



Product Catalog

Packaged Rooftop Air Conditioners Foundation™ Electric/Electric

15–22 Tons, 50 Hz





Introduction

Packaged Rooftop Air Conditioners

Through the years, Trane has designed and developed the most complete line of Packaged Rooftop products available in the market today.

Trane customers demanded a product that provided exceptional reliability, was easy to install, and was competitively priced. Trane listened and is proud to introduce the new Trane Foundation™ Light Commercial rooftop unit.

With Foundation, Trane continues to provide the highest standards in quality and reliability, comfort, performance, and ease of installation.

Trademarks

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Revision Summary

- Added MERV13 option
- Updated Features and Benefits, General Data, Performance, and Mechanical Specifications sections.



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Features and Benefits

Foundation™ has features and benefits that make it first class in the light commercial rooftop market. Designed with input from field contractors and technicians, its convertible airflow and ease of installation are outstanding.

Standard and Optional Features at a Glance

Standard Features

- 2" throwaway filters
- 5kA SCCR (Short Circuit Current Rating)
- 5 year Limited Compressor Warranty
- 5 year Limited Heat Exchanger (15 Tons); 1 Year on 17½, 20 and 22 Tons
- 1 year Limited Parts Warranty
- Belt Drive Motors
- Cleanable Condensate Drain Pan
- Colored and Numbered Wiring
- Condenser End Forking
- Convertible Airflow
- Cooling to 40°F
- Discharge Line Thermostat
- Electromechanical Controls
- Easy Access Low Voltage Terminal Board (LTB)
- Foil-Faced and Edge Captured Insulation
- High Pressure Cutout
- Liquid Line Refrigerant Drier
- Locking Safety Device
- Microchannel Type Condenser Coils
- Operating Charge of R-410A
- Phase Monitor
- Quick Access Panels
- Quick Adjust Fan Motor Mounting Plate
- Single Point Power
- Single Side Service
- Standardized Components

Factory Installed Options

- Complete Coat™ Microchannel Condenser Coil

Factory or Field Installed Options

- Condensate Overflow Switch
- Electric Heaters
- Manual Outside Air Dampers
- Oversized Motor

Field Installed Options

- 2" MERV 13 Throwaway Filters
- Crankcase Heater
- High and Low Static Drive Kits
- Low Ambient Kit
- Remote Potentiometer
- Roof Curb

- Thermostat
- Tool-less Hail Guard

Other Benefits

- Cabinet Design Ensures Water Integrity
- Convertible Airflow - Downflow to Horizontal Airflow Configuration
- Ease of Service, Installation and Maintenance
- Mixed Model Build Enables “Fastest in the Industry” Ship Cycle Times
- Rigorous Testing
- Unmatched Product Support

Outstanding Standard Features

Colored and Numbered Wiring

Save time and money tracing wires and diagnosing the unit.

Compressors

Foundation™ contains the best compressor technology available to achieve the highest possible performance. Dual compressors are outstanding for humidity control and part load cooling conditions.

Condenser End Forking

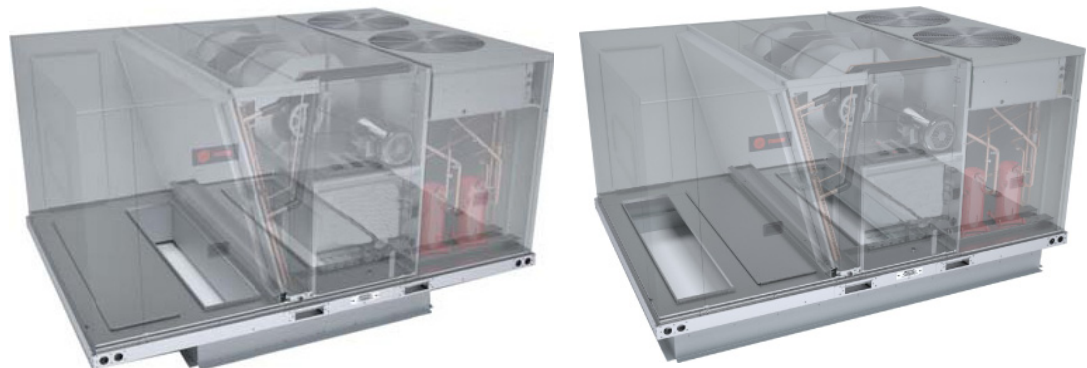
Added fork openings on condenser end of unit for ease of maneuvering unit through narrow openings.

Controls—Electromechanical

This 24-volt control includes the control transformer and contactor pressure lugs for power wiring.

Convertible Units

Foundation units ship in the downflow configuration. A horizontal conversion kit, consisting of two downflow duct covers, is needed to convert the unit from a downflow to a horizontal airflow configuration. Units come complete with horizontal duct flanges so the contractor doesn't have to field fabricate them. These duct flanges are a time and cost saver. Units also have the ability to fit Trane and other competitors roof curbs (Carrier). In a matter of minutes, you can go from the Trane configuration to the Carrier configuration by simply changing the return air opening plate. This design allows for easy field conversion and eliminates the need for costly adapter curbs.





Features and Benefits

Discharge Line Thermostat

A bi-metal element discharge line thermostats installed as a standard feature on the discharge line of each system. This standard feature provides extra protection to the compressors against high discharge temperatures in case of loss of charge, extremely high ambient and other conditions which could drive the discharge temperature higher.

Efficiency

Product efficiencies meet the requirements of ASHRAE 90.1 - 2010, MEW, ESTIDAMA, ESMA and ASHRAE 2013.

Easy Access Low Voltage Terminal Board

Foundation™ Low Voltage Terminal Board is mounted outside the main electrical control cabinet. It is extremely easy to locate and attach the thermostat control wiring and also test operation of all unit functions. This is another cost and time saving installation feature.

Foil Faced Insulation

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

Locking Safety Device with Anti-Short Cycle Timer

This device monitors compressor safety switch trips to prevent short cycling, protecting the compressor. A manual reset is required after the fourth safety switch trip.

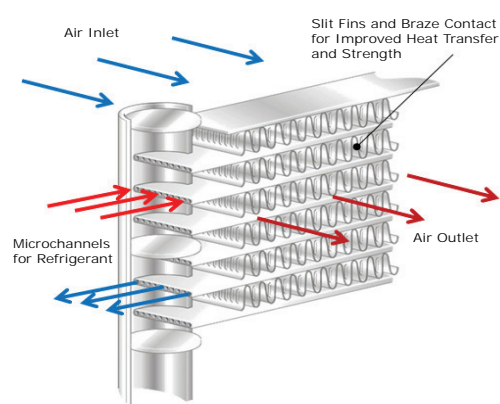
Low Ambient Cooling

All Foundation units have cooling capabilities down to 40°F as standard.

Low Voltage Connections

The wiring of the low voltage connections to the unit and the thermostat is as simple as R-R, G-G, Y-Y, and W-W. This simplified system makes it easy for the installer to wire.

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

Motors

All indoor fan motors are belt drive as standard.

Pressure Cutouts

Low and high pressure cutouts are standard on all Foundation™ models.

Phase Monitor

Foundation features a three-phase line monitor module that protects against phase loss, phase reversal and phase unbalance. It is intended to protect compressors from reverse rotation. It has an operating input voltage range of 190–600 Vac, and LED indicators for ON and FAULT. There are no field adjustments and the module will automatically reset from a fault condition.

Quick-Access Panels

Remove three or less screws for access to the standardized internal components and wiring.

Quick-Adjust Fan Motor Mounting Plate

With the quick-adjust slider plate, the belt and sheaves can be quickly adjusted without moving the mounted fan motor. This results in reduced time spent on routine maintenance.

Single Point Power

A single electrical connection powers the unit and all on-board options.

Single Side Service

Single side service is standard on all units.

Sloped Drain Pans

Every Foundation™ unit has a non-corrosive, sloped drain pan made of rigid PVC - standard on all units - that is removable for easy cleaning.

Standardized Components

Components are placed in the same location on all Foundation units. Familiarize yourself with one Foundation and you are familiar with every Foundation. Due to standardized components throughout the Foundation line, contractors/owners can stock fewer parts.

Variety of Options

Factory Installed Options

Complete Coat™ Condenser Coil

The cathodic epoxy type electrodisposition coating is formulated for high edge build to a number of different types of heat exchangers. The coating is selected to provide excellent resistance and durability to corrosive effects of alkalies, acids, alcohols, petroleum, seawater, salt air, and corrosive environments.

Factory or Field Installed Options

Condensate Overflow Switch

A condensate overflow switch is available to shut the unit down in the event that the condensate drain line becomes clogged. This option protects the unit from water overflowing from the drain pan and entering the base of the units.

Electric Heaters

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

Manual Outside Air Damper

A 0–25 percent manual air damper is available.



Features and Benefits

Oversized Motors

Factory or field installed oversized motors are available for high static applications.

Field Installed Options

Crankcase Heaters

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

Roof Curbs

Available for downflow units. Only one roof curb for the entire Foundation™ line simplifies curb selection.

Static Drive Accessories

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

Thermostats

Available in programmable and non-programmable.

Tool-less Hail Guards

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



Two-Inch MERV 13 Pleated Filters

Two-inch MERV 13 filters are available on all models.

Other Benefits

Cabinet Integrity

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

Easy to Install, Service and Maintain

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

Outstanding Flexibility

The Foundation unit has the ability to adapt to specific Carrier WeatherMaker™ models without costly adapter curbs. This will save contractors money and make the installation an ease.

Rigorous Testing

All of Foundation's designs were rigorously rain tested at the factory to ensure water integrity. Foundation units incorporate either a one piece top or the Trane-Tite-Top (T3). Each part of the top overlaps in such a way that water cannot leak into the unit. These overlapped edges are gasketed and sealed to ensure superior water integrity.

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

Rigging tests include lifting a unit into the air and letting it drop one foot, assuring that the lifting lugs and rails hold up under stress. For the microchannel coils, the supplier will perform the leak check at 450 psig. The completely assembled refrigerant system is leak tested at a minimum of 225 psig with a refrigerant and nitrogen mixture.

All parts are inspected at the point of final assembly. Sub-standard parts are identified and rejected immediately. Every unit receives a 100% unit run test before leaving the production line to make sure it lives up to rigorous Trane requirements.

