



Product Catalog

Packaged Rooftop Air Conditioners Precedent™ Cooling and Gas/ Electric

Ultra High Efficiency

12.5 to 25 Tons — 60 Hz





Introduction

Packaged Rooftop Air Conditioners

Trane's 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 Symbio 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.

The Precedent product is designed for comfort cooling, mixed air applications. If the product is being considered for other types of applications, such as process cooling, dedicated outdoor air, indoor agriculture, etc. Consult with your local Trane Sales Representative. Applying the units in an unintended application could result in inadequate performance and/or premature component failures.

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.

Symbio 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, Precedent™ continues to provide the highest standards in quality and reliability, comfort, ease of service, and the performance of Trane light commercial products.

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Revision History

- Added modulating gas heat (10:1) option. Changes include the following:
 - Updated heat type in the Model Number Description chapter.
 - Updated General data table.
 - Updated Static pressure drop through accessories (inches water column) - ultra high efficiency - gas heater table in the Fan Performance chapter.
 - Added Gas-fired heating capacities modulating gas - ultra high efficiency table to the Heating Performance chapter.
 - Updated Unit wiring, Electrical characteristics - oversized indoor fan motor and Electrical characteristics — inducer motor tables in the Electrical data chapter.
- Streamline Features and Benefits chapter tables.
- Streamline Model Number description.
- Electrical data corrections in table 30 MCA and max fuse values, and table 32 RLA values for 17.5 and 20 ton 208/230 volt units.



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Features and Benefits

Features

Note: Equipment feature availability is dependent on unit configuration. For more information, see Packaged Rooftop Air Conditioners Precedent™ Quick Reference Support Guide (PREC-PRC001-EN), the ordering system, or contact product support.*

Table 1. Features – standard and optional

	Standard Features	Options		
		Factory Installed	Factory or Field Installed	Field Installed
3-year Limited Parts Warranty	X			
5-year Limited Compressor Warranty	X			
10-year Limited Heat Exchanger Warranty	X			
15-year Limited Warranty Stainless Steel Heat Exchanger		X		
2 inch Filter	X			
2 inch MERV 8 Filters		X		
2 inch MERV 13 Filters		X		
Access Doors	X			
Access Door (Control Box)	X			
Anti-Short Cycle Timer (Standard with Symbio™)	X			
Barometric Relief			X	
CO ₂ Sensor				X
Clogged Filter Switch			X	
Coil guards	X			
CompleteCoat™ Condenser Coil		X		
Condensate Overflow Switch			X	
Convertible Airflow	X			
Colored and Numbered Wiring	X			
Crankcase Heaters	X			
Direct Drive Motors	X			
Direct Drive Plenum Fan	X			
Discharge Air Temperature Sensing Kit — MZVAV, SZVAV, Economizer, HGRH, Mod Gas	X			
Economizer: Low Leak — Downflow (12.5 to 25 Tons)			X	
Economizer: Low Leak — Horizontal (12.5 to 25 Tons)				X
Economizer: Standard — Downflow (12.5 to 25 Tons)			X	
Economizer: Standard — Horizontal (12.5 to 25 Tons)				X
Expansion Modules			X	
Fault Detection and Diagnostics (FDD)	X			
Filter Removal Tool	X			
Foil-Faced and Edge Protected Insulation	X			
Frostat™	X			
Tubular Gas Heat Exchanger	X			
High Pressure Control	X			
High Altitude Kit				X
High Static/Oversized Motor		X		
High Temperature Sensor				X
IAQ Dual Sloped Composite Drain Pan	X			
Liquid Line Refrigerant Drier	X			
Low Ambient Cooling to 0°F	X			



Features and Benefits

Table 1. Features – standard and optional (continued)

	Standard Features	Options		
		Factory Installed	Factory or Field Installed	Field Installed
Low Pressure Control	X			
LP Conversion Kit				X
Microchannel Coils	X			
Modulating Gas Heat (10:1)		X		
Modulating Hot Gas Reheat (HGRH)		X		
Motorized Outdoor Air Damper			X	
Operating Charge of R-410A	X			
Phase Monitor	X			
Powered Exhaust				X
Powered or Unpowered Convenience Outlet		X		
Provisions for Through-the-Base Gas	X			
Reference or Comparative Enthalpy			X	
Remote Potentiometer				X
Roof Curb				X
Single Point Power	X			
Single Side Service	X			
Smoke Detector - Return		X		
Smoke Detector - Supply		X		
Stainless Steel Drain Pan		X		
Standardized Components	X			
Symbio Controls	X			
Thermal Expansion Valve	X			
Through-the-Base Electrical Access		X		
Through-the-Base Electrical with Circuit Breaker		X		
Through-the-Base Electrical with Disconnect Switch		X		
Through-the-Base Gas Piping		X		
Variable Air Flow (MZVAV)		X		
Variable Air Flow (SZVAV)	X			
Ventilation Override				X

Control Options

Note: Control option availability is dependent on unit configuration. For more information, see *Packaged Rooftop Air Conditioners Precedent™ Quick Reference Support Guide (PREC-PRC001*-EN)*, the ordering system, or contact product support.

Table 2. Control options — standard and optional

	Standard Features	Options		
		Factory Installed	Factory or Field Installed	Field Installed
Dual Thermistor Remote Zone Sensor				X
Symbio Service and Installation App	X			
Symbio 700 Advanced Module			X	
Humidity Sensor/Humidistat				X
Thermostat				X

Table 2. Control options — standard and optional (continued)

	Standard Features	Options		
		Factory Installed	Factory or Field Installed	Field Installed
Wireless Zone Sensor				X
Zone Sensor				X
LonTalk® Communication Interface (LCI)			X	
Trane® Air-Fi® Wireless Communication Interface (WCI)			X	

Note: For more information, reference the Controls chapter.

Accessories

Note: Accessory availability is dependent on unit configuration. Some accessories may require additional accessories/options for full functionality. For more information, see *Packaged Rooftop Air Conditioners Precedent™ Quick Reference Support Guide (PREC-PRC001*-EN)*, the ordering system, or contact product support.

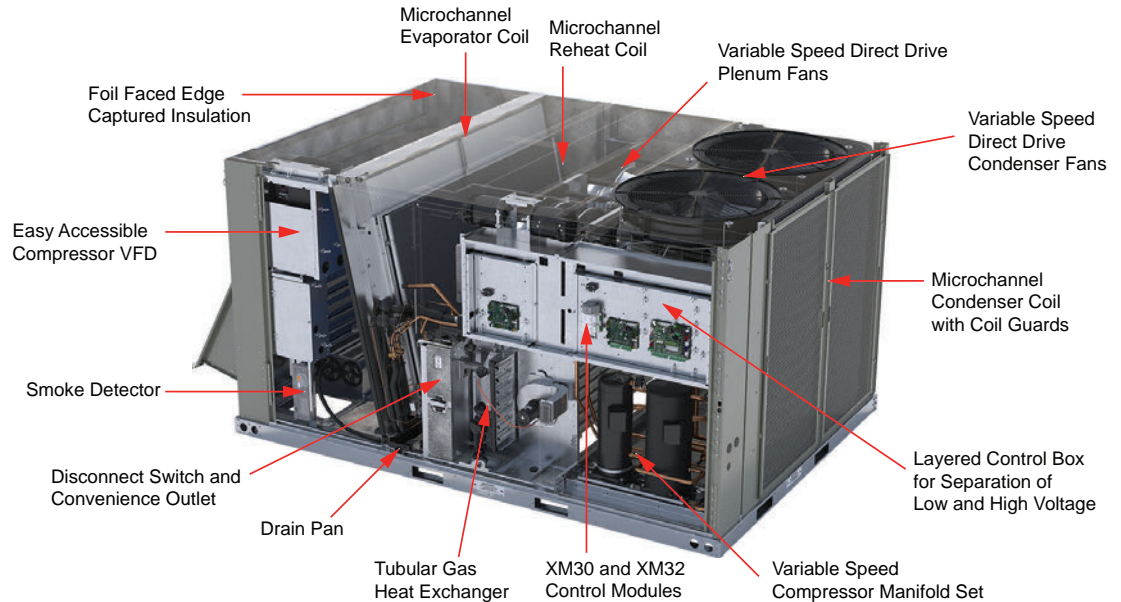
FIA KIT	DESCRIPTION
FIABARM003*	Barometric Relief
FIAC02K001*	CO ₂ (DCV) Wall Mounted Sensor
FIAC02K002*	CO ₂ (DCV) Duct Mounted Sensor
FIACURB404*	14-inch Full Perimeter Knockdown Curb
FIACLFS003*	Clogged Filter Switch
FIACLFS004*	Clogged Filter Switch (MERV13)
FIADFDB001*	Differential Dry Bulb Economizer Control
FIAECON003*	Dry Bulb Downflow Economizer
FIAECON303*	Dry Bulb Horizontal Economizer
FIAECON103*	Dry Bulb Downflow Low Leak
FIAECON203*	Dry Bulb Horizontal Low Leak
FIAENTH001*	Reference Enthalpy Economizer Control
FIAENTH002*	Comparative Enthalpy Economizer Control
FIAHTST001*	High Temperature (Fire) Duct Mounted Stat
FIAHZDC001*	Horizontal Conversion Panel
FIALTCI001*	LonTalk Communication Interface
FIAOPTN002*	Fresh Air Options Module
FIAOVFL001*	Condensate Overflow Switch
FIAHALT003*	High Altitude Gas Adjustment Kit - 2-Stage gas
FIALPKT003*	LP Gas Conversion Kit - 2-Stage gas
FIALPKTM08*	LP Gas Conversion Kit - Modulating gas
FIALPKTM09*	LP Gas Conversion Kit - Modulating gas
FIALPKTM10*	LP Gas Conversion Kit - Modulating gas
FIAPWRX303*	Power Exhaust 230V
FIAPWRX403*	Power Exhaust 460V
FIAPWRXW03*	Power Exhaust 575V
FIAS7ADV01*	Symbio 700 Advanced Controls and BACnet BAS Upgrade Kit
FIASCCM001*	Symbio Customer Connection Module



Features and Benefits

FIA KIT	DESCRIPTION
FIAXMOD030*	Symbio 700 XM30 Expansion Module
FIAXMOD032*	Symbio 700 XM32 Expansion Module

Key Benefits



Airflow Distribution

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

Cabinet Integrity

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

Coil Guards

Coil guards protect condenser coil during shipping as well as hail, vandals, wind, etc. Toolless design lends itself to ease of maintenance in cleaning coils.



CO₂ Sensor — Demand Control Ventilation (DCV)

Demand-controlled ventilation (DCV) is a control strategy that responds to the actual demand (need) for ventilation by regulating the rate at which the HVAC system brings outdoor air into the building. A CO₂ sensor measures the concentration (parts per million, ppm) of CO₂ (carbon dioxide) in the air. As the CO₂ concentration changes, the outside air damper modulates to meet the current ventilation needs of the zone. The CO₂ sensor kit is available as a field installed accessory and wires directly to the Symbio 700 controller.

CompleteCoat™ Condenser Coil

This optional coated coil provides excellent corrosion resistance as well as uniformity of coverage and coating thickness.

Controls — Symbio™

Enhanced BAS Integration and Connectivity

- Open standard communications
 - BACnet® over Zigbee (Air-Fi Wireless)
 - BACnet MS/TP
 - BACnet IP
 - Modbus™ RTU
 - Modbus TCP/IP
 - LonTalk®
- Securely access, troubleshoot, and monitor equipment from anywhere via Trane Connect™

Serviceability

- Wireless mobile app interface (iPhone and Android) to simplify startup/service
- On-board user interface
- Data Trending
- Real-time, clear language diagnostics
- Historical alarm logs
- Backup and Restore functionality to reduce commissioning and service time

Flexibility

- Future-ready upgradable software, supporting changing codes and new sequences of operation
- Standard, consistent pre-engineered applications that meet industry standards
- Built-in Schedules (requires Tracer® TU)
- Expandable inputs and outputs (requires Tracer TU)
- Ability to add custom programmed sequences (requires Tracer TU)

Accessibility

Control box consists of a multilevel design with Symbio Controls located on hinged panels which provide protection from high voltage components for ease of servicing.

Convenience Outlet

This option is GFCI, 120V/15A, 2 plug, convenience outlet powered or GFCI, 120V/20A, 2 plug convenience outlet unpowered. This option can be ordered when through the base electrical with either the disconnect switch or circuit breaker option is ordered.



Features and Benefits



Convertible Units

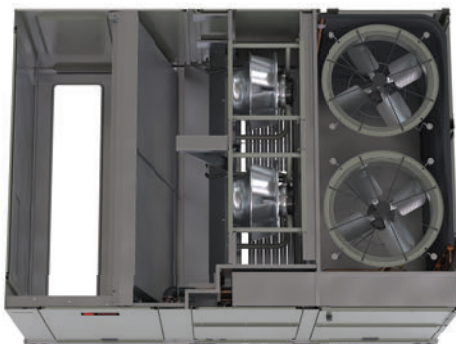
Units ship in a downflow configuration and can be easily converted to horizontal by simply removing the two existing panels and installing the optional field accessory Horizontal Conversion Panel kit.



Direct Drive Plenum Fans

All 12.5 to 25 tons units are equipped with a direct drive plenum fan design with the following features.

- Backward-curved fan wheel
- External rotor direct drive variable speed indoor motor
- Variable speed adjustment available in Symbio controller
- Designed to slide out for ease of maintenance



Drain Pan

Every Precedent unit has an easy-to-clean, composite removable dual-sloped drain pan (IAQ).



eFlex™ Variable Speed Scroll Compressor

Variable speed scroll compressors are matched with a specially designed variable frequency drive that modulates capacity. This allows for precise control of leaving air temperatures to meet space loads.

The eFlex™ compressors also include brushless permanent magnet motors designed to operate at higher efficiency resulting in significant part load energy savings. This makes units with eFlex™ compressors the most efficient products in their class at part load.

Fault Detection and Diagnostics (FDD)

This offering meets the mandatory requirement of CA Title 24 of fully configurable diagnostics allowing fault history and reading fault codes at the unit via Symbio™ 700 board or app. This feature provides detection of the following faults: Air temperature sensor failure/fault and notification of acceptable economizer mode. The FDD system shall be certified by the Energy Commission as meeting the requirements.

Flexibility

Precedent™ offers ultimate flexibility. Units are built to order in our standard ship cycle time.

High Altitude Kit

While recommended for units applied above 2,000 feet, domestic contractors should consult with local authority on best practice. High altitude kits contain gas orifices that derate the gas input rate (Btuh/r) by 10%.

High Efficiency Filtration

Precedent™ units offer a variety of high efficiency filtration options. MERV 8 and MERV 13 filters provide additional filtration beyond the capabilities of typical 2 inches throwaway filters.

High Static Motor

Available on 25 ton models, this high static motor option extends beyond the capability of the standard motor.

Hinged Access Doors

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





Features and Benefits

Humidity Sensor/Humidistat

The humidity sensor/humidistat, when used in conjunction with our dehumidification (hot gas reheat) units will provide outstanding humidity control and comfort. Humidity sensors can be wall or duct mounted. The humidity deadband can be set between 40% and 60% relative humidity.

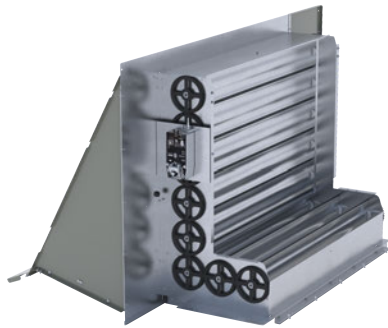
Low Ambient Cooling

All Precedent™ ultra high efficiency units have cooling capabilities down to 0°F.

Low Leak Economizer

This accessory meets low leak requirements for ASHRAE 90.1, IECC, and CA Title 24 standards (4 cfm/ft²@1" wg exterior air/return air). This option allows 100% outdoor air supply from 0 to 100% modulating dampers and is standard with barometric relief. It can be paired with powered exhaust for additional building pressure relief. This option can be paired with or without fault detection and diagnostics (FDD) to meet current mandatory CA Title 24 requirements.

The economizers come with four control options, dry bulb, reference enthalpy, comparative enthalpy, or differential dry bulb.



Note: Downflow low leak economizer is available as a factory installed option. Horizontal low leak economizer option is only available as a field installed option.

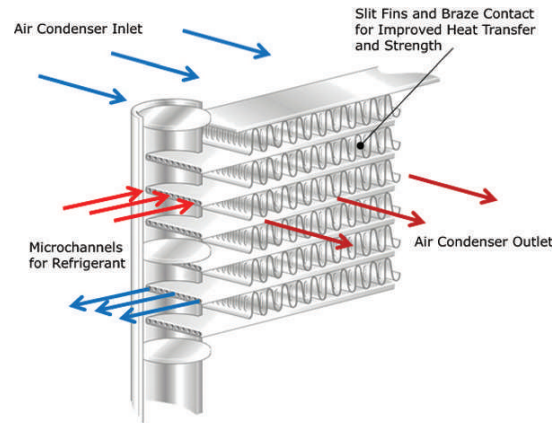
LP Conversion Kit

Provided for field conversion of gas/electric units from natural gas to propane.

Microchannel Coils

Microchannel coils are all-aluminum coils with fully-brazed construction. This design reduces risk of leaks and provides increased coil rigidity — making them more rugged on the jobsite. Their flat streamlined tubes with small ports and metallurgical tube-to-fin bond allow for exceptional heat transfer. Microchannel all-aluminum construction provides several additional benefits:

- Light weight (simplifies coil handling)
- Easy to recycle
- Minimize galvanic corrosion



Modulating Gas Heat (10:1)

Modulating natural gas heat option, with a high modulation range of 10:1, automatically modulates the gas value and combustion blower motor providing improved comfort with stable temperature control.

- Less on/off cycling
- Continuous heating output
- Wide operation range (low and high heat)
- Coupled with variable speed fan control enables independent control of supply airflow and discharge air temperature
- With Zoned Rooftop Systems, modulating gas heat enables effective supply air tempering as well as warm-up sequences

Modulating Hot Gas Reheat (HGRH)

All 12.5 to 25 tons units can be ordered with a factory installed modulating hot gas reheat (HGRH) humidity control system designed to provide year around comfort by improving indoor air quality while controlling humidity levels.

- Modulating gas reheat, no more on/off
- Maintains stable neutral leaving air temperature, resulting in less cycling
- Includes both relative humidity and dew point control
- Available on downflow or horizontal

Multiple-Zone VAV Control

A multiple-zone VAV (MZVAV) system consists of a packaged rooftop unit that serves several individually controlled zones. Each zone is equipped with a VAV terminal unit that varies the quantity of air delivered to maintain the desired temperature in that zone. The rooftop unit controller varies the speed of the indoor fan to maintain the static pressure in the supply ductwork at a setpoint, ensuring that all zones receive the necessary quantity of air. In addition, cooling capacity is cycled to maintain the supply air temperature at the desired setpoint.

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
- Symbio Controls



Features and Benefits

Rigorous Testing

All Precedent™ designs were rigorously tested at the factory to ensure premier quality.

Rain testing is completed to ensure water integrity.

Transportation vibration and forklifting tests are performed to ensure that the unit arrives at the job site in top condition.

Rigging lift and drop tests are completed to assure that the lifting lugs and rails hold up under stress.

During production we perform 100% coil leak test at the factory. The assembled unit is leak tested to 465 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 meets rigorous requirements.

Single Zone VAV (SZVAV)

SZVAV is fully integrated into the control system. It provides the simplest and fastest commissioning in the industry through proven factory-installed, wired, and tested system controllers. All control modules, logic boards and sensors are factory installed and tested to ensure the highest quality and most reliable system available. This means no special programming of algorithms, or hunting at the jobsite for field installed sensors, boards, etc. SZVAV is a quick and simple solution for many applications and is available from your most trusted rooftop VAV system solution provider -Trane.

Building system modeling in energy simulation software such as TRACE is recommended to evaluate performance improvements for your application.

Supply/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. In order for the supply air smoke detector or return air smoke detector to properly sense smoke in the supply air stream or the return air stream, the air velocity entering the smoke detector unit must be between 500 to 4000 feet per minute. Equipment covered in this manual will develop an airflow velocity that falls within these limits over the entire airflow range specified in the evaporator fan performance table.



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.

Through-the-Base Gas Piping

Factory provided through-the-base openings simplify gas piping connections. Because these utility openings frequently minimize the number of roof penetrations, the integrity of roofing materials is enhanced.

This option shall have all piping necessary including, black steel, manual gas shut-off valve, elbows, and union. This assembly will require minor field labor to install.

Ventilation Override

Ventilation override allows the unit to be set to transition to up to three different pre-programmed sequences for smoke purge, pressurization, and exhaust. The transition occurs when a binary input on

the Customer Connection Module is closed (shorted). This would typically be a hard wired relay output from a smoke detector or fire control panel. The Customer Connection module that allows ventilation override is available as a field installed accessory (FIASCCM001). For more information on functionality, refer to *Symbio™ 700 Controller with Precedent™ Packaged Rooftop Air-Conditioners Application Guide* (ACC-APG002*-EN).



Model Number Description

Digit 1 — Unit Function

Y = DX Cooling, Gas Heat

Digit 2 — Cooling Efficiency

Z = Ultra High Efficiency

Digit 3 — Refrigerant

J = R-410A

Digit 4,5,6 — Nominal Gross Cooling Capacity (MBh)

150 = 12.5 Ton

180 = 15 Ton

210 = 17.5 Ton

240 = 20 Ton

300 = 25 Ton

Digit 7 — Design Sequence

Digit 8 — Voltage Selection

3 = 208–230/60/3

4 = 460/60/3

W = 575/60/3

Digit 9 — Unit Controls

S = Symbio™ 700

Digit 10 — Heat Type

0 = Base Model

A = Stainless Steel Gas Heat

B = Modulating Gas Heat

Digit 11 — Heating Capacity

L = Low Gas Heat

M = Medium Gas Heat

H = High Gas Heat

Digit 12, 13 — Service Sequence

** = Factory Assigned

Digit 14 — Fresh Air Selection

0 = No Fresh Air

C = Economizer, Dry Bulb 0–100% without Barometric Relief

D = Economizer, Dry Bulb 0–100% with Barometric Relief

E = Economizer, Reference Enthalpy 0–100% without Barometric Relief

F = Economizer, Reference Enthalpy 0–100% with Barometric Relief

G = Economizer, Comparative Enthalpy 0–100% without Barometric Relief

H = Economizer, Comparative Enthalpy 0–100% with Barometric Relief

K = Downflow Low Leak Economizer, Dry Bulb with Barometric Relief

M = Downflow Low Leak Economizer, Reference Enthalpy with Barometric Relief

P = Downflow Low Leak Economizer, Comparative Enthalpy with Barometric Relief

R = Downflow Low Leak Economizer, Differential Dry Bulb with Barometric Relief

Digit 15 — Supply Fan/Drive Type/Motor

2 = Single Zone Variable Air Volume with Standard Motor

3 = Single Zone Variable Air Volume with Oversized/High Static Motor

4 = Multiple Zone Variable Air Volume with Standard Motor

5 = Multiple Zone Variable Air Volume with Oversized/High Static Motor

Digit 16 — Hinged Service Access/Filters

A = Hinged Access Panels/Standard Filters

C = Hinged Access Panels/2 inch MERV 8 Filters

E = Hinged Access Panels/2 inch MERV 13 Filters

Digit 17 — Condenser Coil Protection

0 = Standard Coil

1 = Condenser with CompleteCoat™

Digit 18 — Through-the-Base Provisions

0 = No Through-the-Base Provisions

A = Through-the-Base Electric

B = Through-the-Base Gas Piping

C = Through-the-Base Electric and Gas Piping

Digit 19 — Disconnect/Circuit Breaker

0 = No Disconnect/No Circuit Breaker

1 = Unit Mounted/Non-Fused Disconnect

2 = Unit Mounted Circuit Breaker

Digit 20— Convenience Outlet

0 = No Convenience Outlet

A = Unpowered 20A Convenience Outlet

B = Powered 15A Convenience Outlet (three-phase only)

Digit 21— Communications Options

0 = No Communications Interface

1 = Advanced Controller with BACnet® Communications Interface

2 = Advanced Controller with LonTalk® Communications Interface

3 = Advanced Controller with Air-Fi® Communications Interface

Digit 22— Refrigeration System Option

0 = Standard Refrigeration System

A = Dehumidification Option

Digit 23— Controls Expansion Module

0 = None

1 = XM-30 Expansion Module

2 = XM-32 Expansion Module

3 = XM-30 and XM-32 Expansion Module

4 = XM-30 Expansion Module (Qty 2)

5 = XM-32 Expansion Module (Qty 2)

Digit 24— Smoke Detector

0 = No Smoke Detector

A = Return Air Smoke Detector

B = Supply Air Smoke Detector

C = Supply and Return Air Smoke Detectors

Digit 25— System Monitoring Controls

- 0 = No Monitoring Control
- 1 = Clogged Filter Switch
- 2 = Condensate Overflow Switch
- 4 = Clogged Filter Switch and Condensate Overflow Switch

Digit 26— Not Used**Digit 27— Unit Hardware Enhancements**

- 0 = No Enhancements
- 1 = Stainless Steel Drain Pan

Digit 28— Short Circuit Current Rating

- 0 = Standard (5k) SCCR Marking
- A = Tier 2 (65K) SCCR Marking

Digit 29— Low Ambient

- 0 = None



General Data

Table 3. General data— 12.5 to 25 tons — ultra high efficiency

	12.5 Tons	15 Tons	17.5 Tons	20 Tons	25 Tons
	YZJ150	YZJ180	YZJ210	YZJ240	YZJ300
Cooling Performance					
Gross Cooling Capacity	152000	183000	217000	252000	281000
AHRI Net Cooling Capacity	150000	180000	212000	242000	272000
Nominal cfm/AHRI Rated cfm	4375	5250	6650	8000	9250
EER (208/230/460 Volt)	14.3	12.6	12	10.8	10.8
EER (575 Volt)	14	12.5	11.7	10.6	10.6
IEER(b) (208/230/460 Volt)	26.1	24.5	20.8	20.5	20
IEER(b) (575 Volt)	22.7	21.8	17.7	17.7	17.8
System Power(kW) (208/230/460 Volt)	10.49	14.29	17.67	22.59	25.19
System Power(kW) (575 Volt)	10.71	14.4	18.12	23.02	25.66
Compressor					
Number/Type	1/Scroll	1/Scroll	2/Manifold Scroll	2/Manifold Scroll	2/Manifold Scroll
Minimum Percent Capacity	27%	22%	12%	11%	14%
Sound^(a)					
Outdoor Sound Rating (dBA)	90	91	93	93	93
Outdoor Coil					
Type	Microchannel	Microchannel	Microchannel	Microchannel	Microchannel
Configuration	Full Face	Full Face	Full Face	Full Face	Full Face
Coil Width(in.)	0.7	0.7	1	1	1
Face Area (sq. ft.)	38.85	38.85	38.85	38.85	38.85
Rows/FPI (Fins per inch)	44949	44949	44949	44949	44949
Indoor Coil					
Type	Microchannel	Microchannel	Microchannel	Microchannel	Microchannel
Configuration	Full Face	Full Face	Full Face	Full Face	Full Face
Coil Width(in.)	1	1	1	1	1
Face Area (sq. ft.)	28.1	28.1	28.1	28.1	28.1
Rows/FPI (Fins per inch)	44975	44975	44975	44975	44975
Refrigerant Control	TXV	TXV	TXV	TXV	TXV
STD. Drain Connection No./Size (in.)	1/1.00 PVC Socket	1/1.00 PVC Socket	1/1.00 PVC Socket	1/1.00 PVC Socket	1/1.00 PVC Socket
Stainless Drain Connection No./Size (in.)	1/1.00 NPT	1/1.00 NPT	1/1.00 NPT	1/1.00 NPT	1/1.00 NPT
Reheat Coil					
Type	Microchannel	Microchannel	Microchannel	Microchannel	Microchannel
Configuration	Full Face	Full Face	Full Face	Full Face	Full Face
Tube Size (in.)	0.6	0.6	0.6	0.6	0.6
Face Area (sq. ft.)	21.83	21.83	21.83	21.83	21.83
Rows/FPI (Fins per inch)	44949	44949	44949	44949	44949
Outdoor Fan					
Type	Propeller	Propeller	Propeller	Propeller	Propeller
No. Used/Diameter (in.)	2/26x3	2/26x3	2/28x4	2/28x4	2/28x4
Drive Type/No. Speeds (208/230/460 Volt)	Direct / Variable	Direct / Variable	Direct / Variable	Direct / Variable	Direct / Variable

Table 3. General data— 12.5 to 25 tons — ultra high efficiency (continued)

	12.5 Tons	15 Tons	17.5 Tons	20 Tons	25 Tons
	YZJ150	YZJ180	YZJ210	YZJ240	YZJ300
Drive Type/No. Speeds (575 Volt)	Direct / 1	Direct / 1	Direct / 1	Direct / 1	Direct / 1
CFM (208/230/460 Volt)	11340	11340	17030	17030	17030
CFM (575 Volt)	11340	11340	16100	16100	16100
Number Motors/HP (208/230/460 Volt)	2/0.5	2/0.5	2/1.5	2/1.5	2/1.5
Number Motors/HP (575 Volt)	2/0.5	2/0.5	2/1.0	2/1.0	2/1.0
Motor rpm (208/230/460 Volt)	1125	1125	1190	1190	1190
Motor rpm (575 Volt)	1125	1125	1125	1125	1125
Indoor Fan					
Type	BC Plenum	BC Plenum	BC Plenum	BC Plenum	BC Plenum
No. Used/Diameter (in.)/Width (in.)	2/23x6	2/23x6	2/23x6	2/23x6	2/23x6
Drive Type/No. Speeds/RPM	Direct / Variable	Direct / Variable	Direct / Variable	Direct / Variable	Direct / Variable
Motor HP (Standard/Oversized)	3.0 / –	3.0 / –	Staged: 3.0 / – Modulating: 3.0 / 4.6	Staged: 3.0 / – Modulating: 3.0 / 4.6	Staged: 3.0 / 4.6 Modulating: 3.0 / 4.6
Max Motor RPM	1850	1850	1850 / 1940	1850 / 1940	1850 / 1940
Filters					
Type Furnished	Throwaway	Throwaway	Throwaway	Throwaway	Throwaway
Number Size Recommended	(4) 20 x 24 x 2	(4) 20 x 24 x 2	(4) 20 x 24 x 2	(4) 20 x 24 x 2	(4) 20 x 24 x 2
	(4) 20 x 30 x 2	(4) 20 x 30 x 2	(4) 20 x 30 x 2	(4) 20 x 30 x 2	(4) 20 x 30 x 2
Refrigerant Charge					
lbs of R-410A	15.9	14.8	18.6	18.6	18.6
lbs of R-410A, Hot Gas Reheat	16.4	15.3	19.1	19.1	19.1
Heating Performance (Gas Heat Only)					
Heating Input: Staged					
Low Heat Input (Btu) (High/Low Stage)	150,000/105,000	250,000/175,000	250,000/175,000	250,000/175,000	250,000/175,000
Mid Heat Input (Btu) (High/Low Stage)	200,000/140,000	320,000/224,000	320,000/224,000	320,000/224,000	320,000/224,000
High Heat Input (Btu) (High/Low Stage)	250,000/175,000	400,000/280,000	400,000/280,000	400,000/280,000	400,000/280,000
Heating Output: Staged					
Low Heat Input (Btu) (High/Low Stage)	121,500/85,000	202,500/141,750	202,500/141,750	202,500/141,750	202,500/141,750
Mid Heat Input (Btu) (High/Low Stage)	162,000/113,400	259,200/181,440	259,200/181,440	259,200/181,440	259,200/181,440
High Heat Input (Btu) (High/Low Stage)	202,500/141,750	324,000/226,800	324,000/226,800	324,000/226,800	324,000/226,800
Heating Input: Modulating					
Low Heat Input (Btu) (Maximum/Minimum)	N/A	250,000/25,000	250,000/25,000	250,000/25,000	250,000/25,000
High Heat Input (Btu) (Maximum/Minimum)	250,000/25,000	400,000/40,000	400,000/40,000	400,000/40,000	400,000/40,000
Heating Output: Modulating					
Low Heat Output (Btu) (Maximum/Minimum)	N/A	202,500/20,250	202,500/20,250	202,500/20,250	202,500/20,250
High Heat Output (Btu) (Maximum/Minimum)	202,500/20,250	324,000/32,400	324,000/32,400	324,000/32,400	324,000/32,400
Steady State Efficiency %					
Low Heat Input	81	81	81	81	81
Mid Heat Input	81	81	81	81	81
High Heat Input	81	81	81	81	81
No. Burners: Staged					



General Data

Table 3. General data— 12.5 to 25 tons — ultra high efficiency (continued)

	12.5 Tons	15 Tons	17.5 Tons	20 Tons	25 Tons
	YZJ150	YZJ180	YZJ210	YZJ240	YZJ300
Low Heat Output	5	5	5	5	5
Mid Heat Output	5	7	7	7	7
High Heat Output	7	8	8	8	8
No. Burners: Modulating					
Low Heat Output	N/A	6	6	6	6
High Heat Output	6	8	8	8	8
No. Stages					
Low Heat Input	2	2	2	2	2
Mid Heat Input	2	2	2	2	2
High Heat Input	2	2	2	2	2
Gas Supply Line Pressure (InWC)					
Natural (minimum/maximum) Low Heat	4.5/14.0	4.5/14.0	4.5/14.0	4.5/14.0	4.5/14.0
Natural (minimum/maximum) Mid Heat	4.5/14.0	4.5/14.0	4.5/14.0	4.5/14.0	4.5/14.0
Natural (minimum/maximum) High Heat	4.5/14.0	6.0/14.0	6.0/14.0	6.0/14.0	6.0/14.0
LP (minimum/maximum)	11.5/14.0	11.5/14.0	11.5/14.0	11.5/14.0	11.5/14.0
Gas Connection Pipe Size (in.)					
Low Heat	44989	44989	44989	44989	44989
Mid Heat	44989	44989	44989	44989	44989
High Heat	44989	44989	44989	44989	44989
Cabinet					
Cabinet Size	D1	D1	D1	D1	D1

^(a) Outdoor sound rating shown is tested in accordance with AHRI 370-2015. For additional information reference the outdoor sound power level data in the performance section.



