	33.1	31.6	30.8	30.1	2.89	3.20	3.37	3.54
42	35.8	34.2	33.4	32.6	2.94	3.24	3.42	3.60
47	38.8	37.0	36.2	35.4	3.00	3.31	3.49	3.67
52	41.5	39.7	38.8	37.9	3.05	3.37	3.54	3.73
57	44.6	42.6	41.7	40.7	3.12	3.44	3.62	3.81
62	47.4	45.3	44.3	43.3	3.17	3.51	3.69	3.88
67	50.5	48.3	47.4	46.2	3.23	3.59	3.78	3.96
72	53.4	51.0	49.9	48.7	3.30	3.65	3.84	4.04

For other airflow conditions, see heating capacity correction factor [Table 111](#).
 Net heating capacity and power input includes indoor fan heat at ARI esp. To obtain net heating at other conditions, subtract fan heat at this condition and add fan heat at new condition.

⁽¹⁾ Integrated heating capacities and powers include the effects of defrost in the frost region. All heating capacities and power (kw) are at 70% OD relative humidity and demand defrost cycle.

Table 116. 3 Tons Three Phase Heating Capacities (Net) WSC036E3,E4,EW at 1200 CFM

Outdoor Temp.	Integrated Heating Capacity (Btuh/1000) at Indicated Indoor Dry Bulb Temp ⁽¹⁾				Total Power in Kilowatts at at Indicated Indoor Dry Bulb Temp			
	F.	60	70	75	80	60	70	75
-8	11.7	11.0	10.5	10.2	2.41	2.68	2.81	2.97
-3	13.8	13.0	12.6	12.1	2.45	2.72	2.87	3.02
2	15.9	15.0	14.7	14.3	2.48	2.75	2.92	3.07
7	16.9	15.8	15.3	14.7	2.48	2.76	2.91	3.05
12	19.5	18.3	17.8	17.1	2.53	2.81	2.94	3.12
17	21.8	20.7	20.1	19.5	2.57	2.85	3.02	3.17
22	24.4	23.1	22.6	21.9	2.62	2.90	3.06	3.22
27	27.2	26.0	25.3	24.7	2.66	2.96	3.11	3.29
32	29.9	28.5	27.8	27.1	2.71	3.01	3.18	3.35
37	32.9	31.4	30.7	30.0	2.77	3.08	3.25	3.42
42	35.5	34.0	33.2	32.5	2.82	3.14	3.31	3.49
47	38.7	37.0	36.2	35.5	2.90	3.21	3.38	3.58
52	41.4	39.7	38.8	38.1	2.95	3.27	3.45	3.65
57	44.7	42.9	41.9	41.1	3.02	3.35	3.53	3.73
62	47.5	45.6	44.6	43.8	3.09	3.42	3.61	3.82
67	50.7	48.7	47.8	46.8	3.16	3.51	3.70	3.91
72	53.5	51.5	50.5	49.5	3.22	3.59	3.79	3.99

For other airflow conditions, see heating capacity correction factor [Table 111](#).
 Net heating capacity and power input includes indoor fan heat at ARI esp. To obtain net heating at other conditions, subtract fan heat at this condition and add fan heat at new condition.

⁽¹⁾ Integrated heating capacities and powers include the effects of defrost in the frost region. All heating capacities and power (kw) are at 70% OD relative humidity and demand defrost cycle.



Performance Data

(4 Tons)

Table 117. 4 Tons Single Phase Heating Capacities (Net) WSC048E1 at 1200 CFM

Outdoor Temp.	Integrated Heating Capacity (Btuh/1000) at Indicated Indoor Dry Bulb Temp ⁽¹⁾				Total Power in Kilowatts at at Indicated Indoor Dry Bulb Temp			
	F.	60	70	75	80	60	70	75
-8	15.2	14.0	13.4	12.8	3.23	3.60	3.81	4.02
-3	17.6	16.5	15.8	15.2	3.24	3.61	3.81	4.03
2	20.3	19.0	18.5	17.8	3.28	3.62	3.83	4.07
7	20.8	19.2	18.3	17.6	3.24	3.59	3.77	3.97
12	23.9	22.2	21.4	20.6	3.27	3.61	3.80	4.01
17	26.6	25.0	24.2	23.4	3.28	3.63	3.82	4.03
22	29.8	28.2	27.3	26.4	3.33	3.68	3.88	4.08
27	33.2	31.5	30.6	29.8	3.37	3.72	3.91	4.13
32	36.2	34.5	33.5	32.6	3.41	3.77	3.95	4.17
37	39.8	37.9	36.9	36.0	3.46	3.81	4.01	4.22
42	42.9	40.9	39.9	38.9	3.50	3.86	4.06	4.27
47	46.6	44.4	43.3	42.3	3.56	3.91	4.11	4.34
52	49.9	47.6	46.4	45.5	3.61	3.97	4.17	4.39
57	53.8	51.2	50.2	49.1	3.67	4.02	4.24	4.46
62	57.3	54.6	53.4	52.2	3.72	4.09	4.30	4.52
67	61.4	58.5	57.1	55.8	3.79	4.16	4.37	4.59
72	64.9	61.9	60.4	59.0	3.85	4.22	4.44	4.67

For other airflow conditions, see heating capacity correction factor [Table 111](#).

Net heating capacity and power input includes indoor fan heat at ARI esp. To obtain net heating at other conditions, subtract fan heat at this condition and add fan heat at new condition.

⁽¹⁾ Integrated heating capacities and powers include the effects of defrost in the frost region. All heating capacities and power (kw) are at 70% OD relative humidity and demand defrost cycle.

Table 118. 4 Tons Three Phase Heating Capacities (Net) WSC048E3,E4,EW at 1200 CFM

Outdoor Temp.	Integrated Heating Capacity (Btuh/1000) at Indicated Indoor Dry Bulb Temp ⁽¹⁾				Total Power in Kilowatts at at Indicated Indoor Dry Bulb Temp			
	F.	60	70	75	80	60	70	75
-8	13.9	12.3	11.4	10.4	3.02	3.33	3.51	3.69
-3	16.7	15.0	14.1	13.2	3.06	3.38	3.55	3.74
2	19.5	17.8	17.1	16.1	3.11	3.44	3.61	3.81
7	20.7	19.0	17.9	16.9	3.11	3.44	3.61	3.80
12	23.8	22.0	21.1	20.0	3.16	3.49	3.67	3.85
17	26.6	24.9	23.9	22.9	3.20	3.53	3.71	3.90
22	29.9	28.1	27.1	26.1	3.24	3.59	3.77	3.96
27	33.3	31.4	30.4	29.3	3.29	3.65	3.82	4.02
32	36.2	34.3	33.3	32.3	3.33	3.69	3.88	4.07
37	39.8	37.8	36.8	35.8	3.39	3.74	3.94	4.15
42	42.9	40.8	39.8	38.7	3.44	3.79	3.99	4.20
47	46.6	44.4	43.3	42.1	3.50	3.86	4.05	4.26
52	50.0	47.6	46.5	45.3	3.55	3.92	4.12	4.33
57	53.9	51.3	50.3	49.0	3.62	3.98	4.19	4.41
62	57.5	54.7	53.4	52.2	3.69	4.05	4.25	4.48
67	61.5	58.7	57.4	56.0	3.75	4.13	4.34	4.56
72	65.0	62.3	60.8	59.3	3.82	4.21	4.42	4.64

For other airflow conditions, see heating capacity correction factor [Table 111](#).

Net heating capacity and power input includes indoor fan heat at ARI esp. To obtain net heating at other conditions, subtract fan heat at this condition and add fan heat at new condition.

⁽¹⁾ Integrated heating capacities and powers include the effects of defrost in the frost region. All heating capacities and power (kw) are at 70% OD relative humidity and demand defrost cycle.



Performance Data

(5 Tons)

Table 119. 5 Tons Single Phase Heating Capacities (Net) WSC060E1 at 1200 CFM

Outdoor Temp.	Integrated Heating Capacity (Btuh/1000) at Indicated Indoor Dry Bulb Temp ⁽¹⁾				Total Power in Kilowatts at at Indicated Indoor Dry Bulb Temp			
	F.	60	70	75	80	60	70	75
-8	18.6	17.1	16.4	15.7	3.73	4.16	4.37	4.60
-3	22.2	20.9	20.1	19.4	3.82	4.26	4.49	4.71
2	26.0	24.6	23.8	23.0	3.88	4.31	4.55	4.79
7	28.4	26.7	25.7	24.9	3.92	4.36	4.58	4.80
12	32.3	30.2	29.5	28.6	3.97	4.45	4.66	4.91
17	36.2	34.5	33.6	32.7	4.03	4.46	4.69	4.97
22	40.1	38.3	37.4	36.4	4.08	4.52	4.75	5.01
27	44.1	42.2	41.3	40.4	4.15	4.61	4.84	5.08
32	48.2	46.2	45.2	44.2	4.21	4.66	4.90	5.15
37	52.4	50.3	49.2	48.2	4.27	4.72	4.97	5.24
42	56.5	54.3	53.2	52.1	4.33	4.79	5.04	5.31
47	60.7	58.5	57.4	56.2	4.41	4.86	5.12	5.39
52	64.9	62.7	61.4	60.1	4.48	4.94	5.20	5.47
57	69.7	67.0	65.6	64.3	4.55	5.03	5.28	5.57
62	74.1	71.2	69.8	68.4	4.62	5.11	5.38	5.66
67	79.0	75.6	74.1	72.6	4.72	5.19	5.47	5.76
72	83.3	79.9	78.2	76.6	4.80	5.29	5.58	5.88

For other airflow conditions, see heating capacity correction factor [Table 111](#).

Net heating capacity and power input includes indoor fan heat at ARI esp. To obtain net heating at other conditions, subtract fan heat at this condition and add fan heat at new condition.

⁽¹⁾ Integrated heating capacities and powers include the effects of defrost in the frost region. All heating capacities and power (kw) are at 70% OD relative humidity and demand defrost cycle.

Table 120. 5 Tons Three Phase Heating Capacities (Net) WSC060E3,E4,EW at 1200 CFM

Outdoor Temp.	Integrated Heating Capacity (Btuh/1000) at Indicated Indoor Dry Bulb Temp ⁽¹⁾				Total Power in Kilowatts at at Indicated Indoor Dry Bulb Temp			
	F.	60	70	75	80	60	70	75
-8	20.4	19.4	18.8	18.3	3.68	4.13	4.37	4.64
-3	23.7	22.6	22.0	21.5	3.76	4.21	4.45	4.73
2	27.1	26.0	25.4	24.8	3.84	4.30	4.53	4.81
7	28.6	27.2	26.4	25.7	3.85	4.29	4.54	4.80
12	32.4	30.8	30.1	29.3	3.92	4.37	4.63	4.89
17	36.0	34.4	33.6	32.8	3.98	4.44	4.69	4.96
22	39.9	38.2	37.4	36.6	4.06	4.52	4.77	5.05
27	44.0	42.3	41.3	40.4	4.13	4.61	4.85	5.13
32	47.9	46.1	45.1	44.2	4.20	4.68	4.94	5.21
37	52.2	50.2	49.3	48.3	4.28	4.76	5.03	5.31
42	56.3	54.2	53.2	52.2	4.36	4.84	5.12	5.41
47	60.8	58.5	57.4	56.4	4.45	4.94	5.21	5.50
52	65.0	62.6	61.5	60.3	4.54	5.03	5.30	5.60
57	69.7	67.1	65.9	64.7	4.64	5.13	5.40	5.70
62	74.0	71.3	70.0	68.8	4.74	5.24	5.51	5.81
67	78.8	75.9	74.6	73.2	4.85	5.36	5.63	5.93
72	83.1	80.2	78.7	77.2	4.95	5.48	5.75	6.04

For other airflow conditions, see heating capacity correction factor [Table 111](#).

Net heating capacity and power input includes indoor fan heat at ARI esp. To obtain net heating at other conditions, subtract fan heat at this condition and add fan heat at new condition.

⁽¹⁾ Integrated heating capacities and powers include the effects of defrost in the frost region. All heating capacities and power (kw) are at 70% OD relative humidity and demand defrost cycle.

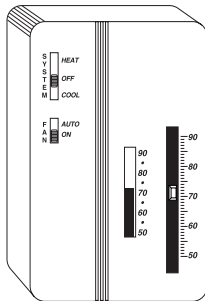
Controls

ReliaTel™ Controlled Units

Zone Sensors are the building occupant's comfort control devices for Precedent™ units with the Micro control:

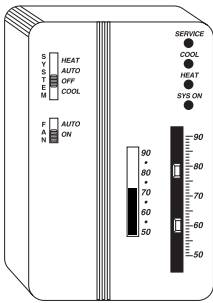
Manual Changeover

Heat, Cool or Off System Switch. Fan Auto or Off Switch. One temperature setpoint lever.



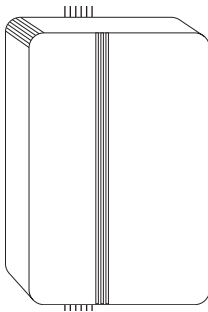
Manual/Automatic Changeover

Auto, Heat, Cool or Off System Switch. Fan Auto or Off Switch. Two temperature setpoint levers. Optional STATUS Indication LED lights, System On, Heat, Cool, or Service.

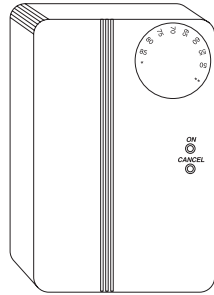


Remote Sensor

Sensor(s) available for all zone sensors to provide remote sensing capabilities.



Integrated Comfort™ System



Sensor(s) available with optional temperature adjustment and override buttons to provide central control through a Trane Integrated

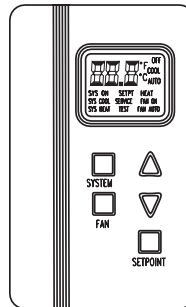
Comfort™ system.