Unmatched Support

Trane Sales Representatives are a Support Group that can assist you with:

- Product
- Application
- Service
- Training
- Special Applications
- Specifications
- Computer Programs and much more



Application Considerations

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

Clearance Requirements

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

Complete Coat™ Microchannel Condenser Coil

The cathodic epoxy type electrodisposition coating is formulated for high edge build to a number of different types of heat exchangers. The coating is selected to provide excellent resistance and durability to corrosive effects of alkalis, acids, alcohols, petroleum, seawater, salt air, and corrosive environments. This coating shall be available on microchannel condenser coils.

Condensate Trap

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

Low Ambient Cooling

The Foundation line features low ambient cooling down to 40°F. The following options need to be included/considered when low ambient applications are required: continuous fan operation, crankcase heaters, frostat. Contact your local Trane Representative for more assistance with low ambient cooling applications.

Unit Pitch

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



Selection Procedure

Cooling Capacity

Step 1.

Calculate the building's total and sensible cooling loads at design conditions. Use the following calculation methods or any other standard accepted method. Factors used in unit selection:

Total Cooling Load: 180 MBh

Sensible Cooling Load: 149.5 MBh

Airflow: 6000 cfm

Electrical Characteristics: 380-415/50/3

Summer Design Conditions: Entering Evaporator Coil: 80 DB, 67 WB Outdoor Ambient: 95 DB

External Static Pressure: 0.39 in. wg

Rooftop—downflow configuration

Accessories

- Roof curb
- Electric Heat

Step 2.

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

$$180 \text{ MBh} / 12 \text{ MBh} = 15.0 \text{ tons}$$

Step 3.

Table 2, p. 16 shows that a EAC180AD has a **gross** cooling capacity of 184.2 MBh and 153.6 MBh sensible capacity at 6000 cfm and 95 DB outdoor ambient with 80 DB, 67 WB air entering the evaporator.

To Find Capacity at Intermediate Conditions Not in the Table.

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

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

Step 4.

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

External Static Duct System	0.39 wg
Standard Filter 2 in. from Table 18, p. 31	0.06 wg
Electric Heater Size 36 kW from Table 18, p. 31	0.07 wg
(Reference "Heating Capacity," p. 12 for determination of heater size.)	
Total Static Pressure	0.56 wg

Note: The Evaporator Fan Performance

Table 6, p. 22 has already accounted for the pressure drop for standard filters and wet coils (see note below Table 6).

Therefore, the actual total static pressure is 0.56 - 0.06 (from Table 18, p. 31 = 0.50 wg).

With 6000 cfm and 0.50 wg.

Table 6, p. 22 shows 1.39 bhp for this unit. Note below the table gives a formula to calculate Fan Motor Heat,

$$3.15 \times \text{bhp} = \text{MBh.}$$

$$3.15 \times 1.39 = 4.38 \text{ MBh.}$$



Selection Procedure

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

Net Total Cooling Capacity
= 184.2 MBh - 4.38 = 179.82 MBh.

Net Sensible Cooling Capacity
= 153.6 MBh - 4.38 = 149.22 MBh.

Step 5.

If the performance will not meet the required load of the building—total or sensible cooling load, try a selection at the next higher size unit.

Heating Capacity

Step 1.

Calculate the building heating load.

Step 2.

Size the system heating capacity to match the calculated building heating load. The following are building heating requirements:

T* cooling units:
415 volt/3 phase Power Supply
Total heating load of 115.0 MBh
6000 cfm

The electric heat accessory capacities are listed in [Table 19, p. 31](#). From the table, a 27 kW heater will deliver 122.94 MBh at 415 volts. In order to determine capacity at 415 volts, the heater voltage correction factor from [Table 20, p. 32](#) must be used. Therefore, 122.94 MBh x 0.94 (voltage correction factor) = 115.6 MBh.

Air Delivery Selection

External static pressure drop through the air distribution system has been calculated to be 0.50 inches of water. From [Table 18, p. 31](#) static pressure drop through the economizer is 0.04 and the 27 kW heater is 0.07 inches of water (0.39 + 0.04 + 0.07). Enter [Table 6, p. 22](#) for a EAC180AD at 6000 cfm and 0.50 static pressure. The standard motor at 627 rpm will give the desired airflow at a rated bhp of 1.39.



Model Number Description

E	A	C	1	8	0	A	D	E	R	A	0	0
1	2	3	4	5	6	7	8	9	10	11	12	13

Digit 1 – Unit Type

E = Packaged Cooling, Electric Heat

Digit 2 – Efficiency

A = ASHRAE 90.1 - 2010

Digit 3 – Airflow Configuration

C = Convertible

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

180 = 15 Tons

210 = 17½ Tons

240 = 20 Tons

270 = 22 Tons

Digit 7 – Major Design Sequence

A

Digit 8 – Voltage Selection

D = 380-415/50/3

Digit 9 – Unit Controls

E = Electromechanical

Digit 10 – Heating Capacity

0 = No Heat

N = 27kW @50Hz

P = 41kW @50Hz

R = 54kW @50Hz

Digit 11 – Minor Design Sequence

Digit 12, 13 – Service Sequence

00 = None

Digit 14 – Fresh Air Selection

0 = No Fresh Air

A = Manual Outside Air Damper
0-25%

Digit 15 – Supply Fan/Drive Type/Motor

0 = Standard Motor

1 = Oversized Motor

Digit 16 – Not Used

Digit 17 – Condenser Coil Protection

0 = Standard Coil

4 = CompleteCoat™ Condenser Coil

Digit 18 – Through The Base Provisions

0 = No Through The Base Provisions

Digit 19 – Disconnect Switch

0 = No Disconnect

Digit 20– Not Used

Digit 21– Not Used

Digit 22– Not Used

Digit 23– Not Used

Digit 24– Not Used

Digit 25 - System Monitoring Controls

0 = No Monitoring Controls

A = Condensate Drain Pan Overflow Switch

Model Number Notes

1. Some field set up required.
2. All Factory Installed Options are Built-to-Order. Check order services for estimated production cycle.



General Data

Table 1. General data – 15-22 tons

	15 Ton	17½ Ton	20 Ton	22 Ton
	EAC180	EAC210	EAC240	EAC270
Cooling Performance^(a)				
Gross Cooling Capacity	184,200	208,200	249,400	259,700
EER (Downflow/Horizontal) ^(b)	12.05	11.46	10.5	10.65
Nominal Airflow CFM	7200	6700	8800	8800
Net Cooling Capacity at Nom. Airflow	179,500	203,100	241,900	254,000
Integrated Energy Efficiency Ratio (IEER) (One Speed Fan) ^(c)	13.39	13.03	12.3	12.3
Percent Capacity @ part load (Stage 1/Stage 2)	52 / 100	52 / 100	63 / 100	66 / 100
System Power (kW)	14.90	17.70	23.85	23.85
Compressor				
Number/Type	2 / Scrolls	2 / Scrolls	2 / Scrolls	2 / Scrolls
Sound				
Outdoor Sound Rating (BELS) ^(d)	9.7	9.7	9.5	9.5
Outdoor Coil				
Type	Microchannel	Microchannel	Microchannel	Microchannel
Coil Width (in.)	1.0	1.0	1.0	1.0
Face Area (sq. ft.)	34.74	34.74	34.74	34.74
Rows/FPI	1 / 23	1 / 23	1 / 23	1 / 23
Indoor Coil				
Type	Hi-Performance	Hi-Performance	Hi-Performance	Hi-Performance
Tube Size (in.) ID	0.3125	0.3125	0.3125	0.3125
Face Area (sq. ft.)	26.00	26.00	26.00	26.00
Rows/FPI	4 / 15	4 / 15	4 / 15	4 / 15
Refrigerant Control	Short Orifice	Short Orifice	Short Orifice	Short Orifice
Drain Connection Number/Size (in.)	1 / 1.00 PVC Pipe Female	1 / 1.00 PVC Pipe Female	1 / 1.00 PVC Pipe Female	1 / 1.00 PVC Pipe Female
Outdoor Fan				
Type	Propeller	Propeller	Propeller	Propeller
Number Used/Diameter (in.)	2 / 28	2 / 28	2 / 28	2 / 28
Drive Type/No. Speeds	Direct / 1	Direct / 1	Direct / 1	Direct / 1
cfm	11,300	11,300	11,300	11,300
Number Motors @ 50Hz	2 / 0.75	2 / 0.75	2 / 0.75	2 / 0.75
Motor rpm	950	950	950	950
Indoor Fan				
Type	FC Centrifugal	FC Centrifugal	FC Centrifugal	FC Centrifugal
Number Used/Diameter (in.)	2 / 15x15	2 / 15x15	2 / 15x15	2 / 15x15
Drive Type/No. Speeds	Belt / 1	Belt / 1	Belt / 1	Belt / 1
Number Motors	1	1	1	1
Motor hp (Standard/Oversized)	3.0 / --	3.0 / 5.0	5.0 / 7.5	5.0 / 7.5
Motor rpm (Standard/Oversized)	2850 / --	2850 / 2920	2920 / 1460	2920 / 1460
Motor Frame Size (Standard/Oversized)	145T / --	145T / 184T	184T / 213T	184T / 213T
Filters				
Type Furnished ^(e)	Throwaway	Throwaway	Throwaway	Throwaway
Number Size Recommended	(8) 20x25x2	(8) 20x25x2	(8) 20x25x2	(8) 20x25x2
Refrigerant Charge (Pounds of R-410A)^(f)				
Circuit 1 / Circuit 2	9.26 / 8.2	13.89 / 7.39	13.8 / 7.5	13.8 / 7.5

(a) Cooling Performance is rated at 95°F ambient, 80°F entering dry bulb, 67°F entering wet bulb. Gross capacity does not include the effect of fan motor heat. Net cooling capacity includes the effect of fan motor heat. Units are suitable for operation to ±20% of nominal cfm. Tested in accordance with AHRI Standard 340/360-2019.

(b) EER is rated at AHRI conditions and in accordance with AHRI Standard 210/240 or 340/360.

(c) Integrated Energy Efficiency Ratio (IEER) is rated in accordance with AHRI standard 210/240 or 340/360.

(d) Outdoor Sound Rating shown is tested in accordance with AHRI Standard 270 or 370.

(e) Optional field installed MERV 13 filters available.