Gross Cooling Capacities

Table 4. Gross cooling capacities — 12.5 tons, ultra high efficiency

CFM	Ent DB (°F)	Entering Wet Bulb (°F)						Entering Wet Bulb (°F)						Entering Wet Bulb (°F)					
		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
		Ambient Temperature 85°F						Ambient Temperature 95°F						Ambient Temperature 105°F					
3500 ^(a)	75	135.1	106.7	153.0	85.1	169.8	60.7	128.2	103.1	145.3	81.4	161.2	57.2	120.8	99.2	137.0	77.6	151.8	53.3
	80	135.1	120.7	152.9	104.0	169.9	80.5	128.1	120.7	145.1	100.3	161.3	76.8	120.8	116.8	136.8	96.2	152.0	73.0
	85	137.5	137.5	152.6	122.4	170.0	99.5	132.0	132.0	144.9	118.7	161.5	95.9	126.0	126.0	136.7	114.8	152.3	92.1
	90	145.5	145.5	152.5	134.9	170.1	118.4	139.8	139.8	144.8	136.2	161.6	114.7	133.6	133.6	136.6	132.2	152.3	110.8
4000	75	139.3	114.9	157.6	90.2	173.7	62.2	132.0	111.1	149.4	86.4	164.6	58.5	124.3	107.2	140.7	82.4	154.8	55.1
	80	139.1	134.6	157.3	111.4	173.9	84.6	131.9	130.7	149.1	107.5	164.9	80.9	124.3	124.3	140.4	103.6	155.1	77.0
	85	144.7	144.7	157.0	132.5	174.2	106.4	138.7	138.7	148.9	128.6	165.2	102.8	132.3	132.3	140.3	121.7	155.6	98.8
	90	153.2	153.2	156.6	151.9	174.2	127.8	147.0	147.0	148.6	148.6	165.3	124.0	140.3	140.3	140.5	140.5	155.6	120.0
4500	75	142.7	122.8	161.2	95.0	176.7	64.1	135.1	117.1	152.7	91.2	167.2	60.3	127.0	110.4	143.6	87.2	157.6	53.8
	80	142.4	142.4	160.8	118.7	177.0	88.6	135.8	135.8	152.3	114.8	167.7	84.9	129.3	129.3	143.3	110.7	157.6	80.9
	85	150.8	150.8	160.5	138.1	177.5	112.9	144.5	144.5	151.9	137.3	168.2	109.1	137.7	137.7	142.9	133.0	158.1	105.1
	90	159.6	159.6	159.9	159.9	177.5	136.9	153.0	153.0	153.3	153.3	168.2	133.1	145.8	145.8	146.0	146.0	158.1	129.0
5000	75	145.4	125.5	164.1	99.7	179.0	64.4	137.3	125.2	155.4	95.5	169.3	61.5	128.9	120.9	145.9	91.4	158.8	56.8
	80	146.9	146.9	163.7	125.8	179.5	92.5	140.5	140.5	154.9	121.8	170.0	88.7	133.6	133.6	145.6	117.7	159.6	84.8
	85	156.1	156.1	162.9	150.1	180.1	119.3	149.5	149.5	154.2	146.0	170.5	115.4	142.2	142.2	144.8	141.7	160.0	111.3
	90	165.1	165.1	165.3	165.3	180.1	145.9	158.1	158.1	158.3	158.3	170.5	140.3	150.4	150.4	150.6	150.6	160.1	132.9
5500	75	147.3	136.2	166.5	103.9	181.1	65.9	139.2	132.0	157.5	99.9	170.9	62.6	130.6	127.6	147.9	95.7	160.6	56.6
	80	151.2	151.2	166.0	132.7	181.7	96.4	144.5	144.5	157.0	125.1	172.0	92.6	137.3	137.3	147.5	123.6	161.5	88.6
	85	160.7	160.7	164.8	158.7	182.2	125.6	153.7	153.7	155.8	155.8	172.3	121.7	146.1	146.1	146.3	146.2	161.6	117.6
	90	169.7	169.7	169.9	169.9	182.2	149.4	162.3	162.3	162.5	162.5	172.1	149.1	154.1	154.1	154.2	154.2	161.0	144.6
6000	75	148.9	142.8	168.6	108.2	182.6	66.9	140.6	140.6	159.3	104.1	172.3	63.7	131.9	131.9	149.5	99.9	161.3	57.4
	80	155.0	155.0	168.0	138.8	183.8	100.3	148.1	148.1	158.8	131.8	174.0	96.2	140.6	140.6	148.7	129.7	163.1	92.0
	85	164.7	164.7	166.2	166.2	184.0	131.8	157.4	157.4	157.5	157.5	173.9	127.9	149.4	149.4	149.5	149.5	163.0	123.7
	90	173.6	173.6	173.7	173.7	183.3	161.1	165.8	165.8	165.9	165.9	172.8	156.8	157.1	157.1	157.2	157.2	161.5	152.2
CFM	Ent DB (°F)	Entering Wet Bulb (°F)						Entering Wet Bulb (°F)											
		61		67		73		61		67		73							
		MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC						
		Ambient Temperature 115°F						Ambient Temperature 120°F											
3500 ^(a)	75	113.0	95.2	128.2	73.5	141.7	49.7	109.0	93.1	123.5	71.4	136.3	47.5						
	80	113.1	112.6	128.0	92.1	142.0	68.9	109.2	109.2	123.4	89.9	136.5	66.7						
	85	119.6	119.6	128.0	110.8	142.3	88.0	116.2	116.2	123.4	107.7	136.9	85.9						
	90	127.0	127.0	128.0	128.0	142.4	106.7	123.3	123.3	123.5	123.5	137.0	104.5						
4000	75	116.1	101.5	131.4	78.3	144.2	50.9	111.8	97.9	126.5	76.2	138.5	48.7						
	80	117.7	117.7	131.2	99.4	144.6	72.8	114.1	114.1	126.3	97.2	138.9	70.6						
	85	125.4	125.4	131.0	119.6	145.1	94.4	121.7	121.7	126.1	117.3	139.4	92.2						
	90	133.0	133.0	133.2	133.2	145.1	115.8	129.0	129.0	129.2	129.2	139.4	113.5						
4500	75	118.3	109.6	134.1	82.7	146.5	50.4	113.8	107.3	128.8	80.4	140.1	49.8						
	80	122.3	122.3	133.7	106.5	146.7	76.6	118.5	118.5	128.6	104.3	141.2	72.8						
	85	130.3	130.3	133.3	128.5	147.2	100.8	126.3	126.3	128.2	126.2	141.3	98.5						
	90	137.9	137.9	138.1	138.1	147.2	123.3	133.6	133.6	133.7	133.7	141.3	118.4						
5000	75	120.1	116.4	136.0	87.1	147.5	53.1	115.5	114.1	130.7	84.8	141.4	50.9						
	80	126.2	126.2	135.7	113.4	148.6	80.6	122.2	122.2	130.5	106.1	142.6	78.3						
	85	134.4	134.4	134.9	134.9	148.8	107.0	130.1	130.1	130.3	130.3	142.7	104.7						
	90	141.9	141.9	142.0	142.0	148.5	132.0	137.1	137.1	137.3	137.3	142.2	129.4						
5500	75	121.6	121.6	137.7	91.3	148.7	54.2	117.0	117.0	132.2	89.0	142.4	51.9						
	80	129.6	129.6	137.4	114.2	150.3	84.1	125.4	125.4	131.7	116.5	144.1	81.7						
	85	137.8	137.8	138.0	138.0	150.2	113.2	133.3	133.3	133.4	133.4	143.9	111.2						
	90	145.0	145.0	145.1	145.1	149.0	139.8	139.9	139.9	140.0	140.0	142.5	137.2						



Gross Cooling Capacities

Table 4. Gross cooling capacities — 12.5 tons, ultra high efficiency (continued)

CFM	Ent DB (°F)	Entering Wet Bulb (°F)											
		61			67								
		MBh	SHC	MBh	SHC	MBh	SHC						
		Ambient Temperature 115°F			Ambient Temperature 120°F								
6000	75	123.7	123.7	139.1	95.5	149.7	55.3	119.6	119.6	133.5	93.2	143.3	53.0
	80	132.5	132.5	138.2	125.0	151.4	87.6	128.1	128.1	132.6	122.5	145.1	85.2
	85	140.7	140.7	140.8	140.8	151.3	115.5	135.9	135.9	136.0	136.0	144.9	116.5
	90	147.4	147.4	147.5	147.5	149.3	147.4	142.0	142.0	142.1	142.1	142.6	142.6

Notes:

- All capacities shown are gross.
- MBh = Total gross capacity.
- SHC = Sensible heat capacity.

(a) Unit applications below 300 cfm/ton are only applicable to YZJ models with modulating gas heat.

Table 5. Gross cooling capacities — 15 tons, ultra high efficiency

CFM	Ent DB (°F)	Entering Wet Bulb (°F)						Entering Wet Bulb (°F)											
		61		67		73		61		67		73							
		MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC						
		Ambient Temperature 85°F				Ambient Temperature 95°F				Ambient Temperature 105°F									
4200 ^(a)	75	163.0	127.6	183.9	102.1	202.8	72.7	155.1	123.4	174.9	97.8	192.4	68.4	146.7	119.0	165.3	93.3	181.0	63.8
	80	162.6	145.1	183.8	124.3	202.9	96.1	154.8	138.5	174.8	120.1	192.5	91.7	146.4	139.0	165.3	115.2	181.3	87.1
	85	163.6	163.6	183.2	145.7	203.0	118.4	157.4	157.4	174.3	141.4	192.7	114.3	150.7	150.7	164.8	136.9	181.6	109.7
	90	172.9	172.9	182.9	161.6	203.2	140.4	166.4	166.4	174.0	161.3	192.8	136.1	159.4	159.4	164.4	156.6	181.7	131.4
4800	75	168.0	137.0	189.2	107.8	207.2	74.2	159.6	132.7	179.7	103.4	196.1	69.8	150.8	128.1	169.5	99.0	184.1	65.1
	80	167.3	159.1	188.9	132.6	207.4	100.7	159.0	154.6	179.4	128.2	196.4	96.3	150.2	150.2	169.2	123.5	184.5	91.5
	85	171.8	171.8	188.3	157.2	207.7	126.4	165.1	165.1	178.9	152.8	196.8	122.0	157.8	157.8	168.9	146.2	185.1	117.4
	90	181.5	181.5	187.5	178.9	207.7	151.0	174.5	174.5	178.1	174.2	196.8	146.5	166.8	166.8	168.0	168.0	185.1	141.8
5400	75	172.0	145.9	193.4	113.5	210.5	76.6	163.2	141.1	183.5	109.0	198.9	72.0	154.0	133.9	172.8	104.4	186.4	67.2
	80	170.8	170.8	193.0	140.8	210.9	105.2	162.3	162.3	183.0	136.2	199.4	100.7	154.3	154.3	172.4	131.5	187.1	95.9
	85	178.8	178.8	192.3	165.3	211.5	133.3	171.6	171.6	182.5	156.5	200.1	128.8	163.8	163.8	171.6	156.8	187.8	123.9
	90	188.8	188.8	190.8	190.8	211.2	161.3	181.2	181.2	181.4	181.4	199.9	156.7	172.8	172.8	173.0	173.0	187.7	151.8
6000	75	175.1	151.4	196.8	118.8	213.1	77.9	166.1	143.6	186.5	114.3	201.1	73.3	156.1	143.1	175.6	108.8	188.1	68.4
	80	174.2	174.2	196.2	148.7	213.8	109.6	167.0	167.0	185.9	144.1	201.9	105.0	159.2	159.2	174.9	137.9	189.2	100.4
	85	184.7	184.7	195.0	176.3	214.3	140.5	177.1	177.1	184.6	171.3	202.5	135.8	168.8	168.8	173.5	166.1	189.8	130.9
	90	194.9	194.9	195.1	195.1	214.1	171.3	186.7	186.7	186.9	186.9	202.4	166.7	177.7	177.7	177.8	177.8	189.7	156.5
6600	75	177.3	160.4	199.7	123.2	215.2	79.2	167.8	155.5	189.1	118.5	202.8	74.5	157.9	150.4	177.7	113.6	189.6	69.5
	80	179.1	179.1	198.9	156.4	216.2	114.3	171.5	171.5	188.3	152.4	204.2	110.4	163.3	163.3	177.0	141.7	191.5	103.4
	85	189.8	189.8	196.9	185.5	216.6	147.5	181.8	181.8	186.2	186.2	204.5	142.8	173.0	173.0	174.8	174.8	191.4	137.8
	90	200.0	200.0	200.2	200.2	216.5	176.6	191.3	191.3	191.5	191.5	204.3	172.4	181.6	181.6	181.8	181.8	190.6	168.4
7200	75	179.0	167.5	202.1	128.0	217.0	80.4	169.3	169.3	191.1	123.2	204.3	75.7	159.1	159.1	179.5	118.2	190.8	70.7
	80	183.4	183.4	201.0	160.8	218.4	118.0	175.5	175.5	190.2	150.5	206.2	113.7	166.9	166.9	178.7	147.5	193.3	108.1
	85	194.3	194.3	198.2	198.2	218.6	154.4	185.8	185.8	187.3	187.3	206.2	149.6	176.5	176.5	176.7	176.7	192.8	143.4
	90	204.3	204.3	204.5	204.5	217.7	187.7	195.1	195.1	195.3	195.3	204.8	182.3	184.9	184.9	185.0	185.0	190.9	176.7
CFM	Ent DB (°F)	Entering Wet Bulb (°F)						Entering Wet Bulb (°F)											
		61		67		73		61		67		73							
		MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC						
		Ambient Temperature 115°F				Ambient Temperature 120°F													
4200 ^(a)	75	137.7	114.4	154.9	88.6	168.7	58.9	132.9	112.0	149.4	86.1	162.1	56.3						
	80	137.5	134.2	154.8	110.4	169.0	82.2	132.7	132.7	149.3	107.9	162.5	79.6						
	85	143.4	143.4	154.6	132.2	169.5	104.9	139.4	139.4	149.1	129.6	163.0	102.3						
	90	151.6	151.6	154.2	151.5	169.6	126.5	147.4	147.4	148.7	148.7	163.1	123.9						
4800	75	141.3	122.3	158.5	94.2	171.1	60.1	136.3	119.5	152.7	91.7	164.2	58.2						
	80	141.1	141.1	158.3	118.6	171.8	86.6	137.1	137.1	152.5	116.0	164.8	83.9						
	85	149.9	149.9	158.1	136.8	172.5	111.8	145.5	145.5	152.1	139.0	165.6	109.1						
	90	158.2	158.2	158.4	158.4	172.3	136.7	153.5	153.5	153.7	153.7	165.5	134.0						

Table 5. Gross cooling capacities — 15 tons, ultra high efficiency (continued)

CFM	Ent DB (°F)	Entering Wet Bulb (°F)						Entering Wet Bulb (°F)									
		61		67		73		61		67		73					
		MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC				
						Ambient Temperature 115°F						Ambient Temperature 120°F					
5400	75	143.9	130.3	161.4	99.5	172.9	62.1	138.6	127.6	155.3	96.9	165.7	59.4				
	80	146.3	146.3	161.1	126.5	173.8	90.8	142.0	142.0	155.0	123.8	166.9	88.2				
	85	155.2	155.2	160.1	151.4	174.5	118.8	150.5	150.5	154.0	154.0	167.4	116.0				
	90	163.4	163.4	163.6	163.6	174.4	145.9	158.2	158.2	158.4	158.4	167.3	138.1				
6000	75	145.8	137.8	163.7	103.7	174.3	63.2	140.4	135.1	157.4	101.0	166.9	60.5				
	80	150.7	150.7	163.2	132.3	175.7	95.3	146.1	146.1	157.0	126.5	168.6	92.9				
	85	159.6	159.6	161.6	161.6	176.1	125.7	154.6	154.6	155.4	155.4	168.8	122.9				
	90	167.5	167.5	167.7	167.7	175.7	154.1	161.9	161.9	162.0	162.0	168.0	151.0				
6600	75	147.3	147.3	165.5	108.4	175.4	64.3	141.7	141.7	159.1	105.6	167.9	61.6				
	80	154.4	154.4	164.9	130.5	177.7	99.8	149.5	149.5	158.4	136.6	170.6	98.2				
	85	163.2	163.2	163.4	163.4	177.4	133.1	157.9	157.9	158.0	158.0	169.9	127.2				
	90	170.7	170.7	170.9	170.9	176.0	162.5	164.6	164.6	164.8	164.8	168.2	159.4				
7200	75	148.4	148.4	167.0	112.9	176.4	65.5	143.3	143.3	160.5	110.2	168.8	62.8				
	80	157.6	157.6	165.8	146.5	179.0	102.7	152.5	152.5	159.1	143.5	171.4	99.9				
	85	166.3	166.3	166.4	166.4	178.5	131.6	160.6	160.6	160.7	160.7	170.9	125.0				
	90	173.2	173.2	173.3	173.3	176.1	170.7	166.7	166.7	166.8	166.8	168.2	167.6				

Notes:

1. All capacities shown are gross.
2. MBh = Total gross capacity.
3. SHC = Sensible heat capacity.

(a) Unit applications below 300 cfm/ton are only applicable to YZJ models with modulating gas heat.

Table 6. Gross cooling capacities — 17.5 tons, ultra high efficiency

CFM	Ent DB (°F)	Entering Wet Bulb (°F)						Entering Wet Bulb (°F)						Entering Wet Bulb (°F)					
		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
		Ambient Temperature 85°F						Ambient Temperature 95°F						Ambient Temperature 105°F					
4900(a)	75	188.0	145.2	214.6	117.3	241.0	85.6	178.0	139.5	203.3	111.6	227.7	79.8	167.2	133.6	191.2	105.7	213.0	73.5
	80	187.2	158.9	214.4	142.4	241.1	112.3	177.4	160.0	203.2	136.7	227.9	106.4	166.6	155.9	191.1	130.8	213.3	100.0
	85	187.0	187.0	213.6	166.7	241.1	137.6	178.6	178.6	202.5	161.0	228.1	131.8	170.3	170.3	190.5	155.0	213.6	125.8
	90	197.6	197.6	212.8	188.2	241.1	162.8	189.8	189.8	201.9	179.1	228.0	156.7	181.1	181.1	189.8	177.0	213.6	150.3
5600	75	194.2	158.6	221.8	124.2	247.5	87.9	183.7	150.0	209.8	118.3	233.1	82.8	172.3	143.9	196.9	112.1	217.2	76.1
	80	192.9	180.4	221.5	152.2	247.7	117.9	182.5	174.2	209.5	146.1	233.4	111.8	171.2	171.2	196.5	140.0	217.7	105.1
	85	196.1	196.1	220.2	179.8	247.7	147.1	187.9	187.9	208.4	173.9	233.7	141.1	179.0	179.0	195.6	157.3	218.2	134.5
	90	208.2	208.2	218.8	203.9	247.4	174.6	199.7	199.7	207.2	197.6	233.5	168.5	190.4	190.4	194.6	191.0	218.1	161.9
6300	75	199.2	163.9	227.6	131.0	252.4	91.0	188.1	154.6	215.0	125.0	237.0	84.5	176.3	152.9	201.4	118.7	220.0	77.6
	80	197.2	197.2	226.9	161.6	252.6	123.2	186.3	186.3	214.3	155.5	237.5	116.8	174.8	174.8	200.7	149.0	220.8	109.9
	85	204.6	204.6	225.4	192.3	252.8	155.9	195.9	195.9	213.0	181.6	238.0	149.7	186.4	186.4	199.7	171.5	221.5	141.6
	90	217.3	217.3	223.4	217.5	252.2	186.1	208.3	208.3	211.1	211.1	237.6	179.8	198.2	198.2	198.4	198.4	221.4	173.0
7000	75	203.2	175.5	232.4	137.2	256.0	92.6	191.7	167.2	219.1	131.1	239.9	86.0	179.0	160.4	204.9	124.7	222.0	78.8
	80	200.6	200.6	231.3	170.5	256.5	128.1	190.1	190.1	218.0	168.5	240.6	121.6	180.5	180.5	204.0	157.7	223.1	115.1
	85	212.1	212.1	229.4	195.8	256.8	162.9	202.9	202.9	216.0	194.6	241.1	156.3	192.8	192.8	202.0	187.5	223.9	149.2
	90	225.2	225.2	226.6	226.6	255.9	197.3	215.6	215.6	215.8	215.8	240.7	190.9	204.8	204.8	205.0	205.0	223.8	183.9
7700	75	206.3	177.4	236.2	143.2	258.8	94.1	193.9	175.3	222.5	137.0	242.0	87.3	181.1	168.3	207.8	129.0	223.3	80.0
	80	205.0	205.0	234.6	180.5	259.5	132.9	195.7	195.7	221.1	172.8	243.0	126.7	185.7	185.7	206.6	163.9	225.0	119.9
	85	218.6	218.6	231.7	211.3	259.7	170.5	208.9	208.9	218.3	204.5	243.5	163.9	198.3	198.3	203.8	203.8	225.7	156.7
	90	232.1	232.1	232.3	232.3	258.9	208.2	221.9	221.9	222.1	222.1	243.1	199.4	210.3	210.3	210.5	210.5	225.5	191.1
8400	75	208.0	189.7	239.4	147.6	261.0	95.4	195.7	182.9	225.5	141.1	243.6	88.5	182.7	175.8	210.3	134.2	224.3	81.1
	80	210.4	210.4	237.5	189.7	262.0	137.6	200.7	200.7	223.5	176.2	245.2	130.9	190.3	190.3	208.6	162.0	226.7	124.8
	85	224.3	224.3	233.6	221.0	262.1	178.1	214.3	214.3	219.8	219.8	245.5	171.3	203.1	203.1	205.1	205.1	227.1	166.6
	90	238.1	238.1	238.3	238.3	261.3	212.2	227.3	227.3	227.4	227.4	244.4	208.3	214.9	214.9	215.0	215.0	226.0	200.2



Gross Cooling Capacities

Table 6. Gross cooling capacities — 17.5 tons, ultra high efficiency (continued)

CFM	Ent DB (°F)	Entering Wet Bulb (°F)						Entering Wet Bulb (°F)									
		61		67		73		61		67		73					
		MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC				
						Ambient Temperature 115°F						Ambient Temperature 120°F					
4900 ^(a)	75	155.7	126.6	178.1	99.3	196.6	67.5	149.6	121.6	171.0	96.0	187.4	63.7				
	80	155.3	149.3	178.0	124.1	197.0	93.1	149.3	145.9	170.9	120.5	188.0	89.4				
	85	161.2	161.2	177.4	147.0	197.5	119.0	156.3	156.3	170.5	140.0	188.6	115.4				
	90	171.7	171.7	177.0	170.2	197.7	143.4	166.5	166.5	170.1	166.6	188.9	139.7				
5600	75	160.2	137.5	182.9	105.9	199.3	68.8	153.8	133.8	175.4	102.5	189.3	64.8				
	80	159.4	159.4	182.6	133.3	200.1	97.9	153.2	153.2	175.1	129.8	190.3	94.0				
	85	169.2	169.2	181.9	151.3	200.9	127.5	163.9	163.9	174.6	151.1	191.4	122.5				
	90	180.1	180.1	181.0	181.0	201.0	154.7	174.4	174.4	174.6	174.6	191.6	150.8				
6300	75	163.7	143.9	186.6	112.0	200.9	70.0	156.7	141.6	178.7	108.5	190.3	65.8				
	80	164.6	164.6	186.1	142.2	202.1	102.5	159.2	159.2	178.3	138.6	191.9	98.5				
	85	176.0	176.0	184.8	169.9	203.2	134.1	170.3	170.3	177.1	166.0	193.0	130.0				
	90	187.0	187.0	187.2	187.2	203.4	165.7	180.7	180.7	180.8	180.8	193.4	160.8				
7000	75	165.8	153.2	189.5	116.6	201.9	71.0	158.9	149.5	181.4	112.9	191.3	67.0				
	80	170.0	170.0	188.8	150.9	203.7	107.7	164.4	164.4	180.7	143.3	193.1	103.5				
	85	181.7	181.7	186.9	180.0	204.7	141.5	175.6	175.6	178.8	178.8	194.1	137.3				
	90	192.6	192.6	192.7	192.7	205.1	169.2	185.6	185.6	185.7	185.7	194.4	169.2				
7700	75	167.6	161.0	192.1	121.8	203.0	72.2	160.4	160.4	183.6	118.0	192.8	68.3				
	80	174.7	174.7	191.0	149.4	205.1	112.4	168.8	168.8	182.7	151.7	194.6	107.4				
	85	186.5	186.5	188.3	188.3	205.8	151.6	180.0	180.0	180.1	180.1	194.9	143.5				
	90	197.0	197.0	197.1	197.1	205.4	182.7	189.2	189.2	189.3	189.3	194.4	178.1				
8400	75	168.9	168.9	193.9	126.9	204.4	73.5	161.6	161.6	185.2	123.0	193.9	69.6				
	80	178.8	178.8	192.3	164.3	206.6	115.0	172.6	172.6	183.5	160.2	195.5	110.7				
	85	190.6	190.6	190.7	190.7	206.8	151.2	183.6	183.6	183.7	183.7	195.6	143.0				
	90	200.3	200.3	200.4	200.4	205.5	191.5	191.7	191.7	191.8	191.8	194.1	186.8				

Notes:

1. All capacities shown are gross.
2. MBh = Total gross capacity.
3. SHC = Sensible heat capacity.

^(a) Unit applications below 300 cfm/ton are only applicable to YZJ models with modulating gas heat.