Dual Thermistor Remote Zone Sensor

This sensor will allow the customer to reduce the total number of remote sensors to obtain space temperature averaging. This sensor should be utilized with ReliaTel controls.

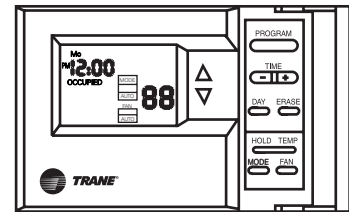
Digital Display Zone Sensor

The Digital LCD (Liquid Crystal Display) zone sensor has the look and functionality of standard zone sensors. This sensor includes a digital display of set point adjustment and space temperature in F (Fahrenheit) or C (Celsius). Includes FAN and SYSTEM buttons (supports the service functions of the standard sensor). E-squared memory stores last programmed set points. Requires 24 VAC (Volts AC). This sensor should be utilized with ReliaTel™ controls.



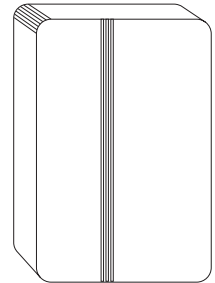
Programmable Night Setback

Auto or manual changeover with seven-day programming. Keyboard selection of Heat, Cool, Fan, Auto, or On. All programmable sensors have System On, Heat, Cool, Service LED/indicators as standard. Night Setback Sensors have one (1) Occupied, one (1) Un-occupied, and two (2) Override programs per day.



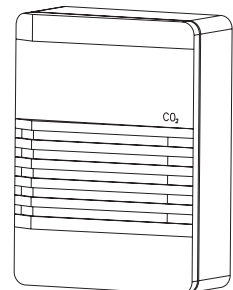
Humidity Sensor

Field installed, wall-mounted or duct-mounted humidity sensor is used to control activation of the hot gas reheat dehumidification option. The humidity sensor can be set for humidity levels between 40% and 60% relative humidity by adjusting the ReliaTel Options Module.



CO₂ Sensing

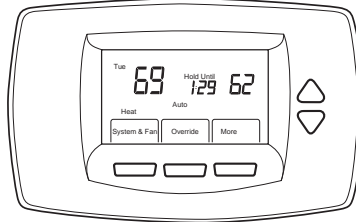
The CO₂ sensor shall have the ability to monitor space occupancy levels within the building by measuring the parts per million of CO₂ (Carbon Dioxide) in the air. As the CO₂ levels increase, the outside air damper modulates to meet the CO₂ space ventilation requirements. The CO₂ accessory shall be available as field installed.



Controls

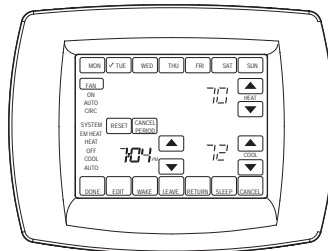
Digital Display Programmable Thermostat (2H/2C)

Two Heat/Two Cool digital display thermostat. 7-day programmable stat with night setback shall be available.



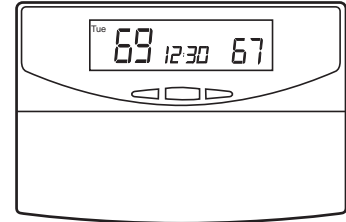
Touchscreen Programmable Thermostat (2H/2C)

Two Heat/Two Cool programmable thermostat with touch screen digital display. Menu-driven programming. Effortless set-up. Program each day separately with no need to copy multiple days. All programming can be done on one screen. Easy to read and use. Large, clear backlit digital display.



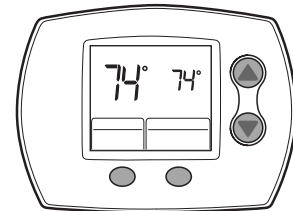
Digital Display Programmable Thermostat with Built-In Relative Humidity Sensing (3H/2C)

Three Heat/Two Cool digital display thermostat with built-in humidity control and display. This thermostat combines both humidity and dry bulb into one. Fully programmable with night setback.



Digital Display Thermostat (3H/2C)

Three Heat, Two Cool digital display thermostat. Easy access battery replacement. Flip-out door for easy battery replacement without removing or disassembling the thermostat.



RA Remote Sensor

Return Air Remote Sensor which can be mounted in the return air duct to report return air temperature.

Room Remote Sensor

Space Remote Sensor which can be mounted on the wall to report/control from a remote location in the space.



Electrical Data

Table 121. Unit Wiring — R-22 — High Efficiency

Tons	Unit Model Number	Voltage Range	Belt Drive Indoor Fan	
			MCA	Max Fuse Size or Max Circuit Breaker
3	T/YHC033A3	187-253	19.9	30
	T/YHC033A4	414-506	10.4	15
	T/YHC033AW	517-633	7.7	15
4	T/YHC043A3	187-253	22.6	35
	T/YHC043A4	414-506	11.8	15
	T/YHC043AW	517-633	8.5	15
5	T/YHC063A3	187-253	28.8	45
	T/YHC063A4	414-506	14.3	20
	T/YHC063AW	517-633	11.4	15

Table 122. Unit Wiring — R-410A — Standard Efficiency

Tons	Unit Model Number	Voltage Range	Standard Indoor Fan Motor ⁽¹⁾	
			MCA	Max Fuse Size or Max Circuit Breaker
3	T/YSC036E1	187-253	27.2	40
	T/YSC036E3	187-253	21.4	30
	T/YSC036E4	414-506	10.1	15
	T/YSC036EW	517-633	8.0	15
4	T/YSC048E1	187-253	35.2	50
	T/YSC048E3	187-253	25.2	35
	T/YSC048E4	414-506	12.5	15
	T/YSC048EW	517-633	9.0	15
5	T/YSC060E1	187-253	43.8	70
	T/YSC060E3	187-253	29.5	45
	T/YSC060E4	414-506	15.5	25
	T/YSC060EW	517-633	10.1	15
3	WSC036E1	187-253	31.2	45
	WSC036E3	187-253	23.8	35
	WSC036E4	414-506	11.4	15
	WSC036EW	517-633	8.8	15
4	WSC048E1	187-253	38.9	60
	WSC048E3	187-253	27.5	40
	WSC048E4	414-506	12.3	15
	WSC048EW	517-633	9.5	15
5	WSC060E1	187-253	44.6	70
	WSC060E3	187-253	30.2	45
	WSC060E4	414-506	14.7	20
	WSC060EW	517-633	11.0	15

⁽¹⁾ No optional motors available for 3-5 Tons. The standard motor for the single phase models is a Multispeed Direct Drive Motor. The standard motor for the 3-phase models is a Belt Drive Motor.



Electrical Data

(R-410A, R-22 Refrigerant)

Table 123. Unit Wiring — R-410A — High Efficiency

Tons	Unit Model Number	Voltage Range	Standard Indoor Fan Motor		Optional Belt Drive Indoor Fan Motor ⁽¹⁾	
			MCA	Max Fuse Size or Max Circuit Breaker	MCA	Max Fuse Size or Max Circuit Breaker
3	T/YHC036E1	187-253	26.7	40	(i)	(i)
	T/YHC036E3	187-253	21.9	30	20.9	30
	T/YHC036E4	414-506	10.0	15	9.5	15
4	T/YHC048E1	187-253	35.7	50	(i)	(i)
	T/YHC048E3	187-253	28.3	40	25.7	40
	T/YHC048E4	414-506	13.6	20	12.3	15
5	T/YHC060E1	187-253	43.8	70	(i)	(i)
	T/YHC060E3	187-253	32.1	45	29.5	45
	T/YHC060E4	414-506	16.8	25	15.5	25

⁽¹⁾ No optional motors available for 3-5 Tons. The standard motor for the single phase models is a Multispeed Direct Drive Motor.

Table 124. Unit Wiring With Electric Heat (Single Point Connection) — Belt Drive — High Efficiency

Tons	Unit Model Number	Heater Model Number	Heater kW Rating	Control Stages	Belt Drive Indoor Motor	
					MCA	Max Fuse Size or Max Circuit Breaker
208/230 Volts Three Phase						
3	THC033A3	BAYHTRR306A	4.5/6.0	1	21.9/24.3	25/25
		BAYHTRR312A	9.0/12.0	2	37.5/42.4	40/45
		BAYHTRR318A	13.1/17.4	2	51.6/58.6	60/60
4	THC043A3	BAYHTRR306A	4.5/6.0	1	22.6/24.3	35/35
		BAYHTRR312A	9.0/12.0	2	37.5/42.4	40/45
		BAYHTRR318A	13.1/17.4	2	51.6/58.6	60/60
5	THC063A3	BAYHTRR306A	4.5/6.0	1	28.8/28.8	45/45
		BAYHTRR312A	9.0/12.0	2	37.5/42.4	45/45
		BAYHTRR318A	13.1/17.4	2	51.6/58.6	60/60
		BAYHTRR323A	17.3/23.0	2	66.3/75.4	70/80
460 Volts Three Phase						
3	THC033A4	BAYHTRR406A	6.0	1	12.1	15
		BAYHTRR412A	12.0	2	21.1	25
		BAYHTRR418A	17.4	2	29.3	30
4	THC043A4	BAYHTRR406A	6.0	1	12.1	15
		BAYHTRR412A	12.0	2	21.1	25
		BAYHTRR418A	17.4	2	29.3	30
5	THC063A4	BAYHTRR406A	6.0	1	14.3	20
		BAYHTRR412A	12.0	2	21.1	25
		BAYHTRR418A	17.4	2	29.3	30
		BAYHTRR423A	23.0	2	37.8	40
575 Volts Three Phase						
3	THC033AW	BAYHTRRW06A	6.0	1	9.3	15
		BAYHTRRW12A	12.0	2	16.6	20
		BAYHTRRW18A	17.4	2	23.1	25
4	THC043AW	BAYHTRRW06A	6.0	1	9.3	15
		BAYHTRRW12A	12.0	2	16.6	20
		BAYHTRRW18A	17.4	2	23.1	25
5	THC063AW	BAYHTRRW06A	6.0	1	11.4	15
		BAYHTRRW12A	12.0	2	16.6	20
		BAYHTRRW18A	17.4	2	23.1	25
		BAYHTRRW23A	23.0	2	29.8	30



Electrical Data

(R-410A Refrigerant)

Table 125. Unit Wiring With Electric Heat (Single Point Connection) – Standard Efficiency

Tons	Unit Model Number	Heater Model Number	Heater kW Rating ⁽¹⁾	Control Stages	Standard Indoor Motor	
					MCA	Max Fuse Size or Max Circuit Breaker
208/230 Volts Single Phase						
3	TSC036E1	BAYHTRE105A	3.8/5.0	1	30.1/33.5	40.0/40.0
		BAYHTRE110A	7.5/10.0	2	52.6/59.6	60.0/60.0
		BAYHTRE114A	10.4/13.8	2	69.8/79.4	70.0/80.0
4	TSC048E1	BAYHTRE105A	3.8/5.0	1	35.2/35.5	50.0/50.0
		BAYHTRE110A	7.5/10.0	2	54.6/61.6	60.0/70.0
		BAYHTRE114A	10.4/13.8	2	71.8/81.4	80.0/90.0
		BAYHTRE118A	13.2/17.6	2	89.0/101.1	90.0/110.0
5	TSC060E1	BAYHTRE105A	3.8/5.0	1	43.8/43.8	70.0/70.0
		BAYHTRE110A	7.5/10.0	2	54.6/61.6	70.0/70.0
		BAYHTRE114A	10.4/13.8	2	71.8/81.4	80.0/90.0
		BAYHTRE118A	13.2/17.6	2	89.0/101.1	90.0/110.0
208/230 Volts Three Phase						
3	TSC036E3	BAYHTRE306A	4.5/6.0	1	21.9/24.3	30.0/30.0
		BAYHTRE312A	9.0/12.0	2	37.5/42.4	40.0/45.0
		BAYHTRE318A	13.1/17.4	2	51.6/58.6	60.0/60.0
4	TSC048E3	BAYHTRE306A	4.5/6.0	1	25.2/25.2	35.0/35.0
		BAYHTRE312A	9.0/12.0	2	37.5/42.4	40.0/45.0
		BAYHTRE318A	13.1/17.4	2	51.6/58.6	60.0/60.0
5	TSC060E3	BAYHTRE306A	4.5/6.0	1	29.5/29.5	45.0/45.0
		BAYHTRE312A	9.0/12.0	2	37.5/42.4	45.0/45.0
		BAYHTRE318A	13.1/17.4	2	51.6/58.6	60.0/60.0
		BAYHTRE323A	17.3/23.0	2	66.3/75.4	70.0/80.0
480 Volts Three Phase						
3	TSC036E4	BAYHTRE406A	6.0	1	12.1	15.0
		BAYHTRE412A	12.0	2	21.1	25.0
		BAYHTRE418A	17.4	2	29.3	30.0
4	TSC048E4	BAYHTRE406A	6.0	1	12.5	15.0
		BAYHTRE412A	12.0	2	21.1	25.0
		BAYHTRE418A	17.4	2	29.3	30.0
5	TSC060E4	BAYHTRE406A	6.0	1	15.5	25.0
		BAYHTRE412A	12.0	2	21.1	25.0
		BAYHTRE418A	17.4	2	29.3	30.0
		BAYHTRE423A	23.0	2	37.8	40.0
575 Volts Three Phase						
3	TSC036EW	BAYHTREW06A	6.0	1	9.4	15.0
		BAYHTREW12A	12.0	2	16.5	20.0
		BAYHTREW18A	17.4	2	23.0	25.0
4	TSC048EW	BAYHTREW06A	6.0	1	9.4	15.0
		BAYHTREW12A	12.0	2	16.5	20.0
		BAYHTREW18A	17.4	2	23.0	25.0
5	TSC060EW	BAYHTREW06A	6.0	1	10.1	15.0
		BAYHTREW12A	12.0	2	16.5	20.0
		BAYHTREW18A	17.4	2	23.0	25.0
		BAYHTREW23A	23.0	2	29.8	30.0

⁽¹⁾ No optional motors available for 3-5 tons. The standard motor for 1-Phase models is a Multispeed, Direct Drive Motor. The Standard Motor for the 3-Phase models is a Belt Drive Motor.