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



Performance Data

Table 2. Gross cooling capacities 15 tons - EAC180AD

Air Flow cfm	Ent DB (°F)	Ambient Temperature																	
		85				95				105									
		Entering Wet Bulb																	
		61		67		73		61		67		73		61		67		73	
MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC
4800	75	161.8	136.0	188.0	106.8	203.9	73.6	146.1	128.8	163.5	101.8	194.6	68.9	129.5	121.8	158.5	94.5	181.5	88.2
	80	164.9	161.7	188.9	133.5	206.0	100.5	153.0	151.6	175.0	127.8	196.0	95.7	141.2	139.8	159.2	121.1	183.3	90.5
	85	178.5	176.8	189.2	159.4	207.8	124.5	167.0	165.4	174.7	153.9	197.0	121.4	155.4	153.9	158.1	147.1	184.4	117.3
	90	190.4	188.6	193.0	184.8	210.2	147.3	180.1	178.3	180.7	178.1	199.3	145.5	169.2	167.6	169.8	168.1	186.6	142.0
5400	75	167.8	147.1	192.0	112.7	206.8	75.3	150.7	139.7	178.7	107.0	197.0	70.5	135.3	131.3	163.1	100.7	184.8	65.4
	80	174.7	173.1	193.4	142.0	208.6	104.7	162.6	161.0	179.8	137.1	198.8	100.7	149.7	148.3	164.3	130.9	185.4	95.4
	85	187.8	186.0	194.1	170.2	211.1	128.2	176.8	175.2	179.5	166.1	200.4	126.3	165.2	163.6	162.9	158.7	188.0	123.3
	90	198.8	196.8	199.6	194.8	213.7	153.1	189.0	187.2	189.5	187.6	203.1	152.6	178.2	176.5	178.7	177.0	189.9	150.6
6000	75	172.7	157.7	195.0	118.4	208.4	76.1	156.4	149.8	181.9	112.8	198.1	72.0	141.8	140.4	166.8	106.7	186.4	66.9
	80	182.8	181.1	197.0	149.1	211.2	107.0	170.8	169.2	183.7	145.6	201.5	104.3	158.1	156.6	168.6	141.0	188.8	100.5
	85	194.9	193.0	197.8	179.9	214.1	134.1	184.4	182.6	183.5	177.4	203.0	130.5	172.9	171.3	167.1	163.6	190.6	128.6
	90	204.7	202.6	205.0	203.0	216.4	157.5	195.5	193.4	195.8	193.8	207.1	159.9	185.0	183.1	185.3	183.3	193.3	157.6
6600	75	177.4	168.2	197.4	122.6	210.3	78.3	162.5	158.8	184.7	118.4	203.3	73.0	148.1	146.8	169.6	112.5	188.2	68.4
	80	189.1	187.3	199.8	155.4	213.2	108.3	177.6	175.9	186.9	153.2	202.6	105.7	165.0	163.5	172.0	149.1	190.4	102.4
	85	200.1	198.2	200.7	188.8	216.1	137.6	190.1	188.3	186.7	183.8	205.8	136.1	178.9	177.2	170.4	168.8	192.7	133.0
	90	209.1	206.9	209.4	207.2	219.0	163.1	200.1	198.1	200.7	198.6	209.0	164.6	189.9	188.1	190.1	188.1	195.6	164.0
7200	75	182.0	175.8	199.4	126.3	211.9	79.7	168.0	166.4	186.7	123.2	201.9	74.9	154.4	153.0	171.8	118.1	191.5	70.0
	80	193.9	192.1	202.1	161.0	214.8	110.7	182.9	181.2	189.6	160.2	204.4	108.1	170.6	169.0	172.5	157.1	192.6	105.6
	85	204.0	202.0	202.9	196.1	218.4	141.8	194.5	192.6	189.2	187.5	207.3	140.5	183.5	181.8	173.1	171.5	194.4	137.3
	90	212.4	210.4	212.6	210.3	220.9	167.2	203.6	201.7	203.8	201.9	210.0	172.3	193.4	191.6	193.6	191.8	198.9	170.6
Air Flow cfm	Ent DB (°F)	Ambient Temperature																	
		115				120				125									
		Entering Wet Bulb																	
		61		67		73		61		67		73		61		67		73	
MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC
4800	75	114.9	113.8	142.4	87.8	169.8	58.5	109.3	108.3	134.3	84.5	161.8	55.7	102.7	101.7	125.5	81.0	155.4	53.1
	80	129.4	128.1	143.1	114.5	169.0	85.1	123.0	121.8	134.3	110.9	162.7	82.5	117.6	116.5	126.4	107.7	155.3	79.8
	85	143.9	142.5	141.0	137.9	170.9	111.9	138.1	136.8	132.1	130.8	163.6	109.2	132.7	131.4	123.0	121.8	156.1	106.5
	90	158.2	156.6	158.7	157.2	172.2	137.5	152.6	151.2	153.2	151.7	165.0	135.2	147.2	145.8	147.7	146.3	158.1	132.6
5400	75	122.1	120.9	146.6	94.0	171.7	60.1	115.8	114.7	138.2	90.7	164.8	56.8	109.5	108.5	129.0	87.0	158.5	54.8
	80	137.4	136.1	147.8	124.2	172.2	90.2	131.2	130.0	139.6	121.0	165.7	87.6	125.3	124.1	130.5	117.6	158.4	84.8
	85	153.3	151.8	145.5	144.1	174.1	119.1	147.4	146.0	135.7	134.4	166.9	116.8	141.6	140.3	126.7	125.5	159.5	114.2
	90	167.1	165.5	167.5	165.9	176.5	146.9	161.4	159.8	161.8	160.3	169.2	144.7	155.6	154.1	156.1	154.6	162.5	142.3
6000	75	128.7	127.5	149.9	100.1	173.0	61.6	122.2	121.1	141.4	96.7	166.5	59.0	115.8	114.7	132.8	93.3	158.9	56.2
	80	145.5	144.2	152.0	133.9	174.2	95.0	139.2	137.9	143.8	130.8	167.8	92.5	133.1	131.8	136.2	127.5	160.5	89.9
	85	161.0	159.5	149.1	147.7	176.9	125.1	155.0	153.6	140.1	138.8	169.7	123.1	149.1	147.7	130.0	128.8	162.2	120.7
	90	173.7	172.0	174.1	172.3	180.3	154.6	167.9	166.3	168.3	166.6	173.2	152.7	162.0	160.4	162.3	160.7	166.0	150.4
6600	75	134.0	133.4	152.8	105.9	174.9	62.4	128.0	126.8	144.1	102.5	167.4	60.4	121.4	120.3	135.3	99.2	160.1	57.0
	80	152.1	150.7	156.0	143.4	176.9	98.5	145.7	144.3	148.3	139.9	169.8	96.0	139.3	138.0	141.0	135.3	162.4	93.3
	85	167.0	165.4	152.3	150.9	179.1	130.7	161.0	159.4	143.0	141.7	171.9	128.8	154.8	153.3	133.9	132.6	164.3	126.4
	90	178.6	176.9	178.8	176.9	182.8	161.5	172.7	171.1	172.9	171.1	175.9	159.7	166.6	165.0	166.8	165.0	167.2	159.0
7200	75	140.1	138.8	155.2	111.7	176.5	64.6	133.2	132.0	146.3	108.3	168.7	61.9	126.4	125.3	137.5	104.9	161.9	59.2
	80	157.8	156.3	159.8	151.4	178.4	101.4	151.3	149.9	152.4	147.0	171.3	99.1	144.8	143.4	145.2	143.8	163.9	96.6
	85	171.7	170.1	155.1	153.7	180.8	135.7	165.6	164.0	145.6	144.3	173.6	134.0	159.3	157.8	136.3	135.0	166.1	131.8
	90	182.2	180.5	182.3	180.5	184.9	167.5	176.1	174.5	176.2	174.5	178.0	165.8	169.9	168.3	170.0	168.3	171.1	162.7

Notes:

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

Table 3. Gross cooling capacities 17½ tons - EAC210AD

Air Flow cfm	Ent DB (°F)	Ambient Temperature																	
		85				95				105									
		Entering Wet Bulb																	
		61		67		73		61		67		73		61		67		73	
MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC
5600	75	199.4	163.4	220.4	125.7	234.1	85.6	184.8	156.0	207.8	119.6	221.5	84.2	169.1	148.3	193.4	113.0	205.4	82.4
	80	201.1	195.4	221.1	156.7	235.7	116.8	187.5	187.5	208.3	150.6	223.6	111.1	175.1	175.1	193.7	143.9	209.4	105.0
	85	211.8	211.8	221.6	186.3	236.9	144.2	200.7	200.7	208.7	180.8	224.9	139.2	188.5	188.5	194.1	174.4	211.0	133.4
	90	221.7	221.7	224.1	215.4	238.4	169.8	211.1	211.1	212.0	208.6	226.4	165.5	199.2	199.2	199.6	199.6	212.6	160.2
6300	75	204.8	175.4	223.7	132.1	234.6	87.6	189.9	168.2	210.9	126.0	224.1	88.6	173.8	160.9	196.5	119.4	209.5	86.3
	80	208.7	208.7	224.6	165.5	238.1	121.6	196.8	196.8	211.8	160.2	226.1	116.7	184.0	184.0	197.2	154.0	212.0	110.0
	85	219.4	219.4	225.2	197.8	239.6	149.8	208.4	208.4	212.2	193.3	227.6	144.2	196.1	196.1	197.5	187.6	213.6	138.7
	90	228.4	228.4	229.1	226.0	241.5	176.3	217.8	217.8	218.1	218.1	229.3	172.6	205.7	205.7	203.7	203.6	215.2	167.8
7000	75	209.1	187.1	226.1	138.2	239.4	122.9	194.3	180.2	213.4	132.4	226.4	90.5	178.0	173.4	198.9	125.8	210.9	90.7
	80	215.2	215.2	227.4	173.0	240.4	124.1	203.8	203.8	214.6	168.5	228.0	118.8	191.1	191.1	200.2	162.9	213.9	112.9
	85	225.1	225.1	228.1	208.1	242.1	155.2	214.1	214.1	215.1	204.6	229.8	148.8	201.7	201.7	200.3	198.7	215.7	143.4
	90	233.4	233.3	233.6	233.4	245.7	243.6	222.6	222.6	222.8	222.8	231.7	178.8	210.3	210.3	210.5	210.5	217.3	174.5
7700	75	212.3	198.0	228.3	142.6	241.6	123.4	198.5	191.9	215.4	137.6	228.4	101.5	183.1	183.1	200.8	131.6	213.4	94.9
	80	220.2	220.2	229.8	179.7	242.2	126.3	208.8	208.8	217.0	176.0	229.8	121.2	196.0	196.0	202.5	171.0	215.5	115.4
	85	229.4	229.3	230.5	217.4	246.8	159.4	218.4	218.3	217.4	214.9	231.8	153.7	205.8	205.8	202.5	202.5	217.3	147.8
	90	237.1	237.0	237.3	237.2	248.3	247.3	226.3	226.2	226.4	226.3	235.6	186.4	213.7	213.6	213.9	213.8	219.6	179.7
8400	75	215.1	208.2	230.1	146.6	243.5	128.4	202.1	199.5	217.1	142.0	229.5	86.4	188.2	188.2	202.5	136.5	215.5	98.6
	80	224.1	224.1	231.8	185.9	245.1	132.4	212.7	212.7	218.9	182.8	231.2	120.4	199.8	199.8	204.5	178.3	217.0	120.4
	85	232.7	232.7	232.4	226.0	247.7	161.4	220.9	220.1	219.2	219.2	233.6	156.4	208.9	208.9	204.4	204.4	218.7	151.6
	90	240.1	240.0	240.2	240.2	248.5	247.8	229.1	229.1	229.3	229.2	235.6	190.5	216.4	216.3	216.5	216.5	219.5	183.4