Table 7. Gross cooling capacities — 20 tons, ultra high efficiency

CFM	Ent DB (°F)	Entering Wet Bulb (°F)						Entering Wet Bulb (°F)						Entering Wet Bulb (°F)									
		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				
						Ambient Temperature 85°F						Ambient Temperature 95°F						Ambient Temperature 105°F					
5600 ^(a)	75	216.3	166.4	246.4	134.8	276.5	98.6	205.5	160.4	234.2	128.7	262.0	92.3	193.8	156.9	220.9	122.2	246.1	85.6				
	80	215.1	183.0	246.1	163.7	276.5	128.9	204.5	183.7	233.9	157.7	262.2	122.5	192.9	179.1	220.7	150.4	246.4	115.7				
	85	214.4	214.4	245.0	190.5	276.5	157.7	204.8	204.8	232.9	184.4	262.2	151.9	195.9	195.9	219.8	177.9	246.5	145.1				
	90	225.6	225.6	243.9	215.0	276.2	186.2	217.2	217.2	232.0	205.1	262.0	179.6	207.9	207.9	218.9	202.6	246.4	172.5				
6400	75	223.3	178.3	254.6	142.6	284.1	101.3	211.8	172.0	241.6	136.2	268.5	94.8	199.6	165.5	227.4	129.5	251.3	88.7				
	80	221.5	205.9	254.1	174.3	284.2	135.3	210.2	199.3	241.0	167.8	268.7	128.7	198.0	198.0	226.9	160.8	251.7	121.5				
	85	223.9	223.9	252.4	208.1	284.1	168.6	215.2	215.2	239.5	196.4	268.8	162.1	205.5	205.5	225.7	187.4	252.0	155.1				
	90	237.5	237.5	250.6	232.2	283.5	199.3	228.4	228.4	237.9	225.4	268.3	192.6	218.4	218.4	224.0	224.0	251.7	185.4				
7200	75	228.8	189.4	261.3	150.4	289.9	104.8	216.8	183.1	247.4	143.9	273.2	97.9	204.0	176.3	232.5	137.1	254.9	90.4				
	80	226.1	226.1	260.2	184.5	290.1	141.3	214.3	214.3	246.4	177.9	273.6	134.4	201.8	201.8	231.6	170.9	255.6	127.1				
	85	233.5	233.5	258.2	219.1	290.0	178.6	224.1	224.1	244.7	208.4	273.9	170.8	213.9	213.9	230.2	196.8	256.1	162.6				
	90	247.7	247.7	255.5	247.3	289.0	212.2	238.0	238.0	242.2	242.2	273.1	205.3	227.2	227.2	227.9	227.9	255.6	198.0				
8000	75	233.3	200.3	266.6	157.3	294.3	106.7	220.8	191.1	252.1	150.8	276.8	99.6	207.2	183.4	236.5	143.9	257.6	92.0				
	80	229.7	229.7	265.1	194.5	294.6	146.9	217.6	217.6	252.2	188.8	277.4	139.9	207.3	207.3	235.3	184.0	258.6	133.4				
	85	241.8	241.8	262.7	222.7	294.7	185.9	231.9	231.9	248.1	221.7	277.7	178.8	221.1	221.1	232.8	214.1	259.1	171.1				
	90	256.6	256.6	259.0	259.0	293.3	224.6	246.2	246.2	246.4	246.4	276.7	217.7	234.7	234.7	234.9	234.9	258.5	210.2				
8800	75	236.8	202.5	270.9	163.1	297.7	108.5	223.2	200.2	255.9	157.6	279.5	101.2	209.4	192.6	239.8	148.1	259.5	93.4				
	80	233.9	233.9	269.0	204.1	298.3	153.4	223.9	223.9	254.1	197.9	280.5	146.4	213.1	213.1	238.3	183.7	261.1	139.0				
	85	249.1	249.1	265.2	240.1	298.2	194.4	238.7	238.7	250.6	232.8	280.6	187.2	227.3	227.3	234.7	234.7	261.4	179.4				
	90	264.3	264.3	264.5	264.5	296.7	236.8	253.3	253.3	253.5	253.5	279.6	227.5	241.0	241.0	241.2	241.2	260.5	218.1				

Table 7. Gross cooling capacities — 20 tons, ultra high efficiency (continued)

CFM	Ent DB (°F)	Entering Wet Bulb (°F)						Entering Wet Bulb (°F)						Entering Wet Bulb (°F)					
		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
		Ambient Temperature 85°F						Ambient Temperature 95°F						Ambient Temperature 105°F					
9600	75	238.6	216.0	274.5	168.4	300.5	110.1	225.3	208.6	259.2	161.4	281.6	102.7	211.1	201.0	242.8	153.9	261.0	94.8
	80	239.9	239.9	272.1	211.1	301.4	157.7	229.5	229.5	256.9	197.8	283.1	152.1	218.3	218.3	240.7	183.6	263.5	142.2
	85	255.6	255.6	267.3	250.8	301.0	202.8	244.7	244.7	252.3	243.4	283.0	195.5	232.7	232.7	236.1	236.1	263.1	191.9
	90	271.1	271.1	271.3	271.3	299.4	240.8	259.5	259.5	259.7	259.7	281.0	237.0	246.3	246.3	246.5	246.5	261.2	228.4
CFM	Ent DB (°F)	Entering Wet Bulb (°F)						Entering Wet Bulb (°F)											
		61		67		73		61		67		73							
		MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC						
		Ambient Temperature 115°F						Ambient Temperature 120°F											
5600 ^(a)	75	181.4	147.3	206.6	115.3	228.4	79.2	172.1	142.4	195.7	110.2	214.4	73.5						
	80	180.6	172.0	206.3	143.2	228.8	108.3	171.4	166.8	195.4	138.1	215.0	102.6						
	85	186.1	186.1	205.6	167.7	229.2	137.9	178.7	178.7	194.9	165.9	215.6	132.4						
	90	197.7	197.7	204.8	195.2	229.2	165.0	189.8	189.8	194.1	189.7	215.7	159.4						
6400	75	186.5	158.6	212.1	123.0	232.1	80.9	176.7	153.5	200.5	117.7	217.1	74.9						
	80	185.1	185.1	211.6	153.6	232.8	113.8	175.5	175.5	200.0	148.2	218.0	108.0						
	85	195.0	195.0	210.7	178.1	233.4	147.7	186.9	186.9	199.4	171.9	219.1	140.0						
	90	207.2	207.2	209.3	209.3	233.3	177.7	198.5	198.5	198.7	198.7	218.9	171.8						
7200	75	190.4	164.8	216.4	129.9	234.5	82.3	179.8	161.5	204.2	124.5	218.6	76.2						
	80	189.9	189.9	215.6	166.7	235.6	120.0	181.8	181.8	203.6	157.9	220.2	114.1						
	85	202.6	202.6	214.0	194.7	236.5	154.5	193.9	193.9	202.0	188.7	221.2	148.3						
	90	215.1	215.1	215.3	215.3	236.2	190.0	205.5	205.5	205.7	205.7	221.2	182.8						
8000	75	192.7	176.1	219.6	134.4	236.2	83.7	182.1	170.4	207.1	128.7	219.6	77.4						
	80	196.0	196.0	218.8	169.4	237.9	125.5	187.4	187.4	206.2	158.9	222.1	119.6						
	85	209.1	209.1	216.3	205.9	238.6	162.8	199.8	199.8	203.8	203.8	222.7	156.5						
	90	221.6	221.6	221.8	221.8	238.4	195.2	211.1	211.1	211.2	211.2	222.3	192.3						
8800	75	194.6	184.6	222.7	140.3	237.4	85.0	183.6	183.6	209.6	134.4	220.4	78.6						
	80	201.3	201.3	221.3	169.6	240.0	131.1	192.2	192.2	208.4	172.2	224.1	123.7						
	85	214.6	214.6	217.8	217.8	240.1	176.8	204.7	204.7	205.1	205.1	223.7	164.0						
	90	226.9	226.9	227.1	227.1	239.1	209.2	215.4	215.4	215.5	215.5	222.5	202.2						
9600	75	195.9	195.9	225.0	145.9	238.3	86.2	184.7	184.7	211.5	139.9	221.1	79.9						
	80	206.0	206.0	205.0	-752.7	242.1	133.1	196.4	196.4	209.2	181.8	225.4	126.6						
	85	219.3	219.3	219.5	219.5	241.4	175.5	208.7	208.7	208.9	208.9	224.8	172.5						
	90	231.2	231.2	231.3	231.3	239.4	219.1	218.6	218.6	218.7	218.7	222.5	212.0						

Notes:

1. All capacities shown are gross.
2. MBh = Total gross capacity.
3. SHC = Sensible heat capacity.

^(a) Unit applications below 300 cfm/ton are only applicable to YZJ models with modulating gas heat.



Gross Cooling Capacities

Table 8. Gross cooling capacities — 25 tons, ultra high efficiency

CFM	Ent DB (°F)	Entering Wet Bulb (°F)						Entering Wet Bulb (°F)						Entering Wet Bulb (°F)					
		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
		Ambient Temperature 85°F						Ambient Temperature 95°F						Ambient Temperature 105°F					
7000 ^(a)	75	245.5	191.0	279.7	154.1	312.6	111.4	233.2	184.2	265.7	147.2	295.3	104.2	219.9	180.6	250.5	139.8	275.9	97.2
	80	242.4	218.8	279.3	187.1	312.7	146.7	230.4	207.6	265.3	180.2	295.5	139.2	216.5	216.5	250.1	172.4	276.2	130.9
	85	239.1	239.1	277.5	225.7	312.6	181.1	230.1	230.1	263.6	211.8	295.5	173.7	220.3	220.3	248.2	200.0	276.5	164.5
	90	253.5	253.5	274.7	241.5	312.3	212.8	244.2	244.2	260.3	239.1	295.5	205.3	233.9	233.9	245.0	245.0	276.4	197.0
8000	75	252.8	204.0	288.8	162.7	320.4	115.8	239.7	197.0	273.7	155.5	301.6	107.8	225.7	189.5	257.3	148.7	280.4	99.0
	80	247.4	247.4	288.2	199.3	320.6	153.6	234.7	234.7	273.4	198.0	301.8	145.7	221.1	221.1	256.8	184.1	280.9	137.0
	85	250.7	250.7	285.0	234.7	320.5	192.5	241.1	241.1	270.1	227.5	302.0	185.0	230.5	230.5	253.9	215.6	281.5	174.3
	90	266.0	266.0	280.0	263.4	319.8	227.6	255.9	255.9	265.4	255.6	301.4	219.6	244.7	244.7	249.5	247.2	281.0	211.1
9000	75	258.2	218.8	296.0	170.7	326.2	118.0	244.6	207.2	280.0	164.3	306.0	109.7	230.0	200.3	262.6	156.3	283.2	100.5
	80	251.5	251.5	294.9	210.8	326.5	160.0	238.2	238.2	278.6	215.8	306.4	151.7	224.4	224.4	261.3	194.9	284.1	143.9
	85	260.7	260.7	290.5	249.7	326.7	201.1	250.5	250.5	274.9	236.4	306.9	192.8	239.2	239.2	256.8	229.8	285.0	183.7
	90	276.7	276.7	283.8	279.2	325.0	241.5	265.9	265.9	268.4	268.4	305.6	233.4	253.7	253.7	253.9	253.9	284.3	224.6
10000	75	262.4	227.4	301.8	179.4	330.6	119.9	248.2	215.3	285.0	172.0	309.1	111.3	231.8	208.5	266.7	161.7	285.1	101.8
	80	254.0	254.0	299.5	234.6	331.0	166.0	242.7	242.7	282.7	219.3	309.9	158.6	231.4	231.4	264.5	204.7	286.6	149.6
	85	269.5	269.5	292.9	259.1	331.2	210.8	258.6	258.6	276.5	250.6	310.4	202.2	246.6	246.6	258.6	258.6	287.3	192.9
	90	286.0	286.0	286.2	286.2	328.9	255.1	274.4	274.4	274.6	274.6	308.9	246.9	261.3	261.3	261.4	261.4	286.8	235.9
11000	75	263.9	234.4	306.4	185.3	333.9	121.7	249.2	226.1	289.0	176.7	311.3	112.7	233.3	233.3	270.2	168.1	287.1	103.3
	80	260.2	260.2	303.1	236.3	334.6	171.8	249.4	249.4	285.8	220.4	312.7	163.8	237.5	237.5	267.1	205.5	288.7	153.8
	85	277.2	277.2	294.6	294.6	334.5	220.0	265.8	265.8	277.8	277.8	312.9	211.3	253.0	253.0	259.7	259.7	289.0	212.4
	90	294.1	294.1	294.3	294.3	331.9	268.3	281.8	281.8	281.9	281.9	311.3	252.7	267.6	267.6	267.8	267.8	287.2	245.6
12000	75	265.5	243.1	310.6	191.4	336.4	123.2	250.4	234.7	292.7	183.2	312.9	114.1	234.2	234.2	273.1	174.4	289.5	105.2
	80	266.6	266.6	305.9	237.3	337.5	179.6	255.3	255.3	288.1	220.9	315.1	168.7	242.9	242.9	269.1	205.6	290.7	158.4
	85	284.0	284.0	295.7	295.7	337.0	229.1	272.0	272.0	278.6	278.6	314.9	220.3	258.5	258.5	260.1	260.1	290.6	212.5
	90	301.2	301.2	301.4	301.4	332.6	276.1	288.1	288.1	288.2	288.2	311.0	266.5	272.9	272.9	273.0	273.0	287.3	256.1
CFM	Ent DB (°F)	Entering Wet Bulb (°F)						Entering Wet Bulb (°F)											
		61		67		73		61		67		73							
		MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC						
		Ambient Temperature 115°F						Ambient Temperature 120°F											
7000 ^(a)	75	205.6	172.6	233.6	132.6	253.8	88.1	198.0	161.7	224.5	128.3	241.3	83.0						
	80	202.5	202.5	233.5	164.4	254.3	121.8	195.1	195.1	224.4	160.2	242.0	116.8						
	85	209.4	209.4	231.7	196.1	254.9	156.9	203.5	203.5	222.7	187.8	242.9	152.2						
	90	222.3	222.3	228.9	222.2	255.0	188.0	215.9	215.9	220.1	217.6	243.1	183.0						
8000	75	210.6	181.7	239.2	140.5	256.2	89.3	202.6	177.5	229.4	136.0	242.8	84.1						
	80	206.4	206.4	238.6	175.6	257.2	127.4	199.1	199.1	228.8	171.0	243.9	123.4						
	85	218.7	218.7	236.4	204.7	258.3	164.7	212.2	212.2	226.1	203.3	245.3	159.4						
	90	231.9	231.9	232.3	232.3	258.2	201.7	224.8	224.8	224.9	224.9	245.6	196.6						
9000	75	214.3	186.7	243.5	148.1	257.9	90.6	204.9	185.5	233.1	143.6	245.3	85.8						
	80	212.6	212.6	242.2	190.6	259.1	134.3	206.1	206.1	231.9	181.0	245.9	129.4						
	85	226.5	226.5	237.9	237.9	260.2	173.8	219.4	219.4	227.9	227.9	246.6	168.4						
	90	239.7	239.7	239.9	239.9	260.5	215.1	231.7	231.7	231.9	231.9	247.4	205.2						
10000	75	215.2	215.2	246.8	152.6	260.4	92.3	206.6	206.6	236.0	147.8	247.2	87.4						
	80	218.9	218.9	244.8	184.4	261.1	139.5	212.1	212.1	234.2	179.2	248.4	135.5						
	85	233.0	233.0	239.4	239.4	261.7	182.8	225.4	225.4	229.1	229.1	248.0	177.5						
	90	246.0	246.0	246.1	246.1	261.3	223.8	237.1	237.1	237.2	237.2	247.4	217.7						

Table 8. Gross cooling capacities — 25 tons, ultra high efficiency (continued)

CFM	Ent DB (°F)	Entering Wet Bulb (°F)						Entering Wet Bulb (°F)					
		61		67		73		61		67		73	
		MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC
		Ambient Temperature 115°F						Ambient Temperature 120°F					
11000	75	216.5	216.5	249.6	158.9	262.3	94.0	207.6	207.6	238.3	153.9	248.7	88.9
	80	224.4	224.4	246.9	190.9	263.3	144.3	217.2	217.2	236.1	194.7	250.4	138.3
	85	238.5	238.5	240.1	240.1	262.8	192.0	230.3	230.3	230.4	230.4	249.3	181.8
	90	250.9	250.9	251.1	251.1	261.3	234.4	241.0	241.0	241.1	241.1	247.1	228.3
12000	75	217.2	217.2	251.5	164.9	263.9	95.6	208.1	208.1	239.9	159.8	249.8	90.4
	80	229.2	229.2	247.1	212.0	265.3	148.5	221.5	221.5	235.8	206.6	251.7	143.2
	85	243.1	243.1	243.3	243.3	264.0	191.0	234.3	234.3	234.4	234.4	250.6	195.4
	90	254.7	254.7	254.8	254.8	261.0	244.8	243.8	243.8	243.9	243.9	246.7	238.8

Notes:

1. All capacities shown are gross.
2. MBh = Total gross capacity.
3. SHC = Sensible heat capacity.

(a) Unit applications below 300 cfm/ton are only applicable to YZJ models with modulating gas heat.



Reheat Temperature Rise

Table 9. Reheat temperature rise — 12.5 tons

Airflow (cfm)	Ent DB (°F)	Entering Wet Bulb (°F)											
		51				55				59			
		Lvg Evap DB (°F)		Lvg Reheat DB (°F)		Lvg Evap DB (°F)		Lvg Reheat DB (°F)		Lvg Evap DB (°F)		Lvg Reheat DB (°F)	
		MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
Ambient DB 60°F													
2500 ^(a)	60	29.9 ^(b)	32.9 ^(b)	44.8	56.4	33.8 ^(b)	38.1	49.6	59.6	37.8	43.2	54.7	62.6
	65	30.0 ^(b)	32.9 ^(b)	44.8	56.4	33.7 ^(b)	38.1	49.6	59.6	37.8	43.2	54.6	62.6
	70	30.1 ^(b)	34.0 ^(b)	44.9	57.1	33.8 ^(b)	38.1	49.6	59.6	37.8	43.2	54.6	62.6
	75	32.2 ^(b)	38.5	47.5	59.7	33.7 ^(b)	38.2	49.5	59.6	37.8	43.2	54.5	62.6
3000 ^(a)	60	32.9 ^(b)	34.6 ^(b)	45.9	57.1	36.9	39.7	50.7	60.3	40.9	44.8	55.7	63.3
	65	33.0 ^(b)	34.6 ^(b)	45.9	57.2	36.9	39.8	50.7	60.3	40.9	44.9	55.7	63.3
	70	33.9 ^(b)	37.0	46.9	58.5	36.9	39.8	50.7	60.3	40.9	44.9	55.7	63.4
	75	36.8	41.7	50.4	61.4	37.2	41.8	51.0	61.4	41.0	44.9	55.7	63.4
3500 ^(a)	60	35.3	35.9	46.8	57.5	39.2	41.0	51.5	60.7	43.2	46.1	56.4	63.7
	65	35.4	36.0	46.8	57.5	39.3	41.1	51.5	60.8	43.3	46.2	56.4	63.8
	70	37.4	39.5	49.1	59.6	39.3	41.2	51.6	60.8	43.3	46.3	56.4	63.8
	75	40.4	44.4	52.7	62.6	40.6	44.6	52.8	62.7	43.4	46.3	56.4	63.9
4000	60	37.1	37.1	47.4	57.6	41.0	42.1	52.1	60.9	45.1	47.2	56.9	64.0
	65	37.5	37.4	47.7	57.8	41.1	42.2	52.2	61.0	45.1	47.2	57.0	64.0
	70	40.3	41.7	50.9	60.5	41.2	42.6	52.2	61.2	45.2	47.4	57.0	64.1
	75	43.5	46.8	54.7	63.6	43.6	46.9	54.8	63.7	45.3	47.8	57.0	64.3
4500	60	38.6	38.1	48.0	57.4	42.5	43.0	52.6	61.0	46.5	48.0	57.3	64.1
	65	39.1	38.6	48.4	57.8	42.6	43.2	52.6	61.1	46.6	48.1	57.4	64.2
	70	42.7	43.6	52.4	61.2	43.1	43.7	53.0	61.4	46.7	48.3	57.4	64.3
	75	46.0	48.8	56.3	64.4	46.1	48.9	56.4	64.5	47.1	48.9	57.7	64.5
5000	60	39.8	39.2	48.4	57.2	43.7	43.8	52.9	61.0	47.7	48.8	57.6	64.2
	65	41.2	39.8	49.8	57.6	43.9	44.0	53.0	61.2	47.8	48.9	57.7	64.3
	70	44.7	45.3	53.7	61.8	44.4	44.7	53.5	61.5	48.0	49.1	57.8	64.4
	75	48.1	50.6	57.7	65.1	48.2	50.7	57.8	65.2	48.5	50.9	58.2	65.3
5500	60	40.8	40.2	48.7	56.9	44.7	44.6	53.2	61.0	48.7	49.4	57.8	64.2
	65	42.9	42.0	50.8	58.5	44.9	44.8	53.3	61.1	48.8	49.6	57.9	64.4
	70	46.5	46.8	54.9	62.3	46.5	46.9	55.0	62.4	49.0	49.8	58.0	64.5
	75	50.0	52.2	58.9	65.8	50.1	52.3	59.0	65.8	49.7	52.4	58.6	65.9
6000	60	41.7	41.0	49.0	56.6	45.6	45.3	53.4	60.9	49.5	50.0	58.0	64.2
	65	44.3	43.4	51.8	58.9	45.8	45.5	53.6	61.1	49.7	50.2	58.1	64.4
	70	48.0	48.2	55.9	62.7	48.1	48.3	55.9	62.8	49.9	50.4	58.2	64.5
	75	51.6	53.7	59.9	66.3	51.7	53.8	60.0	66.4	51.8	53.9	60.1	66.4
Ambient DB 65°F													
2500 ^(a)	60	30.3 ^(b)	32.1 ^(b)	45.3	58.2	34.2 ^(b)	37.3	50.2	61.4	38.2	42.5	55.3	64.5
	65	30.3 ^(b)	32.1 ^(b)	45.3	58.2	34.2 ^(b)	37.3	50.1	61.4	38.2	42.5	55.2	64.4
	70	30.5 ^(b)	32.2 ^(b)	45.4	58.3	34.2 ^(b)	37.4	50.1	61.4	38.2	42.5	55.2	64.4
	75	32.8 ^(b)	37.2	48.3	61.2	34.1 ^(b)	37.5	50.1	61.4	38.2	42.5	55.1	64.5

Table 9. Reheat temperature rise — 12.5 tons (continued)

Airflow (cfm)	Ent DB (°F)	Entering Wet Bulb (°F)											
		51				55				59			
		Lvg Evap DB (°F)		Lvg Reheat DB (°F)		Lvg Evap DB (°F)		Lvg Reheat DB (°F)		Lvg Evap DB (°F)		Lvg Reheat DB (°F)	
		MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
3000 ^(a)	60	33.3 ^(b)	33.6 ^(b)	46.3	58.7	37.3	38.9	51.2	62.0	41.3	44.1	56.3	65.2
	65	33.3 ^(b)	33.7 ^(b)	46.4	58.7	37.3	38.9	51.2	62.1	41.3	44.1	56.2	65.2
	70	34.4 ^(b)	35.4	47.5	59.8	37.3	39.0	51.2	62.1	41.3	44.2	56.2	65.2
	75	37.3	40.2	51.1	62.7	37.6	40.4	51.5	62.8	41.4	44.2	56.2	65.2
3500 ^(a)	60	35.6	35.0	47.2	58.6	39.6	40.2	52.0	62.4	43.6	45.4	56.9	65.5
	65	35.7	35.1	47.2	58.7	39.6	40.3	52.0	62.4	43.6	45.4	56.9	65.6
	70	37.9	37.9	49.7	60.7	39.7	40.3	52.0	62.5	43.7	45.5	56.9	65.6
	75	41.0	42.8	53.4	63.9	41.1	43.0	53.5	64.0	43.8	45.6	56.9	65.7
4000	60	37.4	36.6	47.8	58.3	41.3	41.3	52.5	62.5	45.4	46.4	57.4	65.8
	65	37.8	36.9	48.1	58.5	41.5	41.4	52.6	62.5	45.5	46.5	57.4	65.8
	70	40.8	40.2	51.5	61.5	41.8	41.8	52.8	62.7	45.6	46.6	57.4	65.9
	75	44.0	45.1	55.4	64.8	44.1	45.3	55.5	64.9	45.7	47.0	57.5	66.1
4500	60	38.9	38.0	48.3	57.8	42.8	42.4	52.9	62.5	46.8	47.3	57.7	65.9
	65	39.4	38.4	48.8	58.2	42.9	42.5	53.0	62.5	46.9	47.4	57.8	65.9
	70	43.2	42.3	53.0	62.1	43.4	43.0	53.4	62.8	47.1	47.6	57.8	66.0
	75	46.5	47.2	57.0	65.6	46.6	47.3	57.1	65.7	47.5	48.1	58.2	66.2
5000	60	40.1	39.2	48.7	57.4	44.0	43.2	53.3	62.3	48.0	48.1	58.0	65.9
	65	41.7	39.8	50.3	57.9	44.1	43.4	53.4	62.4	48.1	48.2	58.0	66.0
	70	45.2	44.1	54.3	62.7	44.7	44.1	53.9	62.8	48.3	48.4	58.1	66.1
	75	48.7	49.0	58.4	66.2	48.8	49.1	58.4	66.3	48.8	49.1	58.6	66.4
5500	60	41.1	40.2	49.0	57.0	45.0	44.1	53.5	62.0	49.0	48.8	58.2	65.9
	65	43.3	41.9	51.3	58.7	45.2	44.4	53.7	62.1	49.1	49.0	58.3	66.0
	70	46.9	45.7	55.4	63.1	47.0	45.8	55.5	63.2	49.3	49.2	58.4	66.1
	75	50.5	50.7	59.5	66.8	50.6	50.8	59.6	66.9	50.7	50.9	59.7	67.0
6000	60	41.9	41.1	49.3	56.7	45.8	45.0	53.8	61.6	49.8	49.4	58.4	65.9
	65	44.7	43.4	52.2	59.1	46.0	45.2	53.9	61.7	50.0	49.6	58.4	66.0
	70	48.5	47.1	56.4	63.5	48.5	47.2	56.5	63.6	50.2	49.9	58.6	66.1
	75	52.1	52.2	60.6	67.4	52.2	52.3	60.6	67.4	52.3	52.4	60.7	67.5
Ambient DB 70°F													
2500 ^(a)	60	30.7 ^(b)	31.2 ^(b)	45.8	59.8	34.6 ^(b)	36.6	50.7	63.2	38.7	41.9	55.9	66.3
	65	30.7 ^(b)	31.2 ^(b)	45.8	59.8	34.6 ^(b)	36.5	50.7	63.1	38.7	41.9	55.9	66.3
	70	30.9 ^(b)	31.4 ^(b)	45.9	59.9	34.6 ^(b)	36.6	50.7	63.2	38.6	41.8	55.8	66.3
	75	33.4 ^(b)	35.8	49.0	62.6	34.6 ^(b)	36.7	50.6	63.2	38.7	41.9	55.8	66.3
3000 ^(a)	60	33.7 ^(b)	32.8 ^(b)	46.8	59.6	37.7	38.1	51.7	63.7	41.7	43.4	56.8	67.0
	65	33.7 ^(b)	32.8 ^(b)	46.8	59.6	37.7	38.1	51.7	63.7	41.7	43.4	56.8	67.0
	70	34.9 ^(b)	33.9 ^(b)	48.2	60.5	37.7	38.2	51.7	63.7	41.7	43.4	56.8	67.0
	75	37.9	38.7	51.9	64.0	38.0	38.5	52.0	63.9	41.8	43.5	56.8	67.0
3500 ^(a)	60	36.0	34.9	47.6	59.1	39.9	39.4	52.4	63.9	44.0	44.7	57.4	67.3
	65	36.0	34.9	47.6	59.1	40.0	39.5	52.4	63.9	44.0	44.7	57.4	67.3
	70	38.4	37.0	50.4	61.2	40.1	39.6	52.5	63.9	44.1	44.8	57.4	67.4
	75	41.6	41.4	54.2	65.0	41.7	41.5	54.3	65.1	44.2	44.8	57.5	67.4



Reheat Temperature Rise

Table 9. Reheat temperature rise — 12.5 tons (continued)

Airflow (cfm)	Ent DB (°F)	Entering Wet Bulb (°F)											
		51				55				59			
		Lvg Evap DB (°F)		Lvg Reheat DB (°F)		Lvg Evap DB (°F)		Lvg Reheat DB (°F)		Lvg Evap DB (°F)		Lvg Reheat DB (°F)	
		MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
4000	60	37.8	36.6	48.2	58.5	41.7	40.7	53.0	63.6	45.8	45.8	57.9	67.5
	65	38.1	36.9	48.5	58.7	41.8	40.9	53.0	63.7	45.8	45.8	57.9	67.5
	70	41.3	39.6	52.1	61.9	42.1	41.0	53.3	63.7	45.9	45.9	57.9	67.6
	75	44.6	43.9	56.1	66.0	44.7	44.1	56.2	66.1	46.0	46.0	58.0	67.6
4500	60	39.2	38.1	48.7	57.9	43.1	42.0	53.3	63.1	47.2	46.7	58.2	67.6
	65	39.7	38.5	49.1	58.3	43.3	42.2	53.4	63.2	47.3	46.8	58.2	67.7
	70	43.7	41.9	53.6	62.4	43.7	42.6	53.8	63.5	47.4	47.0	58.3	67.7
	75	47.1	45.9	57.7	66.7	47.2	46.0	57.8	66.8	47.8	47.5	58.6	67.9
5000	60	40.4	39.3	49.0	57.4	44.3	43.2	53.6	62.6	48.3	47.5	58.4	67.5
	65	42.1	39.9	50.8	57.9	44.4	43.4	53.7	62.7	48.4	47.6	58.4	67.6
	70	45.7	43.9	54.9	62.9	45.8	43.9	55.0	63.1	48.6	47.8	58.5	67.7
	75	49.3	47.7	59.0	67.2	49.3	47.8	59.1	67.3	49.2	48.4	59.1	68.0
5500	60	41.3	40.4	49.3	57.0	45.2	44.2	53.9	62.2	49.3	48.3	58.6	67.2
	65	43.7	42.1	51.8	58.8	45.4	44.4	54.0	62.2	49.4	48.4	58.6	67.2
	70	47.4	45.7	56.0	63.4	47.5	45.8	56.1	63.4	49.6	48.6	58.7	67.3
	75	51.1	49.4	60.2	67.7	51.2	49.5	60.3	67.8	51.3	49.3	60.4	67.8
6000	60	42.3	41.3	49.7	56.7	46.1	45.1	54.1	61.7	50.1	49.0	58.7	66.7
	65	45.2	43.6	52.7	59.2	46.3	45.3	54.2	61.8	50.2	49.2	58.8	66.8
	70	48.9	47.2	57.0	63.7	49.0	47.3	57.0	63.8	50.4	49.5	58.9	66.9
	75	52.7	50.9	61.2	68.1	52.8	51.0	61.3	68.2	52.9	51.1	61.4	68.3

Note: MIN, MAX: The leaving evaporator temperature is affected by the modulating valve position. The MIN and MAX numbers represent modulating valve position impact on both the leaving evaporator temperature and the leaving reheat coil temperature. MAX represents wide open, MIN represents closed to minimum position.