Electrical Data

(R-410A Refrigerant)

Table 126. Unit Wiring With Electric Heat (Single Point Connection) – Standard Efficiency

Tons	Unit Model Number	Heater Model Number	Heater kW Rating	Control Stages	Standard Indoor Motor ⁽ⁱ⁾	
					MCA	Max Fuse Size or Max Circuit Breaker
208/230 Volts Single Phase						
3	WSC036E1	BAYHTRE105A	3.8/5.0	1	53.9/57.2	60.0/70.0
		BAYHTRE110A	7.5/10.0	2	76.4/83.4	80.0/90.0
		BAYHTRE114A	10.4/13.8	2	93.5/103.1	100.0/110.0
4	WSC048E1	BAYHTRE105A	3.8/5.0	1	61.6/64.9	80.0/80.0
		BAYHTRE110A	7.5/10.0	2	84.1/91.1	90.0/100.0
		BAYHTRE114A	10.4/13.8	2	101.2/110.8	110.0/125.0
		BAYHTRE118A	13.2/17.6	2	118.4/130.6	125.0/150.0
5	WSC060E1	BAYHTRX105A	3.8/5.0	1	67.2/70.6	90.0/90.0
		BAYHTRX110A	7.5/10.0	2	89.7/96.7	100.0/110.0
		BAYHTRX114A	10.4/13.8	2	106.8/116.4	110.0/125.0
		BAYHTRX118A	13.2/17.6	2	124.1/136.2	125.0/150.0
208/230 Volts Three Phase						
3	WSC036E3	BAYHTRE306A	4.5/6.0	1	39.5/41.8	45.0/50.0
		BAYHTRE312A	9.0/12.0	2	55.1/60.0	60.0/60.0
		BAYHTRE318A	13.1/17.4	2	69.2/76.2	70.0/80.0
4	WSC048E3	BAYHTRE306A	4.5/6.0	1	43.2/45.5	50.0/50.0
		BAYHTRE312A	9.0/12.0	2	58.8/63.7	60.0/70.0
		BAYHTRE318A	13.1/17.4	2	72.9/79.9	80.0/80.0
5	WSC060E3	BAYHTRX306A	4.5/6.0	1	45.8/48.2	60.0/60.0
		BAYHTRX312A	9.0/12.0	2	61.4/66.3	70.0/70.0
		BAYHTRX318A	13.1/17.4	2	75.6/82.6	80.0/90.0
		BAYHTRX323A	17.3/23.0	2	90.2/99.3	100.0/100.0
480 Volts Three Phase						
3	WSC036E4	BAYHTRE406A	6.0	1	20.4	25.0
		BAYHTRE412A	12.0	2	29.4	30.0
		BAYHTRE418A	17.4	2	37.5	40.0
4	WSC048E4	BAYHTRE406A	6.0	1	21.3	25.0
		BAYHTRE412A	12.0	2	30.3	35.0
		BAYHTRE418A	17.4	2	38.4	40.0
5	WSC060E4	BAYHTRX406A	6.0	1	23.7	30.0
		BAYHTRX412A	12.0	2	32.7	35.0
		BAYHTRX418A	17.4	2	40.8	45.0
		BAYHTRX423A	23.0	2	49.3	50.0
575 Volts Three Phase						
3	WSC036EW	BAYHTREW06A	6.0	1	16.1	20.0
		BAYHTREW12A	12.0	2	23.2	25.0
		BAYHTREW18A	17.4	2	29.7	30.0
4	WSC048EW	BAYHTREW06A	6.0	1	16.7	20.0
		BAYHTREW12A	12.0	2	23.8	25.0
		BAYHTREW18A	17.4	2	30.3	35.0
5	WSC060EW	BAYHTRXW06A	6.0	1	18.2	20.0
		BAYHTRXW12A	12.0	2	25.4	30.0
		BAYHTRXW18A	17.4	2	31.9	35.0
		BAYHTRXW23A	23.0	2	38.6	40.0

⁽ⁱ⁾ No optional motors available for 3-5 Tons. The standard motor for the 1 Phase Models is a Multispeed Direct Drive Motor. The standard motor for the 3 Phase Models is a Belt Drive Motor.



Electrical Data

(R-410A Refrigerant)

Table 127. Unit Wiring With Electric Heat (Single Point Connection) – High Efficiency

Tons	Unit Model Number	Heater Model Number	Heater kW Rating ⁽¹⁾	Control Stages	Standard Indoor Motor		Optional Belt Drive Indoor Motor	
					MCA	Max Fuse Size or Max Circuit Breaker	MCA	Max Fuse Size or Max Circuit Breaker
208/230 Volts Single Phase								
3	THC036E1	BAYHTRE105A	3.8/5.0	1	30.1/33.5	40.0/40.0	—	—
		BAYHTRE110A	7.5/10.0	2	52.6/59.6	60.0/60.0	—	—
		BAYHTRE114A	10.4/13.8	2	69.8/79.4	70.0/80.0	—	—
4	THC048E1	BAYHTRX105A	3.8/5.0	1	35.7/35.7	50.0/50.0	—	—
		BAYHTRX110A	7.5/10.0	2	54.6/61.6	60.0/70.0	—	—
		BAYHTRX114A	10.4/13.8	2	71.8/81.4	80.0/90.0	—	—
		BAYHTRX118A	13.2/17.6	2	89.0/101.1	90.0/110.0	—	—
5	THC060E1	BAYHTRX105A	3.8/5.0	1	43.8/43.8	70.0/70.0	—	—
		BAYHTRX110A	7.5/10.0	2	54.6/61.6	70.0/70.0	—	—
		BAYHTRX114A	10.4/13.8	2	71.8/81.4	80.0/90.0	—	—
		BAYHTRX118A	13.2/17.6	2	89.0/101.1	90.0/110.0	—	—
208/230 Volts Three Phase								
3	THC036E3	BAYHTRE306A	4.5/6.0	1	23.1/25.5	30.0/30.0	21.9/24.3	30.0/30.0
		BAYHTRE312A	9.0/12.0	2	38.8/43.6	40.0/45.0	37.5/42.4	40.0/45.0
		BAYHTRE318A	13.1/17.4	2	52.9/59.9	60.0/60.0	51.6/58.6	60.0/60.0
4	THC048E3	BAYHTRX306A	4.5/6.0	1	28.3/28.3	40.0/40.0	25.7/25.7	40.0/40.0
		BAYHTRX312A	9.0/12.0	2	40.8/45.6	45.0/50.0	37.5/42.4	40.0/45.0
		BAYHTRX318A	13.1/17.4	2	54.9/61.9	60.0/70.0	51.6/58.6	60.0/60.0
5	THC060E3	BAYHTRX306A	4.5/6.0	1	32.1/32.1	45.0/45.0	29.5/29.5	45.0/45.0
		BAYHTRX312A	9.0/12.0	2	40.8/45.6	45.0/50.0	37.5/42.4	45.0/45.0
		BAYHTRX318A	13.1/17.4	2	54.9/61.9	60.0/70.0	51.6/58.6	60.0/60.0
		BAYHTRX323A	17.3/23.0	2	69.5/78.6	70.0/80.0	66.3/75.4	70.0/80.0
460 Volts Three Phase								
3	THC036E4	BAYHTRE406A	6.0	1	12.8	15.0	12.1	15.0
		BAYHTRE412A	12.0	2	21.8	25.0	21.1	25.0
		BAYHTRE418A	17.4	2	29.9	30.0	29.3	30.0
4	THC048E4	BAYHTRX406A	6.0	1	13.8	20.0	12.3	15.0
		BAYHTRX412A	12.0	2	22.8	25.0	21.1	25.0
		BAYHTRX418A	17.4	2	30.9	35.0	29.3	30.0
5	THC060E4	BAYHTRX406A	6.0	1	16.8	25.0	15.5	25.0
		BAYHTRX412A	12.0	2	22.8	25.0	21.1	25.0
		BAYHTRX418A	17.4	2	30.9	35.0	29.3	30.0
		BAYHTRX423A	23.0	2	39.4	40.0	37.8	40.0

⁽¹⁾ Heater kW ratings are at 208/240v for 208/230v units, 480v for 460v units.



Electrical Data

(R-22, R-410A Refrigerant)

Table 128. Electrical Characteristics — Compressor Motor and Condenser Motor — 60 Cycle — High Efficiency —R-22

Tons	Unit Model		Compressor Motors						Condenser Fan Motors				
	Number	No.	Volts	Phase	HP	RPM	RLA	LRA	No.	Phase	HP	FLA	LRA
3	T/YHC033A3	1	208-230	3	2.8	3450	10.7	77.0	1	1	.20	1.5	2.5
	T/YHC033A4	1	460	3	2.8	3450	5.8	39.0	1	1	.20	0.6	1.3
	T/YHC033AW	1	575	3	2.8	3450	4.4	31.0	1	1	.20	0.5	1.2
4	T/YHC043A3	1	208-230	3	3.5	3450	12.5	88.0	1	1	.33	2.0	6.6
	T/YHC043A4	1	460	3	3.5	3450	6.5	44.0	1	1	.33	1.2	2.5
	T/YHC043AW	1	575	3	3.5	3450	4.9	34.0	1	1	.33	0.7	1.5
5	T/YHC063A3	1	208-230	3	4.5	3450	17.4	124.0	1	1	.33	2.0	6.6
	T/YHC063A4	1	460	3	4.5	3450	7.8	59.6	1	1	.33	1.2	2.5
	T/YHC063AW	1	575	3	4.5	3450	6.2	49.4	1	1	.33	0.9	1.5

Table 129. Electrical Characteristics — Compressor Motor and Condenser Motor — 60 Cycle — Standard Efficiency —R-410A

Tons	Unit Model		Compressor Motors						Condenser Fan Motors				
	Number	No.	Volts	Phase	HP	RPM	RLA	LRA	No.	Phase	HP	FLA	LRA
3	T/YSC036E1	1	208-230	1	2.8	3500	15.4	83.0	1	1	0.33	2.0	6.6
	T/YSC036E3	1	208-230	3	2.8	3500	11.5	77.0	1	1	0.33	2.0	6.6
	T/YSC036E4	1	460	3	2.7	3500	5.1	35.0	1	1	0.33	1.2	2.5
	T/YSC036EW	1	575	3	2.8	3500	4.3	31.0	1	1	0.33	0.9	1.3
4	T/YSC048E1	1	208-230	1	3.6	3500	20.5	109.0	1	1	0.33	2.0	6.6
	T/YSC048E3	1	208-230	3	3.6	3500	14.6	91.0	1	1	0.33	2.0	6.6
	T/YSC048E4	1	460	3	3.6	3500	7.1	46.0	1	1	0.33	1.2	2.5
	T/YSC048EW	1	575	3	3.5	3500	5.1	34.0	1	1	0.33	0.9	1.3
5	T/YSC060E1	1	208-230	1	4.4	3500	26.9	145.0	1	1	0.40	2.5	6.6
	T/YSC060E3	1	208-230	3	4.3	3500	17.6	123.0	1	1	0.40	2.5	6.6
	T/YSC060E4	1	460	3	4.3	3500	9.6	62.0	1	1	0.40	1.0	2.8
	T/YSC060EW	1	575	3	4.3	3500	6.1	40.0	1	1	0.40	0.8	2.0
3	WSC036E1	1	208-230	1	3.2	3500	18.6	105.0	1	1	0.25	2.0	4.4
	WSC036E3	1	208-230	3	3.2	3500	13.5	88.0	1	1	0.25	2.0	4.4
	WSC036E4	1	460	3	3.2	3500	6.4	39.0	1	1	0.25	0.9	2.2
	WSC036EW	1	575	3	3.2	3500	5.1	34.0	1	1	0.25	0.7	1.4
4	WSC048E1	1	208-230	1	3.8	3500	23.1	134.0	1	1	0.40	2.5	6.6
	WSC048E3	1	208-230	3	3.8	3500	16.0	91.0	1	1	0.40	2.5	6.6
	WSC048E4	1	460	3	3.8	3500	7.1	46.0	1	1	0.40	1.0	2.8
	WSC048EW	1	575	3	3.8	3500	5.6	37.0	1	1	0.40	0.8	2.0
5	WSC060E1	1	208-230	1	4.8	3500	27.6	158.0	1	1	0.40	2.5	6.6
	WSC060E3	1	208-230	3	4.7	3500	18.1	137.0	1	1	0.40	2.5	6.6
	WSC060E4	1	460	3	4.7	3500	9.0	62.0	1	1	0.40	1.0	2.8
	WSC060EW	1	575	3	4.7	3500	6.8	50.0	1	1	0.40	0.8	2.0



Electrical Data

(R-410A, R-22 Refrigerant)

Table 130. Electrical Characteristics — Compressor Motor— 60 Cycle — High Efficiency — R-410A