Air Flow cfm	Ent DB (°F)	Ambient Temperature																	
		115				120				125									
		Entering Wet Bulb																	
		61		67		73		61		67		73		61		67		73	
MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC
5600	75	152.9	141.1	178.0	106.1	192.5	87.4	145.1	137.8	170.3	102.7	182.1	86.4	137.6	134.3	162.7	99.3	175.4	84.3
	80	162.5	162.5	178.7	137.1	194.3	98.7	156.3	156.3	170.9	133.7	187.1	95.6	150.6	150.6	163.4	130.4	179.4	92.5
	85	176.1	176.1	178.6	167.6	196.1	126.9	169.9	169.9	170.8	164.2	188.4	123.4	163.8	163.8	163.2	160.8	180.8	119.7
	90	186.7	186.7	187.0	187.0	197.5	154.0	180.3	180.3	180.6	180.6	189.9	150.5	173.9	173.9	174.1	174.1	182.3	146.8
6300	75	157.5	153.7	181.0	112.6	193.6	89.2	150.5	148.5	173.1	109.2	184.5	88.4	143.9	143.9	165.4	105.8	176.2	86.2
	80	171.0	171.0	181.9	147.3	196.9	103.5	164.7	164.7	174.2	143.9	189.1	100.1	158.7	158.7	166.6	140.5	181.2	96.2
	85	183.2	183.2	181.9	180.6	198.5	132.3	176.6	176.6	174.0	174.0	190.7	128.8	170.1	170.1	166.3	166.3	183.0	125.0
	90	192.6	192.6	192.9	192.8	200.5	161.1	185.9	185.9	186.1	186.1	192.3	158.1	179.1	179.1	179.3	179.3	184.6	154.2
7000	75	163.2	163.2	183.3	119.0	196.2	92.5	156.7	156.7	175.3	115.6	186.4	90.3	150.4	150.4	167.5	112.2	178.3	90.4
	80	177.7	177.7	184.7	156.5	198.6	106.2	171.0	171.0	176.9	153.2	190.7	102.7	164.4	164.4	169.2	149.7	182.9	99.0
	85	188.3	188.3	184.5	184.5	200.4	137.1	181.5	181.5	176.5	176.5	192.5	133.6	174.7	174.7	168.7	168.7	184.7	129.5
	90	196.8	196.8	197.0	196.9	202.6	167.5	189.8	189.7	190.0	189.9	194.2	164.9	182.7	182.7	182.9	182.8	186.4	160.8
7700	75	169.2	169.2	185.1	125.0	199.4	96.4	162.4	162.4	177.1	121.6	188.2	91.2	156.0	156.0	169.3	118.1	179.8	94.3
	80	182.4	182.4	187.0	164.9	200.1	108.8	175.5	175.5	179.2	161.6	192.1	105.2	168.7	168.7	171.5	158.0	183.5	111.8
	85	192.2	192.2	186.6	186.6	201.9	141.3	185.1	185.1	178.6	178.6	194.0	137.7	178.1	178.1	170.7	170.7	186.1	133.7
	90	199.9	199.8	200.0	199.9	203.6	174.8	192.7	192.7	192.8	192.8	195.8	171.1	185.4	185.4	185.6	185.5	187.9	166.9
8400	75	174.1	174.1	186.7	130.2	200.1	98.2	167.2	167.2	178.7	126.8	189.5	92.5	160.6	160.6	170.7	123.3	181.3	100.2
	80	186.0	186.0	189.0	172.5	202.5	112.3	179.0	179.0	181.2	169.2	194.3	107.3	172.0	172.0	173.5	165.5	185.6	104.3
	85	195.0	195.0	188.4	188.4	203.5	156.4	187.9	187.9	180.3	180.3	196.5	145.2	180.6	180.6	172.4	172.4	187.3	137.5
	90	202.3	202.3	202.4	202.4	205.4	182.1	195.0	195.0	195.4	195.0	197.4	178.4	184.6	184.0	175.6	175.3	178.3	169.0

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



Performance Data

Table 4. Gross cooling capacities 20 tons - EAC240AD

Air Flow cfm	Ent DB (°F)	Ambient Temperature																	
		85						95						105					
		Entering Wet Bulb						Entering Wet Bulb						Entering Wet Bulb					
		61		67		73		61		67		73		61		67		73	
		MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC
7000	75	241.7	202.6	266.3	152.9	283.7	103.7	223.0	193.8	249.2	145.0	266.8	96.5	200.6	184.2	230.5	136.6	248.0	88.9
	80	243.6	231.8	266.9	191.8	284.6	141.9	228.1	219.8	249.7	184.5	268.0	134.6	210.6	210.6	230.8	176.5	249.6	126.6
	85	254.3	254.3	267.6	223.4	286.3	173.9	240.0	240.0	250.4	216.5	269.5	166.7	224.4	224.4	231.3	208.6	251.0	158.3
	90	266.0	266.0	269.9	256.9	287.8	206.7	251.9	251.9	254.2	243.4	271.3	201.4	236.3	236.3	237.5	230.8	252.8	193.3
7500	75	245.1	210.9	268.6	157.1	285.1	104.8	225.8	202.1	251.6	149.2	268.6	97.6	204.8	189.8	232.6	140.7	250.0	90.1
	80	248.8	238.5	269.4	198.0	286.5	144.4	232.0	226.5	252.2	191.1	269.8	137.1	215.3	215.3	233.2	183.2	251.2	129.1
	85	259.5	259.5	270.3	230.6	288.6	178.9	245.1	245.1	253.0	224.2	271.4	170.3	229.2	229.2	233.9	216.6	252.8	161.7
	90	270.9	270.9	273.3	261.7	290.0	211.2	256.6	256.6	258.0	249.6	273.3	206.6	240.7	240.7	241.0	241.0	254.7	198.4
8000	75	247.8	219.0	270.7	160.9	286.5	105.9	226.9	209.3	253.5	153.2	270.0	98.8	208.9	195.1	234.5	144.9	250.7	91.2
	80	252.8	244.8	271.5	203.9	288.2	146.8	236.7	236.7	254.3	197.4	271.3	139.5	220.5	220.5	235.3	189.8	252.7	131.6
	85	264.1	264.1	272.7	237.3	290.4	181.7	249.5	249.5	255.3	231.4	273.6	174.9	233.4	233.4	236.1	222.5	254.4	164.7
	90	275.0	275.0	276.3	265.6	291.9	215.8	260.6	260.6	261.3	255.1	275.6	211.5	244.4	244.4	244.7	244.6	256.3	202.4
8500	75	250.2	226.8	272.5	164.2	287.8	107.0	231.1	214.3	255.3	156.7	270.9	99.9	212.5	200.1	236.2	148.5	252.6	92.4
	80	256.5	250.7	273.5	209.3	289.8	149.0	240.9	240.9	256.2	203.1	272.8	141.8	224.5	224.5	237.1	195.7	254.0	134.5
	85	268.1	268.1	274.8	243.6	291.7	194.1	253.3	253.3	257.3	238.1	275.1	177.7	237.0	237.0	238.0	225.9	255.8	167.1
	90	278.6	278.5	279.6	271.3	293.6	220.1	263.9	263.9	264.2	260.3	277.1	215.9	247.5	247.5	247.7	247.6	257.8	209.3
9000	75	251.1	231.9	274.2	167.4	289.1	108.2	234.2	218.7	256.9	160.1	271.8	100.9	216.3	204.9	237.7	152.0	253.6	93.5
	80	259.6	259.6	275.3	214.3	290.9	150.3	244.5	244.5	257.9	208.6	273.8	143.2	227.9	227.9	238.8	201.4	255.2	136.7
	85	271.4	271.2	277.6	252.7	293.0	187.3	256.6	256.6	259.1	244.2	273.7	191.7	240.1	240.1	239.7	229.0	257.1	171.5
	90	281.6	281.5	281.6	274.8	295.1	224.4	266.8	266.7	266.8	265.0	278.4	220.1	250.2	250.1	250.3	250.2	259.1	213.9
9500	75	253.8	236.0	275.7	170.4	290.2	109.2	237.2	223.1	258.3	163.3	273.4	101.9	219.0	209.3	239.1	155.3	254.1	94.5
	80	263.0	263.0	276.9	219.1	292.1	151.2	247.7	247.7	259.5	213.5	275.0	144.6	231.0	231.0	240.3	206.8	255.9	135.9
	85	273.6	273.6	280.4	249.0	294.3	189.8	259.4	259.3	260.8	247.1	276.7	198.3	242.8	242.8	241.2	231.9	258.5	175.1
	90	284.2	284.1	283.8	278.9	296.5	228.5	269.2	269.2	269.4	269.2	279.6	224.4	252.4	252.4	252.6	252.3	260.3	218.4
10000	75	256.3	239.9	276.8	173.1	291.3	112.9	239.6	227.3	259.4	166.2	273.9	102.9	221.5	213.6	240.1	158.4	254.7	95.6
	80	265.9	265.9	278.3	223.6	293.3	152.9	250.6	250.6	260.9	218.5	276.0	145.9	233.8	233.8	241.7	211.9	256.9	137.3
	85	276.3	276.1	282.5	253.9	295.3	192.7	257.1	257.1	262.6	250.2	278.6	187.6	245.1	245.1	242.7	234.7	259.5	177.5
	90	286.5	286.3	286.7	284.1	297.7	232.4	271.4	271.3	271.5	271.3	280.7	228.9	254.4	254.3	254.5	254.2	262.2	222.7
10500	75	258.5	243.7	278.0	175.0	292.1	111.3	241.8	231.2	260.6	168.7	274.4	104.0	223.7	217.7	241.2	161.1	256.0	96.7
	80	268.5	268.5	279.7	228.0	294.3	153.6	253.2	253.2	262.2	223.2	277.0	147.1	236.2	236.2	243.0	216.9	257.8	138.6
	85	278.3	278.5	284.1	258.0	296.6	194.8	263.2	263.2	267.8	248.1	279.4	190.5	247.1	247.1	243.9	237.2	260.4	182.6
	90	288.5	288.4	288.6	287.9	298.8	236.0	273.3	273.2	273.4	273.0	281.7	233.9	256.2	256.1	256.3	256.0	263.1	226.5
11000	75	260.6	247.4	279.2	177.2	293.4	112.4	243.9	235.0	261.7	171.1	275.5	108.5	225.1	225.1	242.3	163.6	256.2	97.9
	80	270.9	270.9	280.9	232.4	295.3	155.3	255.4	255.4	263.3	227.5	277.9	148.3	238.3	238.3	242.5	221.6	258.6	139.9
	85	280.6	280.6	285.6	261.3	297.6	197.6	265.2	265.1	269.1	251.1	280.1	192.3	248.9	248.9	245.1	239.7	261.9	185.0
	90	290.3	290.2	290.2	290.1	299.8	239.8	275.0	274.8	275.1	274.8	283.2	236.3	257.7	257.7	257.8	257.6	264.0	230.1