- (a) Unit applications below 300 cfm/ton are only applicable to TZJ models without electric heat.
- (b) The unit might be tripped by Froststat at these conditions due to low leaving evaporator air temperature.

Table 10. Reheat temperature rise — 15 tons

Airflow (cfm)	Ent DB (°F)	Entering Wet Bulb (°F)											
		51				55				59			
		Lvg Evap DB (°F)		Lvg Reheat DB (°F)		Lvg Evap DB (°F)		Lvg Reheat DB (°F)		Lvg Evap DB (°F)		Lvg Reheat DB (°F)	
		MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
Ambient DB 60°F													
3000 ^(a)	60	30.3 ^(b)	32.0 ^(b)	47.2	57.8	34.1 ^(b)	37.3	52.1	61.0	38.1	42.5	57.2	64.1
	65	30.5 ^(b)	32.2 ^(b)	47.3	57.9	34.1 ^(b)	37.3	52.1	61.0	38.1	42.6	57.2	64.1
	70	30.8 ^(b)	32.7 ^(b)	47.7	58.1	34.3 ^(b)	37.5	52.2	61.1	38.2	42.7	57.2	64.2
	75	33.0 ^(b)	37.3	50.3	60.9	34.4 ^(b)	38.0	52.3	61.3	38.3	42.9	57.3	64.3
3600 ^(a)	60	33.4 ^(b)	33.8 ^(b)	48.1	58.4	37.2	39.0	53.0	61.6	41.1	44.3	58.0	64.8
	65	33.6 ^(b)	34.1 ^(b)	48.3	58.5	37.3	39.2	53.1	61.7	41.2	44.4	58.0	64.9
	70	34.2 ^(b)	35.9	48.9	59.5	37.5	39.4	53.2	61.8	41.3	44.6	58.1	65.0
	75	37.7	40.8	53.0	62.5	38.1	40.2	53.7	62.2	41.6	44.8	58.2	65.1
4200 ^(a)	60	35.7	35.5	48.9	58.8	39.5	40.5	53.6	62.1	43.4	45.6	58.5	65.3
	65	36.0	34.9	49.1	58.2	39.8	40.7	53.7	62.2	43.6	45.8	58.6	65.4
	70	38.2	38.8	51.4	60.6	40.0	41.0	53.9	62.3	43.8	46.1	58.7	65.5
	75	41.3	43.8	55.2	63.8	40.8	43.9	54.7	63.9	44.1	46.4	58.9	65.6

Table 10. Reheat temperature rise — 15 tons (continued)

Airflow (cfm)	Ent DB (°F)	Entering Wet Bulb (°F)											
		51				55				59			
		Lvg Evap DB (°F)		Lvg Reheat DB (°F)		Lvg Evap DB (°F)		Lvg Reheat DB (°F)		Lvg Evap DB (°F)		Lvg Reheat DB (°F)	
		MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
4800	60	37.6	36.8	49.4	58.7	41.4	41.6	54.0	62.4	45.3	46.6	58.9	65.6
	65	38.3	37.5	49.9	59.1	41.7	42.0	54.2	62.5	45.4	46.9	59.0	65.7
	70	41.1	41.1	53.1	61.6	41.9	41.5	54.4	64.1	45.7	47.3	59.2	65.9
	75	44.4	46.3	56.9	64.9	44.5	46.4	57.0	65.0	46.0	48.0	59.4	66.2
5400	60	39.1	38.2	49.8	58.3	42.8	42.5	54.4	62.5	46.7	47.5	59.1	65.8
	65	40.0	39.0	50.5	58.9	43.2	43.0	54.6	62.7	46.9	47.7	59.3	65.9
	70	43.5	43.1	54.5	62.4	43.9	43.9	55.2	63.1	47.3	48.2	59.5	66.1
	75	46.9	48.3	58.4	65.7	47.0	48.4	58.5	65.8	48.0	49.1	60.0	66.5
6000	60	40.4	39.5	50.2	57.9	44.0	43.4	54.6	62.6	47.9	48.2	59.3	65.9
	65	41.4	40.4	51.0	58.7	44.5	43.9	54.9	62.8	48.2	48.5	59.5	66.0
	70	45.5	44.7	55.7	63.0	45.4	45.0	55.7	63.3	48.6	49.0	59.7	66.2
	75	49.0	50.0	59.7	66.4	49.1	50.1	59.8	66.5	49.4	50.1	60.5	66.7
6600	60	41.4	40.6	50.4	57.6	45.1	44.2	54.8	62.3	48.9	48.8	59.4	65.9
	65	43.6	41.7	52.6	58.5	45.5	44.7	55.2	62.6	49.2	49.2	59.6	66.1
	70	47.3	46.3	56.7	63.4	47.3	45.9	56.8	63.3	49.7	49.8	59.9	66.3
	75	50.8	51.5	60.8	67.0	50.9	51.6	60.9	67.1	50.7	51.0	60.8	66.9
7200	60	42.3	41.5	50.7	57.3	46.0	45.1	55.0	62.0	49.7	49.4	59.5	65.9
	65	45.1	43.8	53.4	59.4	46.4	45.6	55.3	62.3	50.1	49.9	59.8	66.2
	70	48.8	47.6	57.6	63.8	48.8	47.7	57.7	63.9	50.6	50.4	60.1	66.4
	75	52.4	52.9	61.8	67.6	52.5	53.0	61.8	67.6	52.6	53.1	61.9	67.7
Ambient DB 65°F													
3000 ^(a)	60	30.7 ^(b)	31.2 ^(b)	47.8	59.5	34.5 ^(b)	36.4	52.8	62.8	38.5	41.8	57.9	66.0
	65	30.9 ^(b)	31.4 ^(b)	47.9	59.6	34.6 ^(b)	36.5	52.8	62.8	38.6	41.9	58.0	66.1
	70	31.3 ^(b)	31.8 ^(b)	48.3	59.8	34.7 ^(b)	36.7	52.9	62.9	38.6	42.0	58.0	66.1
	75	33.6 ^(b)	35.9	51.2	62.3	34.8 ^(b)	37.1	52.9	63.1	38.8	42.2	58.0	66.2
3600 ^(a)	60	33.7 ^(b)	33.0 ^(b)	48.7	59.9	37.6	38.3	53.6	63.5	41.6	43.5	58.6	66.8
	65	34.0 ^(b)	33.3 ^(b)	48.8	60.0	37.7	38.4	53.7	63.5	41.7	43.7	58.7	66.8
	70	34.6 ^(b)	34.0 ^(b)	49.5	60.5	38.0	38.7	53.8	63.6	41.8	43.9	58.8	66.9
	75	38.3	39.4	53.9	63.9	38.5	39.4	54.3	64.0	42.0	44.1	58.9	67.0
4200 ^(a)	60	36.1	35.0	49.4	59.5	39.9	39.6	54.2	64.0	43.9	44.8	59.1	67.3
	65	36.4	35.2	49.5	59.7	40.2	39.9	54.3	64.1	44.0	45.0	59.2	67.4
	70	38.8	37.4	52.1	61.7	40.4	40.2	54.5	64.2	44.3	45.3	59.3	67.5
	75	42.0	42.2	56.0	65.2	42.1	42.3	56.1	65.3	44.5	45.5	59.5	67.6
4800	60	38.0	36.8	49.9	59.0	41.7	40.8	54.6	64.0	45.7	45.8	59.4	67.6
	65	38.6	37.4	50.4	59.4	42.0	41.1	54.7	64.1	45.9	46.0	59.6	67.7
	70	41.7	40.1	53.8	62.3	42.6	41.4	55.2	64.3	46.2	46.4	59.7	67.8
	75	45.0	44.5	57.8	66.2	45.1	44.6	57.9	66.3	46.4	46.7	59.9	67.9
5400	60	39.5	38.3	50.3	58.5	43.2	42.0	54.8	63.5	47.1	46.6	59.7	67.7
	65	40.3	39.1	51.0	59.1	43.5	42.4	55.1	63.8	47.3	46.9	59.8	67.8
	70	44.0	42.4	55.2	62.8	44.3	43.2	55.7	64.3	47.7	47.4	60.0	68.0
	75	47.5	46.5	59.3	67.0	47.6	46.7	59.3	67.1	48.4	48.2	60.6	68.4



Reheat Temperature Rise

Table 10. Reheat temperature rise — 15 tons (continued)

Airflow (cfm)	Ent DB (°F)	Entering Wet Bulb (°F)											
		51				55				59			
		Lvg Evap DB (°F)		Lvg Reheat DB (°F)		Lvg Evap DB (°F)		Lvg Reheat DB (°F)		Lvg Evap DB (°F)		Lvg Reheat DB (°F)	
		MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
6000	60	40.7	39.6	50.6	58.1	44.4	43.2	55.1	63.1	48.3	47.4	59.8	67.7
	65	42.5	40.6	52.2	58.8	44.8	43.7	55.4	63.3	48.5	47.7	60.0	67.9
	70	46.1	44.4	56.4	63.3	45.8	44.6	56.2	64.0	49.0	48.2	60.2	68.1
	75	49.6	48.3	60.5	67.6	49.7	48.4	60.6	67.7	49.9	49.3	61.0	68.5
6600	60	41.7	40.7	50.8	57.7	45.4	44.3	55.2	62.6	49.3	48.2	59.9	67.5
	65	44.1	42.6	53.2	59.3	45.8	44.8	55.6	62.9	49.6	48.6	60.1	67.7
	70	47.8	46.1	57.4	63.7	47.9	45.9	57.5	63.7	50.0	49.1	60.4	67.9
	75	51.5	49.9	61.6	68.1	51.5	50.0	61.7	68.2	51.1	50.2	61.3	68.6
7200	60	42.6	41.7	51.0	57.3	46.3	45.2	55.4	62.2	50.1	49.0	60.0	67.1
	65	45.5	44.0	54.0	59.6	46.7	45.7	55.7	62.5	50.5	49.4	60.2	67.3
	70	49.3	47.6	58.3	64.1	49.4	47.7	58.4	64.2	50.9	49.9	60.5	67.6
	75	53.0	51.4	62.6	68.5	53.1	51.5	62.6	68.6	53.2	51.1	62.7	68.4
Ambient DB 70°F													
3000 ^(a)	60	31.2 ^(b)	30.4 ^(b)	48.5	61.0	35.0	35.7	53.5	64.6	39.0	41.2	58.7	68.0
	65	31.3 ^(b)	30.6 ^(b)	48.5	61.1	35.1	35.8	53.5	64.6	39.1	41.3	58.7	68.0
	70	31.7 ^(b)	31.0 ^(b)	48.9	61.4	35.2	35.9	53.6	64.7	39.1	41.3	58.8	68.1
	75	34.3 ^(b)	34.7 ^(b)	52.1	63.8	35.3	36.0	53.6	64.8	39.3	41.5	58.8	68.1
3600 ^(a)	60	34.2 ^(b)	32.8 ^(b)	49.2	60.4	38.1	37.4	54.2	65.3	42.1	42.7	59.4	68.8
	65	34.4 ^(b)	33.0 ^(b)	49.4	60.5	38.2	37.5	54.3	65.4	42.2	42.9	59.4	68.8
	70	35.8	33.6 ^(b)	50.9	61.1	38.4	37.8	54.4	65.5	42.3	43.0	59.5	68.9
	75	38.9	37.8	54.7	65.3	39.0	38.5	55.0	65.9	42.5	43.3	59.6	69.0
4200 ^(a)	60	36.5	35.1	49.9	59.8	40.4	39.0	54.7	65.0	44.4	44.0	59.8	69.2
	65	36.8	35.3	50.1	59.9	40.6	39.3	54.9	65.1	44.5	44.1	59.9	69.3
	70	39.4	37.4	52.9	62.0	40.8	39.5	55.0	65.3	44.7	44.4	60.0	69.4
	75	42.6	40.8	56.9	66.2	42.7	40.4	57.0	65.9	45.0	44.7	60.1	69.5
4800	60	38.3	37.0	50.3	59.1	42.1	40.7	55.1	64.4	46.1	45.0	60.1	69.4
	65	39.0	37.6	50.9	59.6	42.4	41.0	55.3	64.6	46.3	45.2	60.2	69.5
	70	42.2	40.2	54.6	62.6	43.0	41.3	55.8	64.8	46.6	45.6	60.3	69.6
	75	45.6	43.6	58.6	66.9	45.7	43.7	58.7	67.0	46.9	45.9	60.5	69.8
5400	60	39.8	38.5	50.7	58.6	43.6	42.2	55.3	63.9	47.5	46.2	60.2	69.0
	65	40.7	39.3	51.5	59.2	43.9	42.6	55.6	64.1	47.8	46.4	60.4	69.1
	70	44.6	42.6	55.9	63.2	44.7	43.3	56.3	64.6	48.1	46.8	60.6	69.3
	75	48.2	46.0	60.1	67.5	48.2	46.1	60.2	67.6	48.9	47.5	61.2	69.8
6000	60	41.0	39.8	51.0	58.1	44.7	43.4	55.5	63.3	48.7	47.3	60.4	68.4
	65	43.0	40.8	52.9	58.9	45.2	43.9	55.8	63.5	48.9	47.5	60.5	68.6
	70	46.6	44.6	57.1	63.6	46.2	44.8	56.7	64.2	49.4	48.0	60.8	68.8
	75	50.3	48.1	61.4	68.0	50.4	48.2	61.5	68.1	50.3	48.9	61.6	69.4
6600	60	42.0	40.9	51.2	57.7	45.7	44.5	55.6	62.8	49.7	48.3	60.4	67.9
	65	44.6	42.9	53.8	59.5	46.2	45.0	56.0	63.0	50.0	48.6	60.6	68.1
	70	48.4	46.4	58.1	64.1	48.4	46.1	58.2	63.9	50.4	49.1	60.9	68.4
	75	52.1	49.9	62.5	68.5	52.2	50.0	62.5	68.6	52.3	50.1	62.6	69.1

Table 10. Reheat temperature rise — 15 tons (continued)

Airflow (cfm)	Ent DB (°F)	Entering Wet Bulb (°F)											
		51				55				59			
		Lvg Evap DB (°F)		Lvg Reheat DB (°F)		Lvg Evap DB (°F)		Lvg Reheat DB (°F)		Lvg Evap DB (°F)		Lvg Reheat DB (°F)	
		MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
7200	60	42.9	41.8	51.4	57.4	46.6	45.4	55.8	62.3	50.4	49.2	60.5	67.5
	65	46.0	44.3	54.6	59.8	47.0	45.9	56.1	62.6	50.8	49.6	60.7	67.7
	70	49.9	48.0	59.0	64.4	49.9	48.0	59.1	64.5	51.3	50.0	61.0	68.0
	75	53.7	51.5	63.4	69.0	53.8	51.6	63.5	69.0	53.9	51.2	63.6	68.8

Note: MIN, MAX: The leaving evaporator temperature is affected by the modulating valve position. The MIN and MAX numbers represent modulating valve position impact on both the leaving evaporator temperature and the leaving reheat coil temperature. MAX represents wide open, MIN represents closed to minimum position.

(a) Unit applications below 300 cfm/ton are only applicable to TZJ models without electric heat.

(b) The unit might be tripped by Froststat at these conditions due to low leaving evaporator air temperature.

Table 11. Reheat temperature rise — 17.5 tons

Airflow (cfm)	Ent DB (°F)	Entering Wet Bulb (°F)											
		51				55				59			
		Lvg Evap DB (°F)		Lvg Reheat DB (°F)		Lvg Evap DB (°F)		Lvg Reheat DB (°F)		Lvg Evap DB (°F)		Lvg Reheat DB (°F)	
		MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
Ambient DB 60°F													
3500 ^(a)	60	29.8 ^(b)	30.2 ^(b)	41.5	55.9	33.4 ^(b)	34.9 ^(b)	45.9	59.1	37.3	39.8	50.6	62.3
	65	30.1 ^(b)	30.6 ^(b)	41.7	56.0	33.6 ^(b)	35.1	46.0	59.2	37.4	39.9	50.8	62.4
	70	30.2 ^(b)	30.8 ^(b)	41.9	56.1	33.8 ^(b)	35.4	46.2	59.3	37.6	40.1	50.9	62.5
	75	32.4 ^(b)	34.0 ^(b)	44.2	58.2	34.0 ^(b)	35.6	46.4	59.4	37.7	40.4	51.0	62.6
4200 ^(a)	60	32.9 ^(b)	32.5 ^(b)	43.1	55.9	36.6	37.1	47.5	59.9	40.5	41.8	52.2	63.1
	65	33.2 ^(b)	32.9 ^(b)	43.3	56.1	36.8	37.3	47.7	60.0	40.7	42.1	52.4	63.3
	70	34.0 ^(b)	33.8 ^(b)	44.1	56.8	37.1	37.7	47.9	60.2	40.9	42.4	52.6	63.4
	75	37.0	37.8	47.4	59.9	37.8	38.6	48.5	60.6	41.2	42.8	52.8	63.6
4900 ^(a)	60	35.3	34.6	44.3	55.5	39.1	38.8	48.7	60.2	42.9	43.5	53.3	63.6
	65	35.7	35.1	44.6	55.9	39.3	39.2	49.0	60.4	43.1	43.8	53.5	63.8
	70	37.6	36.2	46.5	56.8	39.7	39.7	49.3	60.7	43.4	44.1	53.8	63.9
	75	40.8	41.0	50.1	61.3	40.7	40.8	50.2	61.3	43.9	44.7	54.1	64.2
5600	60	37.2	36.5	45.3	55.3	40.9	40.3	49.6	60.0	44.7	44.8	54.1	63.8
	65	37.7	37.0	45.7	55.6	41.3	40.8	50.0	60.4	45.0	45.2	54.4	64.0
	70	40.6	39.8	48.6	58.4	41.8	41.3	50.4	60.7	45.4	45.7	54.7	64.3
	75	43.9	43.7	52.4	62.3	44.0	43.8	52.5	62.4	45.9	46.2	55.1	64.6
6300	60	38.8	38.1	46.2	55.0	42.4	41.7	50.4	59.8	46.1	46.0	54.7	63.9
	65	39.8	39.1	47.0	55.8	42.9	42.2	50.8	60.2	46.5	46.4	55.1	64.1
	70	43.0	42.1	50.4	59.1	43.8	42.8	51.6	60.6	47.0	47.0	55.5	64.5
	75	46.4	46.0	54.2	63.2	46.5	46.1	54.3	63.3	47.5	47.6	55.9	64.8
7000	60	40.1	39.4	46.9	54.9	43.6	42.9	50.9	59.5	47.3	47.0	55.2	63.8
	65	41.3	40.6	47.9	55.8	44.2	43.5	51.4	60.0	47.8	47.5	55.6	64.2
	70	45.0	44.1	51.9	59.8	45.3	44.6	52.4	60.9	48.3	48.1	56.1	64.6
	75	48.5	48.0	55.7	63.9	48.6	48.1	55.8	64.0	49.4	49.3	57.0	65.2
7700	60	41.2	40.5	47.4	54.7	44.6	43.9	51.4	59.3	48.3	47.8	55.7	63.8
	65	42.6	41.9	48.6	55.8	45.3	44.6	52.0	59.8	48.8	48.4	56.1	64.1
	70	46.8	45.8	53.1	60.3	46.6	45.9	53.1	60.8	49.5	49.1	56.6	64.6
	75	50.3	49.8	57.0	64.6	50.4	49.9	57.1	64.6	50.7	50.5	57.7	65.4



Reheat Temperature Rise

Table 11. Reheat temperature rise — 17.5 tons (continued)

Airflow (cfm)	Ent DB (°F)	Entering Wet Bulb (°F)											
		51				55				59			
		Lvg Evap DB (°F)		Lvg Reheat DB (°F)		Lvg Evap DB (°F)		Lvg Reheat DB (°F)		Lvg Evap DB (°F)		Lvg Reheat DB (°F)	
		MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
8400	60	42.1	41.5	47.9	54.6	45.5	44.8	51.8	59.1	49.2	48.6	56.0	63.6
	65	44.6	43.7	50.2	56.5	46.2	45.6	52.4	59.7	49.7	49.2	56.5	64.0
	70	48.2	47.3	54.2	60.9	47.7	46.7	53.7	60.4	50.4	49.9	57.0	64.5
	75	51.9	51.3	58.2	65.1	51.9	51.4	58.2	65.2	51.8	51.5	58.2	65.5
Ambient DB 65°F													
3500 ^(a)	60	30.9 ^(b)	30.9 ^(b)	35.8	58.7	34.7 ^(b)	35.7	40.0	62.0	38.7	40.7	44.3	65.2
	65	31.2 ^(b)	31.2 ^(b)	36.0	58.9	34.9 ^(b)	35.9	40.1	62.1	38.8	40.9	44.4	65.3
	70	31.7 ^(b)	31.8 ^(b)	36.5	59.2	35.1	36.2	40.3	62.2	39.0	41.1	44.6	65.4
	75	34.0 ^(b)	35.1	39.0	61.3	35.3	36.4	40.5	62.3	39.2	41.4	44.7	65.5
4200 ^(a)	60	34.0 ^(b)	32.8 ^(b)	38.2	58.7	37.7	37.6	42.3	62.6	41.7	42.5	46.6	65.9
	65	34.3 ^(b)	33.2 ^(b)	38.5	59.0	38.0	37.9	42.5	62.7	41.9	42.8	46.8	66.0
	70	35.2	34.1 ^(b)	39.4	59.6	38.3	38.3	42.8	62.9	42.1	43.1	47.0	66.1
	75	38.7	38.7	43.0	62.8	39.0	39.2	43.5	63.4	42.4	43.5	47.3	66.3
4900 ^(a)	60	36.3	34.8 ^(b)	40.0	58.1	40.0	39.2	44.1	62.8	43.9	44.0	48.3	66.2
	65	36.7	35.3	40.4	58.5	40.3	39.6	44.4	63.0	44.2	44.3	48.6	66.4
	70	39.1	36.4	42.8	59.4	40.7	40.1	44.8	63.2	44.5	44.7	48.9	66.5
	75	42.2	41.6	46.2	64.0	41.8	41.3	45.8	63.9	44.9	45.2	49.2	66.8
5600	60	38.1	36.6	41.5	57.6	41.8	40.5	45.5	62.5	45.7	45.2	49.7	66.3
	65	38.9	37.2	42.3	58.0	42.2	41.0	45.9	62.8	46.0	45.6	50.0	66.5
	70	41.8	40.0	45.3	60.8	42.7	41.5	46.3	63.1	46.4	46.1	50.4	66.8
	75	45.2	44.1	48.8	64.9	45.3	44.3	48.9	65.0	46.8	46.6	50.7	67.0
6300	60	39.6	38.2	42.7	57.2	43.2	41.8	46.6	62.1	47.1	46.2	50.8	66.2
	65	40.6	39.1	43.7	58.0	43.7	42.3	47.0	62.5	47.4	46.7	51.1	66.5
	70	44.1	42.3	47.3	61.3	44.7	42.9	47.9	62.8	47.9	47.2	51.5	66.8
	75	47.6	46.3	51.0	65.5	47.7	46.4	51.1	65.6	48.8	47.8	52.3	67.1
7000	60	40.8	39.5	43.6	56.9	44.4	43.0	47.5	61.6	48.2	47.1	51.6	66.1
	65	42.1	40.7	44.8	57.8	44.9	43.6	48.0	62.1	48.6	47.6	52.0	66.4
	70	46.1	44.2	49.0	61.8	46.1	44.8	49.1	62.9	49.2	48.3	52.5	66.8
	75	49.7	48.2	52.8	66.1	49.8	48.3	52.9	66.2	50.3	49.4	53.5	67.5
7700	60	41.8	40.6	44.4	56.6	45.3	44.0	48.2	61.3	49.2	47.9	52.3	65.9
	65	44.1	42.0	46.6	57.6	46.0	44.7	48.8	61.8	49.6	48.4	52.8	66.2
	70	47.8	45.9	50.5	62.2	47.4	46.0	50.1	62.7	50.3	49.2	53.3	66.7
	75	51.5	49.9	54.4	66.6	51.6	50.0	54.5	66.7	51.5	50.6	54.5	67.5
8400	60	42.7	41.6	45.1	56.3	46.2	44.9	48.9	61.0	50.0	48.7	53.0	65.6
	65	45.5	43.8	47.9	58.2	46.9	45.7	49.5	61.5	50.5	49.2	53.4	66.0
	70	49.3	47.4	51.8	62.7	49.3	47.2	51.9	62.6	51.2	50.0	54.0	66.5
	75	53.1	51.4	55.8	67.1	53.2	51.5	55.9	67.1	52.6	51.5	55.4	67.4
Ambient DB 70°F													
3500 ^(a)	60	31.5 ^(b)	30.1 ^(b)	36.4	59.9	35.2	35.0	40.5	63.9	39.2	40.1	44.9	67.2
	65	31.7 ^(b)	30.4 ^(b)	36.6	60.0	35.4	35.2	40.6	64.0	39.3	40.3	45.0	67.3
	70	32.2 ^(b)	30.6 ^(b)	37.1	60.2	35.6	35.5	40.9	64.1	39.5	40.5	45.2	67.4
	75	34.8 ^(b)	34.0 ^(b)	39.8	62.8	35.8	35.7	41.0	64.2	39.7	40.8	45.3	67.5

Table 11. Reheat temperature rise — 17.5 tons (continued)

Airflow (cfm)	Ent DB (°F)	Entering Wet Bulb (°F)											
		51				55				59			
		Lvg Evap DB (°F)		Lvg Reheat DB (°F)		Lvg Evap DB (°F)		Lvg Reheat DB (°F)		Lvg Evap DB (°F)		Lvg Reheat DB (°F)	
		MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
4200 ^(a)	60	34.4 ^(b)	32.7 ^(b)	38.7	59.0	38.2	36.8	42.8	64.0	42.1	41.9	47.2	67.8
	65	34.7 ^(b)	33.0 ^(b)	39.0	59.3	38.4	37.1	43.0	64.2	42.3	42.1	47.4	67.9
	70	35.6	33.9 ^(b)	39.8	60.0	38.8	37.5	43.3	64.4	42.6	42.4	47.6	68.0
	75	39.3	37.4	43.8	63.8	39.5	38.3	44.1	64.9	42.9	42.8	47.9	68.2
4900 ^(a)	60	36.7	34.9	40.5	58.2	40.4	38.7	44.6	63.4	44.4	43.4	48.9	67.9
	65	37.1	35.3	40.8	58.5	40.8	39.0	44.9	63.6	44.6	43.7	49.1	68.1
	70	39.6	36.4	43.4	59.5	41.1	39.5	45.2	63.9	44.9	44.0	49.4	68.2
	75	42.8	40.6	46.9	64.5	43.0	40.6	47.0	64.8	45.3	44.5	49.7	68.5
5600	60	38.5	36.7	41.9	57.7	42.1	40.4	45.9	62.8	46.1	44.6	50.2	67.7
	65	39.3	37.3	42.7	58.0	42.6	40.8	46.3	63.1	46.4	44.9	50.5	67.9
	70	42.4	40.0	45.8	60.9	43.0	41.4	46.7	63.4	46.8	45.4	50.8	68.2
	75	45.8	43.4	49.5	65.2	45.9	42.7	49.6	64.5	47.2	45.9	51.2	68.5
6300	60	39.9	38.3	43.0	57.2	43.5	41.9	47.0	62.2	47.5	45.8	51.2	67.2
	65	41.0	39.3	44.1	58.0	44.1	42.4	47.4	62.6	47.8	46.2	51.6	67.5
	70	44.7	42.4	47.9	61.4	45.0	43.0	48.4	62.9	48.3	46.7	52.0	67.9
	75	48.2	45.8	51.6	65.7	48.3	45.9	51.7	65.8	49.2	47.3	52.8	68.2
7000	60	41.1	39.6	44.0	56.9	44.7	43.1	47.8	61.8	48.6	46.9	52.1	66.7
	65	42.4	40.9	45.2	57.8	45.3	43.7	48.4	62.2	49.0	47.3	52.4	67.1
	70	46.6	44.4	49.6	61.9	46.5	44.9	49.5	63.0	49.6	47.9	52.9	67.5
	75	50.3	47.9	53.5	66.3	50.4	48.0	53.6	66.4	50.7	49.0	54.0	68.2
7700	60	42.1	40.8	44.8	56.6	45.7	44.2	48.6	61.4	49.6	47.9	52.8	66.3
	65	44.5	42.2	47.1	57.7	46.3	44.9	49.2	61.9	50.0	48.4	53.2	66.7
	70	48.3	46.1	51.1	62.4	48.4	46.2	51.1	62.8	50.6	49.0	53.7	67.1
	75	52.1	49.7	55.1	66.8	52.2	49.8	55.2	66.9	51.9	50.3	54.9	68.0
8400	60	43.0	41.7	45.4	56.4	46.5	45.1	49.2	61.1	50.4	48.7	53.4	65.9
	65	45.9	44.0	48.3	58.3	47.2	45.8	49.8	61.6	50.9	49.3	53.8	66.4
	70	49.7	47.7	52.3	62.8	49.8	47.3	52.4	62.7	51.5	50.0	54.4	66.8
	75	53.7	51.3	56.5	67.3	53.7	51.4	56.6	67.4	53.8	51.4	56.6	67.8

Note: MIN, MAX: The leaving evaporator temperature is affected by the modulating valve position. The MIN and MAX numbers represent modulating valve position impact on both the leaving evaporator temperature and the leaving reheat coil temperature. MAX represents wide open, MIN represents closed to minimum position.

^(a) Unit applications below 300 cfm/ton are only applicable to TZJ models without electric heat.

^(b) The unit might be tripped by Froststat at these conditions due to low leaving evaporator air temperature.