Tons	Unit Model		Volts	Phase	HP	RPM	Compressor Rated	
	Number						LRA	RLA
3	THC036E1		208-230	1	2.8	3500	83.0	15.4
	THC036E3		208-230	3	2.8	3500	77.0	11.5
	THC036E4		460	3	2.7	3500	35.0	5.1
4	THC048E1		208-230	1	3.6	3500	109.0	20.5
	THC048E3		208-230	3	3.6	3500	91.0	14.6
	THC048E4		460	3	3.6	3500	46.0	7.1
5	THC060E1		208-230	1	4.4	3500	145.0	26.9
	THC060E3		208-230	3	4.3	3500	123.0	17.6
	THC060E4		460	3	4.3	3500	62.0	9.6
3	YHC036E1		208-230	1	2.8	3500	83.0	15.4
	YHC036E3		208-230	3	2.8	3500	77.0	11.5
	YHC036E4		460	3	2.7	3500	35.0	5.1
4	YHC048E1		208-230	1	3.6	3500	109.0	20.5
	YHC048E3		208-230	3	3.6	3500	91.0	14.6
	YHC048E4		460	3	3.6	3500	46.0	7.1
5	YHC060E1		208-230	1	4.4	3500	145.0	26.9
	YHC060E3		208-230	3	4.3	3500	123.0	17.6
	YHC060E4		460	3	4.3	3500	62.0	9.6

Table 131. Electrical Characteristics — Condenser Fan Motor— 60 Cycle — High Efficiency — R-410A

Tons	Unit Model		Volts	Hz.	Phase	Compressor Rated		
	Number					LRA	FLA	BHP
3	T/YHC036E1		208-230	60	1	2.4	1.5	0.20
	T/YHC036E3		208-230	60	1	2.4	1.5	0.20
	T/YHC036E4		460	60	1	1.3	0.6	0.20
4	T/YHC048E1		208-230	60	1	6.6	2.5	0.40
	T/YHC048E3		208-230	60	1	6.6	2.5	0.40
	T/YHC048E4		460	60	1	2.8	1.0	0.40
5	T/YHC060E1		208-230	60	1	6.6	2.5	0.40
	T/YHC060E3		208-230	60	1	6.6	2.5	0.40
	T/YHC060E4		460	60	1	2.8	1.0	0.40

Table 132. Electrical Characteristics — Evaporator Fan Motor — 60 Cycle — Belt Drive — R-22

Tons	Unit Model		Volts	Hz.	Phase	No.	HP	Amps	
	Number							FLA	RLA
3	T/YHC033A3		208-230	60	3	1	1.00	5.00	32.20
	T/YHC033A4		460	60	3	1	1.00	2.50	16.10
	T/YHC033AW		575	60	3	1	1.00	1.70	13.20
4	T/YHC043A3		208-230	60	3	1	1.00	5.00	32.20
	T/YHC043A4		460	60	3	1	1.00	2.50	16.10
	T/YHC043AW		575	60	3	1	1.00	1.70	13.20
5	T/YHC063A3		208-230	60	3	1	1.00	5.00	32.20
	T/YHC063A4		460	60	3	1	1.00	2.50	16.10
	T/YHC063AW		575	60	3	1	1.00	1.70	13.20



Electrical Data

(R-410A Refrigerant)

Table 133. Electrical Characteristics — Evaporator Fan Motor — 60 Cycle — R-410A

Tons	Unit Model Number	Volts	Hz.	Phase	No.	FLA	LRA	BHP
Standard Direct Drive Motor								
3	T/YHC036E1	208-230	60	1	1	6.0	—	0.75
	T/YHC036E3	208-230	60	1	1	6.0	—	0.75
	T/YHC036E4	208-230	60	1	1	6.0	—	0.75
Optional Belt Drive Motor								
3	T/YHC036E3	208-230	60	3	1	5.0	32.2	1.00
	T/YHC036E4	460	60	3	1	2.5	16.1	1.00
Standard Direct Drive Motor								
4	T/YHC048E1	208-230	60	1	1	7.6	—	1.00
	T/YHC048E3	208-230	60	1	1	7.6	—	1.00
	T/YHC048E4	208-230	60	1	1	7.6	—	1.00
Optional Belt Drive Motor								
4	T/YHC048E3	208-230	60	3	1	5.0	32.2	1.00
	T/YHC048E4	460	60	3	1	2.5	16.1	1.00
Standard Direct Drive Motor								
5	T/YHC060E1	208-230	60	1	1	7.6	—	1.00
	T/YHC060E3	208-230	60	1	1	7.6	—	1.00
	T/YHC060E4	460	60	1	1	7.6	—	1.00
Optional Belt Drive Motor								
5	T/YHC060E3	208-230	60	3	1	5.0	32.2	1.00
	T/YHC060E4	460	60	3	1	2.5	16.1	1.00
3	T/YSC036E1	208-230	60	1	1	6.0	—	0.75
	T/YSC036E3	208-230	60	3	1	5.0	32.2	1.00
	T/YSC036E4	460	60	3	1	2.5	16.1	1.00
	T/YSC036EW	575	60	3	1	1.7	13.2	1.00
4	T/YSC048E1	208-230	60	1	1	7.6	—	1.00
	T/YSC048E3	208-230	60	3	1	5.0	32.2	1.00
	T/YSC048E4	460	60	3	1	2.5	16.1	1.00
	T/YSC048EW	575	60	3	1	1.7	13.2	1.00
5	T/YSC060E1	208-230	60	1	1	7.6	—	1.00
	T/YSC060E3	208-230	60	3	1	5.0	32.2	1.00
	T/YSC060E4	460	60	3	1	2.5	16.1	1.00
	T/YSC060EW	575	60	3	1	1.7	13.2	1.00
3	WSC036E1	208-230	60	1	1	6.0	—	0.75
	WSC036E3	208-230	60	3	1	5.0	32.2	1.00
	WSC036E4	460	60	3	1	2.5	16.1	1.00
	WSC036EW	575	60	3	1	1.7	13.2	1.00
4	WSC048E1	208-230	60	1	1	7.6	—	1.00
	WSC048E3	208-230	60	3	1	5.0	32.2	1.00
	WSC048E4	460	60	3	1	2.5	16.1	1.00
	WSC048EW	575	60	3	1	1.7	13.2	1.00
5	WSC060E1	208-230	60	1	1	7.6	—	1.00
	WSC060E3	208-230	60	3	1	5.0	32.2	1.00
	WSC060E4	460	60	3	1	2.5	16.1	1.00
	WSC060EW	575	60	3	1	1.7	13.2	1.00

Table 134. Electrical Characteristics — Inducer Motor

Unit Model Number	Stages	HP	RPM	Volts	Phase	LRA
YSC036-060A YHC033-063A YSC036-060E**(L,M,X,Y) YHC036E(L,M,X,Y) YHC048,060E	1	1/35	2750	208-230	1	0.6
YSC036-060E**(H,Z) YHC036E(H,Z)	1	1/15	3300	208-230	1	0.4

Jobsite Connections

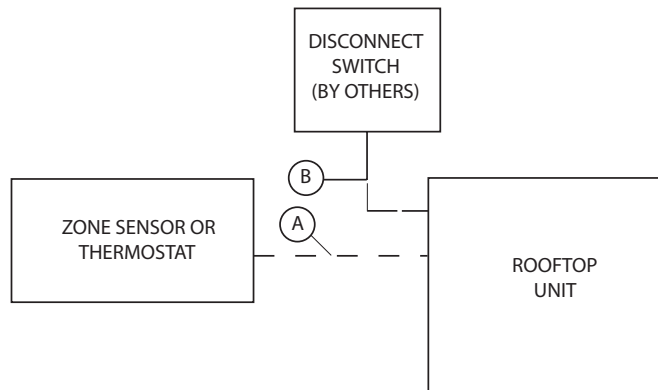
Table 135. Typical Number of Wires

Zone Sensors

A	Manual Changeover.....	4
	Manual/Auto Changeover.....	5
	Manual/Auto Changeover with Status Indication LED's.....	10
	Programmable Night Setback with Status Indication LED's.....	7

Thermostats

A	3 Wires, 24-volts, Cooling only
	4 Wires, 24-volts, with Electric Heat
B	3 Power Wires + 1 Ground Wire (three phase)
	2 Power Wires + 1 Ground Wire (single phase)



For specific wiring information, see the installation instructions.

All wiring except power wire is low voltage.

All customer supplied wiring to be copper and must conform to applicable electrical codes (such as NEC or CEC) and local electric codes. Wiring shown dotted is to be furnished and installed by the customer.

Dimensional Data

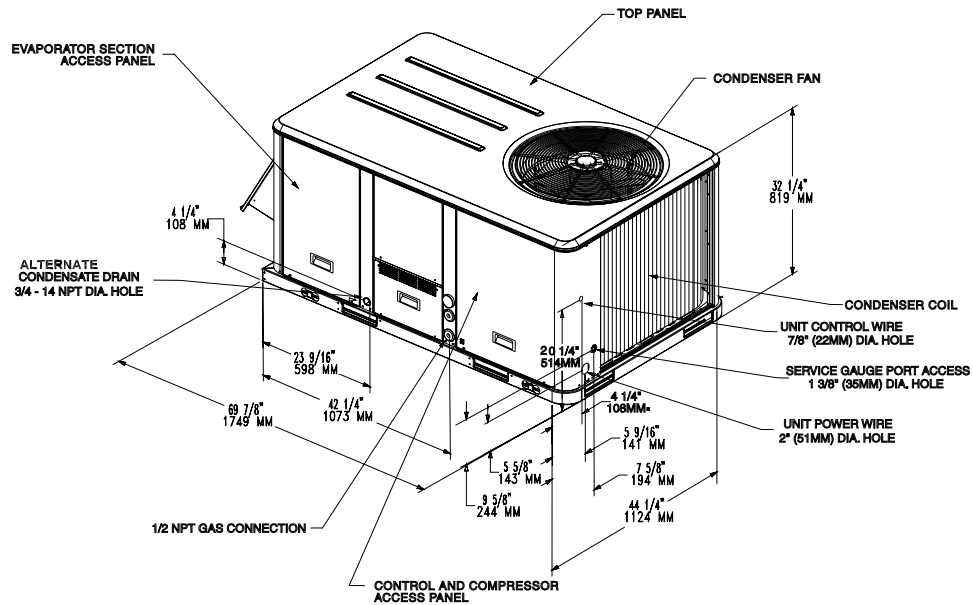


Figure 2. Cooling and Gas/Electric - 3-4 Tons - Low & Medium Heat - R-22

* All dimensions are in inches/millimeters.

** 1/2 NPT Gas Connection = (Y_C Models only); 2" Electrical Connection: Single Point Power When Heat Installed (T_C Models only.)

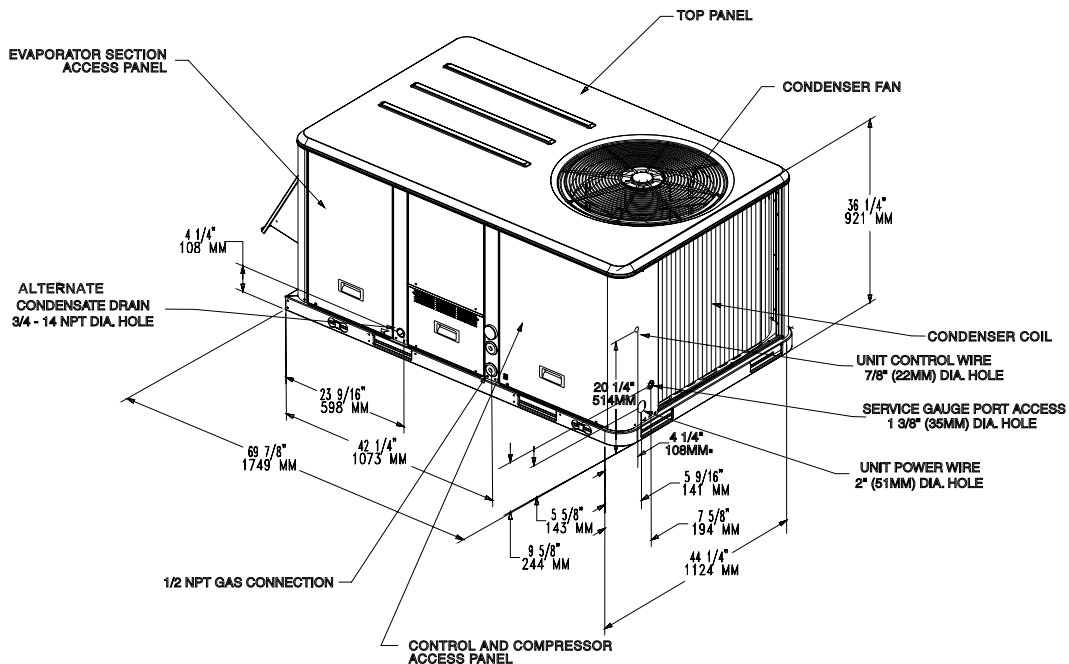


Figure 3. Cooling and Gas/Electric - 5 Tons - High Heat - R-22; Cooling and Gas/Electric 3-5 Tons — Standard Efficiency R-410A Cooling and Gas/Electric; 3 Tons High Efficiency R-410A

* All dimensions are in inches/millimeters.

** 1/2 NPT Gas Connection = (Y_C Models only); 2" Electrical Connection: Single Point Power When Heat Installed (T_C Models only.)

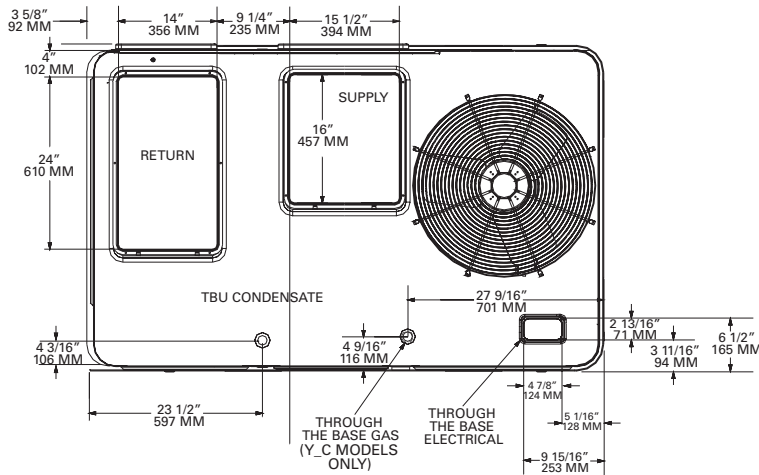


Figure 4. Cooling and Gas/Electric Models 3-5 Tons R-22; 3-5 Tons Standard Efficiency R-410A; 3 Tons High Efficiency R-410A - Downflow Airflow Supply/Return - Through the Base Utilities

* All dimensions are in inches/millimeters.