Table 4. Gross cooling capacities 20 tons - EAC240AD

Air Flow cfm	Ent DB (°F)	Ambient Temperature																	
		115				120				125									
		Entering Wet Bulb																	
		61		67		73		61		67		73							
MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC						
7000	75	183.2	170.4	210.9	128.1	228.5	78.5	175.6	164.1	201.2	124.0	218.9	77.6	167.9	157.9	192.2	120.0	210.0	74.1
	80	194.9	194.9	211.2	168.2	230.1	118.3	187.3	187.3	201.6	164.1	220.5	114.2	180.4	180.4	192.7	160.3	211.3	110.3
	85	208.5	208.5	211.6	198.6	231.7	150.3	200.6	200.6	202.0	190.7	222.1	146.2	193.3	193.3	193.0	183.1	212.9	141.8
	90	220.1	220.1	220.4	220.4	233.5	185.2	212.0	212.0	212.3	212.3	223.9	180.8	204.4	204.4	204.6	204.6	214.8	176.2
7500	75	187.1	175.8	212.9	132.2	230.1	82.5	178.9	169.3	203.2	128.1	220.1	78.7	171.5	163.3	194.1	124.3	211.0	75.3
	80	199.8	199.8	213.5	175.0	231.7	120.9	192.0	192.0	203.8	171.0	222.0	116.8	184.7	184.7	194.9	167.1	212.8	112.8
	85	212.9	212.9	213.9	202.6	233.4	153.7	204.8	204.8	204.2	194.6	223.7	149.5	196.2	196.2	195.1	187.0	214.5	144.9
	90	224.1	224.1	224.4	224.3	235.3	190.3	215.8	215.8	216.0	216.0	225.7	185.9	207.8	207.7	208.0	208.0	216.5	181.1
8000	75	191.1	181.2	214.7	136.4	231.2	83.5	182.7	174.7	204.9	132.2	221.6	79.9	174.9	168.5	195.7	128.3	212.1	76.5
	80	204.0	204.0	215.5	181.6	233.1	123.3	196.0	196.0	205.8	177.5	223.3	119.2	188.4	188.4	196.8	173.6	214.0	115.2
	85	216.8	216.8	216.0	206.4	234.9	156.7	208.5	208.5	206.2	198.3	225.1	152.5	199.6	199.5	197.0	190.4	215.8	147.9
	90	227.4	227.4	227.6	227.5	236.9	194.8	218.9	218.8	219.1	219.0	227.2	190.6	210.7	210.7	210.9	210.8	218.0	185.8
8500	75	194.4	186.2	216.2	140.1	232.0	84.7	185.7	179.5	206.4	135.9	222.4	81.0	178.7	173.3	197.2	132.0	212.9	77.6
	80	207.7	207.7	217.3	187.8	233.9	125.0	199.4	199.4	207.6	183.6	224.2	121.0	191.7	191.7	197.2	178.0	214.8	116.8
	85	220.0	220.0	217.8	209.8	236.1	159.5	211.6	211.5	207.9	201.6	226.4	155.2	202.1	202.4	198.7	193.7	217.0	151.1
	90	230.2	230.2	230.4	230.3	238.3	199.5	221.5	221.5	221.6	221.6	228.6	194.9	213.1	213.0	213.2	213.1	219.3	189.9
9000	75	198.0	191.0	217.7	143.6	233.2	85.9	189.3	184.2	207.8	139.5	223.2	82.2	180.9	180.9	198.4	135.6	213.8	78.8
	80	210.9	210.9	218.5	194.1	235.0	126.5	202.5	202.5	207.7	188.2	225.2	122.6	194.7	194.7	199.3	181.2	215.8	118.3
	85	222.9	222.9	219.5	212.9	237.3	162.5	214.3	214.2	209.5	204.7	227.5	157.7	206.0	206.0	207.4	198.2	218.0	153.0
	90	232.6	232.5	232.7	232.6	239.5	203.7	223.7	223.7	223.8	223.7	229.8	199.2	215.1	215.1	215.2	215.2	220.4	193.8
9500	75	200.6	195.4	218.9	147.1	233.9	86.9	191.4	191.4	208.9	143.0	224.1	83.3	183.6	183.6	199.5	140.4	214.5	79.5
	80	213.7	213.7	218.8	198.8	236.0	127.8	205.2	205.2	210.7	194.3	228.1	123.8	197.2	197.2	201.1	184.3	216.7	119.6
	85	225.3	225.2	220.9	215.9	238.3	164.7	216.5	216.5	210.9	207.6	228.4	160.2	208.1	208.1	201.4	199.3	219.0	155.4
	90	234.6	234.6	234.7	234.6	240.6	207.5	225.6	225.6	225.7	225.7	230.8	203.2	216.9	216.9	217.0	217.0	221.5	197.4
10000	75	202.5	202.5	219.9	150.1	234.7	88.1	194.0	194.0	210.0	146.0	224.7	84.2	186.1	186.1	200.6	141.9	215.4	81.1
	80	216.3	216.3	220.6	201.6	236.9	129.1	207.6	207.6	211.4	194.3	227.0	125.2	199.5	199.4	202.7	187.0	217.5	120.9
	85	227.4	227.3	222.2	218.6	239.2	167.1	218.5	218.5	212.2	210.3	229.3	162.5	209.9	209.9	202.6	202.0	219.8	157.6
	90	236.4	236.3	236.5	236.4	241.7	211.5	227.3	227.2	227.4	227.3	231.8	206.1	218.4	218.4	218.5	218.5	222.4	200.4
10500	75	205.0	205.0	221.0	152.9	235.5	89.3	196.4	196.4	211.0	148.8	225.6	85.6	188.3	188.3	201.6	144.7	216.1	82.2
	80	218.5	218.4	222.2	204.4	237.7	130.4	209.7	209.7	212.9	196.9	227.8	126.7	201.4	201.4	204.2	189.6	218.3	122.0
	85	229.2	229.2	223.4	221.1	240.1	169.3	220.2	220.2	213.3	212.8	230.1	164.3	210.6	210.6	203.7	203.7	220.6	159.5
	90	237.9	237.9	238.0	237.9	242.6	215.3	228.7	228.7	228.8	228.8	232.7	209.8	219.8	219.8	219.9	219.8	222.4	203.7
11000	75	207.3	207.3	222.0	155.6	236.3	90.2	198.6	198.6	211.9	151.5	226.3	86.4	190.5	190.5	202.5	147.3	216.7	83.3
	80	220.4	220.4	223.6	206.9	238.4	131.8	211.6	211.6	214.3	199.4	228.5	127.7	203.1	203.1	205.5	192.0	218.9	123.2
	85	230.8	230.8	224.5	223.5	240.8	171.2	221.7	221.7	214.4	214.4	230.9	166.8	212.9	212.9	204.7	204.7	221.3	161.9
	90	239.3	239.3	239.4	239.3	243.7	219.0	230.0	230.0	230.1	230.0	232.5	213.5	221.0	221.0	221.1	221.0	223.3	205.7

Notes:

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



Performance Data

Table 5. Gross cooling capacities 22 tons - EAC270AD

Air Flow cfm	Ent DB (°F)	Ambient Temperature																				
		85						95						105								
				Entering Wet Bulb																		
		61	67	73	61	67	73	61	67	73	61	67	73	61	67	73	61	67	73			
		MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC	
7000	75	251.7	204.2	277.1	155.7	294.4	105.3	232.1	195.2	259.2	147.7	277.0	97.9	211.3	186.1	239.3	139.1	257.8	90.1			
	80	254.7	235.6	277.8	193.6	296.2	144.2	238.1	223.1	259.7	186.1	278.9	136.9	220.2	210.1	239.8	177.8	259.3	128.7			
	85	265.7	259.1	278.5	228.6	297.9	177.2	250.6	244.3	260.3	221.7	280.2	169.9	234.2	228.4	240.2	213.6	260.8	161.9			
	90	277.9	270.9	281.5	260.0	299.5	208.1	263.0	256.4	265.3	247.1	282.9	204.7	246.6	240.5	247.7	234.2	262.8	194.8			
7500	75	255.4	212.7	279.6	160.0	296.1	108.3	235.8	203.8	261.6	152.0	279.1	99.1	213.4	192.5	241.6	143.5	260.0	91.3			
	80	259.8	242.4	280.4	199.8	298.1	146.8	242.3	229.9	262.3	192.7	280.5	139.4	225.4	219.8	242.3	184.6	260.2	131.5			
	85	271.2	264.5	281.3	236.3	300.3	182.1	255.9	249.6	263.0	229.9	282.7	174.4	239.2	233.3	242.8	222.2	262.7	164.9			
	90	283.0	275.9	284.8	263.9	301.8	212.8	267.9	261.2	269.2	253.3	284.1	208.2	251.2	244.9	251.5	240.4	264.8	199.7			
8000	75	258.3	220.8	281.7	164.2	297.6	107.6	239.2	212.3	263.6	156.4	280.3	100.2	217.7	198.0	243.5	147.9	261.0	92.9			
	80	264.3	248.9	282.7	205.8	299.8	149.2	247.3	236.7	264.6	199.0	282.0	141.9	230.3	224.6	244.5	191.1	262.5	133.9			
	85	276.0	269.2	283.8	243.5	302.0	185.1	260.6	254.1	265.3	237.6	284.0	176.9	243.7	237.6	245.0	226.1	264.3	167.8			
	90	287.2	280.0	288.9	270.4	303.7	217.2	271.9	265.1	272.7	258.9	286.6	214.1	255.0	248.6	254.9	246.2	266.6	205.4			
8500	75	260.9	228.6	283.6	167.7	299.3	108.7	241.2	217.7	265.4	160.2	281.2	103.0	221.6	203.2	245.2	151.9	261.9	93.6			
	80	268.0	254.9	284.7	211.0	301.1	150.9	251.6	245.4	266.5	204.7	283.2	144.0	234.4	228.6	246.4	197.1	263.1	137.4			
	85	280.1	273.1	285.9	250.2	303.3	199.1	264.6	258.0	267.4	244.9	285.8	181.2	247.4	241.3	247.0	229.7	265.7	171.0			
	90	290.8	283.6	291.9	275.3	305.4	221.4	275.4	268.5	275.7	264.0	288.2	218.4	258.1	251.7	258.3	251.8	268.5	209.9			
9000	75	262.0	235.6	285.3	171.1	300.5	109.8	244.6	222.4	267.0	163.8	282.2	102.5	225.6	208.1	246.8	155.6	263.5	98.4			
	80	271.3	260.6	286.5	215.9	302.5	152.3	255.4	249.2	268.2	210.0	284.5	145.6	238.0	232.1	248.1	202.8	265.5	139.3			
	85	283.6	276.4	287.8	256.6	304.9	184.5	267.9	261.3	269.2	248.5	287.1	184.0	250.6	244.4	248.7	233.1	267.2	175.7			
	90	293.9	286.6	294.6	279.8	306.9	225.5	278.3	271.3	278.3	268.6	289.4	221.3	260.8	254.3	261.0	254.4	269.8	213.8			
9500	75	265.0	239.9	286.7	174.3	301.7	110.9	247.5	226.8	268.3	167.2	283.9	103.6	228.5	212.6	248.1	159.2	263.5	95.8			
	80	274.4	266.0	288.0	220.6	303.8	153.7	258.8	252.5	269.8	215.0	285.7	147.0	241.2	235.3	249.7	208.1	265.7	138.4			
	85	286.6	279.1	290.0	253.7	306.3	189.4	270.8	264.1	270.9	251.6	289.1	188.0	253.3	247.0	250.3	236.2	268.3	179.1			
	90	296.6	289.1	297.0	283.7	308.3	229.4	280.7	273.7	280.6	272.7	291.1	228.0	263.1	256.6	263.2	256.4	271.1	218.8			
10000	75	267.6	244.0	287.9	177.0	303.0	114.9	250.0	231.0	269.5	170.3	284.5	104.7	231.0	217.0	249.2	162.6	264.3	96.9			
	80	278.0	271.2	289.6	225.0	304.9	154.9	261.8	255.4	271.3	219.8	286.7	148.4	244.0	238.1	251.2	213.2	266.7	139.9			
	85	289.1	280.4	294.3	254.8	307.4	193.4	271.5	265.5	270.4	252.5	289.7	188.5	255.6	249.4	251.7	239.1	269.3	181.6			
	90	298.9	291.5	299.1	287.6	309.5	232.4	282.9	275.9	282.7	275.7	292.1	229.4	265.1	258.5	265.2	258.4	272.1	223.3			
10500	75	269.9	247.9	289.1	179.5	303.6	113.1	252.4	235.1	270.7	173.1	285.6	105.8	233.2	221.1	250.3	165.5	265.5	98.1			
	80	280.6	273.8	291.0	229.3	306.0	156.2	264.4	258.0	272.6	224.6	287.7	149.7	246.5	240.5	252.5	218.1	267.5	141.3			
	85	290.9	283.5	295.1	240.2	307.5	195.5	274.5	267.5	278.5	250.5	290.5	189.7	257.6	251.3	252.9	241.7	270.1	182.6			
	90	300.9	293.5	301.0	291.0	310.8	235.8	284.8	277.7	284.6	277.6	293.4	232.4	266.8	260.2	266.9	260.1	272.9	226.6			
11000	75	272.1	251.7	290.2	181.8	304.5	114.2	254.5	239.0	271.6	175.3	285.7	106.9	235.3	225.1	251.3	168.3	265.7	99.1			
	80	282.9	276.0	292.2	233.3	306.9	157.3	266.6	260.2	273.8	228.9	288.5	151.0	248.6	242.6	253.7	222.8	268.3	141.8			
	85	292.5	285.5	297.5	263.5	308.5	198.3	276.5	269.5	280.4	254.0	291.3	193.5	259.4	253.1	254.1	244.4	271.0	186.0			
	90	302.7	295.2	302.7	294.3	311.8	239.4	286.5	279.4	286.6	279.2	294.2	235.9	268.3	261.8	268.4	261.6	273.7	230.2			

Table 5. Gross cooling capacities 22 tons - EAC270AD

Air Flow cfm	Ent DB (°F)	Ambient Temperature																	
		115				120				125									
		Entering Wet Bulb																	
		61		67		73		61		67		73		61		67		73	
MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC	MBh	SHC		
7000	75	191.2	172.9	218.7	130.5	237.0	79.5	182.6	166.2	208.7	126.3	227.1	78.5	175.0	160.1	199.3	122.4	218.0	75.1
	80	203.3	198.3	219.3	169.3	239.0	120.4	195.4	190.6	209.3	165.2	228.9	116.2	188.2	183.5	200.0	161.3	219.4	112.3
	85	217.4	212.0	219.4	201.6	240.6	153.5	209.2	204.0	209.3	193.5	230.6	149.3	201.6	196.6	200.0	185.9	221.1	145.0
	90	229.5	223.8	229.9	224.2	242.6	186.5	221.1	215.6	221.4	215.9	232.6	182.2	213.0	207.7	213.3	208.0	223.1	177.5
7500	75	194.9	178.3	220.9	135.0	238.5	83.5	186.1	171.5	210.7	130.8	228.3	79.7	178.4	165.4	201.2	126.9	219.1	76.3
	80	208.5	203.3	221.6	176.2	240.5	123.0	200.3	195.3	211.6	172.1	230.5	118.9	192.6	187.8	202.3	168.3	220.9	115.0
	85	222.1	216.6	221.8	205.8	242.3	156.9	213.7	208.4	211.6	197.7	232.2	152.7	205.9	200.8	202.2	189.8	222.6	148.3
	90	233.7	227.8	233.9	228.1	244.4	191.5	224.9	219.3	225.2	219.6	234.4	187.1	216.6	211.1	216.8	211.4	224.9	182.3
8000	75	199.0	183.7	222.7	139.3	238.5	85.5	190.2	177.0	212.5	135.1	229.5	81.5	182.3	170.8	202.9	131.3	220.1	77.4
	80	212.9	207.6	223.3	183.2	241.6	125.5	204.4	199.4	213.7	178.8	231.8	121.5	196.6	191.7	204.3	174.8	221.9	117.4
	85	226.1	220.5	223.9	209.7	243.8	160.2	217.5	212.1	213.7	201.5	233.7	155.9	208.1	203.0	204.1	193.5	224.0	151.4
	90	237.1	231.2	237.3	231.3	246.1	195.8	228.1	222.5	228.3	222.6	236.0	191.5	219.6	214.2	219.8	214.3	226.4	186.7
8500	75	202.6	188.9	224.3	143.4	241.6	85.8	193.5	182.1	214.0	139.2	230.8	82.1	186.2	175.8	204.4	135.3	221.3	78.6
	80	216.7	211.3	225.7	189.1	242.8	127.2	208.1	203.0	215.6	185.0	232.7	123.1	200.0	195.1	206.2	180.9	223.0	119.1
	85	229.5	223.9	225.8	213.3	245.1	163.0	220.7	215.3	215.4	205.0	234.9	158.9	212.3	207.1	205.8	196.9	225.2	154.0
	90	239.9	234.0	240.1	234.1	247.5	200.5	230.8	225.1	231.0	225.2	237.4	195.9	222.0	216.5	222.1	216.6	227.8	190.6
9000	75	206.4	193.8	225.7	147.2	241.1	87.5	197.3	186.9	215.3	143.1	230.9	83.5	189.0	180.4	205.7	139.2	222.2	79.8
	80	220.1	214.7	227.4	194.9	243.9	128.9	211.3	206.1	217.3	190.7	233.7	124.7	203.1	198.1	207.4	183.7	224.0	120.6
	85	232.4	226.7	227.5	216.6	246.2	166.1	223.4	217.9	217.0	208.3	236.0	161.5	214.8	209.5	207.3	200.1	226.3	156.9
	90	242.3	236.3	242.4	236.4	248.8	204.0	233.0	227.3	233.1	227.4	238.6	199.9	224.0	218.6	224.2	218.7	229.0	194.5
9500	75	209.2	198.4	227.0	151.0	241.9	100.1	199.9	191.5	216.5	146.9	232.3	84.4	191.5	186.9	206.8	142.9	222.5	80.9
	80	223.0	217.6	229.0	200.4	244.9	130.0	214.1	208.9	218.9	196.1	234.6	126.3	205.7	200.7	209.3	186.7	224.9	121.9
	85	234.8	229.1	228.9	219.7	247.2	168.3	225.7	220.2	218.4	211.3	237.0	164.1	216.9	211.6	220.2	214.3	227.2	159.5
	90	244.3	238.3	244.4	238.3	249.9	208.1	234.9	229.2	235.0	229.2	239.7	203.3	225.8	220.3	225.9	220.4	230.1	198.0
10000	75	222.9	210.9	228.0	154.4	243.3	89.2	202.4	197.5	217.6	150.2	233.0	85.5	194.1	189.5	207.8	146.1	223.6	82.1
	80	225.6	220.1	229.6	204.3	245.8	131.7	216.5	211.3	220.0	196.8	235.5	127.8	208.0	203.0	211.0	189.5	225.7	123.4
	85	236.9	231.2	230.2	222.7	248.1	171.2	227.6	222.1	219.7	214.2	237.8	166.7	218.7	213.4	209.7	204.7	228.0	161.7
	90	246.1	240.1	246.2	240.1	250.9	211.3	236.6	230.8	236.7	230.9	240.8	207.3	227.4	221.9	227.5	221.9	231.0	200.8
10500	75	213.9	208.7	229.0	157.5	244.3	90.3	204.9	200.0	218.6	153.4	233.9	86.6	196.5	191.8	208.8	149.2	223.8	83.2
	80	227.9	222.4	231.2	207.1	246.5	132.7	218.7	213.4	221.6	199.5	236.2	129.2	210.0	204.9	212.5	192.0	226.4	124.6
	85	238.8	233.0	231.4	225.4	249.0	173.5	229.3	223.8	220.8	215.5	238.6	169.1	220.3	215.0	210.8	205.8	228.8	164.2
	90	247.6	241.6	247.7	241.6	251.9	215.0	238.0	232.3	238.1	232.3	241.7	210.5	228.7	223.3	228.8	223.3	231.9	204.1
11000	75	216.2	211.1	230.0	160.4	245.0	91.4	207.1	202.2	219.5	156.3	234.3	87.7	198.6	193.9	209.7	152.2	224.4	84.3
	80	229.8	224.3	232.7	209.7	247.2	134.3	220.5	215.3	223.0	202.0	236.9	130.1	211.7	206.7	213.8	194.5	227.0	126.0
	85	240.3	234.6	232.5	226.9	249.7	175.7	230.8	225.3	221.8	216.6	239.3	171.3	221.7	216.4	211.8	206.8	229.4	166.3
	90	249.0	243.0	249.0	243.0	252.7	218.6	239.3	233.6	239.4	233.6	242.5	213.3	229.9	224.5	230.0	224.5	232.1	207.5