Table 12. Reheat temperature rise — 20 tons

Airflow (cfm)	Ent DB (°F)	Entering Wet Bulb (°F)											
		51				55				59			
		Lvg Evap DB (°F)		Lvg Reheat DB (°F)		Lvg Evap DB (°F)		Lvg Reheat DB (°F)		Lvg Evap DB (°F)		Lvg Reheat DB (°F)	
		MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
Ambient DB 60°F													
4000 ^(a)	60	30.0 ^(a)	30.0 ^(a)	41.6	56.6	33.5 ^(b)	34.6 ^(b)	45.9	60.3	37.2	39.4	50.6	63.6
	65	30.3 ^(b)	30.4 ^(b)	41.9	56.8	33.7 ^(b)	34.8 ^(b)	46.1	60.4	37.4	39.7	50.7	63.7
	70	30.6 ^(b)	30.7 ^(b)	42.1	57.0	34.0 ^(b)	35.2	46.4	60.6	37.6	39.9	50.9	63.8
	75	32.7 ^(b)	33.8 ^(b)	44.4	59.3	34.3 ^(b)	35.5	46.6	60.8	37.8	40.2	51.0	64.0



Reheat Temperature Rise

Table 12. Reheat temperature rise — 20 tons (continued)

Airflow (cfm)	Ent DB (°F)	Entering Wet Bulb (°F)											
		51				55				59			
		Lvg Evap DB (°F)		Lvg Reheat DB (°F)		Lvg Evap DB (°F)		Lvg Reheat DB (°F)		Lvg Evap DB (°F)		Lvg Reheat DB (°F)	
		MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
4800 ^(a)	60	32.9 ^(b)	32.6 ^(b)	43.1	56.3	36.6	36.8	47.4	60.9	40.4	41.5	52.0	64.4
	65	33.4 ^(b)	33.1 ^(b)	43.5	56.7	36.8	37.1	47.7	61.0	40.7	41.8	52.2	64.5
	70	34.3 ^(b)	34.0 ^(b)	44.3	57.4	37.2	37.7	48.0	61.3	40.9	42.2	52.4	64.7
	75	37.3	37.6	47.6	60.8	38.0	38.6	48.7	61.8	41.3	42.7	52.8	64.9
5600 ^(a)	60	35.3	34.7 ^(b)	44.3	55.9	39.0	38.6	48.6	60.8	42.8	43.2	53.1	64.7
	65	35.8	35.3	44.7	56.3	39.3	39.0	48.9	61.1	43.2	43.6	53.4	64.9
	70	37.8	36.6	46.6	57.4	39.8	39.6	49.4	61.4	43.5	44.0	53.7	65.2
	75	40.9	40.8	50.2	62.0	40.9	40.8	50.3	62.3	44.0	44.6	54.1	65.4
6400	60	37.2	36.7	45.3	55.6	40.9	40.3	49.5	60.5	44.7	44.6	53.9	64.9
	65	37.8	37.3	45.8	56.1	41.4	40.8	49.9	60.9	45.1	45.0	54.3	65.1
	70	40.7	40.0	48.7	58.8	41.9	41.4	50.4	61.3	45.6	45.6	54.7	65.4
	75	44.0	43.5	52.3	62.9	44.1	42.9	52.4	62.4	46.1	46.2	55.1	65.8
7200	60	38.8	38.2	46.2	55.4	42.4	41.7	50.2	60.2	46.2	45.7	54.5	64.8
	65	39.9	39.3	47.1	56.3	43.0	42.3	50.7	60.6	46.6	46.2	54.9	65.1
	70	43.1	42.4	50.4	59.5	44.0	43.0	51.6	61.1	47.2	46.9	55.5	65.5
	75	46.5	45.9	54.2	63.7	46.6	46.0	54.3	63.8	47.8	47.6	55.9	65.9
8000	60	40.2	39.6	46.8	55.2	43.7	42.9	50.8	59.9	47.4	46.7	55.1	64.5
	65	41.5	40.9	48.0	56.3	44.3	43.6	51.4	60.4	47.9	47.3	55.5	64.9
	70	45.1	44.3	51.8	60.1	45.5	44.9	52.5	61.4	48.6	48.0	56.1	65.4
	75	48.7	47.9	55.7	64.4	48.8	48.0	55.8	64.5	49.7	49.3	57.1	66.2
8800	60	41.3	40.7	47.4	55.1	44.7	44.0	51.3	59.6	48.4	47.7	55.5	64.3
	65	42.8	42.2	48.7	56.3	45.5	44.8	52.0	60.2	48.9	48.2	55.9	64.7
	70	46.9	46.0	53.1	60.7	46.8	46.2	53.2	61.3	49.7	49.1	56.6	65.3
	75	50.5	49.7	57.1	65.0	50.6	49.8	57.2	65.1	51.0	50.5	57.8	66.3
9600	60	42.2	41.7	47.9	55.0	45.6	44.9	51.7	59.4	49.2	48.5	55.8	64.0
	65	44.6	43.4	50.2	56.3	46.4	45.8	52.4	60.1	49.8	49.1	56.3	64.5
	70	48.4	47.5	54.2	61.2	48.0	47.4	53.8	61.3	50.6	50.0	57.1	65.1
	75	52.1	51.3	58.2	65.6	52.2	51.4	58.3	65.7	52.1	51.6	58.4	66.2
Ambient DB 65°F													
4000 ^(a)	60	30.8 ^(b)	30.7 ^(b)	35.7	59.7	34.6	35.4	39.7	63.2	38.7	40.4	44.2	66.5
	65	31.2 ^(b)	31.0 ^(b)	36.0	59.9	34.8	35.7	39.9	63.4	38.8	40.6	44.3	66.7
	70	31.4 ^(b)	31.4 ^(b)	36.2	60.0	35.0	36.0	40.2	63.6	39.0	40.9	44.5	66.8
	75	34.0 ^(b)	34.9 ^(b)	38.9	62.5	35.3	36.3	40.4	63.7	39.2	41.3	44.7	66.9
4800 ^(a)	60	33.8 ^(b)	32.8 ^(b)	38.0	59.3	37.7	37.4	42.2	63.6	41.7	42.2	46.5	67.1
	65	34.3 ^(b)	33.3 ^(b)	38.4	59.6	38.0	37.7	42.4	63.8	42.0	42.5	46.7	67.2
	70	35.2	34.3 ^(b)	39.4	60.3	38.4	38.3	42.8	64.0	42.2	42.9	47.0	67.4
	75	38.7	38.6	43.0	63.8	39.2	39.2	43.6	64.5	42.6	43.4	47.4	67.6
5600 ^(a)	60	36.2	34.9 ^(b)	39.9	58.6	40.1	38.9	44.1	63.5	43.9	43.7	48.2	67.3
	65	36.7	35.5	40.4	59.0	40.5	39.4	44.4	63.8	44.2	44.1	48.5	67.5
	70	39.1	36.8	42.7	60.1	40.9	40.0	44.8	64.1	44.6	44.5	48.9	67.7
	75	42.4	41.4	46.3	64.8	42.1	41.3	45.9	64.9	45.1	45.1	49.3	68.0

Table 12. Reheat temperature rise — 20 tons (continued)

Airflow (cfm)	Ent DB (°F)	Entering Wet Bulb (°F)											
		51				55				59			
		Lvg Evap DB (°F)		Lvg Reheat DB (°F)		Lvg Evap DB (°F)		Lvg Reheat DB (°F)		Lvg Evap DB (°F)		Lvg Reheat DB (°F)	
		MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
6400	60	38.1	36.8	41.5	58.1	41.8	40.5	45.4	63.0	45.6	44.9	49.5	67.3
	65	39.0	37.4	42.3	58.5	42.4	41.0	45.9	63.4	46.0	45.4	49.9	67.5
	70	41.9	40.2	45.3	61.3	42.9	41.6	46.4	63.8	46.5	46.0	50.4	67.9
	75	45.4	43.9	48.9	65.5	45.5	44.1	49.0	65.6	47.1	46.6	50.8	68.2
7200	60	39.7	38.3	42.7	57.7	43.2	41.8	46.5	62.5	47.0	45.9	50.6	67.1
	65	40.8	39.4	43.7	58.5	43.9	42.5	47.1	63.0	47.4	46.5	51.0	67.4
	70	44.4	42.5	47.4	61.8	44.9	43.2	48.1	63.4	48.1	47.2	51.5	67.8
	75	47.9	46.2	51.1	66.1	47.9	46.3	51.2	66.2	49.0	47.9	52.4	68.2
8000	60	40.9	39.6	43.7	57.3	44.4	43.0	47.4	62.0	48.2	46.9	51.4	66.7
	65	42.3	41.0	44.9	58.3	45.1	43.7	48.1	62.5	48.6	47.4	51.9	67.1
	70	46.3	44.5	49.1	62.2	46.4	45.0	49.3	63.5	49.3	48.2	52.5	67.6
	75	49.9	48.2	52.9	66.6	50.0	48.3	53.0	66.7	50.5	49.5	53.6	68.4
8800	60	42.0	40.8	44.5	57.0	45.4	44.1	48.2	61.6	49.1	47.8	52.1	66.3
	65	44.2	42.3	46.7	58.1	46.2	44.9	48.9	62.2	49.7	48.3	52.7	66.8
	70	48.0	46.2	50.6	62.7	47.6	46.3	50.3	63.2	50.4	49.2	53.3	67.3
	75	51.7	49.9	54.4	67.0	51.7	50.0	54.5	67.1	51.8	50.6	54.6	68.3
9600	60	42.9	41.7	45.2	56.7	46.3	44.9	48.8	61.2	49.9	48.6	52.7	65.9
	65	45.6	44.0	47.9	58.6	47.1	45.8	49.6	61.9	50.6	49.2	53.4	66.4
	70	49.4	47.7	51.9	63.0	49.5	47.4	51.9	63.0	51.3	50.1	54.0	67.0
	75	53.2	51.4	55.8	67.5	53.3	51.5	55.9	67.6	52.8	51.7	55.5	68.1
Ambient DB 70°F													
4000 ^(a)	60	31.3 ^(b)	30.1 ^(b)	36.2	60.5	35.1	34.8 ^(b)	40.3	65.0	39.2	39.8	44.8	68.5
	65	31.6 ^(b)	30.5 ^(b)	36.5	60.7	35.3	35.0	40.5	65.1	39.4	40.0	45.0	68.6
	70	32.2 ^(b)	30.8 ^(b)	37.1	60.9	35.6	35.4	40.7	65.3	39.6	40.3	45.1	68.7
	75	34.7 ^(b)	33.7 ^(b)	39.6	63.6	35.8	35.7	41.0	65.4	39.9	40.6	45.4	68.9
4800 ^(a)	60	34.3 ^(b)	32.8 ^(b)	38.5	59.5	38.2	36.7	42.7	64.7	42.1	41.6	47.0	68.9
	65	34.7 ^(b)	33.3 ^(b)	38.9	59.8	38.4	37.0	43.0	64.9	42.4	41.9	47.2	69.1
	70	35.6	34.2 ^(b)	39.8	60.6	38.9	37.5	43.3	65.2	42.7	42.2	47.5	69.2
	75	39.3	37.5	43.7	64.4	39.7	38.4	44.2	65.8	43.1	42.7	47.9	69.5
5600 ^(a)	60	36.6	35.0	40.4	58.7	40.5	38.7	44.5	63.9	44.3	43.0	48.7	68.8
	65	37.1	35.6	40.8	59.1	40.9	39.1	44.9	64.2	44.6	43.4	49.0	69.0
	70	39.6	36.8	43.4	60.2	41.4	39.7	45.3	64.6	45.0	43.8	49.3	69.3
	75	43.1	40.8	47.0	65.1	42.5	40.8	46.4	65.5	45.5	44.4	49.8	69.6
6400	60	38.5	36.9	41.9	58.2	42.2	40.5	45.8	63.2	46.0	44.4	50.0	68.3
	65	39.4	37.5	42.7	58.5	42.7	41.0	46.3	63.6	46.4	44.8	50.3	68.6
	70	42.5	40.3	45.9	61.4	43.2	41.6	46.8	64.0	46.9	45.4	50.8	68.9
	75	46.0	43.6	49.5	65.7	46.1	43.0	49.6	65.2	47.4	46.0	51.3	69.3
7200	60	40.0	38.4	43.1	57.7	43.6	41.9	46.9	62.6	47.4	45.7	51.0	67.6
	65	41.2	39.6	44.1	58.5	44.2	42.5	47.4	63.0	47.8	46.1	51.4	68.0
	70	44.9	42.6	47.9	61.9	45.3	43.2	48.5	63.5	48.4	46.8	51.9	68.5
	75	48.4	46.0	51.6	66.2	48.5	46.1	51.7	66.3	49.4	47.4	52.9	68.9



Reheat Temperature Rise

Table 12. Reheat temperature rise — 20 tons (continued)

Airflow (cfm)	Ent DB (°F)	Entering Wet Bulb (°F)											
		51				55				59			
		Lvg Evap DB (°F)		Lvg Reheat DB (°F)		Lvg Evap DB (°F)		Lvg Reheat DB (°F)		Lvg Evap DB (°F)		Lvg Reheat DB (°F)	
		MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
8000	60	41.3	39.8	44.0	57.3	44.7	43.1	47.7	62.1	48.5	46.8	51.8	67.1
	65	42.6	41.1	45.3	58.3	45.4	43.8	48.4	62.6	49.0	47.3	52.2	67.5
	70	46.8	44.6	49.6	62.3	46.7	45.1	49.6	63.5	49.7	48.0	52.9	68.0
	75	50.4	48.1	53.4	66.7	50.5	48.2	53.5	66.8	50.9	49.1	54.0	68.8
8800	60	42.3	40.9	44.8	57.0	45.7	44.2	48.5	61.7	49.4	47.8	52.5	66.6
	65	44.7	42.4	47.2	58.1	46.5	45.0	49.2	62.2	50.0	48.4	53.0	67.0
	70	48.4	46.3	51.1	62.7	47.9	46.4	50.6	63.3	50.7	49.1	53.7	67.6
	75	52.1	49.9	55.0	67.2	52.2	50.0	55.1	67.3	52.1	50.5	55.0	68.5
9600	60	43.2	41.9	45.5	56.7	46.6	45.1	49.2	61.3	50.2	48.7	53.1	66.2
	65	46.0	44.2	48.4	58.6	47.3	46.0	49.9	61.9	50.9	49.3	53.7	66.6
	70	49.8	47.8	52.3	63.1	49.9	47.6	52.4	63.1	51.6	50.1	54.4	67.2
	75	53.7	51.4	56.3	67.6	53.7	51.5	56.4	67.7	53.8	51.6	56.5	68.3

Note: MIN, MAX: The leaving evaporator temperature is affected by the modulating valve position. The MIN and MAX numbers represent modulating valve position impact on both the leaving evaporator temperature and the leaving reheat coil temperature. MAX represents wide open, MIN represents closed to minimum position.

- (a) Unit applications below 300 cfm/ton are only applicable to TZJ models without electric heat.
- (b) The unit might be tripped by Frost at these conditions due to low leaving evaporator air temperature.

Table 13. Reheat temperature rise — 25 tons

Airflow (cfm)	Ent DB (°F)	Entering Wet Bulb (°F)											
		51				55				59			
		Lvg Evap DB (°F)		Lvg Reheat DB (°F)		Lvg Evap DB (°F)		Lvg Reheat DB (°F)		Lvg Evap DB (°F)		Lvg Reheat DB (°F)	
		MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
Ambient DB 60°F													
5000 ^(a)	60	33.1 ^(b)	34.2 ^(b)	44.6	61.1	36.5	38.6	48.8	64.4	40.1	43.1	53.2	67.6
	65	33.8 ^(b)	35.0	45.2	61.5	37.0	39.2	49.2	64.7	40.6	43.7	53.7	67.9
	70	35.0	36.5	46.3	62.2	37.6	40.0	49.8	65.0	41.1	44.3	54.1	68.2
	75	37.7	41.0	49.2	65.2	38.3	41.4	50.3	65.7	41.7	45.1	54.6	68.6
6000 ^(a)	60	35.9	35.9	45.8	61.2	39.3	40.3	50.0	64.6	42.9	44.7	54.3	67.8
	65	36.7	36.9	46.6	61.7	39.9	41.0	50.5	64.9	43.5	45.4	54.9	68.2
	70	38.3	38.8	48.0	62.7	40.7	42.0	51.2	65.4	44.1	46.1	55.4	68.5
	75	42.0	44.2	52.1	66.3	42.1	43.8	52.5	66.2	44.9	47.1	56.1	69.0
7000 ^(a)	60	38.1	37.5	46.9	60.8	41.5	41.6	50.9	64.5	44.9	45.9	55.1	67.8
	65	39.0	38.6	47.7	61.4	42.3	42.6	51.6	65.0	45.6	46.7	55.7	68.2
	70	42.0	42.3	50.6	63.8	43.1	43.6	52.4	65.5	46.3	47.7	56.4	68.7
	75	45.4	46.9	54.3	67.2	44.9	47.0	54.0	67.3	47.2	48.7	57.1	69.2
8000	60	39.8	39.0	47.7	60.3	43.1	42.8	51.6	64.3	46.5	46.9	55.7	67.7
	65	41.3	40.6	49.0	61.3	44.0	43.8	52.4	64.9	47.2	47.8	56.4	68.2
	70	44.6	44.4	52.3	64.3	45.0	45.4	53.2	65.7	48.1	48.9	57.2	68.8
	75	48.1	49.1	56.2	67.9	48.2	49.2	56.3	67.9	49.1	50.0	58.0	69.2
9000	60	41.3	40.4	48.4	59.7	44.4	43.8	52.2	64.0	47.8	47.8	56.2	67.5
	65	43.0	42.3	49.9	61.0	45.4	44.9	53.1	64.7	48.6	48.7	56.9	68.1
	70	46.8	46.2	53.8	64.7	47.1	46.8	54.5	65.7	49.6	50.0	57.8	68.7
	75	50.3	50.9	57.7	68.4	50.4	51.0	57.8	68.5	51.1	51.8	59.1	69.5

Table 13. Reheat temperature rise — 25 tons (continued)

Airflow (cfm)	Ent DB (°F)	Entering Wet Bulb (°F)											
		51				55				59			
		Lvg Evap DB (°F)		Lvg Reheat DB (°F)		Lvg Evap DB (°F)		Lvg Reheat DB (°F)		Lvg Evap DB (°F)		Lvg Reheat DB (°F)	
		MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
10000	60	42.5	41.6	49.0	59.3	45.5	44.7	52.6	63.5	48.8	48.6	56.6	67.3
	65	44.5	43.7	50.7	60.7	46.6	46.0	53.6	64.4	49.7	49.6	57.3	67.9
	70	48.5	47.8	55.0	65.0	48.5	48.0	55.2	65.6	50.8	50.9	58.3	68.6
	75	52.2	52.6	59.0	68.8	52.2	51.7	59.1	69.6	52.6	53.0	59.8	69.5
11000	60	43.5	42.7	49.4	58.9	46.4	45.6	53.0	63.1	49.7	49.3	56.9	67.0
	65	46.3	44.9	52.0	60.4	47.6	46.9	54.0	64.0	50.6	50.3	57.7	67.6
	70	50.0	49.3	56.1	65.2	49.7	49.1	55.8	65.4	51.9	51.7	58.7	68.4
	75	53.7	54.0	60.1	69.2	53.8	54.1	60.2	69.3	53.8	54.0	60.4	69.5
12000	60	44.3	43.6	49.8	58.5	47.2	46.4	53.3	62.7	50.4	49.9	57.1	66.7
	65	47.5	46.6	52.8	60.9	48.5	47.8	54.4	63.7	51.5	51.1	58.1	67.4
	70	51.3	50.5	57.0	65.5	51.4	50.7	57.0	66.0	52.7	52.5	59.1	68.2
	75	55.1	55.2	61.1	69.6	55.2	55.3	61.1	69.6	54.9	54.4	60.9	70.3
Ambient DB 65°F													
5000 ^(a)	60	33.5 ^(b)	33.3 ^(b)	45.0	62.7	36.9	37.9	49.2	66.1	40.6	42.5	53.7	69.4
	65	34.1 ^(b)	34.1 ^(b)	45.6	63.1	37.4	38.4	49.7	66.4	41.1	43.1	54.2	69.7
	70	35.3	35.6	46.7	63.9	38.0	39.2	50.2	66.8	41.5	43.6	54.6	70.0
	75	38.2	39.8	49.8	66.6	38.6	40.6	50.8	67.4	42.1	44.4	55.1	70.4
6000 ^(a)	60	36.2	35.4	46.3	61.9	39.7	39.5	50.4	66.1	43.2	44.0	54.8	69.5
	65	37.0	36.3	47.0	62.5	40.3	40.2	51.0	66.5	43.8	44.7	55.3	69.9
	70	38.6	38.1	48.4	63.7	41.1	41.2	51.7	67.0	44.4	45.4	55.8	70.3
	75	42.5	43.0	52.6	67.6	42.5	43.0	52.9	67.9	45.2	46.4	56.5	70.7
7000 ^(a)	60	38.4	37.4	47.3	61.0	41.8	40.9	51.3	65.7	45.2	45.3	55.5	69.4
	65	39.3	38.4	48.0	61.7	42.6	41.8	52.0	66.2	45.9	46.0	56.1	69.8
	70	42.5	41.4	51.1	64.3	43.5	42.8	52.7	66.8	46.6	47.0	56.7	70.3
	75	45.9	45.7	54.9	68.3	45.3	45.0	54.4	68.0	47.6	48.0	57.5	70.8
8000	60	40.2	39.1	48.1	60.3	43.4	42.4	51.9	64.9	46.8	46.4	56.1	69.1
	65	41.7	40.6	49.4	61.4	44.3	43.3	52.7	65.7	47.5	47.2	56.8	69.6
	70	45.1	43.9	52.8	64.5	45.7	44.4	53.9	66.3	48.4	48.2	57.5	70.2
	75	48.5	47.9	56.7	68.8	48.6	48.0	56.8	68.9	49.4	49.4	58.3	70.7
9000	60	41.5	40.4	48.7	59.8	44.6	43.6	52.5	64.3	48.0	47.3	56.5	68.7
	65	43.3	42.3	50.3	61.0	45.7	44.7	53.4	65.1	48.9	48.2	57.3	69.3
	70	47.1	45.9	54.2	64.8	47.4	46.4	54.8	66.2	49.9	49.4	58.1	70.0
	75	50.7	49.8	58.2	69.2	50.8	49.9	58.3	69.3	51.4	51.0	59.4	70.9
10000	60	42.7	41.6	49.2	59.3	45.7	44.7	52.9	63.7	49.1	48.2	56.9	68.2
	65	44.7	43.8	51.0	60.6	46.9	45.9	53.9	64.6	50.0	49.1	57.7	68.9
	70	48.9	47.7	55.4	65.1	48.8	47.8	55.5	65.9	51.1	50.3	58.6	69.7
	75	52.5	51.5	59.5	69.5	52.6	51.6	59.5	69.6	52.9	52.3	60.1	70.8
11000	60	43.7	42.8	49.7	58.8	46.6	45.7	53.2	63.2	49.9	49.0	57.2	67.6
	65	46.6	45.0	52.3	60.4	47.9	46.9	54.3	64.1	50.9	50.0	58.0	68.4
	70	50.3	49.2	56.4	65.3	50.0	49.0	56.1	65.5	52.1	51.3	59.0	69.3
	75	54.1	53.1	60.6	69.8	54.2	53.1	60.6	69.9	54.1	53.4	60.7	70.6



Reheat Temperature Rise

Table 13. Reheat temperature rise — 25 tons (continued)

Airflow (cfm)	Ent DB (°F)	Entering Wet Bulb (°F)											
		51				55				59			
		Lvg Evap DB (°F)		Lvg Reheat DB (°F)		Lvg Evap DB (°F)		Lvg Reheat DB (°F)		Lvg Evap DB (°F)		Lvg Reheat DB (°F)	
		MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
12000	60	44.5	43.7	50.1	58.5	47.5	46.5	53.6	62.8	50.7	49.7	57.4	67.2
	65	47.8	46.7	53.2	60.9	48.7	47.9	54.7	63.7	51.8	50.8	58.4	68.0
	70	51.6	50.5	57.3	65.5	51.7	50.1	57.4	65.3	53.0	52.1	59.4	68.9
	75	55.5	54.4	61.5	70.1	55.5	54.5	61.6	70.1	55.1	54.4	61.2	70.3
Ambient DB 70°F													
5000 ^(a)	60	33.8 ^(b)	32.9 ^(b)	45.5	63.3	37.3	37.1	49.7	67.8	41.0	41.8	54.2	71.3
	65	34.5 ^(b)	33.6 ^(b)	46.1	63.8	37.8	37.7	50.2	68.1	41.5	42.4	54.7	71.5
	70	35.7	34.9 ^(b)	47.2	64.7	38.4	38.5	50.7	68.5	41.9	43.0	55.1	71.8
	75	38.7	38.5	50.5	67.9	39.1	39.2	51.3	68.9	42.6	43.7	55.6	72.2
6000 ^(a)	60	36.6	35.4	46.7	62.0	40.0	38.9	50.8	67.0	43.6	43.4	55.2	71.2
	65	37.4	36.3	47.3	62.6	40.7	39.6	51.4	67.4	44.2	44.0	55.7	71.5
	70	39.0	37.9	48.8	63.9	41.5	40.5	52.1	68.0	44.8	44.7	56.3	71.9
	75	43.0	41.9	53.3	68.4	43.0	42.1	53.4	69.1	45.6	45.7	56.9	72.4
7000 ^(a)	60	38.8	37.5	47.6	61.0	42.1	40.8	51.7	65.9	45.6	44.6	55.9	70.7
	65	39.7	38.5	48.4	61.7	42.8	41.5	52.3	66.5	46.2	45.4	56.5	71.2
	70	42.9	41.4	51.6	64.3	43.8	42.6	53.1	67.2	47.0	46.2	57.2	71.7
	75	46.3	44.9	55.4	68.7	46.4	44.5	55.5	68.6	47.9	47.3	57.9	72.3
8000	60	40.4	39.2	48.4	60.3	43.6	42.4	52.3	65.1	47.1	45.9	56.5	69.9
	65	42.0	40.7	49.7	61.4	44.5	43.3	53.1	65.8	47.8	46.7	57.1	70.5
	70	45.4	43.9	53.3	64.6	46.0	44.4	54.3	66.5	48.7	47.7	57.9	71.2
	75	48.9	47.4	57.2	69.0	49.0	47.5	57.3	69.1	49.7	48.8	58.7	71.8
9000	60	41.8	40.6	49.0	59.7	44.9	43.7	52.8	64.3	48.3	47.1	56.9	69.1
	65	43.6	42.5	50.5	61.0	46.0	44.8	53.7	65.1	49.1	47.9	57.6	69.8
	70	47.5	46.0	54.7	64.8	47.6	46.3	55.1	66.3	50.2	49.0	58.5	70.6
	75	51.1	49.6	58.7	69.3	51.2	49.7	58.8	69.4	51.7	50.6	59.8	71.6
10000	60	42.9	41.7	49.5	59.3	46.0	44.9	53.2	63.8	49.4	48.2	57.2	68.5
	65	45.0	43.9	51.2	60.6	47.1	46.0	54.2	64.6	50.2	49.1	58.0	69.2
	70	49.2	47.8	55.8	65.1	49.0	47.9	55.8	65.9	51.4	50.2	59.0	70.0
	75	52.9	51.4	59.9	69.6	53.0	51.5	60.0	69.7	53.2	52.0	60.5	71.2
11000	60	43.9	42.9	49.9	58.8	46.9	45.8	53.5	63.2	50.2	49.1	57.5	67.9
	65	46.9	45.2	52.7	60.3	48.1	47.1	54.6	64.1	51.2	50.0	58.3	68.7
	70	50.7	49.3	56.8	65.4	50.7	49.2	56.9	65.5	52.4	51.3	59.3	69.5
	75	54.5	53.0	61.0	69.9	54.5	53.1	61.1	70.0	54.4	53.2	61.0	70.8
12000	60	44.7	43.8	50.3	58.5	47.7	46.6	53.9	62.8	50.9	49.8	57.7	67.3
	65	48.1	46.9	53.5	61.0	48.9	48.0	54.9	63.7	52.0	50.9	58.7	68.1
	70	52.0	50.6	57.7	65.6	52.0	50.3	57.8	65.3	53.2	52.2	59.7	69.1
	75	55.8	54.4	62.0	70.2	55.9	54.5	62.0	70.3	56.0	54.3	62.1	70.5

Note: MIN, MAX: The leaving evaporator temperature is affected by the modulating valve position. The MIN and MAX numbers represent modulating valve position impact on both the leaving evaporator temperature and the leaving reheat coil temperature. MAX represents wide open, MIN represents closed to minimum position.

- ^(a) Unit applications below 300 cfm/ton are only applicable to TZJ models without electric heat.
- ^(b) The unit might be tripped by Froststat at these conditions due to low leaving evaporator air temperature.