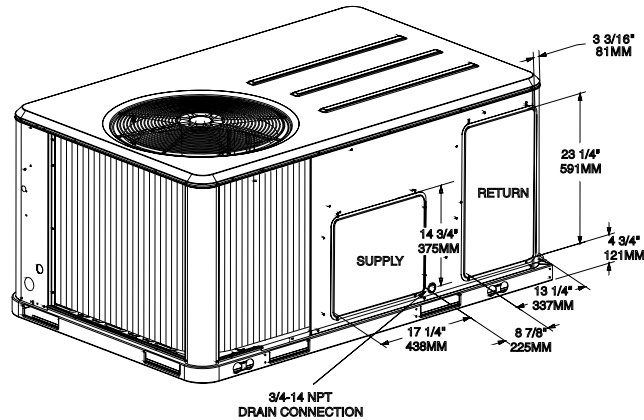


Figure 5. Cooling and Gas/Electric Models 3-5 Tons R-22; 3-5 Tons Standard Efficiency R-410A; 3 Tons High Efficiency R-410A - Horizontal Airflow Supply/Return

* All dimensions are in inches/millimeters.

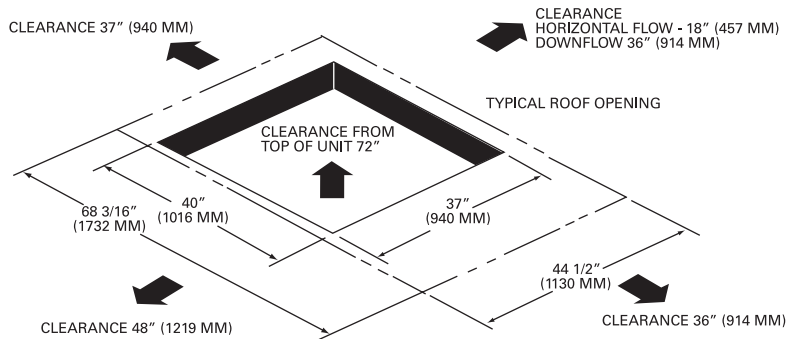


Figure 6. Cooling and Gas/Electric Models 3-5 Tons R-22; 3-5 Tons Standard Efficiency R-410A; 3 Tons High Efficiency R-410A - Unit Clearance and Roof Opening

* All dimensions are in inches/millimeters.

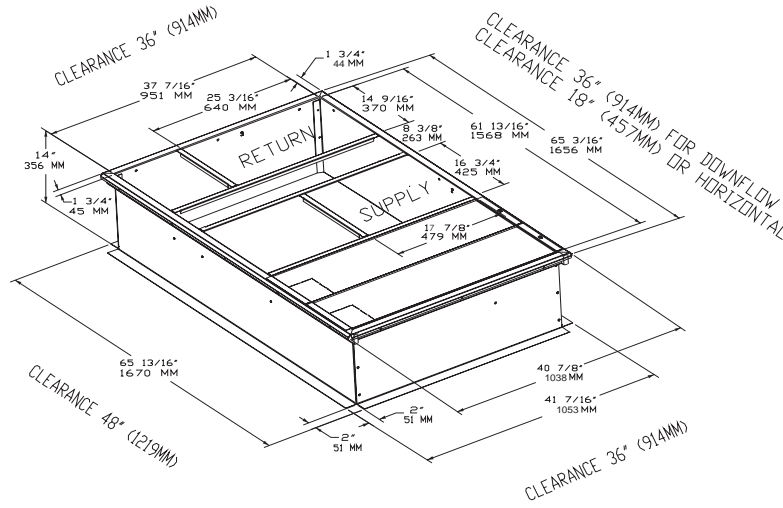


Figure 7. Cooling and Gas/Electric Models - 3-5 Tons R-22; 3-5 Tons Standard Efficiency R-410A; 3 Tons High Efficiency R-410A - Roof Curb
 * All dimensions are in inches/millimeters.

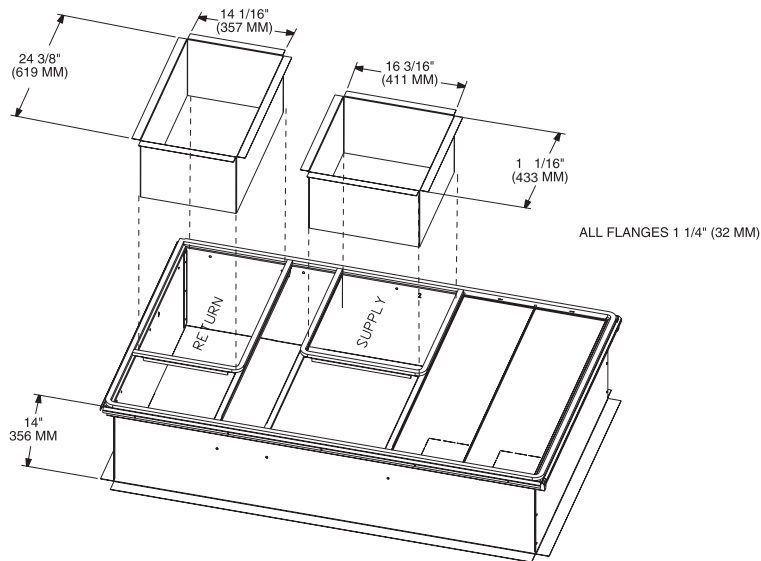


Figure 8. Cooling and Gas/Electric Models - 3-5 Tons R-22; 3-5 Tons Standard Efficiency R-410A; 3 Tons High Efficiency R-410A - Downflow Duct Connections - Field Fabricated
 * All dimensions are in inches/millimeters.

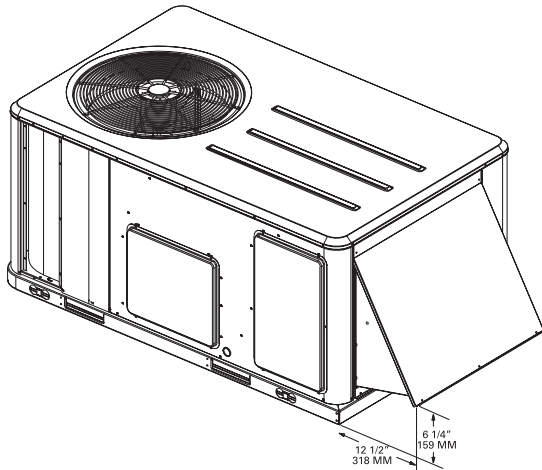


Figure 9. Cooling and Gas/Electric Models - 3-5 Tons R-22; 3-5 Tons Standard Efficiency R-410A; 3 Tons High Efficiency R-410A-Economizer, Manual or Motorized Fresh Air Damper

* All dimensions are in inches/millimeters.

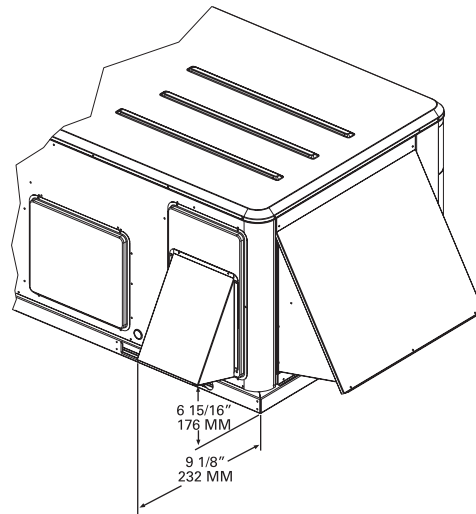


Figure 11. Cooling and Gas/Electric Models - 3-5 Tons R-22; 3-5 Tons Standard Efficiency R-410A; 3 Tons High Efficiency R-410A-Economizer & Barometric Relief Damper Hood

* All dimensions are in inches/millimeters.

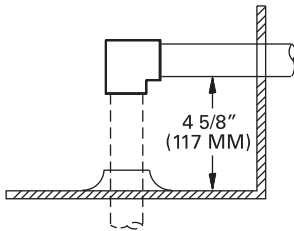


Figure 10. Gas/Electric Models - 3-5 Tons R-22; 3-5 Tons Standard Efficiency R-410A; 3 Tons High Efficiency R-410A Height of Gas Pipe required from Inside Base of Unit to Gas Shut off assembly (Factory Provided) - Y_C Models only

* All dimensions are in inches/millimeters.

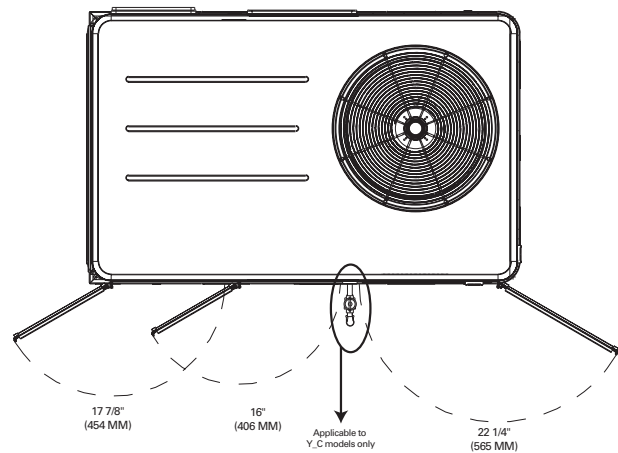


Figure 12. Cooling and Gas/Electric Models - 3-5 Tons R-22; 3-5 Tons Standard Efficiency R-410A; 3 Tons High Efficiency R-410A - Swing Diameter for Hinged Door(s) Option

* All dimensions are in inches/millimeters.

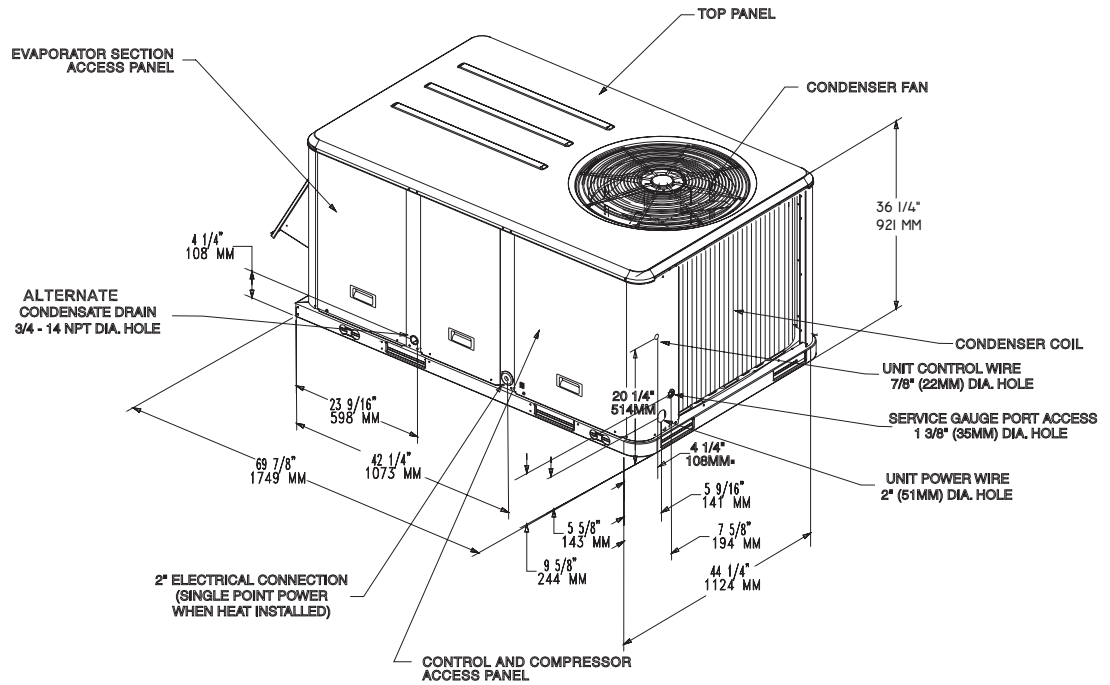


Figure 13. Heat Pumps - 3-4 Tons - R-410A

* All dimensions are in inches/millimeters.

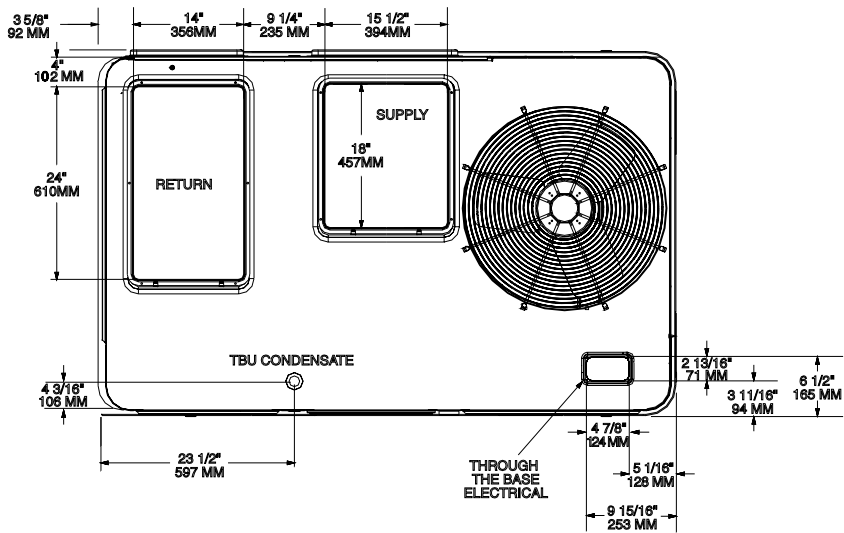


Figure 14. Heat Pump Models 3-4 Tons - R-410A - Downflow Airflow Supply/Return Through the Base Utilities

* All dimensions are in inches/millimeters.