Notes:

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



Performance Data

Table 6. Evaporator fan performance - 15 ton cooling only units - EAC180AD - downflow airflow

External Static Pressure (Inches of Water)																					
		0.10		0.20		0.30		0.40		0.50		0.60		0.70		0.80		0.90		1.00	
cfm	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	
3-hp Standard Motor & Low Static Drive Accessory											3-hp Standard Motor Drive										
4800	---	---	---	---	---	---	535	0.80	574	0.91	612	1.01	649	1.13	684	1.26	719	1.41	751	1.55	
5400	---	---	---	---	523	0.88	563	1.00	599	1.13	634	1.25	668	1.37	701	1.49	734	1.63	766	1.78	
6000	---	---	505	0.95	551	1.10	592	1.25	627	1.39	660	1.52	692	1.66	723	1.79	753	1.93	783	2.07	
6600	---	---	537	1.20	581	1.37	621	1.53	656	1.68	689	1.84	719	1.99	748	2.13	776	2.29	804	2.43	
7200	521	1.27	570	1.48	612	1.67	650	1.85	685	2.03	717	2.19	747	2.36	775	2.52	802	2.69	828	2.85	

Continued

External Static Pressure (Inches of Water)																					
		1.10		1.20		1.30		1.40		1.50		1.60		1.70		1.80		1.90		2.00	
cfm	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	
3-hp Standard Motor & Drive							3-hp Standard Motor & High Static Drive Accessory														
4800	782	1.70	811	1.85	837	1.99	862	2.14	886	2.29	909	2.44	932	2.59	954	2.74	976	2.89	997	3.04	
5400	797	1.94	827	2.10	855	2.27	882	2.43	907	2.60	931	2.77	953	2.93	975	3.09	997	3.26	1018	3.43	
6000	812	2.22	841	2.38	869	2.56	897	2.73	923	2.92	949	3.10	973	3.29	997	3.48	1019	3.66	1039	3.84	
6600	832	2.58	859	2.73	885	2.90	912	3.08	938	3.26	963	3.45	988	3.65	1012	3.85	1035	4.06	1058	4.26	
7200	854	3.01	880	3.18	905	3.33	930	3.50	954	3.68	979	3.87	1003	4.06	1026	4.27	1049	4.48	---	---	

Notes:

1. For Standard Evaporator Fan Speed (rpm), reference [Table 14, p. 30](#).
2. For High Evaporator Fan Speed (rpm), reference [Table 16, p. 30](#).
3. For Oversized Evaporator Fan Speed (rpm), reference [Table 17, p. 30](#).
4. Fan motor heat (MBh) = 3.15 x Fan bhp.
5. Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data.
6. For all non-standard sheave combinations, please refer to accessory installer's guides ACC-SVN163*-EN and ACC-SVN169*-EN.
7. 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 7. Evaporator fan performance - 15 ton cooling only units - EAC180AD - horizontal airflow

External Static Pressure (Inches of Water)																				
0.10			0.20		0.30		0.40		0.50		0.60		0.70		0.80		0.90		1.00	
cfm	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
3-hp Standard Motor & Low Static Drive Accessory											3-hp Standard Motor Drive									
4800	---	---	---	---	524	0.80	568	0.93	610	1.08	649	1.23	685	1.37	718	1.52	750	1.68	780	1.83
5400	---	---	518	0.89	557	1.02	597	1.16	637	1.32	675	1.48	710	1.65	743	1.81	774	1.98	804	2.15
6000	503	0.96	554	1.15	595	1.30	630	1.44	666	1.60	701	1.78	736	1.96	769	2.15	800	2.33	830	2.51
6600	542	1.23	592	1.44	632	1.63	666	1.79	698	1.95	731	2.13	763	2.32	795	2.51	826	2.72	855	2.92
7200	582	1.56	630	1.79	670	2.00	704	2.19	733	2.36	763	2.54	793	2.74	823	2.94	852	3.15	881	3.37

Continued

External Static Pressure (Inches of Water)																				
1.10			1.20		1.30		1.40		1.50		1.60		1.70		1.80		1.90		2.00	
cfm	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
3-hp Standard Motor & Drive					3-hp Standard Motor & High Static Drive Accessory															
4800	809	1.99	836	2.14	862	2.30	887	2.45	912	2.60	935	2.76	958	2.92	981	3.08	1002	3.23	1023	3.39
5400	833	2.32	860	2.49	886	2.67	912	2.84	936	3.01	959	3.19	982	3.36	1004	3.54	1026	3.71	1047	3.89
6000	858	2.69	884	2.88	910	3.07	936	3.27	960	3.46	984	3.65	1007	3.85	1029	4.04	1050	4.23	1071	4.42
6600	883	3.12	910	3.32	936	3.52	960	3.73	984	3.94	1008	4.15	1030	4.36	---	---	---	---	---	---
7200	909	3.59	935	3.81	961	4.03	986	4.25	1009	4.47	---	---	---	---	---	---	---	---	---	---

Notes:

1. For Standard Evaporator Fan Speed (rpm), reference [Table 14, p. 30](#).
2. For High Evaporator Fan Speed (rpm), reference [Table 16, p. 30](#).
3. For Oversized Evaporator Fan Speed (rpm), reference [Table 17, p. 30](#).
4. Fan motor heat (MBh) = 3.15 x Fan bhp.
5. Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data.
6. For all non-standard sheave combinations, please refer to accessory installer's guides ACC-SVN163*-EN and ACC-SVN169*-EN.
7. 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.



Performance Data

Table 8. Evaporator fan performance - 17½ ton cooling only units - EAC210AD - downflow airflow

External Static Pressure (Inches of Water)																					
		0.10		0.20		0.30		0.40		0.50		0.60		0.70		0.80		0.90		1.00	
cfm	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	
3-hp Standard Motor & Low Static Drive Accessory																		3-hp Standard Motor Drive			
5600	---	---	---	---	---	---	572	1.08	609	1.21	643	1.33	675	1.46	708	1.59	740	1.72	771	1.87	
6300	---	---	---	---	566	1.23	606	1.38	642	1.53	674	1.67	705	1.81	735	1.96	764	2.10	793	2.24	
7000	---	---	559	1.38	601	1.57	640	1.74	676	1.91	708	2.07	738	2.23	766	2.39	793	2.55	820	2.70	
7700	552	1.53	597	1.74	638	1.95	675	2.15	710	2.35	742	2.53	771	2.71	799	2.89	825	3.06	851	3.24	
8400	592	1.91	637	2.19	675	2.41	710	2.63	744	2.85	776	3.05	805	3.25	833	3.45	858	3.65	883	3.84	

Continued

External Static Pressure (Inches of Water)																					
		1.10		1.20		1.30		1.40		1.50		1.60		1.70		1.80		1.90		2.00	
cfm	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	
3-hp Standard Motor Drive															5-hp Oversized Motor & Drive						
5600	802	2.03	831	2.19	860	2.36	887	2.53	913	2.71	938	2.88	961	3.05	983	3.22	1004	3.39	1025	3.56	
6300	822	2.39	850	2.55	877	2.72	904	2.90	930	3.08	956	3.27	981	3.47	1005	3.66	1028	3.86	1050	4.05	
7000	846	2.86	872	3.02	898	3.18	923	3.35	949	3.53	973	3.72	998	3.92	1021	4.12	1045	4.33	1068	4.54	
7700	875	3.41	899	3.58	923	3.76	947	3.93	971	4.11	994	4.28	1017	4.47	1040	4.67	1063	4.88	1085	5.09	
8400	907	4.03	930	4.22	953	4.41	975	4.59	997	4.78	1018	4.97	1040	5.17	1062	5.36	1084	5.55	1105	5.75	

Notes:

1. For Standard Evaporator Fan Speed (rpm), reference [Table 14, p. 30](#).
2. For High Evaporator Fan Speed (rpm), reference [Table 16, p. 30](#).
3. For Oversized Evaporator Fan Speed (rpm), reference [Table 17, p. 30](#).
4. Fan motor heat (MBh) = 3.15 x Fan bhp.
5. Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data.
6. For all non-standard sheave combinations, please refer to accessory installer's guides ACC-SVN163*-EN and ACC-SVN169*-EN.
7. 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 9. Evaporator fan performance - 17½ ton cooling only units - EAC210AD - horizontal airflow