Evaporator Fan Performance

Table 14. Evaporator fan performance - 12.5 ton, downflow, high gas heat

Available External Static Pressure (Inches of Water Gauge)																				
CFM	0.10"		0.20"		0.30"		0.40"		0.50"		0.60"		0.70"		0.80"		0.90"		1.00"	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3-hp Standard Motor																				
3750	562	0.21	623	0.30	677	0.40	726	0.50	772	0.60	816	0.70	857	0.81	895	0.92	932	1.03	968	1.15
4000	591	0.25	650	0.34	701	0.44	749	0.55	794	0.65	836	0.76	877	0.87	915	0.98	951	1.10	986	1.22
4500	650	0.32	704	0.43	753	0.54	798	0.65	841	0.77	881	0.89	919	1.01	956	1.13	991	1.26	1025	1.38
5000	710	0.42	760	0.53	807	0.65	849	0.78	889	0.90	928	1.03	964	1.16	999	1.30	1033	1.43	1066	1.57
5500	771	0.53	817	0.65	862	0.79	902	0.92	940	1.06	976	1.19	1011	1.34	1045	1.48	1078	1.63	1109	1.77
6000	833	0.66	876	0.80	917	0.94	956	1.08	993	1.23	1027	1.38	1060	1.53	1093	1.68	1124	1.84	1154	2.00
Available External Static Pressure (Inches of Water Gauge)																				
CFM	1.10"		1.20"		1.30"		1.40"		1.50"		1.60"		1.70"		1.80"		1.90"		2.00"	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3-hp Standard Motor																				
3750	1003	1.27	1036	1.39	1069	1.51	1099	1.64	1129	1.77	1158	1.9	1188	2.04	1217	2.18	1246	2.33	1274	2.47
4000	1020	1.34	1053	1.47	1085	1.6	1116	1.73	1146	1.87	1175	2	1203	2.14	1230	2.28	1257	2.43	1285	2.58
4500	1058	1.51	1089	1.65	1119	1.78	1150	1.92	1180	2.07	1208	2.21	1236	2.36	1263	2.51	1290	2.66	1315	2.81
5000	1098	1.71	1129	1.85	1159	1.99	1187	2.14	1215	2.29	1242	2.44	1270	2.59	1297	2.75	1323	2.91	1349	3.07
5500	1139	1.92	1170	2.07	1199	2.23	1227	2.38	1255	2.54	1282	2.7	1308	2.86	1333	3.02	1358	3.18	1383	3.35
6000	1184	2.16	1213	2.32	1240	2.48	1268	2.65	1296	2.81	1322	2.98	1348	3.15	1373	3.32	1397	3.49	1421	3.67

Notes:

1. Available External Static Pressure is the static pressure difference between the return duct and the supply duct plus the static pressure drop caused by accessories and options.
2. Data includes pressure drop due to standard filters, wet coils, and high gas heat. No accessories or options are included in pressure drop data.
3. To determine static pressure drop due to other options/accessories, refer to the applicable table in the fan performance section.
4. Direct drive fan motor heat is negligible.
5. 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 15. Evaporator fan performance - 12.5 ton, horizontal, high gas heat

Available External Static Pressure (Inches of Water Gauge)																				
CFM	0.10"		0.20"		0.30"		0.40"		0.50"		0.60"		0.70"		0.80"		0.90"		1.00"	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3-hp Standard Motor																				
3750	596	0.26	651	0.35	700	0.44	746	0.54	788	0.64	831	0.74	872	0.85	910	0.96	947	1.07	982	1.19
4000	628	0.31	680	0.40	728	0.50	772	0.60	814	0.70	854	0.81	893	0.92	931	1.04	967	1.15	1002	1.28
4500	693	0.41	742	0.51	786	0.62	827	0.73	867	0.85	904	0.96	939	1.08	975	1.20	1009	1.33	1043	1.46
5000	759	0.53	805	0.65	846	0.76	884	0.88	921	1.01	957	1.14	991	1.27	1023	1.40	1055	1.53	1087	1.67
5500	825	0.68	868	0.81	907	0.94	943	1.07	978	1.20	1012	1.34	1044	1.48	1076	1.62	1106	1.76	1134	1.91
6000	893	0.85	933	1.00	970	1.14	1004	1.28	1037	1.42	1069	1.56	1099	1.71	1130	1.87	1159	2.03	1187	2.18
Available External Static Pressure (Inches of Water Gauge)																				
CFM	1.10"		1.20"		1.30"		1.40"		1.50"		1.60"		1.70"		1.80"		1.90"		2.00"	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3-hp Standard Motor																				
3750	1015	1.31	1048	1.43	1079	1.56	1110	1.69	1140	1.82	1169	1.95	1197	2.09	1224	2.23	1250	2.37	1276	2.51
4000	1035	1.4	1067	1.52	1097	1.65	1128	1.78	1158	1.92	1186	2.06	1214	2.2	1241	2.34	1268	2.49	1293	2.63
4500	1076	1.59	1107	1.73	1137	1.86	1167	2	1195	2.14	1222	2.28	1249	2.43	1276	2.58	1303	2.74	1328	2.89
5000	1118	1.81	1149	1.95	1179	2.1	1207	2.25	1235	2.4	1262	2.55	1289	2.7	1314	2.86	1339	3.01	1364	3.17
5500	1164	2.05	1193	2.2	1221	2.36	1249	2.51	1277	2.67	1304	2.84	1330	3	1355	3.16	1380	3.33	1404	3.5



Evaporator Fan Performance

Table 15. Evaporator fan performance - 12.5 ton, horizontal, high gas heat (continued)

Available External Static Pressure (Inches of Water Gauge)										
CFM	1.10"	1.20"	1.30"	1.40"	1.50"	1.60"	1.70"	1.80"	1.90"	2.00"
	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP
3-hp Standard Motor										
6000	1214 2.33	1240 2.49	1267 2.65	1294 2.82	1320 2.98	1346 3.15	1371 3.32	1396 3.5	1421 3.67	1445 3.85

Notes:

1. Available External Static Pressure is the static pressure difference between the return duct and the supply duct plus the static pressure drop caused by accessories and options.
2. Data includes pressure drop due to standard filters, wet coils, and high gas heat. No accessories or options are included in pressure drop data.
3. To determine static pressure drop due to other options/accessories, refer to the applicable table in the fan performance section.
4. Direct drive fan motor heat is negligible.
5. 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 16. Evaporator fan performance - 15 ton, downflow, high gas heat

Available External Static Pressure (Inches of Water Gauge)										
CFM	0.10"	0.20"	0.30"	0.40"	0.50"	0.60"	0.70"	0.80"	0.90"	1.00"
	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP
3-hp Standard Motor										
4500	650 0.32	704 0.43	753 0.54	798 0.65	841 0.77	881 0.89	919 1.01	956 1.13	991 1.26	1025 1.38
4800	686 0.38	738 0.49	785 0.61	828 0.73	869 0.85	908 0.97	946 1.10	981 1.23	1016 1.36	1050 1.49
5400	759 0.50	806 0.63	850 0.76	891 0.89	930 1.02	966 1.16	1002 1.30	1036 1.44	1069 1.59	1100 1.73
6000	833 0.66	876 0.80	917 0.94	956 1.08	993 1.23	1027 1.38	1060 1.53	1093 1.68	1124 1.84	1154 2.00
6600	909 0.84	948 0.99	985 1.15	1022 1.31	1057 1.47	1090 1.63	1122 1.79	1152 1.96	1182 2.12	1211 2.30
7200	984 1.06	1020 1.23	1055 1.40	1090 1.57	1123 1.74	1155 1.91	1185 2.09	1214 2.27	1243 2.45	1270 2.63

Available External Static Pressure (Inches of Water Gauge)										
CFM	1.10"	1.20"	1.30"	1.40"	1.50"	1.60"	1.70"	1.80"	1.90"	2.00"
	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP
3-hp Standard Motor										
4500	1058 1.51	1089 1.65	1119 1.78	1150 1.92	1180 2.07	1208 2.21	1236 2.36	1263 2.51	1290 2.66	1315 2.81
4800	1082 1.63	1113 1.77	1143 1.91	1172 2.05	1200 2.19	1229 2.34	1256 2.5	1283 2.65	1310 2.81	1335 2.97
5400	1131 1.88	1162 2.03	1191 2.18	1219 2.33	1247 2.49	1274 2.64	1300 2.8	1325 2.96	1351 3.13	1376 3.3
6000	1184 2.16	1213 2.32	1240 2.48	1268 2.65	1296 2.81	1322 2.98	1348 3.15	1373 3.32	1397 3.49	1421 3.67
6600	1240 2.47	1267 2.64	1294 2.82	1321 2.99	1346 3.17	1371 3.35	1397 3.53	1421 3.72	1446 3.9	1469 4.09
7200	1297 2.81	1324 3	1350 3.19	1375 3.38	1400 3.57	1425 3.76	1449 3.95	1472 4.15	1495 4.34	1518 4.54

Notes:

1. Available External Static Pressure is the static pressure difference between the return duct and the supply duct plus the static pressure drop caused by accessories and options.
2. Data includes pressure drop due to standard filters, wet coils, and high gas heat. No accessories or options are included in pressure drop data.
3. To determine static pressure drop due to other options/accessories, refer to the applicable table in the fan performance section.
4. Direct drive fan motor heat is negligible.
5. 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 17. Evaporator fan performance - 15 ton, horizontal, high gas heat

Available External Static Pressure (Inches of Water Gauge)										
CFM	0.10"	0.20"	0.30"	0.40"	0.50"	0.60"	0.70"	0.80"	0.90"	1.00"
	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP
3-hp Standard Motor										
4500	693 0.41	742 0.51	786 0.62	827 0.73	867 0.85	904 0.96	939 1.08	975 1.20	1009 1.33	1043 1.46
4800	732 0.48	779 0.59	821 0.70	861 0.82	899 0.94	935 1.07	970 1.19	1002 1.31	1036 1.45	1069 1.58
5400	812 0.65	855 0.78	895 0.90	932 1.03	966 1.16	1001 1.30	1034 1.44	1065 1.58	1095 1.71	1124 1.85
6000	893 0.85	933 1.00	970 1.14	1004 1.28	1037 1.42	1069 1.56	1099 1.71	1130 1.87	1159 2.03	1187 2.18
6600	974 1.10	1011 1.26	1046 1.42	1079 1.57	1109 1.72	1139 1.88	1168 2.04	1196 2.20	1224 2.37	1251 2.54
7200	1056 1.40	1090 1.57	1123 1.74	1154 1.91	1184 2.08	1212 2.25	1239 2.42	1266 2.59	1291 2.77	1317 2.95

Table 17. Evaporator fan performance - 15 ton, horizontal, high gas heat (continued)

Available External Static Pressure (Inches of Water Gauge)											
CFM	1.10"	1.20"	1.30"	1.40"	1.50"	1.60"	1.70"	1.80"	1.90"	2.00"	
	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP
3-hp Standard Motor											
4500	1076 1.59	1107 1.73	1137 1.86	1167 2	1195 2.14	1222 2.28	1249 2.43	1276 2.58	1303 2.74	1328 2.89	
4800	1101 1.72	1132 1.86	1162 2	1191 2.15	1219 2.29	1246 2.44	1273 2.59	1298 2.74	1324 2.9	1349 3.06	
5400	1154 2	1184 2.15	1212 2.3	1241 2.46	1268 2.62	1295 2.78	1321 2.94	1347 3.1	1372 3.27	1396 3.43	
6000	1214 2.33	1240 2.49	1267 2.65	1294 2.82	1320 2.98	1346 3.15	1371 3.32	1396 3.5	1421 3.67	1445 3.85	
6600	1277 2.72	1303 2.89	1328 3.05	1352 3.22	1375 3.4	1400 3.58	1425 3.76	1449 3.94	1472 4.13	1495 4.31	
7200	1343 3.13	1367 3.32	1391 3.51	1415 3.69	1438 3.88	1460 4.06	1482 4.25	1504 4.44	1527 4.63	1549 4.83	

Notes:

1. Available External Static Pressure is the static pressure difference between the return duct and the supply duct plus the static pressure drop caused by accessories and options.
2. Data includes pressure drop due to standard filters, wet coils, and high gas heat. No accessories or options are included in pressure drop data.
3. To determine static pressure drop due to other options/accessories, refer to the applicable table in the fan performance section.
4. Direct drive fan motor heat is negligible.
5. 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 18. Evaporator fan performance - 17.5 ton, downflow, high gas heat

Available External Static Pressure (Inches of Water Gauge)											
CFM	0.10"	0.20"	0.30"	0.40"	0.50"	0.60"	0.70"	0.80"	0.90"	1.00"	
	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP
3-hp Standard Motor											
5250	741 0.47	789 0.59	834 0.72	875 0.85	914 0.98	952 1.11	987 1.25	1022 1.39	1055 1.53	1087 1.67	
5600	784 0.55	829 0.68	873 0.82	913 0.95	950 1.09	986 1.23	1021 1.37	1054 1.52	1087 1.67	1118 1.82	
6300	871 0.75	912 0.89	951 1.04	989 1.19	1025 1.34	1059 1.50	1091 1.66	1122 1.82	1153 1.98	1183 2.14	
7000	959 0.99	996 1.15	1032 1.31	1067 1.48	1101 1.64	1133 1.81	1164 1.99	1194 2.16	1222 2.34	1250 2.51	
7700	1047 1.28	1081 1.45	1115 1.63	1147 1.81	1179 1.99	1210 2.18	1239 2.37	1267 2.56	1295 2.75	1321 2.94	
8400	1136 1.62	1168 1.81	1199 2.00	1229 2.20	1258 2.40	1288 2.60	1316 2.80	1343 3.00	1369 3.21	1395 3.42	

Available External Static Pressure (Inches of Water Gauge)

CFM	1.10"	1.20"	1.30"	1.40"	1.50"	1.60"	1.70"	1.80"	1.90"	2.00"	
	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP
3-hp Standard Motor											
5250	1119 1.81	1149 1.96	1179 2.11	1207 2.26	1235 2.41	1262 2.56	1288 2.72	1314 2.88	1340 3.04	1366 3.21	
5600	1148 1.97	1178 2.12	1207 2.28	1236 2.43	1263 2.59	1290 2.75	1316 2.91	1341 3.08	1365 3.24	1390 3.41	
6300	1211 2.31	1240 2.48	1267 2.65	1294 2.82	1320 2.99	1347 3.16	1372 3.34	1397 3.51	1421 3.69	1445 3.87	
7000	1278 2.69	1305 2.88	1331 3.06	1357 3.24	1382 3.43	1407 3.62	1431 3.81	1455 4.00	1479 4.19	1502 4.38	
7700	1347 3.13	1373 3.33	1398 3.52	1423 3.72	1447 3.92	1470 4.13	1494 4.33	1517 4.54	1539 4.74	1562 4.95	
8400	1420 3.62	1444 3.83	1467 4.04	1491 4.26	1514 4.47	1537 4.69	1560 4.91	1582 5.13	1603 5.35	1625 5.57	

Notes:

1. Available External Static Pressure is the static pressure difference between the return duct and the supply duct plus the static pressure drop caused by accessories and options.
2. Data includes pressure drop due to standard filters, wet coils, and high gas heat. No accessories or options are included in pressure drop data.
3. To determine static pressure drop due to other options/accessories, refer to the applicable table in the fan performance section.
4. Direct drive fan motor heat is negligible.
5. 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 19. Evaporator fan performance - 17.5 ton, horizontal, high gas heat

Available External Static Pressure (Inches of Water Gauge)											
CFM	0.10"	0.20"	0.30"	0.40"	0.50"	0.60"	0.70"	0.80"	0.90"	1.00"	
	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP
3-hp Standard Motor											
5250	792 0.60	836 0.73	876 0.85	914 0.97	949 1.10	984 1.24	1017 1.37	1049 1.51	1079 1.64	1110 1.78	
5600	839 0.71	881 0.84	920 0.98	955 1.11	990 1.24	1023 1.38	1055 1.53	1086 1.67	1116 1.81	1145 1.96	
6300	933 0.97	972 1.12	1008 1.27	1041 1.42	1073 1.56	1104 1.72	1133 1.87	1163 2.03	1191 2.19	1219 2.36	
7000	1028 1.30	1064 1.46	1097 1.63	1129 1.79	1159 1.96	1187 2.12	1215 2.29	1242 2.46	1268 2.63	1295 2.81	



Evaporator Fan Performance

Table 19. Evaporator fan performance - 17.5 ton, horizontal, high gas heat (continued)

Available External Static Pressure (Inches of Water Gauge)											
CFM	0.10"	0.20"	0.30"	0.40"	0.50"	0.60"	0.70"	0.80"	0.90"	1.00"	
	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP
3-hp Standard Motor											
7700	1124 1.69	1157 1.87	1188 2.05	1218 2.24	1246 2.42	1273 2.59	1299 2.77	1325 2.96	1350 3.14	1374 3.33	
8400	1220 2.15	1251 2.35	1280 2.55	1308 2.75	1335 2.95	1361 3.15	1386 3.34	1410 3.53	1433 3.73	1456 3.93	
Available External Static Pressure (Inches of Water Gauge)											
CFM	1.10"	1.20"	1.30"	1.40"	1.50"	1.60"	1.70"	1.80"	1.90"	2.00"	
	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP
3-hp Standard Motor											
5250	1141 1.93	1170 2.07	1199 2.22	1228 2.38	1256 2.53	1283 2.69	1309 2.85	1335 3.01	1360 3.17	1384 3.33	
5600	1173 2.11	1202 2.26	1230 2.41	1258 2.57	1285 2.73	1312 2.9	1338 3.06	1363 3.23	1388 3.40	1412 3.57	
6300	1245 2.52	1271 2.68	1296 2.84	1321 3.01	1347 3.18	1373 3.36	1398 3.53	1422 3.71	1446 3.89	1470 4.08	
7000	1321 2.99	1346 3.17	1370 3.35	1394 3.53	1417 3.71	1439 3.89	1461 4.08	1485 4.27	1508 4.46	1531 4.65	
7700	1398 3.52	1422 3.72	1446 3.92	1468 4.12	1491 4.32	1513 4.52	1534 4.71	1555 4.91	1576 5.11	1596 5.31	
8400	1479 4.14	1501 4.34	1523 4.55	1545 4.77	1567 4.98	1588 5.2	1609 5.42	1629 5.64	1649 5.85	-	-

Notes:

1. Available External Static Pressure is the static pressure difference between the return duct and the supply duct plus the static pressure drop caused by accessories and options.
2. Data includes pressure drop due to standard filters, wet coils, and high gas heat. No accessories or options are included in pressure drop data.
3. To determine static pressure drop due to other options/accessories, refer to the applicable table in the fan performance section.
4. Direct drive fan motor heat is negligible.
5. 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 20. Evaporator fan performance - 20 ton, downflow, high gas heat

Available External Static Pressure (Inches of Water Gauge)											
CFM	0.10"	0.20"	0.30"	0.40"	0.50"	0.60"	0.70"	0.80"	0.90"	1.00"	
	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP
3-hp Standard Motor											
6000	833 0.66	876 0.8	917 0.94	956 1.08	993 1.23	1027 1.38	1060 1.53	1093 1.68	1124 1.84	1154 2	
6400	883 0.78	924 0.92	963 1.08	1000 1.23	1036 1.38	1069 1.54	1101 1.7	1132 1.86	1163 2.03	1192 2.19	
7200	984 1.06	1020 1.23	1055 1.4	1090 1.57	1123 1.74	1155 1.91	1185 2.09	1214 2.27	1243 2.45	1270 2.63	
8000	1086 1.42	1118 1.6	1150 1.78	1182 1.97	1213 2.16	1243 2.35	1272 2.55	1300 2.74	1326 2.94	1353 3.14	
8800	1188 1.84	1218 2.04	1247 2.24	1276 2.45	1304 2.66	1333 2.87	1360 3.08	1387 3.29	1412 3.5	1437 3.72	
9600	1290 2.35	1318 2.57	1345 2.79	1372 3.01	1398 3.23	1424 3.46	1450 3.69	1476 3.92	1500 4.15	1524 4.38	
Available External Static Pressure (Inches of Water Gauge)											
CFM	1.10"	1.20"	1.30"	1.40"	1.50"	1.60"	1.70"	1.80"	1.90"	2.00"	
	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP
3-hp Standard Motor											
6000	1184 2.16	1213 2.32	1240 2.48	1268 2.65	1296 2.81	1322 2.98	1348 3.15	1373 3.32	1397 3.49	1421 3.67	
6400	1221 2.36	1249 2.53	1276 2.7	1303 2.87	1329 3.05	1355 3.22	1380 3.4	1405 3.58	1429 3.76	1453 3.94	
7200	1297 2.81	1324 3	1350 3.19	1375 3.38	1400 3.57	1425 3.76	1449 3.95	1472 4.15	1495 4.34	1518 4.54	
8000	1378 3.33	1403 3.54	1427 3.74	1452 3.94	1476 4.15	1499 4.36	1522 4.57	1544 4.78	1567 4.99	1588 5.21	
8800	1462 3.94	1485 4.15	1509 4.37	1531 4.59	1554 4.81	1576 5.04	1598 5.26	1620 5.49	1641 5.72	1662 5.95	
9600	1548 4.61	1570 4.85	1593 5.09	1614 5.32	1636 5.56	1657 5.8	1678 6.04	-	-	-	-

Notes:

1. Available External Static Pressure is the static pressure difference between the return duct and the supply duct plus the static pressure drop caused by accessories and options.
2. Data includes pressure drop due to standard filters, wet coils, and high gas heat. No accessories or options are included in pressure drop data.
3. To determine static pressure drop due to other options/accessories, refer to the applicable table in the fan performance section.
4. Direct drive fan motor heat is negligible.
5. 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 21. Evaporator fan performance - 20 ton, horizontal, high gas heat

Available External Static Pressure (Inches of Water Gauge)										
CFM	0.10"	0.20"	0.30"	0.40"	0.50"	0.60"	0.70"	0.80"	0.90"	1.00"
	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP
3-hp Standard Motor										
6000	893 0.85	933 1	970 1.14	1004 1.28	1037 1.42	1069 1.56	1099 1.71	1130 1.87	1159 2.03	1187 2.18
6400	947 1.02	985 1.17	1021 1.32	1054 1.47	1085 1.62	1116 1.77	1145 1.93	1174 2.09	1202 2.25	1229 2.42
7200	1056 1.4	1090 1.57	1123 1.74	1154 1.91	1184 2.08	1212 2.25	1239 2.42	1266 2.59	1291 2.77	1317 2.95
8000	1165 1.88	1197 2.07	1227 2.26	1256 2.45	1284 2.64	1311 2.82	1336 3.01	1361 3.19	1385 3.38	1409 3.58
8800	1276 2.46	1305 2.66	1333 2.87	1360 3.08	1386 3.29	1411 3.5	1436 3.7	1459 3.91	1482 4.11	1504 4.32
9600	1387 3.15	1413 3.37	1439 3.6	1465 3.83	1489 4.06	1513 4.28	1537 4.51	1559 4.73	1581 4.95	1602 5.18
Available External Static Pressure (Inches of Water Gauge)										
CFM	1.10"	1.20"	1.30"	1.40"	1.50"	1.60"	1.70"	1.80"	1.90"	2.00"
	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP

Notes:

1. Available External Static Pressure is the static pressure difference between the return duct and the supply duct plus the static pressure drop caused by accessories and options.
2. Data includes pressure drop due to standard filters, wet coils, and high gas heat. No accessories or options are included in pressure drop data.
3. To determine static pressure drop due to other options/accessories, refer to the applicable table in the fan performance section.
4. Direct drive fan motor heat is negligible.
5. 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 22. Evaporator fan performance - 25 ton, downflow, high gas heat

Available External Static Pressure (Inches of Water Gauge)										
CFM	0.10"	0.20"	0.30"	0.40"	0.50"	0.60"	0.70"	0.80"	0.90"	1.00"
	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP
3-hp Standard Motor										
7500	1022 1.19	1057 1.36	1091 1.53	1124 1.71	1157 1.89	1188 2.07	1217 2.25	1246 2.44	1274 2.62	1301 2.81
8000	1086 1.42	1118 1.6	1150 1.78	1182 1.97	1213 2.16	1243 2.35	1272 2.55	1300 2.74	1326 2.94	1353 3.14
9000	1213 1.96	1243 2.17	1271 2.37	1300 2.58	1328 2.79	1356 3.01	1383 3.22	1409 3.44	1434 3.66	1459 3.87
10000	1342 2.64	1369 2.87	1395 3.09	1420 3.32	1446 3.55	1471 3.79	1496 4.03	1521 4.26	1545 4.5	1568 4.75
11000	1471 3.47	1495 3.71	1519 3.96	1543 4.21	1566 4.46	1589 4.72	1612 4.98	1635 5.24	1658 5.5	1680 5.76
12000	1601 4.45	1623 4.71	1645 4.98	1667 5.26	1688 5.53	1710 5.81	- -	- -	- -	- -
Available External Static Pressure (Inches of Water Gauge)										
CFM	1.10"	1.20"	1.30"	1.40"	1.50"	1.60"	1.70"	1.80"	1.90"	2.00"
	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP

Notes:

1. Available External Static Pressure is the static pressure difference between the return duct and the supply duct plus the static pressure drop caused by accessories and options.
2. Data includes pressure drop due to standard filters, wet coils, and high gas heat. No accessories or options are included in pressure drop data.
3. To determine static pressure drop due to other options/accessories, refer to the applicable table in the fan performance section.
4. Direct drive fan motor heat is negligible.
5. 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.



Evaporator Fan Performance

Table 23. Evaporator fan performance - 25 ton, downflow, high gas heat, high static drive

Available External Static Pressure (Inches of Water Gauge)											
CFM	0.10"	0.20"	0.30"	0.40"	0.50"	0.60"	0.70"	0.80"	0.90"	1.00"	
	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP
5-hp Oversized Motor											
7500	1033 1.2	1068 1.38	1102 1.55	1134 1.73	1167 1.91	1198 2.09	1228 2.27	1256 2.46	1284 2.64	1312 2.84	
8000	1097 1.44	1130 1.62	1162 1.81	1193 2	1224 2.19	1254 2.38	1283 2.57	1310 2.76	1337 2.96	1364 3.16	
9000	1227 1.99	1256 2.2	1285 2.41	1313 2.62	1341 2.83	1368 3.04	1395 3.26	1421 3.47	1446 3.69	1471 3.91	
10000	1357 2.68	1383 2.91	1410 3.14	1435 3.38	1461 3.61	1486 3.84	1510 4.08	1535 4.31	1558 4.55	1582 4.79	
11000	1488 3.52	1511 3.76	1536 4.02	1559 4.27	1582 4.53	1605 4.79	1628 5.05	1651 5.3	1673 5.56	1695 5.82	
12000	1620 4.52	1640 4.78	1663 5.06	1685 5.33	1706 5.62	1727 5.9	1748 6.18	1769 6.46	1790 6.74	1810 7.02	
Available External Static Pressure (Inches of Water Gauge)											
CFM	1.10"	1.20"	1.30"	1.40"	1.50"	1.60"	1.70"	1.80"	1.90"	2.00"	
	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP
5-hp Oversized Motor											
7500	1339 3.03	1365 3.23	1391 3.43	1416 3.63	1441 3.83	1465 4.03	1488 4.24	1512 4.44	1534 4.65	1556 4.85	
8000	1390 3.37	1415 3.57	1440 3.78	1465 3.99	1489 4.2	1512 4.42	1535 4.63	1558 4.85	1580 5.07	1602 5.29	
9000	1495 4.13	1519 4.35	1542 4.58	1565 4.81	1588 5.04	1610 5.28	1632 5.51	1654 5.75	1675 5.99	1696 6.23	
10000	1605 5.03	1627 5.28	1649 5.52	1670 5.77	1691 6.02	1712 6.27	1733 6.52	1754 6.78	1774 7.04	1794 7.3	
11000	1717 6.09	1738 6.35	1759 6.62	1779 6.88	1799 7.15	1819 7.42	1839 7.69	1858 7.97	1877 8.24	1896 8.52	
12000	1831 7.31	1851 7.59	1871 7.88	1890 8.16	1910 8.45	1928 8.74	- -	- -	- -	- -	

Notes:

1. Available External Static Pressure is the static pressure difference between the return duct and the supply duct plus the static pressure drop caused by accessories and options.
2. Data includes pressure drop due to standard filters, wet coils, and high gas heat. No accessories or options are included in pressure drop data.
3. To determine static pressure drop due to other options/accessories, refer to the applicable table in the fan performance section.
4. Direct drive fan motor heat is negligible.
5. 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 24. Evaporator fan performance - 25 ton, horizontal, high gas heat

Available External Static Pressure (Inches of Water Gauge)											
CFM	0.10"	0.20"	0.30"	0.40"	0.50"	0.60"	0.70"	0.80"	0.90"	1.00"	
	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP
3-hp Standard Motor											
7500	1097 1.57	1130 1.75	1162 1.92	1192 2.10	1221 2.28	1249 2.45	1275 2.62	1301 2.80	1326 2.99	1351 3.17	
8000	1165 1.88	1197 2.07	1227 2.26	1256 2.45	1284 2.64	1311 2.82	1336 3.01	1361 3.19	1385 3.38	1409 3.58	
9000	1304 2.62	1332 2.83	1359 3.05	1386 3.26	1412 3.47	1437 3.68	1461 3.89	1484 4.10	1506 4.31	1528 4.52	
10000	1443 3.55	1468 3.77	1493 4.01	1518 4.25	1542 4.48	1565 4.72	1587 4.96	1609 5.20	1631 5.42	1651 5.65	
11000	1583 4.67	1605 4.91	1628 5.17	1651 5.43	1673 5.70	1695 5.95	- -	- -	- -	- -	
12000	1724 6.02	- -	- -	- -	- -	- -	- -	- -	- -	- -	
Available External Static Pressure (Inches of Water Gauge)											
CFM	1.10"	1.20"	1.30"	1.40"	1.50"	1.60"	1.70"	1.80"	1.90"	2.00"	
	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP	RPM BHP
3-hp Standard Motor											
7500	1376 3.36	1400 3.55	1424 3.75	1447 3.95	1469 4.14	1492 4.33	1513 4.52	1534 4.72	1555 4.91	1577 5.11	
8000	1432 3.77	1455 3.97	1479 4.18	1501 4.39	1523 4.6	1545 4.81	1566 5.01	1587 5.21	1607 5.42	1627 5.62	
9000	1550 4.73	1572 4.95	1592 5.17	1613 5.39	1633 5.61	1654 5.84	- -	- -	- -	- -	
10000	1671 5.89	- -	- -	- -	- -	- -	- -	- -	- -	- -	
11000	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	
12000	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	

Notes:

1. Available External Static Pressure is the static pressure difference between the return duct and the supply duct plus the static pressure drop caused by accessories and options.
2. Data includes pressure drop due to standard filters, wet coils, and high gas heat. No accessories or options are included in pressure drop data.
3. To determine static pressure drop due to other options/accessories, refer to the applicable table in the fan performance section.
4. Direct drive fan motor heat is negligible.
5. 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 25. Evaporator fan performance - 25 ton, horizontal, high gas heat, high static drive

CFM	0.10"		0.20"		0.30"		0.40"		0.50"		0.60"		0.70"		0.80"		0.90"		1.00"		
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	
5-hp Oversized Motor																					
7500	1102	1.54	1134	1.71	1164	1.88	1194	2.05	1222	2.22	1250	2.40	1278	2.58	1305	2.76	1332	2.95	1359	3.14	
8000	1172	1.84	1202	2.02	1230	2.20	1258	2.38	1285	2.57	1312	2.75	1338	2.94	1364	3.14	1390	3.33	1415	3.53	
9000	1311	2.57	1338	2.77	1364	2.97	1389	3.18	1414	3.38	1438	3.59	1462	3.79	1485	4.01	1509	4.22	1532	4.44	
10000	1452	3.48	1475	3.69	1499	3.92	1522	4.14	1545	4.37	1567	4.60	1589	4.83	1610	5.06	1631	5.29	1653	5.53	
11000	1593	4.58	1613	4.81	1635	5.06	1657	5.31	1678	5.55	1698	5.80	1719	6.05	1739	6.30	1758	6.56	1778	6.81	
12000	1734	5.90	1752	6.15	1773	6.42	1792	6.68	1812	6.95	1831	7.23	1850	7.5	1869	7.77	1887	8.04	1906	8.32	
CFM	1.10"		1.20"		1.30"		1.40"		1.50"		1.60"		1.70"		1.80"		1.90"		2.00"		
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	
5-hp Oversized Motor																					
7500	1384	3.34	1408	3.53	1432	3.72	1455	3.92	1478	4.11	1500	4.31	1521	4.51	1543	4.7	1564	4.9	1585	5.11	
8000	1440	3.74	1464	3.94	1487	4.15	1510	4.35	1532	4.56	1553	4.77	1575	4.98	1596	5.19	1616	5.4	1636	5.61	
9000	1555	4.66	1577	4.88	1600	5.11	1622	5.34	1643	5.57	1664	5.8	1684	6.03	1704	6.26	1724	6.5	1743	6.73	
10000	1674	5.76	1695	6	1715	6.25	1736	6.49	1756	6.75	1777	7	1796	7.25	1816	7.51	1835	7.77	1853	8.02	
11000	1797	7.07	1816	7.33	1836	7.59	1855	7.85	1873	8.12	1892	8.39	1911	8.66	1929	8.94	-	-	-	-	
12000	1923	8.59	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Notes:

1. Available External Static Pressure is the static pressure difference between the return duct and the supply duct plus the static pressure drop caused by accessories and options.
2. Data includes pressure drop due to standard filters, wet coils, and high gas heat. No accessories or options are included in pressure drop data.
3. To determine static pressure drop due to other options/accessories, refer to the applicable table in the fan performance section.
4. Direct drive fan motor heat is negligible.
5. 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.