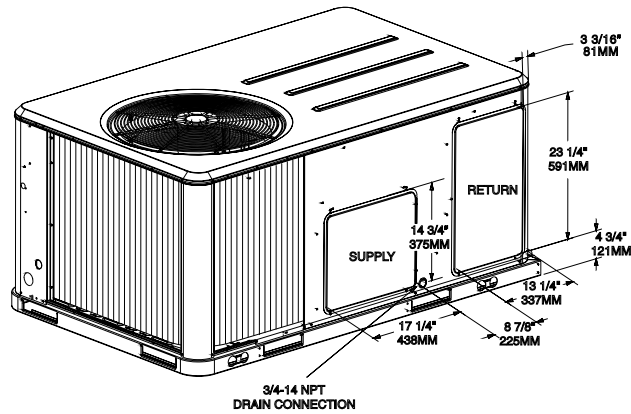


Figure 15. Heat Pump Models 3-4 Tons - R-410A - Horizontal Airflow Supply and Return

* All dimensions are in inches/millimeters.

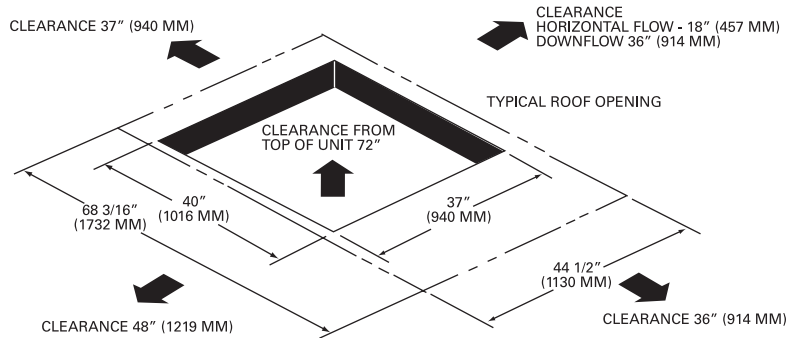


Figure 16. Heat Pump Models 3-4 Tons - Unit Clearance and Roof Opening

* All dimensions are in inches/millimeters.

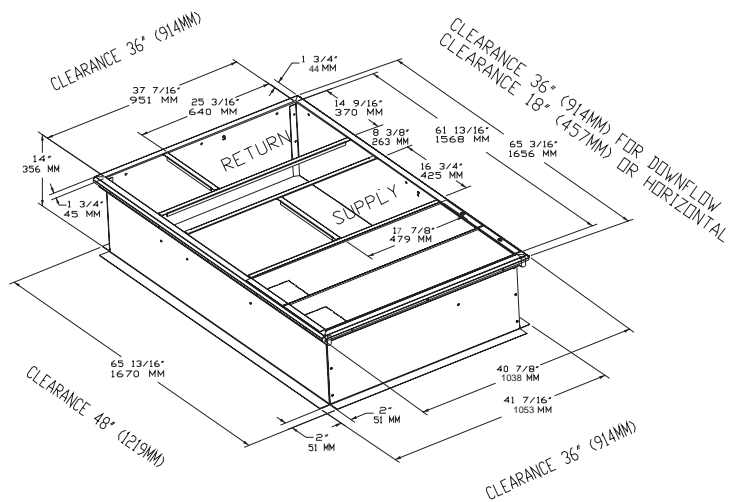


Figure 17. Heat Pump Models - 3-4 Tons - R-410A - Roof Curb

* All dimensions are in inches/millimeters.

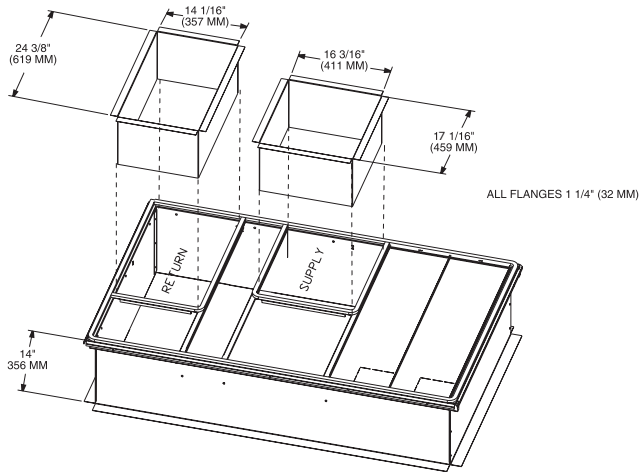


Figure 18. Heat Pump Models 3-4 Tons - R-410A Downflow Duct Connections Field Fabricated
 * All dimensions are in inches/millimeters.

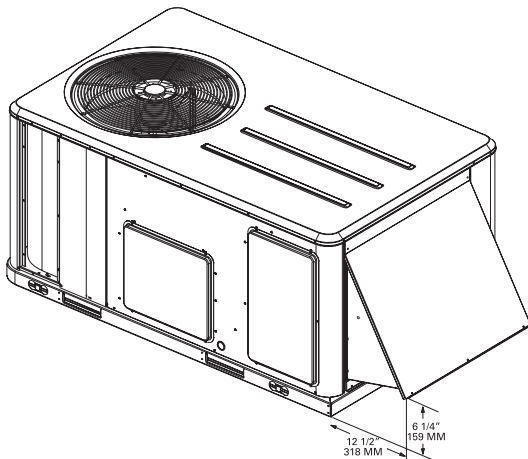


Figure 19. Heat Pump Models - 3-4 Tons - R-410A Economizer, Manual or Motorized Fresh Air Damper
 * All dimensions are in inches/millimeters.

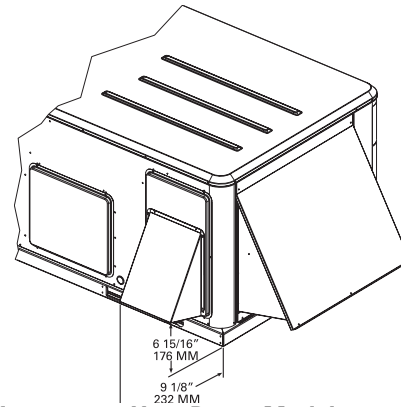


Figure 20. Heat Pump Models - 3-4 Tons - R-410A Barometric Relief Damper Hood
 * All dimensions are in inches/millimeters.

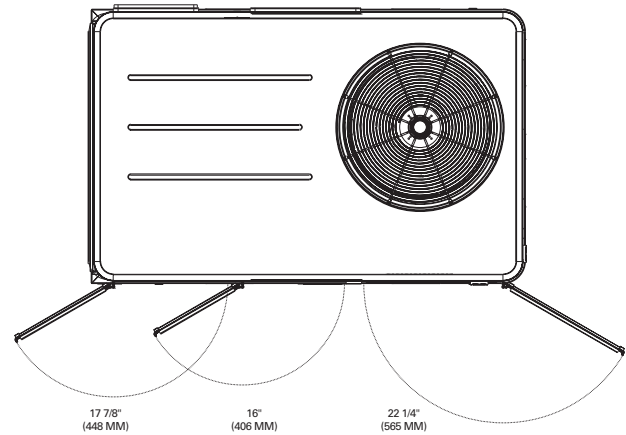


Figure 21. Heat Pump Models - 3-4 Tons - R-410A Swing Diameter for Hinged Door(s) Option
 * All dimensions are in inches/millimeters.

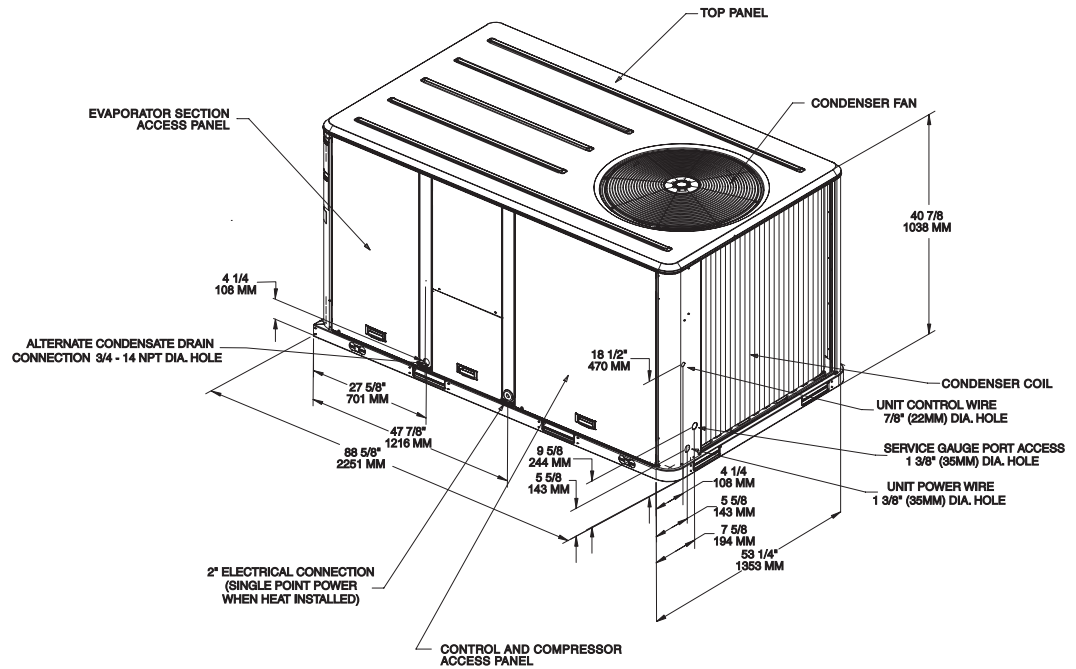


Figure 22. Cooling and Gas/Electric 4-5 Tons High Efficiency R-410A; Heat Pumps - 5 Tons - R-410A

* All dimensions are in inches/millimeters.

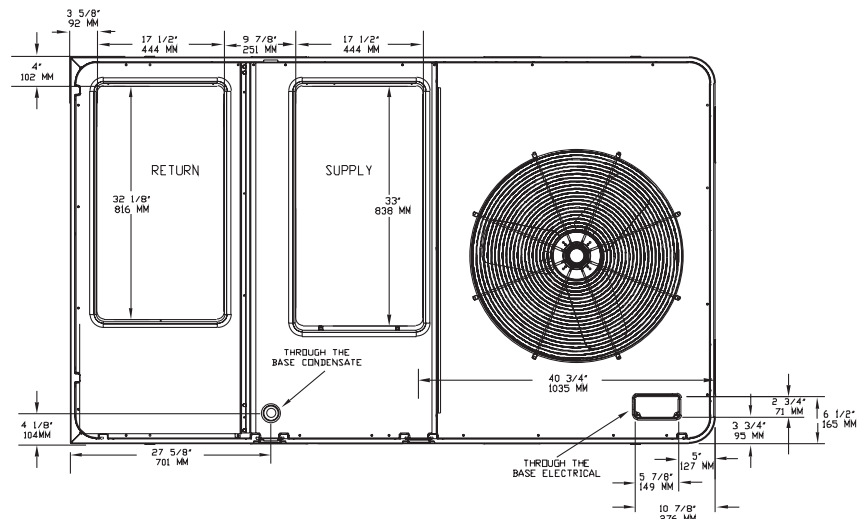


Figure 23. Cooling and Gas/Electric 4-5 Tons High Efficiency R-410A; Heat Pumps - 5 Tons - R-410A - Downflow Airflow Supply/Return - Through the Base Utilities

* All dimensions are in inches/millimeters.

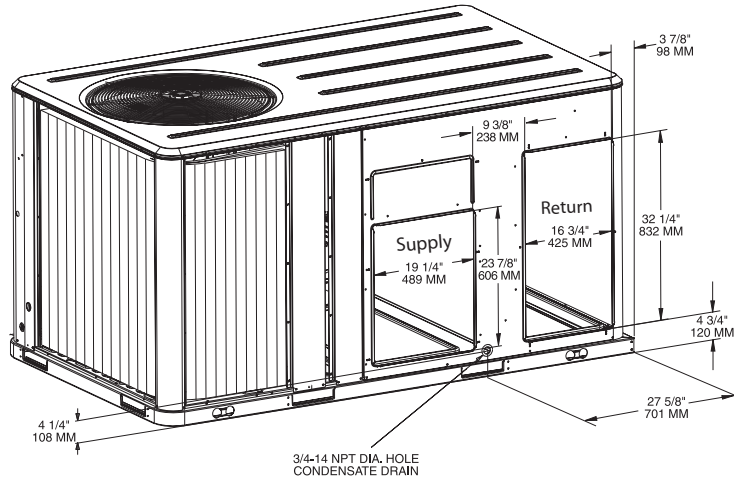


Figure 24. Cooling and Gas/Electric 4-5 Tons High Efficiency R-410A; Heat Pumps - 5 Tons - R-410A - Horizontal Airflow Supply and Return
 * All dimensions are in inches/millimeters.