Fan Performance

Table 26. Outdoor sound power level

Tons	Unit Model Number	Octave Center Frequency								Overall dBA
		63	125	250	500	1000	2000	4000	8000	
12.5	YZJ150A*	96	88	88	87	86	81	78	73	90
15	YZJ180A*	96	89	88	87	87	82	78	72	91
17.5	YZJ210A*	91	93	92	90	88	84	80	75	93
20	YZJ240A*	93	93	92	91	89	84	80	76	93
25	YZJ300A*	92	94	93	90	89	84	80	74	93

Notes:

1. Outdoor sound rating shown is tested in accordance with AHRI 370-2015.
2. Indoor sound in accordance with AHRI 260 is available through Trane's selection software.

Table 27. Static pressure drop through accessories (inches water column) - ultra high efficiency - economizer

Tons	Unit Model Number	CFM ^(a)	Standard Filters ^(b)	2" MERV 8 Filter ^(c)	2" MERV 13 Filter ^(c)	Reheat Coil	Economizer with OA/RA Dampers ^(d)							
							Downflow		Horizontal		Low Leak Downflow		Low Leak Horizontal	
							100% OA	100% RA	100% OA	100% RA	100% OA	100% RA	100% OA	100% RA
12.5	YZJ150A	3750	0.02	0.04	0.07	0.02	0.10	0.02	0.10	0.02	0.11	0.09	0.05	0.09
		5000	0.03	0.06	0.10	0.02	0.15	0.03	0.15	0.03	0.17	0.13	0.09	0.14
		6000	0.04	0.08	0.13	0.03	0.20	0.04	0.20	0.04	0.23	0.17	0.12	0.18
15	YZJ180A	4500	0.03	0.05	0.09	0.02	0.13	0.02	0.13	0.02	0.14	0.11	0.07	0.12
		6000	0.04	0.08	0.13	0.03	0.20	0.04	0.20	0.04	0.23	0.17	0.12	0.18
		7200	0.06	0.10	0.17	0.04	0.27	0.05	0.27	0.05	0.32	0.23	0.16	0.25
17.5	YZJ210A	5250	0.04	0.06	0.11	0.03	0.16	0.03	0.16	0.03	0.19	0.14	0.09	0.15
		7000	0.05	0.10	0.17	0.04	0.26	0.05	0.26	0.05	0.30	0.22	0.15	0.24
		8400	0.07	0.13	0.22	0.05	0.35	0.06	0.35	0.06	0.42	0.29	0.21	0.33
20	YZJ240A	6000	0.04	0.08	0.13	0.03	0.20	0.04	0.20	0.04	0.23	0.17	0.12	0.18
		8000	0.07	0.12	0.21	0.05	0.32	0.06	0.32	0.06	0.39	0.27	0.19	0.3
		9600	0.09	0.16	0.27	0.06	0.44	0.07	0.44	0.07	0.54	0.37	0.27	0.41
25	YZJ300A	7500	0.06	0.11	0.19	0.04	0.29	0.05	0.29	0.05	0.34	0.24	0.17	0.27
		10000	0.09	0.17	0.29	0.06	0.48	0.08	0.48	0.08	0.58	0.40	0.29	0.45
		12000	0.12	0.23	0.39	0.08	0.66	0.11	0.66	0.11	0.82	0.55	0.39	0.62

- ^(a) See below for restrictions: Multi-speed, single zone VAV or multi-zone VAV applications are capable of running below 300 cfm/ton during low speed airflow operation.
- ^(b) Tested with: 2-in filters 12.5 to 25 Tons.
- ^(c) Difference in pressure drop should be considered when utilizing optional 2-in pleated filters.
- ^(d) OA = Outside Air and RA = Return Air.

Table 28. Static pressure drop through accessories (inches water column) - ultra high efficiency - gas heater

Tons	Unit Model Number	CFM ^(a)	Gas Heater ^(b)					
			Downflow ^(c)			Horizontal		
			L	M	H	L	M	H
12.5	YZJ150A	3750	-0.09	-0.09	-0.08	0.03	0.03	0.03
		5000	-0.06	-0.06	-0.04	0.10	0.10	0.10
		6000	-0.03	-0.03	-0.02	0.12	0.12	0.13
15	YZJ180A	4500	-0.07	-0.05	-0.06	0.08	0.08	0.10
		6000	-0.03	-0.02	-0.02	0.12	0.13	0.16
		7200	-0.01	0.00	0.01	0.11	0.13	0.19
17.5	YZJ210A	5250	-0.05	-0.03	-0.04	0.11	0.11	0.13
		7000	-0.01	-0.01	0.00	0.11	0.13	0.18
		8400	0.02	0.02	0.04	0.10	0.13	0.20
20	YZJ240A	6000	-0.03	-0.02	-0.02	0.12	0.13	0.16
		8000	0.01	0.01	0.03	0.1	0.13	0.19
		9600	0.04	0.05	0.07	0.1	0.14	0.21
25	YZJ300A	7500	0.00	0.00	0.01	0.11	0.13	0.19
		10000	0.06	0.07	0.08	0.11	0.15	0.21
		12000	0.14	0.15	0.14	0.16	0.21	0.31

^(a) See below for restrictions: Multi-speed, single zone VAV or multi-zone VAV applications are capable of running below 300 cfm/ton during low speed airflow operation.

^(b) Model digit 11 selection of Low Gas Heat is 5x5, Medium Gas Heat is 7x7, and High Gas Heat is 8x8 for 15 to 25T units. Digit 11 selection of Low and Medium Gas Heat is 5x5 and High Gas Heat is 7x7 for the 12.5T unit.

^(c) Negative values mean the Downflow application of gas heaters reduces airside pressure drop losses versus cooling only models.

Table 29. Static pressure drop through accessories (inches water column) - ultra high efficiency — modulating gas heat option

Tons	Unit Model Number	CFM	Gas Heater ^(a)			
			Downflow		Horizontal	
			L	H	L	H
12.5	YZJ150A	3750	-	0.04	-	0.07
		5000	-	0.08	-	0.13
		6000	-	0.11	-	0.20
15	YZJ180A	4500	0.06	0.09	0.11	0.15
		6000	0.11	0.19	0.20	0.28
		7200	0.16	0.28	0.29	0.42
20	YZJ240A	6000	0.11	0.19	0.20	0.28
		8000	0.20	0.36	0.36	0.52
		9600	0.30	0.53	0.52	0.75
25	YZJ300A	7500	0.18	0.31	0.31	0.45
		10000	0.33	0.58	0.56	0.82
		12000	0.49	0.87	0.81	1.17

^(a) Model digit 10 selection B is Mod Gas of which Low Gas Heat is 2x2 for 6T, 4x4 for 7.5 to 12.5T, High Gas Heat is 4x4 for 6T, 6x6 for 7.5 to 12.5T. 12.5T D.0 is High only with 6-Tube. 15 to 25T units are Low with 6-Tube and High with 8-Tube.



Heating Performance

Table 30. Gas-fired heating capacities staged gas - ultra high efficiency

Tons	Unit Model Number	Heating Input BTU (High / Low Stage)	Heating Output BTU (High / Low Stage)	Air Temperature Rise°F
12.5	YZJ150A**(0,A)L	150,000 / 105,000	121,500 / 85,000	10 - 40
	YZJ150A**(0,A)M	200,000 / 140,000	162,000 / 113,400	15 - 45
	YZJ150A**(0,A)H	250,000 / 175,000	202,500 / 141,750	25 - 55
15	YZJ180A**(0,A)L	250,000 / 175,000	202,500 / 141,750	15 - 45
	YZJ180A**(0,A)M	320,000 / 224,000	259,200 / 181,440	20 - 50
	YZJ180A**(0,A)H	400,000 / 280,000	324,000 / 226,800	25 - 55
17.5	YZJ210A**(0,A)L	250,000 / 175,000	202,500 / 141,750	15 - 45
	YZJ210A**(0,A)M	320,000 / 224,000	259,200 / 181,440	20 - 50
	YZJ210A**(0,A)H	400,000 / 280,000	324,000 / 226,800	25 - 55
20	YZJ240A**(0,A)L	250,000 / 175,000	202,500 / 141,750	10 - 40
	YZJ240A**(0,A)M	320,000 / 224,000	259,200 / 181,440	15 - 45
	YZJ240A**(0,A)H	400,000 / 280,000	324,000 / 226,800	20 - 50
25	YZJ300A**(0,A)L	250,000 / 175,000	202,500 / 141,750	10 - 40
	YZJ300A**(0,A)M	320,000 / 224,000	259,200 / 181,440	15 - 45
	YZJ300A**(0,A)H	400,000 / 280,000	324,000 / 226,800	20 - 50

Table 31. Gas-fired heating capacities modulating gas - ultra high efficiency

Tons	Unit Model Number	Heating Input BTU (High / Low Stage)	Heating Output BTU (High / Low Stage)	Air Temperature Rise°F
12.5	YZJ150A**BH	250,000 / 25,000	202,500 / 20,250	5 - 55
15	YZJ180A**BL	250,000 / 25,000	202,500 / 20,250	5 - 45
	YZJ180A**BH	400,000 / 40,000	324,000 / 32,400	5 - 55
17.5	YZJ210A**BL	250,000 / 25,000	202,500 / 20,250	5 - 45
	YZJ210A**BH	400,000 / 40,000	324,000 / 32,400	5 - 55
20	YZJ240A**BL	250,000 / 25,000	202,500 / 20,250	5 - 40
	YZJ240A**BH	400,000 / 40,000	324,000 / 32,400	5 - 50
25	YZJ300A**BL	250,000 / 25,000	202,500 / 20,250	5 - 40
	YZJ300A**BH	400,000 / 40,000	324,000 / 32,400	5 - 50



Controls

Enhanced BAS Integration and Connectivity

- Symbio™ 700 integrates seamlessly with Trane® Tracer® Synchrony and Tracer Ensemble® to deliver optimized building automation and building management features and functions.
- Easily integrate with open standard protocols to connect seamlessly to a BAS (whether that is Trane or non-Trane).
- Digit 21 must equal 1, 2, or 3 for communication support.

BACnet® Communications

Symbio™ 700 includes native BACnet communications which allows the unit to communicate directly with a Tracer or non-Trane Building Automation System via open protocol BACnet MS/TP or IP.

Modbus Communications

Symbio 700 includes native Modbus communications which allows the unit to communicate directly with a Tracer or non-Trane Building Automation System via open protocol Modbus RTU or TCP/IP.

LonTalk® Communications

The optional LonTalk® communications module allows the unit to communicate directly with a Tracer or non-Trane Building Automation System via open protocol LonTalk.

Air-Fi® Wireless Communications

The optional Air-Fi communications module allows the unit to communicate directly with a Tracer or non-Trane Building Automation System via open protocol BACnet over Zigbee wireless.

Secure Remote Connectivity with Trane Connect

The Symbio controller enables secure remote connectivity via Trane Connect to Trane Intelligent Services and remote monitoring. Trane Connect provides anywhere/anytime access to monitor and manage with secure remote access and connectivity options through a multitude of platforms. Peace of mind that the system will be operational and provide comfort to customers.

Serviceability

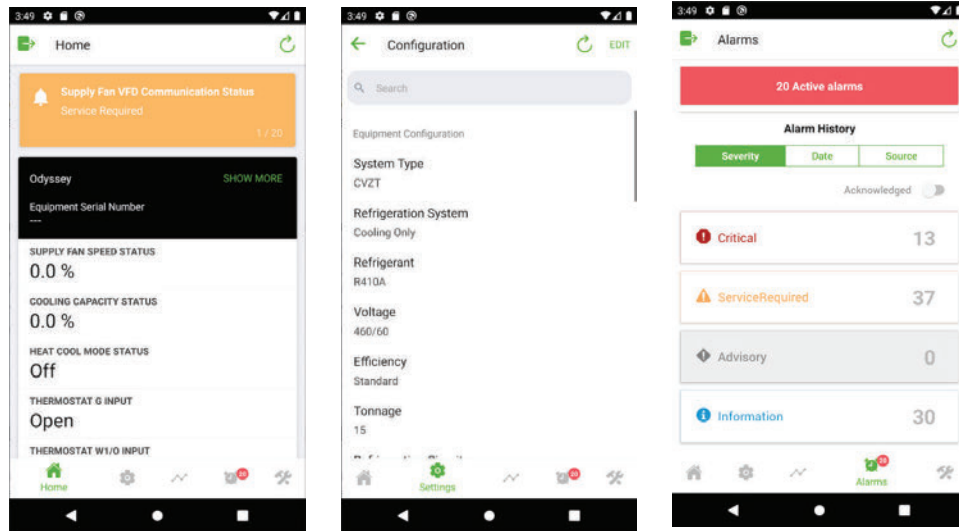
Symbio™ Service and Installation Mobile App

The Symbio™ Service and Installation mobile app is accessible through mobile devices (phones and tablets) via Bluetooth connectivity or via Trane Connect. The intuitive mobile app feels natural to technicians and operators. They will quickly be able to view equipment status and alarms, perform startup tasks, change configurations, test the equipment's performance in specific modes—and much more. Free for download from App Store (Apple iOS) and Google Play (Android devices).

To download the Symbio™ Service and Installation Mobile App use the links below or scan the code with your mobile phone camera.

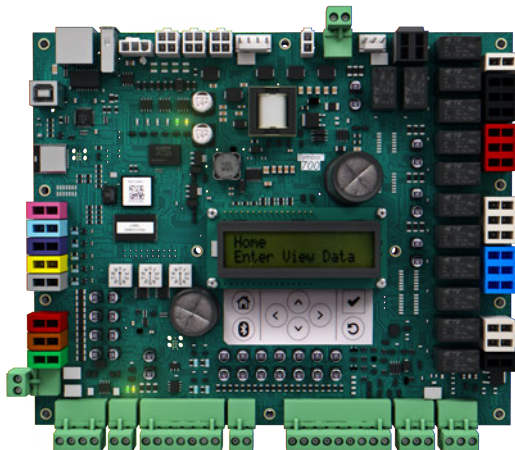
Apple download link (<https://apps.apple.com/us/app/symbio-service-installation/id1309310176>)

Google Play (Android) download link (<https://play.google.com/store/apps/details?id=com.trane.mobileservicetool>)

Figure 1. Scan code**Figure 2. Symbio™ service and installation mobile app**

Onboard User Interface

An integrated onboard user interface that makes setup and continued operation easy. It provides real time operational performance, status, data, and alarms. It also allows the user to interact with, service, troubleshoot, and control their equipment without additional service software tools or when a mobile interface is not available.

Figure 3. Onboard user interface

Service Test Mode

Symbio™ 700 requires no special tools to run the unit through its paces. Simply navigate to the 'Service' section of the on-board user interface or the 'Tools' section of the Symbio™ Service and Installation Mobile App and enter the 'Service Test Mode' section. Here the unit can be placed in the desired operating condition for a pre-determined amount of time supporting troubleshooting efforts in the field. The Symbio™ 700 will return to normal control when the user exits test mode or when the pre-determined, user-selected Service Test time has expired.

Symbio™ 700 controls with upgradeable software

Trane's equipment and systems feature engineered, tested, and proven applications that meet industry energy standards and provide the flexibility to customize and update over the life of the equipment. Professional operational algorithms are embedded within the Symbio™ 700 controller at the Trane factory. Symbio™ 700 standardizes each equipment unit to maintain standards for comfort, efficiency, and air quality, without additional field programming. Symbio™ 700 provides the flexibility over the life of the equipment to meet changing customer needs and/or industry standards.

Flexibility

Expansion Modules (requires Tracer® TU)

- XM30 – Provides 4 universal inputs or analog outputs
- XM32 – Provides 4 binary outputs

Field Programming via TGP2 (requires Tracer TU)

- Control ancillary equipment
- Custom sequences

TGP2 and XM Limitations:

- Programs will only have access to available BACnet® points. (Ensures system reliability.)
- TGP2 programs will not have direct I/O control access for factory components. (Compressors will not be able to be directly controlled On/Off without going through factory provided protection sequences.)
- Onboard I/O will not be available to custom applied TGP2 programs. If additional I/O is required for a new control loop, a separate expansion module will be required.
- Customer applied I/O will be limited to a maximum combination of 2 XM modules. Only XM30 or XM32 modules will be supported by the Symbio 700 UC.
- Tracer TU will be required to configure XMs and to create, view, or modify TGP2 programs.

Economizer Controls

There are four options for economizer control, Dry Bulb Temperature, Comparative Enthalpy, Reference Enthalpy and Differential Dry Bulb Temperature.

Dry Bulb Temperature Control

The dry bulb system measures outdoor temperature comparing it to the economizer enable setpoint. If the outdoor temperature is below the economizer enable setpoint, the economizer will operate freely. This system is best suited for arid regions where the humidity levels of outside air would not be detrimental to building comfort and indoor air quality.

Comparative Enthalpy Control

The comparative enthalpy system measures the temperature and humidity of both return air and outside air to determine which source has lower enthalpy. This system allows true comparison of outdoor air and return air enthalpy by measurement of outdoor air and return air temperature and humidity.

Reference Enthalpy Control

The reference enthalpy system compares outdoor air temperature and humidity to the economizer enthalpy enable setpoint. If outdoor air temperature and humidity are below the economizer enthalpy

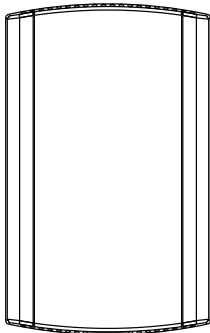
enable setpoint, the economizer will operate freely. This system provides more sophisticated control where outdoor air humidity levels may not be acceptable for building comfort and indoor air quality.

Differential Dry Bulb Temperature Control

The differential dry bulb system measures the temperature of both return air and outside air to determine when to economize. If outdoor air temperature is below the return air temperature minus a differential, the economizer will operate freely. This system is best suited for arid regions where the humidity levels of outside air would not be detrimental to building comfort and indoor air quality.

Zone Sensors

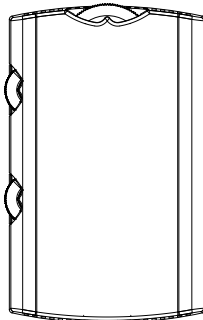
Zone Temperature Only



BAYSENS077

Provides temperature input only. Can be used as a secondary remote temperature input for thermostats.

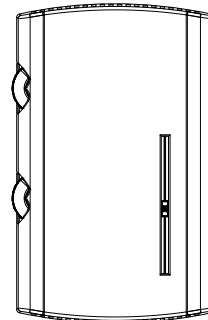
Manual Changeover



BAYSENS106

Heat, Cool or Off System Switch. Fan Auto or Off Switch. Single temperature setpoint thumbwheel.

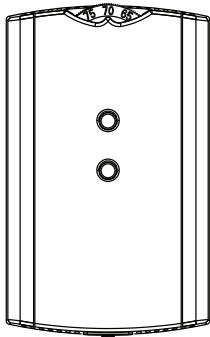
Manual/Automatic Changeover



BAYSENS108

Auto, Heat, Cool or Off System Switch. Fan Auto or Off Switch. Dual temperature setpoint sliders

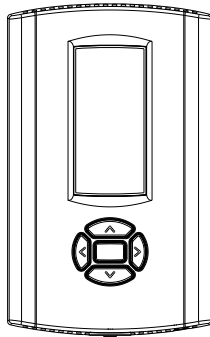
Integrated Comfort™ System



BAYSENS073 / BAYSENS074 / BAYSENS075

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

Wired Display Sensor



BAYSENS135

LCD display that provides heat, cool, auto, or off. Includes two temperature setpoints and a lockable setting with °F or °C indicators.

Touchscreen Digital Display Communicating Sensor



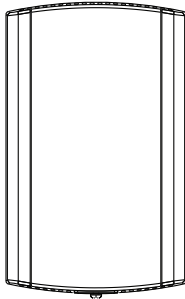
BAYSENS800

Uses BACnet® MS/TP link to communicate zone temperature and setpoints. Auto, Heat, Cool or Off System Switch. Fan Auto or On Switch. 7-day programmable thermostat with night setback.

Note: Not compatible with VAV units. Requires BACnet communications.

Air-Fi Wireless Communicating Zone Sensors

Wireless Zone Temperature Only

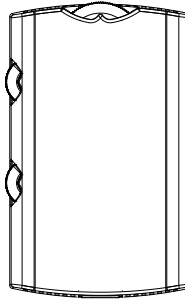


BAYSENS077

Measures temperature and optional humidity (with WCS-SH) for use in public spaces where no local user interface is preferred.

Note: Requires BACnet communications.

Wireless Display Sensor

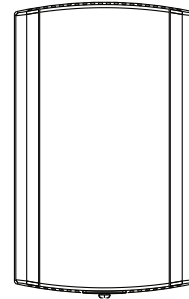


BAYSENS106

Easy-to-use interface for clear and simple monitoring and control. Can be configured for any Trane system or to meet the customer's preference.

Note: Requires BACnet communications.

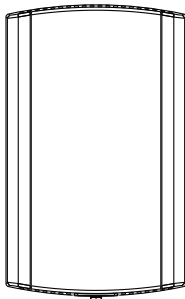
Wired CO₂ Sensor



X13790422010

The maintenance-free carbon dioxide (CO₂) sensor is primarily used for demand control ventilation applications.

Wired Zone Temperature and Humidity Sensor

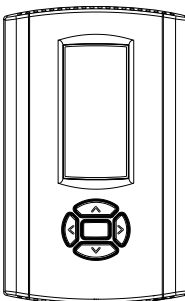


BAYSENS036

Measures temperature and relative humidity. Relative humidity input is used to control activation of dehumidification.

Thermostats

Digital Display Programmable Thermostat (3H/2C)

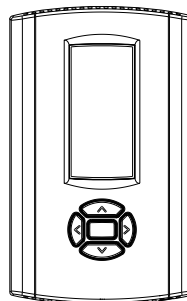


BAYSTAT150

Three Heat/Two Cool Auto changeover digital display thermostat. 7-day programmable thermostat with night setback.

Note: Not compatible with VAV units.

Digital Display Programmable Thermostat (1H/1C)

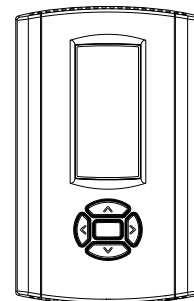


BAYSTAT151

One Heat/One Cool Auto changeover digital display thermostat.

Note: Not compatible with VAV units.

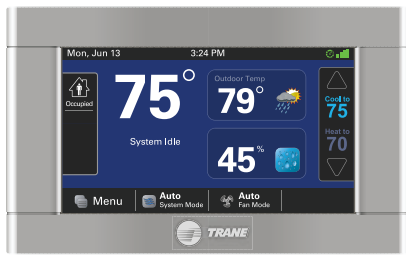
Digital Display Thermostat (3H/2C)



BAYSTAT155

Three Heat/Two Cool Auto changeover display thermostat.

Note: Not compatible with VAV units.

Pivot® Web Enabled Smart Thermostat (3H/2C)

BAYSTAT814

Our Pivot Smart Thermostat system is great for commercial buildings. With its intuitive touchscreen and customizable display, it is easy for occupants to use. The Trane Pivot mobile app enables users to control multiple buildings remotely, making changes in seconds to all systems.

Note: Not compatible with VAV units.

Touchscreen Programmable Thermostat with Relative Humidity Sensor (3H/2C)

BAYSTAT152

Three Heat, Two Cool digital display thermostat with built-in humidity control. This thermostat combines both humidity and temperature into one.

Note: Not compatible with VAV units.

Humidity Control (HGRH)

Sequence of Operations

Humidity Control system capable of operating in normal cooling, dual mode to satisfy cooling and humidity requirements, and hot gas reheat mode when only humidity demand is required. Function between requirements and unit transition seamlessly providing an all-around comfort solution.

Note: Supports Humidistat control. When the Humidistat input becomes active, compressors will stage to full capacity and modulate the 3 way valve.

Initiation of Humidity Control

- Conforms to ASHRAE standard (62)
- Dehumidification is initiated when too much moisture is in the space (>60°F Dew point)
 - Two measurement options for this dehumidification status:
 - Humidity control is started when:
 - Dew point is too high (60°F is default),
 - Relative Humidity is too high (60% is default), DH is started
 - Choice between these values above is user-configurable, and the actual values are adjustable by customer if desired
- Reheat circuit is initiated when space temperature drops below setpoint during humidity control.

Humidity Control Routine

There are two independent control loops: One to control latent load, the other to control sensible load.

Latent load is controlled by compressor staging:

- Compressors initially move up one stage from the last cooling mode stage.
- Compressors are staged up as needed by the controller to achieve a target leaving ID air dew point based on space conditions.

Sensible load is controlled with the Modulating 3 way valve:

- Modulating valve opens when space temperature is below setpoint.
- The reheat valve adjusts the amount of flow to RH coil to achieve the targeted leaving ID air temperature, based on space conditions.

Purge Cycle

During dehumidification, every 120 minutes (default) a 3 minute cooling “purge cycle” will be executed. This purge cycle is executed for system reliability, specifically it helps manage oil return to compressors.

- Modulating valve moves to a fixed position based on OD air and compressor stage.
- Compressors move to full load.

Leaving Humidity Control and Returning to Cooling Only

- When space humidity drops to below the threshold humidity value (60°F dew point or 60% relative humidity), system reverts back to cooling mode. Dead band of ~5°F yields approximately 55°F dew point for switch to cooling.
- Unit can stay in humidity control mode indefinitely, with purge cycles happening regularly.
 - Relative humidity setpoint is 65% for unoccupied mode.
 - Dew point for unoccupied mode is the same as occupied (default 60°F DP).



Electrical Data

Table 32. Unit wiring

Tons	Unit Model Number	Voltage Range	Standard Indoor Fan Motor		Oversized/High Static Indoor Fan Motor		Optional Power Exhaust Standard Indoor Fan Motor		Optional Power Exhaust Oversized/High Static Indoor Fan Motor	
			MCA	Max Fuse Size or Max Circuit Breaker	MCA	Max Fuse Size or Max Circuit Breaker	MCA	Max Fuse Size or Max Circuit Breaker	MCA	Max Fuse Size or Max Circuit Breaker
12.5	YZJ150A3	187-253	72	100	-	-	78	110	-	-
	YZJ150A4	414-506	41	60	-	-	45	60	-	-
	YZJ150AW	517-633	29	40	-	-	31	45	-	-
15	YZJ180A3	187-253	84	125	-	-	90	125	-	-
	YZJ180A4	414-506	48	70	-	-	52	70	-	-
	YZJ180AW	517-633	35	50	-	-	37	50	-	-
17.5	YZJ210A3S(0,A)	187-253	94	125	-	-	100	125	-	-
	YZJ210A4S(0,A)	414-506	48	60	-	-	52	60	-	-
	YZJ210AWS(0,A)	517-633	40	50	-	-	42	50	-	-
	YZJ210A3SB	187-253	94	125	98	125	100	125	104	125
	YZJ210A4SB	414-506	48	60	50	60	52	60	53	70
	YZJ210AWSB	517-633	40	50	41	50	42	50	43	50
20	YZJ240A3S(0,A)	187-253	109	150	-	-	114	150	-	-
	YZJ240A4S(0,A)	414-506	58	80	-	-	62	80	-	-
	YZJ240AWS(0,A)	517-633	47	60	-	-	49	60	-	-
	YZJ240A3SB	187-253	109	150	117	150	114	150	120	150
	YZJ240A4SB	414-506	58	80	60	80	62	80	63	80
	YZJ240AWSB	517-633	47	60	48	60	49	60	51	70
25	YZJ300A3	187-253	110	150	114	150	116	150	120	150
	YZJ300A4	414-506	56	70	57	80	59	80	61	80
	YZJ300AW	517-633	44	60	46	60	46	60	48	60

Table 33. Electrical characteristics - compressor motor and condenser motor

Tons	Unit Model Number	No.	Compressor Motors						No.	Condenser Fan Motor				
			Volts	Phase	hp ^(a) , ^(b)	rpm	Amps ^(c)			Volts	Phase	hp	Amps	
							RLA	LRA					FLA	LRA
12.5	YZJ150A3	1	208/230	3	-	-	35.6	-	2	208/230	1	0.5	4.7	-
	YZJ150A4	1	460	3	-	-	21.3	-	2	460	1	0.5	2.5	-
	YZJ150AW	1	575	3	-	-	15.8	-	2	575	1	0.5	1.1	3
15	YZJ180A3	1	208/230	3	-	-	45.3	-	2	208/230	1	0.5	4.7	-
	YZJ180A4	1	460	3	-	-	26.9	-	2	460	1	0.5	2.5	-
	YZJ180AW	1	575	3	-	-	20.5	-	2	575	1	0.5	1.1	3
17.5	YZJ210A3	2	208/230	3	- / 8.7	- / 3500	30/32.6	- / 255	2	208/230	3	1.5	2.6	-
	YZJ210A4	2	460	3	- / 8.7	- / 3500	18/13.4	- / 123	2	460	3	1.5	1.3	-
	YZJ210AW	2	575	3	- / 8.7	- / 3500	14/11.4	- / 93.7	2	575	3	1.5	1.1	3

Table 33. Electrical characteristics - compressor motor and condenser motor (continued)

Tons	Unit Model Number	No.	Compressor Motors						No.	Condenser Fan Motor				
			Volts	Phase	hp ^(a) , ^(b)	rpm	Amps ^(c)			Volts	Phase	hp	Amps	
							RLA	LRA					FLA	LRA
20	YZJ240A3	2	208/230	3	- / 8.7	- / 3500	42.1/32.6	- / 255	2	208/230	3	1.5	2.6	-
	YZJ240A4	2	460	3	- / 8.7	- / 3500	26/13.4	- / 123	2	460	3	1.5	1.3	-
	YZJ240AW	2	575	3	- / 8.7	- / 3500	20/11.4	- / 93.7	2	575	3	1.5	1.1	3
25	YZJ300A3	2	208/230	3	- / 8.7	- / 3500	43.3/32.6	- / 255	2	208/230	3	1.5	2.6	-
	YZJ300A4	2	460	3	- / 8.7	- / 3500	23.9/13.4	- / 123	2	460	3	1.5	1.3	-
	YZJ300AW	2	575	3	- / 8.7	- / 3500	17.7/11.4	- / 93.7	2	575	3	1.5	1.1	3

^(a) Hp for each compressor.

^(b) Data not available for variable speed driven motor.

^(c) Amp draw for each motor (compressor and condenser fan motor); multiply value by number of motors to determine total amps.

Table 34. Electrical characteristics - indoor fan motor

Tons	Unit Model Number	No.	Volts	Phase	hp	Amps ^(a)	
						FLA	LRA ^(b)
12.5	YZJ150A3	2	208/230	3	3	8.8	-
	YZJ150A4	2	460	3	3	4.6	-
	YZJ150AW	2	575	3	3	3.2	-
15	YZJ180A3	2	208/230	3	3	8.8	-
	YZJ180A4	2	460	3	3	4.6	-
	YZJ180AW	2	575	3	3	3.2	-
17.5	YZJ210A3	2	208/230	3	3	8.8	-
	YZJ210A4	2	460	3	3	4.6	-
	YZJ210AW	2	575	3	3	3.2	-
20	YZJ240A3	2	208/230	3	3	8.8	-
	YZJ240A4	2	460	3	3	4.6	-
	YZJ240AW	2	575	3	3	3.2	-
25	YZJ300A3	2	208/230	3	3	8.8	-
	YZJ300A4	2	460	3	3	4.6	-
	YZJ300AW	2	575	3	3	3.2	-

^(a) Amp draw for each motor (compressor and condenser fan motor); multiply value by number of motors to determine total amps.

^(b) Data not available for variable speed driven motor.

Table 35. Electrical characteristics - oversized indoor fan motor

Tons	Unit Model Number	No.	Volts	Phase	hp	Amps ^(a)	
						FLA	LRA ^(b)
17.5	YZJ210A3SB	2	208/230	3	5	11.0	-
	YZJ210A4SB	2	460	3	5	5.5	-
	YZJ210AWSB	2	575	3	5	3.9	-
20	YZJ240A3SB	2	208/230	3	5	11.0	-
	YZJ240A4SB	2	460	3	5	5.5	-
	YZJ240AWSB	2	575	3	5	3.9	-
25	YZJ300A3	2	208/230	3	5	11	-
	YZJ300A4	2	460	3	5	5.5	-
	YZJ300AW	2	575	3	5	3.9	-



Electrical Data

Table 35. Electrical characteristics - oversized indoor fan motor (continued)

- (a) Amp draw for each motor (compressor and condenser fan motor); multiply value by number of motors to determine total amps.
 (b) Data not available for variable speed driven motor.

Table 36. Electrical characteristics - power exhaust

Tons	Volts	Phase	hp	rpm	FLA	LRA
12 to 25	208-230	1	0.87	1075	5.7	13.6
12 to 25	460	1	0.87	1075	3.3	7.2
12 to 25	575	1	0.80	1075	2.3	5.8

Table 37. Electrical characteristics — inducer motor

Unit Model Number	Stages	hp	rpm	Volts	Phase	FLA	LRA
YZJ150A**(0,A)(L,M,H)	2	1/15	3300/2800	208-230	1	0.36/0.30	0.73
YZJ(180-300)A**(0,A)(L,M)	2	1/15	3300/2800	208-230	1	0.36/0.30	0.73
YZJ(180-300)A**(0,A)H	2	1/6	3300/2300	208-230	1	0.95/0.49	1.53
YZJ(150,180,210,240,300)A**B	Variable	1/5	3300	115	1	3.4	7.3

Dimensional Data

Figure 4. 12.5 to 25 tons ultra high efficiency

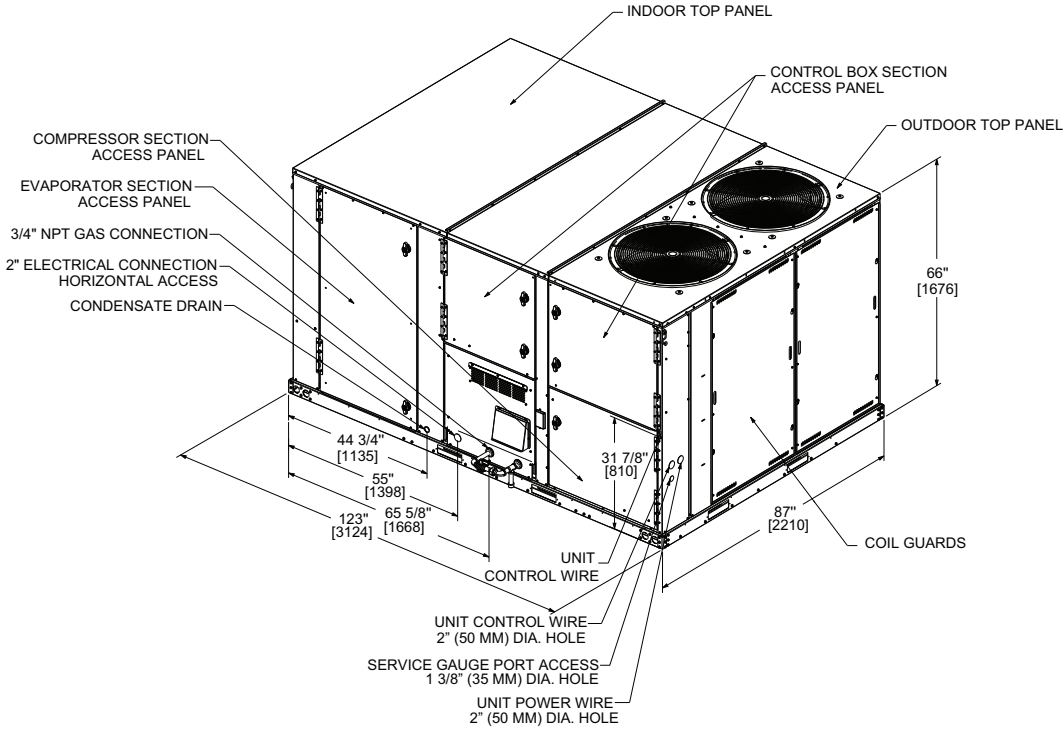
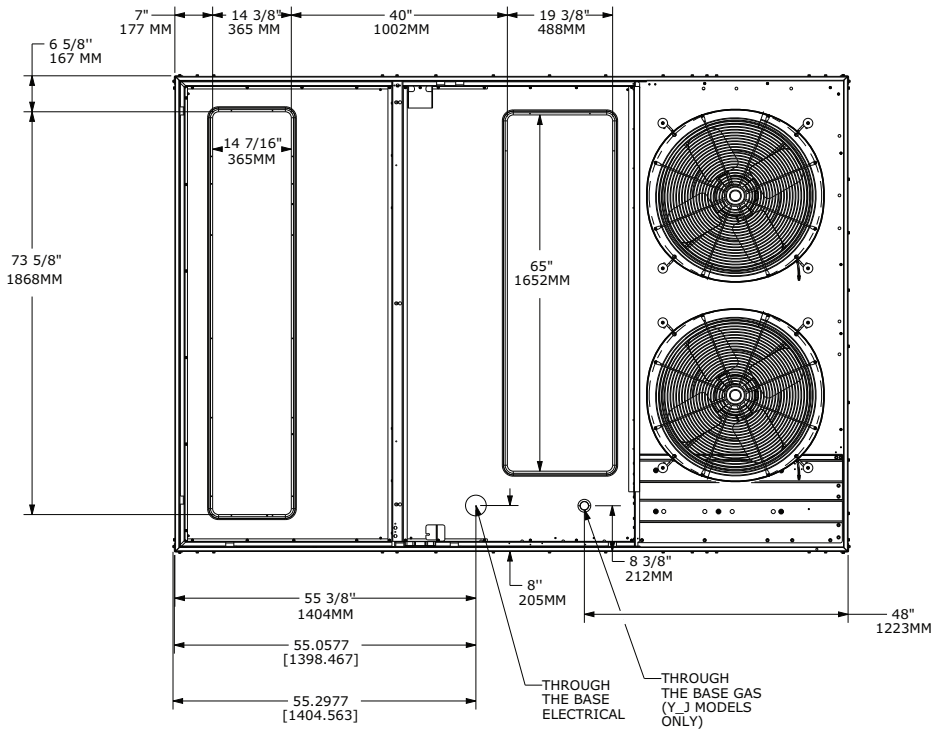


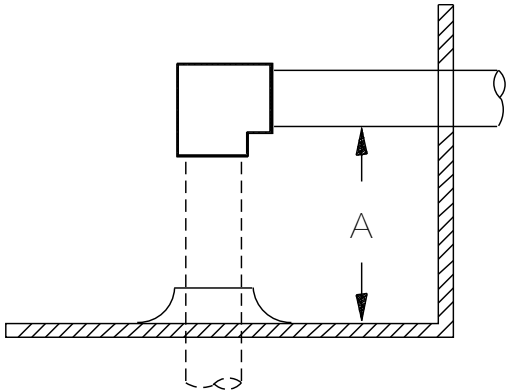
Figure 5. 12.5 to 25 tons ultra high efficiency – downflow airflow supply/return, through-the-base utilities





Dimensional Data

Figure 6. 12.5 to 25 tons ultra high efficiency— gas pipe height



Note: Height of gas pipe required from inside unit base to gas shut off assembly (factory provided).

Model	Dimension A	
	inch	mm
YZJ (150 – 300)*	1 3/6	30

Figure 7. 12.5 to 25 tons ultra high efficiency – horizontal airflow supply/return

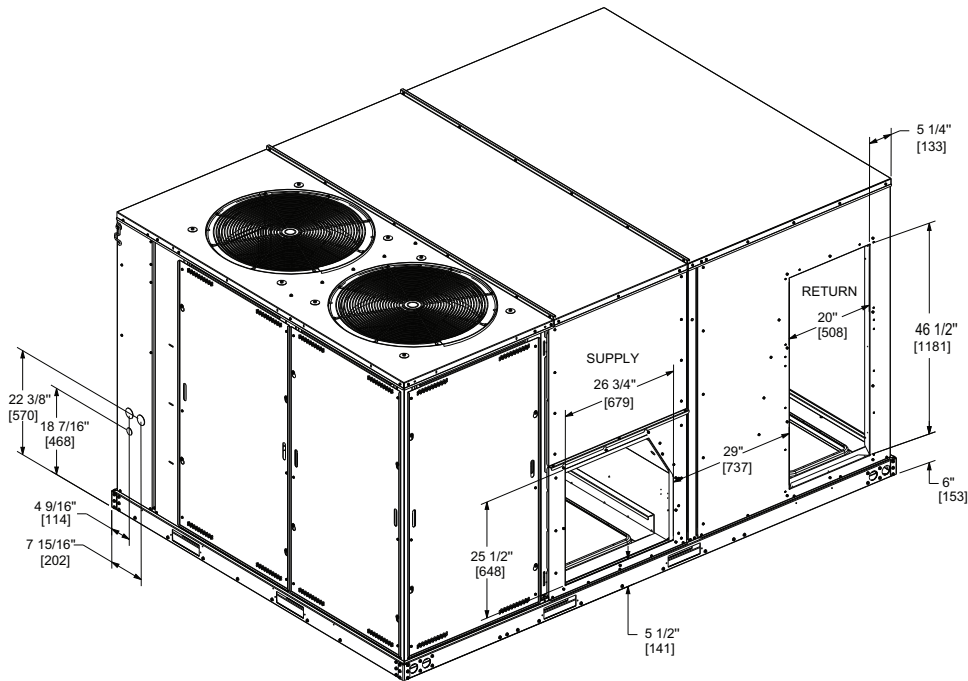


Figure 8. 12.5 to 25 tons ultra high efficiency – power exhaust

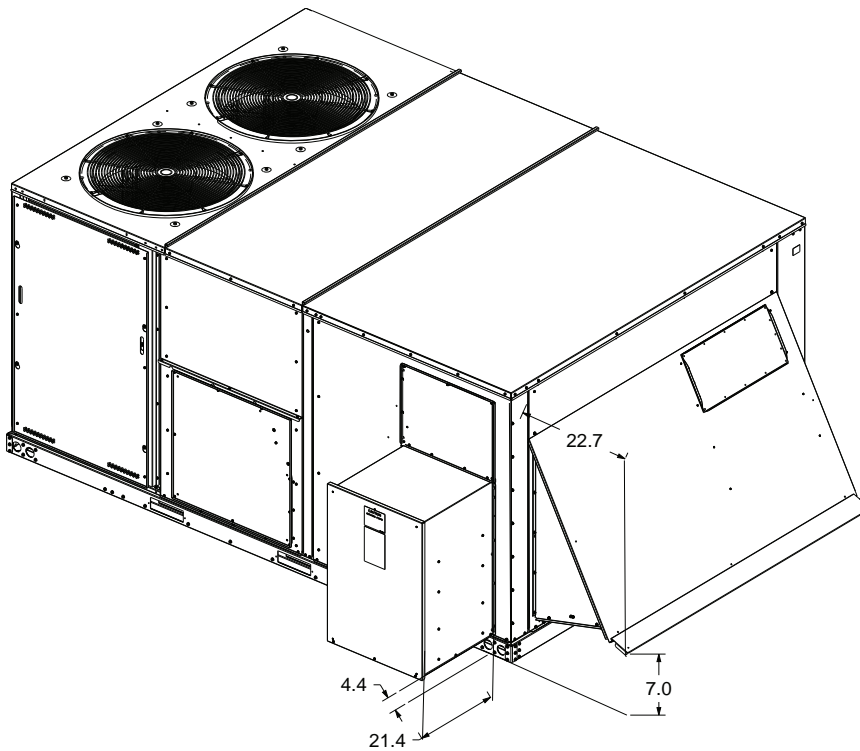


Figure 9. 12.5 to 25 tons ultra high efficiency – unit clearance and roof opening

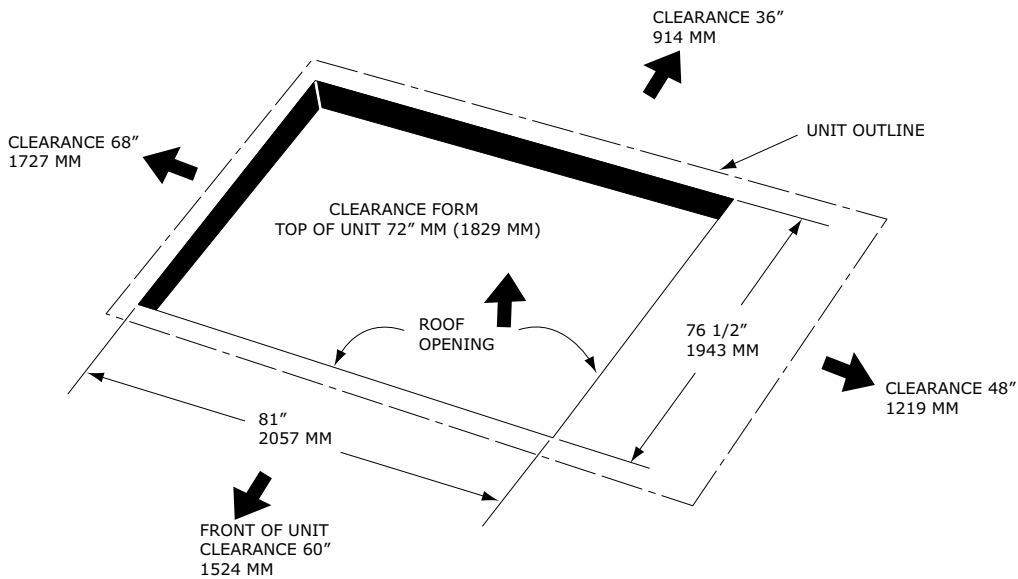


Figure 10. 12.5 to 25 tons ultra high efficiency – roof curb

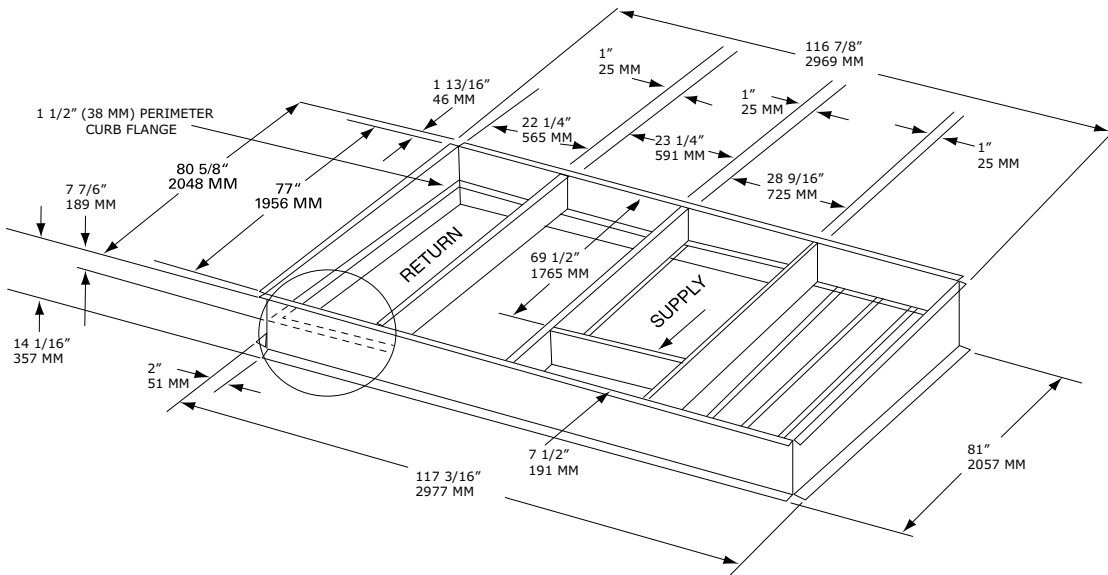
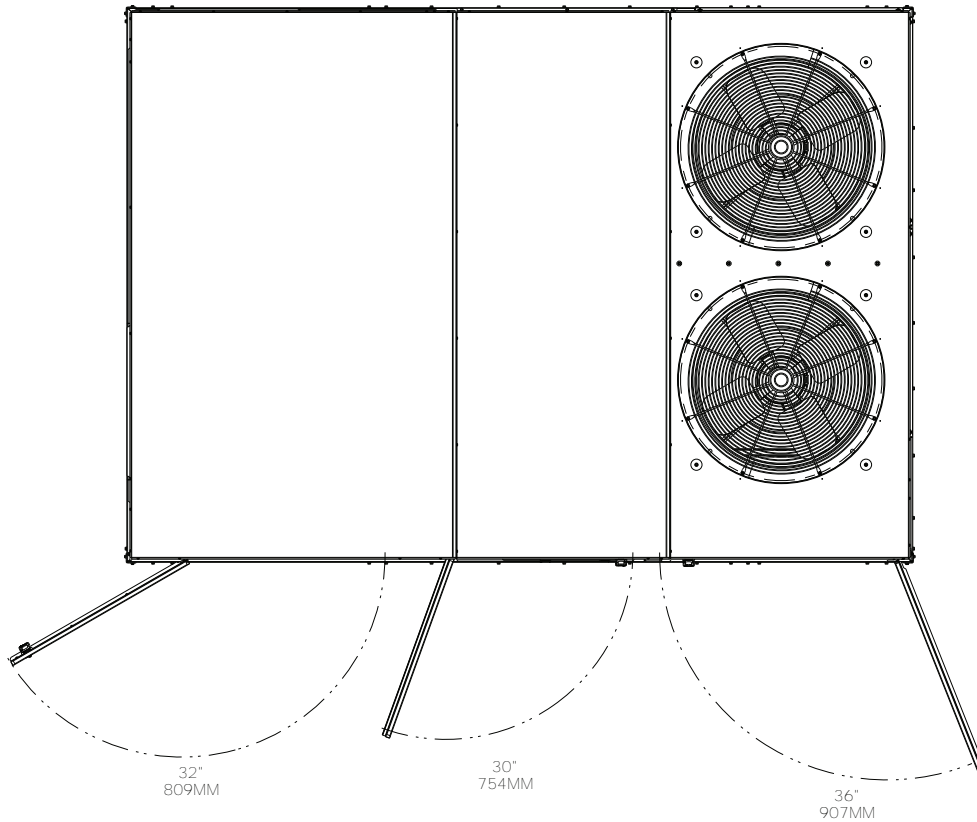


Figure 11. 12.5 to 25 ton ultra high efficiency – swing diameter for hinged door(s) option



Weights

Table 38. Model weights, corner weights (lbs) and center of gravity dimensions (in.)

Tons	Unit Model No.	Model Weights ^(a)		Corner Weights ^(b)				Center of Gravity (in.)	
		Shipping	Net	A	B	C	D	Length	Width
12.5	YZJ150	2341	2121	651	544	422	505	56	38
15	YZJ180	2346	2126	652	545	423	506	56	38
17.5	YZJ210	2446	2226	718	562	416	531	54	37
20	YZJ240	2451	2231	719	563	417	532	54	37
25	YZJ300	2454	2234	720	564	417	533	54	37

^(a) Weights are approximate. Weights do not include additional factory or field installed options/accessories. For option/accessory additional weights to be added to unit weight, reference the following table.

^(b) Corner weights are given for information only.

Figure 12. Corner weights

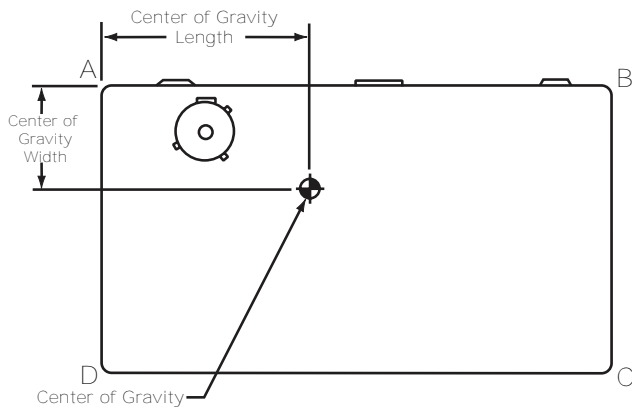


Table 39. Factory installed options (FIOPS)/accessory net weights (lb)

Accessory	YZJ150-300
	12.5, 15, 17.5, 20, 25 Tons
Barometric Relief	40
Economizer	91
Low Leak Economizer - Downflow	150
Low Leak Economizer - Horizontal	180
Oversized Motor ^(a)	30
Powered Convenience Outlet	50
Powered Exhaust	110
Reheat Coil	33
Roof Curb	235
Smoke Detector, Supply	5
Smoke Detector, Return	5
Stainless Steel Heat Exchanger	5
Through-the-Base Electrical	10
Through-the-Base Gas	10
Unit Mounted Circuit Breaker	10



Weights

Table 39. Factory installed options (FIOPS)/accessory net weights (lb) (continued)

Accessory	YZJ150-300
	12.5, 15, 17.5, 20, 25 Tons
Unit Mounted Disconnect	10

Notes:

1. Weights for options not listed are less than 5 pounds.
2. Net weight should be added to unit weight when ordering factory-installed accessories.
3. Weights are approximate.

^(a) Oversized motor only allowed on the 25 ton.



Mechanical Specifications

General

- Packaged rooftop units cooling, heating capacities, and efficiencies are AHRI Certified within scope of AHRI Standard 210-240 for 6 to 25 tons and ANSIZ21.47 and 10 CFR Part 431 pertaining to Commercial Warm Air Furnaces (all gas heating units).
- Convertible airflow.
- Symbio controls operating range between 0°F and 125°F in cooling mode standard from the factory.
- Factory assembled, internally wired, fully charged with R-410A, and 100 percent run tested to check cooling operation, fan and blower rotation, and control sequence before leaving the factory.
- Colored and numbered wiring internal to the unit for simplified identification.
- Units cULus listed and labeled, classified in accordance for Central Cooling Air Conditioners.

Casing

- Zinc coated, heavy gauge, galvanized steel.
- Weather resistant pre-painted metal with galvanized substrate.
- Meets ASTM B117, 672 hour salt spray test.
- Single side maintenance through hinged access panels.
- Exposed vertical panels and top covers in the indoor air section insulated with a cleanable foil-faced, fire-retardant permanent, odorless glass fiber material.
- Base pan shall have no penetrations within the perimeter of the curb other than the raised 1 inch high downflow supply/return openings to provide an added water integrity precaution, if the condensate drain backs up.
- Base of the unit insulated with 1/8 inch, foil-faced, closed-cell insulation.
- Unit base provisions for forklift and/or crane lifting on three sides of unit.

Coils

Microchannel Coils

- Optimal heat transfer performance due to flat, streamlined tubes with small ports, and metallurgical tube-to-fin bond.
- Reduce system refrigerant charge by up to 50% leading to better compressor reliability.
- Compact all-aluminum microchannel coils reduce the unit weight.
- Recyclable all-aluminum coils. All-aluminium construction minimizes galvanic corrosion.
- Strong aluminum brazed structure provides better fin protection.
- Flat streamlined tubes more dust resistant and easy to clean.
- Coils leak tested at the factory to ensure the pressure integrity.

Compressors

- All units have variable speed compressor matched with variable frequency drive that modulates the speed of the compressor motor and provides several compressor protection functions.
- Permanent magnet motor with voltage utilization range of plus or minus 10 percent of unit nameplate voltage.
- Crankcase heaters sized to minimize the amount liquid refrigerant present in the oil sump during off cycles are standard on all compressors.
- Single variable speed compressors in 12.5 and 15 ton units. Manifoldd variable and fixed speed compressors in 17.5 to 25 ton units.
- Variable speed modulation to 15 Hz equating to 27% or less of full capacity
- Control of the eFlex system is integrated with the Symbio™ 700 unit controller to ensure optimal equipment reliability and performance.

Coil Guards

Provides condenser coil protection.



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- Variable speed modulation to 15 Hz equating to 27% or less of full capacity
- Control of the eFlex system is integrated with the Symbio™ 700 unit controller to ensure optimal equipment reliability and performance.

Filters

- Standard throwaway filters
- Optional 2 inch MERV 8 and MERV 13 filters

Frostat™

- Utilized as a safety device.
- Opens to prevent freezing temperatures on evaporator coil.
- Temperature will need to rise to 50°F before closing.
- Utilized in low airflow or high outside air applications (cooling only).

Gas Heating Section

- The heating section shall have a progressive tubular heat exchanger with corrosion-resistant aluminized steel tubes and burners as standard on all models.
- Stainless steel heat exchanger with 409 stainless steel tubes and 439 stainless steel burners shall be optional.
- Induced draft combustion blower shall be used to pull the combustion products through the firing tubes.
- 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, 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).

Tubular Gas Heat Exchanger

- Compact cabinet features a tubular heat exchanger in low, medium and high heat capacities.
- Corrosion-resistant aluminized steel tubes and burners are standard on all models.
- Induced draft blower to pull the gas mixture through the burner tubes.
- Direct spark ignition and a flame sensor as a safety device to validate the flame.

Indoor Fan

- Direct drive plenum fan design.
- Plenum fan design — backward-curved fan wheel along with an external rotor direct drive variable speed indoor motor.
- Supply fan speed adjustments can be made using the Symbio™ 700 or Mobile App.
- Motors are electronically protected.
- Variable speed direct drive motors are high efficiency.

Powered or Unpowered Convenience Outlet

- Powered GFCI, 120V/15A, 2 plug, convenience outlet or unpowered GFCI, 120V/20A, 2 plug, convenience outlet.
- When convenience outlet is powered, a service receptacle disconnect will be available.
- 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.
- Available to order when through-the-base electrical with disconnect switch or circuit breaker option is ordered.

Stainless Steel Drain Pan

- Corrosion and oxidation resistance.
- Constructed of 304 stainless steel.

Stainless Steel Heat Exchanger

- Constructed of 409 stainless steel tubes and 439 stainless steel burners.
- Resistant to corrosion and oxidation and easy to clean.
- High strength to weight ratio allows for high ventilation rates with gas units.
- Compliment dehumidification option as a high outside air ventilation unit.
- 15 years stainless steel heat exchanger warranty is standard.

Through-the-Base Electrical with Circuit Breaker

- Thermal magnetic, molded case, HACR circuit breaker with provisions for through-the-base electrical connections.
- Circuit breaker installed within unit in water tight enclosure.
- Wiring provided from the switch to the unit high voltage terminal block.
- Circuit breaker will provide overcurrent protection, sized per NEC and cULus guidelines, and agency recognized by cULus.

Through-the-Base Electrical with Disconnect Switch

- 3-pole, molded case, disconnect switch with provisions for through-the-base electrical connections.
- Disconnect switch installed within unit in a water tight enclosure.
- Wiring provided from the switch to the unit high voltage terminal block.
- Switch cULus agency recognized.

Note: Disconnect switch sized per NEC and cULus guidelines but will not be used in place of unit overcurrent protection

Economizer (Standard)

- Available with or without barometric relief.
- 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.
- Barometric relief shall provide a pressure operated damper that shall be gravity closing.
- Barometric relief shall prohibit entrance of outside air during the equipment "off" cycle.
- Optional solid state or differential enthalpy control.
- Arrives in shipping position and shall be moved to the operating position by the installing contractor.

Powered Exhaust

- Available for 6 to 25 ton units.
- Shall provide exhaust of return air, when using an economizer.
- Maintain better building pressurization.



Mechanical Specifications

Roof Curb

- Designed to mate with the unit's downflow supply and return.
- Provide support and a water tight installation when installed properly.
- Shall allow field-fabricated rectangular supply/return ductwork to be connected directly to the curb.
- Curb shall be shipped knocked down for field assembly.
- Shall include wood nailer strips.

Ventilation Override Operation

- Unit can be set to transition up to 3 different pre-programmed sequences for smoke purge, pressurization, and exhaust.
- Transition occurs when binary input on the Symbio is closed (shorted) (typically hard wired relay output from a smoke detector/ fire control panel).

Note: Requires Symbio™ Customer Connection Module, FIASCCM001*.



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