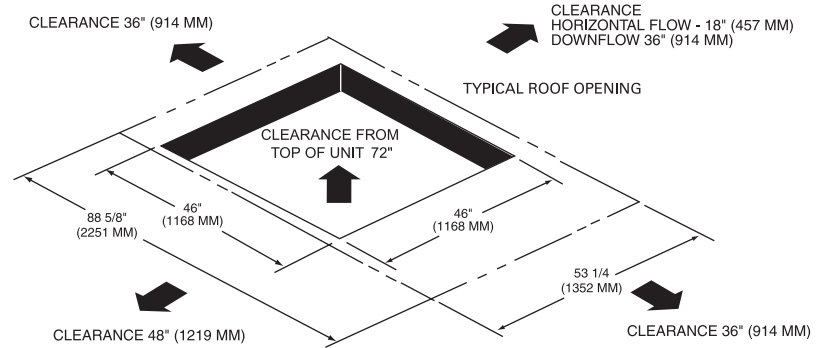


Figure 25. Cooling and Gas/Electric 4-5 Tons High Efficiency R-410A; Heat Pumps - 5 Tons - R-410A - Unit Clearance and Roof Opening
 * All dimensions are in inches/millimeters.

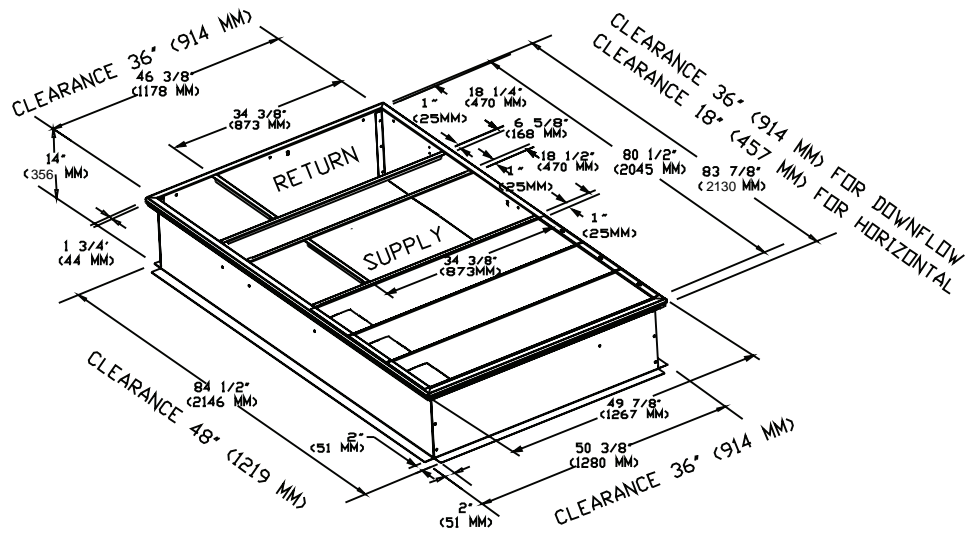


Figure 26. Cooling and Gas/Electric 4-5 Tons High Efficiency R-410A; Heat Pumps - 5 Tons - R-410A - Roof Curb

* All dimensions are in inches/millimeters.

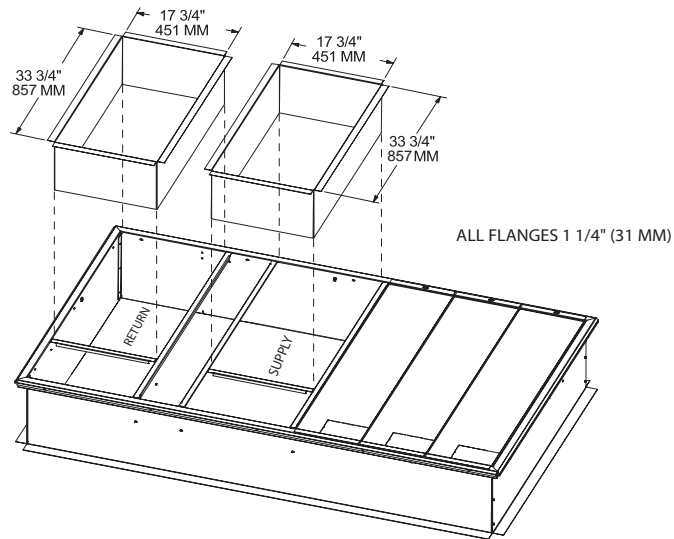


Figure 27. Cooling and Gas/Electric 4-5 Tons High Efficiency R-410A; Heat Pumps - 5 Tons - R-410A - Downflow Duct Connections Field Fabricated

* All dimensions are in inches/millimeters.

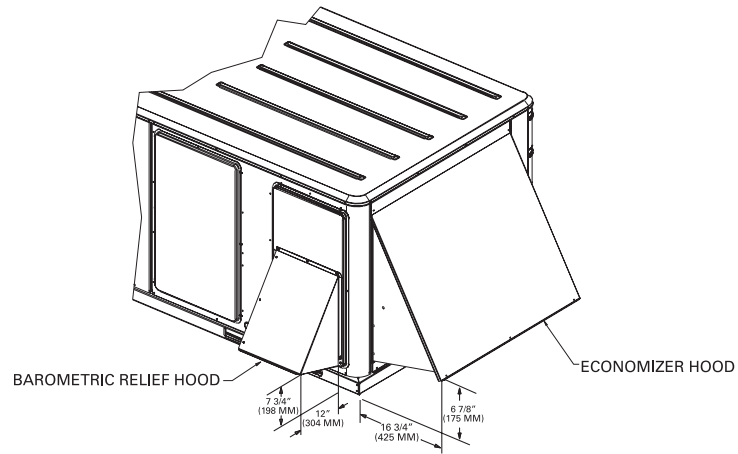


Figure 28. Cooling and Gas/Electric 4-5 Tons High Efficiency R-410A; Heat Pumps - 5 Tons - R-410A - Barometric Relief Damper Hood
 * All dimensions are in inches/millimeters.

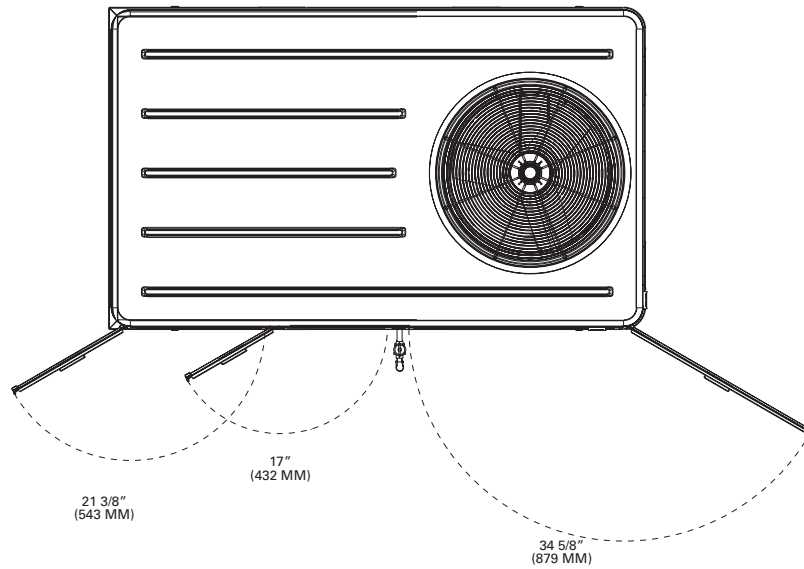


Figure 29. Cooling and Gas/Electric 4-5 Tons High Efficiency R-410A; Heat Pumps - 5Tons - R-410A - Swing Diameter for Hinged Door(s) Option
 * All dimensions are in inches/millimeters.

Weights

Table 136. Maximum Unit & Corner Weights (Lbs) and Center of Gravity Dimensions (in.)

Tons	Unit Model No.	Maximum Model Weights ⁽ⁱ⁾		Corner Weights ⁽ⁱⁱ⁾				Center of Gravity (in.)	
		Shipping	Net	A	B	C	D	Length	Width
R-22 Refrigerant									
3	THC033A	566	464	140	119	109	96	32	19
	YHC033A	627	537	159	139	126	111	32	19
4	THC043A	598	507	147	124	122	112	31	20
	YHC043A	669	577	167	144	139	127	32	20
5	THC063A	648	557	167	135	130	125	31	19
	YHC063A	704	612	180	151	144	137	32	20
R-410A Refrigerant									
3	TSC036E1, E3, E4, EW	555	480	157	122	95	107	31	19
	YSC036E1, E3, E4, EW	607	532	165	137	95	134	31	19
	WSC036E1, E3, E4, EW	589	514	177	107	113	117	29	20
4	TSC048E1, E3, E4, EW	586	511	167	129	101	114	31	19
	YSC048E1, E3, E4, EW	638	563	175	145	101	142	31	19
	WSC048E1, E3, E4, EW	600	525	181	109	115	119	29	20
5	TSC060E1, E3, E4, EW	636	561	183	142	111	125	31	19
	YSC060E1, E3, E4, EW	688	613	190	158	110	155	31	19
	WSC060E1, E3, E4, EW	825	682	228	177	114	163	38	24

⁽ⁱ⁾ Weights are approximate.

⁽ⁱⁱ⁾ Corner weights are given for information only.

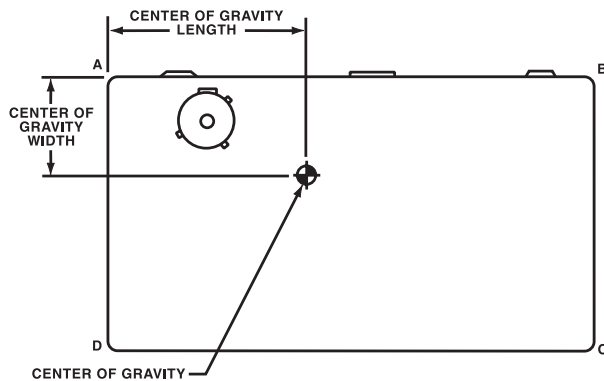


Table 137. Maximum Unit & Corner Weights (Lbs) and Center of Gravity Dimensions (in.)

Tons	Unit Model No.	Maximum Model Weights ⁽ⁱ⁾		Corner Weights ⁽ⁱⁱ⁾				Center of Gravity (in.)	
		Shipping	Net	A	B	C	D	Length	Width
3	THC036E1,3,4	566	472	109	85	186	92	40	26
	YHC036E1,3,4	637	544	127	103	204	110	39	26
4	THC048E1,3,4	798	653	155	127	248	123	40	25
	YHC048E1,3,4	869	725	173	145	266	141	40	25
5	THC060E1,3,4	823	676	204	74	327	71	41	26
	YHC060E1,3,4	894	748	222	92	345	89	41	26

⁽ⁱ⁾ Weights are approximate.

⁽ⁱⁱ⁾ Corner weights are given for information only.



Weights

Table 138. Factory Installed Options (FIOPS)/Accessory Net Weights (Lbs)^{(i), (ii)}

Accessory	T/YSC & T/YHC - R-22	T/YHC - R-410A	T/YHC - R-410A	WSC***E - R-410A	
	Net Weight		Net Weight	Net Weight	
	3-5 Tons	3 Tons	4-5 Tons	3-4 Tons	5 Tons
Economizer	26	26	36	26	36
460 V IDM Transformer ⁽ⁱⁱⁱ⁾	29	29	29	29	29
Barometric Relief	7	7	10	7	10
Powered Exhaust	—	—	—	—	—
Motorized Outside Air Damper	20	20	30	20	30
Manual Outside Air Damper	16	16	26	16	26
Roof Curb	70	70	115	70	115
Oversized Motor	—	—	8	5	8
Belt Drive Option	38	38	—	38	—
Smoke Detector, Return	7	7	7	7	7
Smoke Detector, Supply	5	5	5	5	5
Coil Guards	12	12	20	12	20
Hinged Doors	10	10	12	10	12
Powered Convenience Outlet	38	38	38	38	38
Stainless Steel Heat Exchanger ^(iv)	4	4	—	—	—
Through the Base Electrical	8	8	13	8	13
Through the Base Gas	5	5	—	—	—
Electric Heaters ^(v)	15	15	30	15	30
Unit Mounted Circuit Breaker	5	5	5	5	5
Unit Mounted Disconnect	5	5	5	5	5
Novar Control	8	8	5	5	5
Dehumidification (Hot Gas Reheat) Coil ^(vi)	15	15	—	—	—

⁽ⁱ⁾ Weights for options not listed are <5 lbs.

⁽ⁱⁱ⁾ Net weight should be added to unit weight when ordering factory-installed accessories.

⁽ⁱⁱⁱ⁾ Apply weight with all 460V units with the Standard Direct Drive Motor.

^(iv) Applicable to Gas/Electric units only.

^(v) Applicable to Cooling and Heat Pump units only.

^(vi) Applicable to R-22 T/Y units only.



Mechanical Specifications

General

The units shall be convertible airflow. The operating range shall be between 115°F and 0°F in cooling as standard from the factory for units with microprocessor controls. Operating range for units with electromechanical controls shall be between 115°F and 40°F. Cooling performance shall be rated in accordance with ARI testing procedures. All units shall be factory assembled, internally wired, fully charged with R-22 and R-410A, and 100 percent run tested to check cooling operation, fan and blower rotation, and control sequence before leaving the factory. Wiring internal to the unit shall be colored and numbered for simplified identification. Units shall be UL listed and labeled, classified in accordance to UL 1995/CAN/CSA No. 236-M90 for Central Cooling Air Conditioners. Canadian units shall be CSA Certified.

Casing

Unit casing shall be constructed of zinc coated, heavy gauge, galvanized steel. Exterior surfaces shall be cleaned, phosphatized, and finished with a weather-resistant baked enamel finish. Unit's surface shall be tested 1000 hours in a salt spray test in compliance with ASTM B117. Cabinet construction shall allow for all maintenance on one side of the unit. Service panels shall have lifting handles and be removed and reinstalled by removing two fasteners while providing a water and air tight seal. All exposed vertical panels and top covers in the indoor air section shall be insulated with a cleanable foil-faced, fire-retardant permanent, odorless glass fiber material. The base of the unit shall be insulated with 1/8 inch, 1 pound density foil-faced, closed-cell material. All insulation edges shall be either captured or sealed. The unit's base pan shall have no penetrations within the perimeter of the curb other than the raised 1 1/8 inch high downflow supply/return openings to provide an added water integrity precaution, if the condensate drain backs up. The base

of the unit shall have provisions for forklift and crane lifting, with forklift capabilities on three sides of the unit.

Compressors

All units shall have direct-drive, hermetic, scroll type compressors with centrifugal type oil pumps. Motor shall be suction gas-cooled and shall have a voltage utilization range of plus or minus 10 percent of unit nameplate voltage. Internal overloads shall be provided with the scroll compressors.

Controls

Unit shall be completely factory-wired with necessary controls and contactor pressure lugs or terminal block for power wiring. Unit shall provide an external location for mounting a fused disconnect device.

A choice of microprocessor or electromechanical controls shall be available.

Microprocessor controls provide for all 24 volt control functions. The resident control algorithms shall make all heating, cooling, and/or ventilating decisions in response to electronic signals from sensors measuring indoor and outdoor temperatures. The control algorithm maintains accurate temperature control, minimizes drift from set point, and provides better building comfort. A centralized microprocessor shall provide anti-short cycle timing and time delay between compressors to provide a higher level of machine protection.

24-volt electromechanical control circuit shall include control transformer and contactor pressure lugs for power wiring. Units shall have single point power entry as standard.

Evaporator and Condenser Coils

Internally finned, 5/16" copper tubes mechanically bonded to a configured aluminum plate fin shall be standard. Coils shall be leak tested at the factory to ensure the pressure integrity. The evaporator coil and condenser coil shall be leak tested to

200 psig and pressure tested to 450 psig. The condenser coil shall have a patent pending 1+1+1 hybrid coil designed with slight gaps for ease of cleaning. A removable, reversible, double-sloped condensate drain pan with provision for through the base condensate drain is standard.

Filters

One inch, throwaway filters shall be standard on all 3-5 ton units. The filter rack can be converted to two inch capability.

Gas Heating Section

The heating section shall have a progressive tubular heat exchanger design using stainless steel burners and corrosion resistant steel throughout. An induced draft combustion blower shall be used to pull the combustion products through the firing tubes. The heater shall use a direct spark ignition (DSI) system. On initial call for heat, the combustion blower shall purge the heat exchanger for 20 seconds before ignition. After three unsuccessful ignition attempts, the entire heating system shall be locked out until manually reset at the thermostat/zone sensor. Units shall be suitable for use with natural gas or propane (field-installed kit) and also comply with the California requirement for low NOx emissions (Gas/Electric Only).

High Pressure Control

All units include High Pressure Cutout as standard.

Indoor Fan

All 3-5 ton 3-phase units are belt driven, FC centrifugal fans with adjustable motor sheaves. 3-5 ton single phase R-410A units have multispeed, direct drive motors. All motors shall be thermally protected. All indoor fan motors meet the U.S. Energy Policy Act of 1992 (EPACT).



Mechanical Specifications

Outdoor Fans

The outdoor fan shall be direct-drive, statically and dynamically balanced, draw-through in the vertical discharge position. The fan motor shall be permanently lubricated and shall have built-in thermal overload protection.

Refrigerant Circuits

Each refrigerant circuit offer thermal expansion valve as standard. Service pressure ports, and refrigerant line filter driers are factory-installed as standard. An area shall be provided for replacement suction line driers.

Unit Top

The top cover shall be one piece construction or where seams exist, it shall be double-hemmed and gasket-sealed. The ribbed top adds extra strength and prevents water from pooling on unit top.

Factory Installed Options

Black Epoxy Pre-Coated Coils

The black epoxy coils have a thermoset vinyl coating that is bonded to the aluminum fin stock prior to the fin-stamping process. The pre-coated coils are an economical option for protection in mildly corrosive environments.

CompleteCoat™ Coils

The cathodic epoxy type electrodisposition coating is formulated for high edge build to plate fin and tube heat exchangers. The coating is selected to provide excellent resistance and durability to corrosive effects of alkalies, acids, alcohols, petroleum, seawater, salt air and corrosive environments.

Dehumidification Option (Available for R-22 units only)

The dehumidification (hot gas reheat) option shall provide increased dehumidification. The option shall consist of a hot-gas reheat coil located on the leaving air side of the evaporator coil piped and circuited.

The option shall be equipped with crankcase heater(s), low pressure switch(es), Froststat™, and a thermostatic expansion valve(s) (TXV) as standard.

Heat Exchanger

The compact cabinet features a tubular heat exchanger in low, medium and high heat capacities.

The heat exchanger is fabricated using stainless steel burners and corrosion-resistant aluminized steel tubes as standard on all models. It has an induced draft blower to pull the gas mixture through the burner tubes. The heater has a direct spark ignition system which doubles as a safety device to prove the flame.

Gas/Electric Precedent models exceed all California seasonal efficiency requirements. They also perform better than required to meet the California NOx emission requirements.

Hinged Access Doors

Sheet metal hinges are available on the Filter/Evaporator, Supply Fan/Heat, and the Compressor/Control Access Doors.

Novar Return Air Sensor

This option, when used in conjunction with Novar Controls, will contain a factory provided and wired zone temperature sensor located in the return air stream.

Novar Unit Controls

Optional Novar rooftop unit controls shall be installed and tested. The Novar electronic thermostat module will interface to the unit microprocessor and will control the unit to the desired stage of cooling or heating.

Phase Monitor

Phase monitor shall provide 100% protection for motors and compressors against problems caused by phase loss, phase imbalance, and phase reversal. Phase monitor is equipped with an LED that provides an ON or FAULT indicator.

Powered or Unpowered Convenience Outlet

This is a GFCI, 120v/15amp, 2 plug, convenience outlet, either powered or unpowered. When the convenience outlet is powered, a service receptacle disconnect will be available. The convenience outlet is powered from the line side of the disconnect or circuit breaker, and therefore will not be affected by the position of the disconnect or circuit breaker. This option can only be ordered when the Through the Base Electrical with either the Disconnect Switch or Circuit Breaker option is ordered.

Stainless Steel Heat Exchanger

The optional stainless steel heat exchanger is constructed of 304 stainless steel. It is resistant to corrosion and oxidation and easy to clean.

The high strength to weight ratio allows for high ventilation rates with gas units. It is an excellent option to compliment the dehumidification option as a high outside air ventilation unit.

With this option, a 10-year stainless steel heat exchanger warranty is standard.

Supply and/or Return Air Smoke Detector

With this option, if smoke is detected, all unit operation will be shut down. Reset will be manual at the unit. Return Air Smoke Detectors require minimum allowable airflow when used with certain models. See the Installation, Operation, and Maintenance (IOM) manual for the models affected and the minimum allowable airflow required. This option is available for microprocessor controlled units.

Through the Base Electrical Access

An electrical service entrance shall be provided allowing electrical access for both control and main power connections inside the curb and through the base of the unit. Option will allow for field installation of liquid-tight conduit and an external field-installed disconnect switch.



Mechanical Specifications

Through the Base Electrical with Circuit Breaker

This option is a thermal magnetic, molded case, HACR Circuit Breaker with provisions for through the base electrical connections. The circuit breaker will be installed in a water tight enclosure in the unit with access through a swinging door. Wiring will be provided from the switch to the unit high voltage terminal block. The circuit breaker will provide overcurrent protection, be sized per NEC and UL guidelines, and be agency recognized by UL/CSA.

Through the Base Electrical with Disconnect Switch

This 3-pole, molded case, disconnect switch with provisions for through the base electrical connections are available. The disconnect switch will be installed in the unit in a water tight enclosure with access through a swinging door. Wiring will be provided from the switch to the unit high voltage terminal block. The switch will be UL/CSA agency recognized. Note: The disconnect switch will be sized per NEC and UL guidelines but will not be used in place of unit overcurrent protection.

Through the Base Gas Piping

The unit shall include a standard through the base gas provision. This option shall have all piping necessary including, black steel, manual gas shut-off valve, elbows, and union. The manual shut-off valve shall include a 1/8" NPT pressure tap. This assembly will require minor field labor to install (Gas/Electric Only).

Two-Inch Pleated Filters

Two inch pleated media filters shall be available on all models.

Factory or Field Installed Options

Clogged Filter/Fan Failure Switch

A dedicated differential pressure switch is available to achieve active fan failure indication and/or clogged filter indication. These indications will be registered with either a zone sensor with status indication lights or an Integrated Comfort™ System.

This option is available for microprocessor controlled units.

Differential Pressure Switches

These sensors allow individual fan failure and dirty filter indication for microprocessor controlled units. The fan failure switch will disable all unit functions and "flash" the Service LED on the zone sensor. The dirty filter switch will light the Service LED on the zone sensor and will allow continued unit operation.

Discharge Air Sensing

This option provides true discharge air sensing in heating models. This sensor is a status indicator readable through Tracer™ or Tracker™. This option is available for microprocessor controlled units.

Economizer

This accessory shall be available with or without barometric relief. The assembly includes fully modulating 0-100 percent motor and dampers, minimum position setting, preset linkage, wiring harness with plug, spring return actuator and fixed dry bulb control. The barometric relief shall provide a pressure operated damper that shall be gravity closing and shall prohibit entrance of outside air during the equipment "off" cycle. Optional solid state or differential enthalpy control shall be available for either factory or field installation. The economizer arrives in the shipping position and shall be moved to the operating position by the installing contractor.

Electric Heaters

Electric heat modules shall be available for installation within basic unit. Electric heater elements shall be constructed of heavy-duty nickel chromium elements internally delta connected for 240 volt, wye connected for 480 and 600 volt. Staging shall be achieved through ReliaTel™. Each heater package shall have automatically reset high limit control operating through heating element contactors. All heaters shall be individually fused from the factory, where required, and shall meet all NEC and CEC requirements when properly installed. Power assemblies shall provide single-point

connection. Electric heat modules shall be UL listed or CSA certified.

Frostat

This option is to be utilized as a safety device. The Frostat opens when temperatures on the evaporator coil fall below 10°F. The temperature will need to rise to 50°F before closing. This option should be utilized in low airflow or high outside air applications (Cooling Only).

LonTalk® Communication Interface

This option shall be provided to allow the unit to communicate as a Tracer™ LCI-R device or directly with generic LonTalk Network Building Automation System Controls.

Reference or Comparative Enthalpy

Reference Enthalpy is used to measure and communicate outdoor humidity. The unit receives and uses this information to provide improved comfort cooling while using the economizer. Comparative Enthalpy measures and communicates humidity for both outdoor and return air conditions, and return air temperature. The unit receives and uses this information to maximize use of economizer cooling, and to provide maximum occupant comfort control. Reference or Comparative Enthalpy option shall be available when a factory or field installed Downflow Economizer is ordered. This option is available on all downflow models.

Tool-less Hail Guards

Tool-less, hail protection quality coil guards are available for condenser coil protection.

Trane Communication Interface

This option shall be provided to interface ReliaTel™ controlled units with the Trane Integrated Comfort™ systems.

Field Installed Options

CO₂ Sensing

The CO₂ sensor shall have the ability to monitor space occupancy levels within the building by measuring the parts per million of CO₂ (Carbon Dioxide) in the air. As the CO₂ levels increase, the outside air damper modulates to meet the CO₂ space ventilation requirements.

Digital Display Zone Sensor

The Digital LCD (Liquid Crystal Display) zone sensor has the look and functionality of standard zone sensors. This sensor includes a digital display of set point adjustment and space temperature in F (Fahrenheit) or C (Celsius). Includes FAN and SYSTEM buttons (supports the service functions of the standard sensor). E-squared memory stores last programmed set points. Requires 24 VAC (Volts AC). This sensor should be utilized with ReliaTel™ controls.

Dual Thermistor Remote Zone Sensor

This sensor will allow the customer to reduce the total number of remote sensors to obtain space temperature averaging. This sensor should be utilized with ReliaTel controls.

High Static Drive

The high static drive option shall allow the standard motor to operate with improved external static capabilities.

Humidity Sensor

This wall-mounted humidity sensor is used to control activation of the hot gas reheat dehumidification option. The humidity sensor can be set for humidity levels between 40% and 60% relative humidity by adjusting the ReliaTel Options Module.

Humidity Sensor

This duct-mounted humidity sensor is used to control activation of the hot gas reheat dehumidification option. The humidity sensor can be set for humidity levels between 40% and 60% relative humidity by adjusting the ReliaTel Options Module.

Manual Outside Air Damper

This rain hood and screen shall provide up to 50 percent outside air.

Motorized Outside Air Damper

Manually set outdoor air dampers shall provide up to 50 percent outside air. Once set, outdoor air dampers shall open to set position when indoor fan starts. The damper shall close to the full closed position when indoor fan shuts down.

Remote Potentiometer

The minimum position setting of the economizer shall be adjusted with this accessory.

Roof Curb

The roof curb shall be designed to mate with the unit's downflow supply and return and provide support and a water tight installation when installed properly. The roof curb design shall allow field-fabricated rectangular supply/return ductwork to be connected directly to the curb. Curb design shall comply with NRCA requirements. Curb shall be shipped knocked down for field assembly and shall include wood nailer strips.

Thermostat

Two stage heating and cooling operation or one stage heating and cooling shall be available in either manual or automatic changeover. Automatic programmable electronic with night set back shall also be available.

Ventilation Override Accessory

With the Ventilation Override Accessory installed, the unit can be set to transition up to 3 different pre-programmed sequences for Smoke Purge, Pressurization, and Exhaust. The transition occurs when a binary input on the RTOM is closed (shorted). This would typically be a hard wired relay output from a smoke detector or fire control panel. The ventilation override accessory shall be available as field installed.

Zone Sensor

This control shall be provided to interface with the Micro equipped units and shall be available in either manual, automatic programmable with night setback, with system malfunction lights, or remote sensor options.



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