External Static Pressure (Inches of Water)																					
		0.10		0.20		0.30		0.40		0.50		0.60		0.70		0.80		0.90		1.00	
cfm	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	
3-hp Standard Motor & Low Static Drive Accessory											3-hp Standard Motor & Drive										
5600	---	---	---	---	570	1.11	608	1.25	646	1.41	683	1.58	719	1.75	752	1.92	783	2.09	812	2.26	
6300	---	---	574	1.29	613	1.46	647	1.61	682	1.77	715	1.94	749	2.13	782	2.32	813	2.52	842	2.71	
7000	571	1.46	617	1.67	657	1.87	691	2.05	722	2.22	752	2.40	783	2.59	813	2.79	843	3.00	872	3.21	
7700	615	1.85	662	2.13	701	2.35	735	2.57	765	2.76	792	2.94	820	3.14	848	3.35	876	3.56	903	3.79	
8400	662	2.35	706	2.65	745	2.92	778	3.16	809	3.38	835	3.59	860	3.79	886	4.00	912	4.23	937	4.45	

Continued

External Static Pressure (Inches of Water)																					
		1.10		1.20		1.30		1.40		1.50		1.60		1.70		1.80		1.90		2.00	
cfm	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	
3-hp Standard Motor Drive											5-hp Oversized Motor & Drive										
5600	841	2.44	868	2.62	894	2.80	920	2.98	944	3.16	968	3.34	990	3.52	1012	3.70	1034	3.88	1055	4.06	
6300	870	2.90	897	3.09	923	3.29	948	3.49	972	3.69	996	3.90	1018	4.10	1041	4.30	1062	4.50	1083	4.70	
7000	900	3.43	927	3.64	953	3.86	977	4.07	1001	4.28	1024	4.51	1047	4.73	1069	4.95	1090	5.17	1111	5.39	
7700	930	4.02	957	4.26	982	4.49	1007	4.73	1031	4.96	1054	5.20	1076	5.43	1098	5.67	--	--	--	--	
8400	963	4.70	988	4.94	1013	5.20	1037	5.46	1061	5.71	--	--	--	--	--	--	--	--	--	--	

Notes:

1. For Standard Evaporator Fan Speed (rpm), reference [Table 14, p. 30](#).
2. For High Evaporator Fan Speed (rpm), reference [Table 16, p. 30](#).
3. For Oversized Evaporator Fan Speed (rpm), reference [Table 17, p. 30](#).
4. Fan motor heat (MBh) = 3.15 x Fan bhp.
5. Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data.
6. For all non-standard sheave combinations, please refer to accessory installer's guides ACC-SVN163*-EN and ACC-SVN169*-EN.
7. 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.



Performance Data

Table 10. Evaporator fan performance - 20 ton cooling only units - EAC240AD - downflow airflow

External Static Pressure (Inches of Water)																					
		0.10		0.20		0.30		0.40		0.50		0.60		0.70		0.80		0.90		1.00	
cfm	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	
5-hp Standard Motor & Field supplied Drive ^(a)												5-hp Standard Motor & Low Static Drive Accessory									
7000	---	---	---	---	601	1.57	640	1.74	676	1.91	708	2.07	738	2.23	766	2.39	793	2.55	820	2.70	
7500	---	---	---	---	627	1.84	665	2.03	700	2.21	732	2.39	761	2.56	790	2.74	816	2.91	842	3.08	
8000	---	---	614	1.93	654	2.14	690	2.35	724	2.55	756	2.75	786	2.93	813	3.12	839	3.30	864	3.49	
8500	598	1.99	641	2.24	681	2.49	716	2.71	749	2.93	780	3.13	810	3.34	838	3.54	863	3.74	888	3.93	
9000	629	2.33	670	2.60	708	2.87	742	3.10	774	3.33	805	3.57	834	3.79	862	4.00	888	4.21	912	4.41	
9500	659	2.71	698	2.98	735	3.27	769	3.53	801	3.79	830	4.03	858	4.26	886	4.49	912	4.73	936	4.95	
10000	690	3.13	728	3.43	763	3.72	796	4.01	827	4.27	855	4.53	883	4.78	910	5.04	936	5.28	961	5.52	
10500	718	3.56	758	3.92	791	4.21	823	4.50	854	4.81	881	5.06	909	5.36	934	5.61	960	5.87	985	6.12	
11000	751	4.09	788	4.46	819	4.75	851	5.09	879	5.35	908	5.67	934	5.95	959	6.23	985	6.51	1009	6.79	
5-hp Standard Motor & Drive												7.5-hp Oversized Motor & Drive									

Continued

External Static Pressure (Inches of Water)																					
		1.10		1.20		1.30		1.40		1.50		1.60		1.70		1.80		1.90		2.00	
cfm	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	
5-hp Standard Motor & Drive																					
7000	846	2.86	872	3.02	898	3.18	923	3.35	949	3.53	973	3.72	998	3.92	1021	4.12	1045	4.33	1068	4.54	
7500	867	3.25	891	3.42	915	3.58	940	3.75	964	3.93	988	4.11	1011	4.30	1035	4.50	1057	4.71	1080	4.93	
8000	889	3.67	913	3.85	936	4.03	959	4.21	981	4.39	1004	4.57	1027	4.75	1049	4.94	1071	5.14	1093	5.36	
8500	912	4.13	935	4.32	957	4.51	979	4.70	1001	4.89	1023	5.08	1044	5.28	1066	5.47	1087	5.66	1108	5.86	
9000	936	4.63	958	4.82	980	5.03	1001	5.24	1022	5.44	1043	5.64	1064	5.85	1084	6.05	1104	6.25	1125	6.45	
9500	960	5.17	982	5.39	1003	5.60	1024	5.81	1045	6.03	1065	6.24	1085	6.46	1104	6.66	1124	6.89	1143	7.10	
10000	984	5.74	1006	5.98	1028	6.22	1048	6.44	1068	6.66	1088	6.90	1107	7.11	1126	7.34	1145	7.57	1163	7.79	
10500	1008	6.37	1030	6.62	1052	6.87	1072	7.12	1092	7.35	1112	7.60	1130	7.83	1149	8.07	---	---	---	---	
11000	1032	7.04	1054	7.30	1076	7.56	1096	7.82	1116	8.09	1135	8.34	1154	8.59	---	---	---	---	---	---	
7.5-hp Oversized Motor & Drive																					

Notes:

1. For Standard Evaporator Fan Speed (rpm), reference [Table 14, p. 30](#).
2. For High Evaporator Fan Speed (rpm), reference [Table 16, p. 30](#).
3. For Oversized Evaporator Fan Speed (rpm), reference [Table 17, p. 30](#).
4. Fan motor heat (MBh) = 3.15 x Fan bhp.
5. Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data.
6. For all non-standard sheave combinations, please refer to accessory installer's guides ACC-SVN163*-EN and ACC-SVN169*-EN.
7. 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.

(a) Field supplied BK160 x 1.4375" fan sheave, 1VP44 x 1.125" motor sheave, and BX60 belt.

Table 11. Evaporator fan performance - 20 ton cooling only units - EAC240AD - horizontal airflow

External Static Pressure (Inches of Water)																				
0.10		0.20		0.30		0.40		0.50		0.60		0.70		0.80		0.90		1.00		
cfm	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
5-hp Standard Motor & Field supplied Drive ^(a)										5-hp Standard Motor & Low Static Drive Accessory										
7000	---	---	617	1.67	657	1.87	691	2.05	722	2.22	752	2.40	783	2.59	813	2.79	843	3.00	872	3.21
7500	603	1.74	649	1.99	689	2.22	723	2.42	752	2.60	781	2.78	809	2.97	838	3.18	866	3.39	894 ^(b)	3.62
8000	637	2.08	681	2.34	720	2.59	753	2.81	783	3.01	811	3.21	837	3.40	864	3.62	891	3.83	917	4.06
8500	671	2.45	714	2.75	751	3.00	785	3.26	815	3.49	842	3.70	867	3.89	891	4.10	917	4.33	943	4.56
9000	706	2.88	747	3.19	783	3.47	816	3.73	846	3.99	874	4.23	898	4.45	921	4.64	945	4.87	969	5.11
9500	741	3.35	779	3.66	814	3.96	848	4.27	878	4.55	905	4.81	929	5.04	953	5.28	975	5.50	997	5.72
10000	773	3.84	811	4.19	846	4.51	880	4.86	909	5.16	936	5.44	961	5.70	984	5.94	1005	6.17	1026	6.42
10500	811	4.45	846	4.79	878	5.12	910	5.46	940	5.79	968	6.12	992	6.39	1015	6.66	1036	6.91	1057	7.17
11000	846	5.07	880	5.44	911	5.78	943	6.17	972	6.53	999	6.85	1024	7.17	1047	7.47	1069	7.74	1088	7.99
7.5-hp Oversized Motor & Drive																				

Continued

External Static Pressure (Inches of Water)																				
1.10		1.20		1.30		1.40		1.50		1.60		1.70		1.80		1.90		2.00		
cfm	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
5-hp Standard Motor & Drive																				
7000	900	3.43	927	3.64	953	3.86	977	4.07	1001	4.28	1024	4.51	1047	4.73	1069	4.95	1090	5.17	1111	5.39
7500	921	3.84	948	4.08	974	4.31	998	4.53	1022	4.76	1046	4.99	1068	5.22	1090	5.45	1111	5.69	1132	5.93
8000	944	4.29	970	4.54	995	4.78	1020	5.03	1044	5.27	1067	5.52	1089	5.77	1111	6.00	1132	6.25	1153	6.50
8500	968	4.80	993	5.05	1017	5.30	1041	5.56	1065	5.83	1088	6.08	1111	6.35	1132	6.60	1153	6.86	--	--
9000	993	5.35	1017	5.61	1040	5.87	1064	6.14	1087	6.41	1109	6.68	1132	6.96	1154	7.25	--	--	--	--
9500	1019	5.97	1042	6.24	1065	6.50	1087	6.78	1109	7.04	1131	7.33	1153	7.62	--	--	--	--	--	--
10000	1048	6.67	1069	6.93	1091	7.19	1112	7.48	1133	7.75	1155	8.04	--	--	--	--	--	--	--	--
10500	1076	7.40	1097	7.68	1118	7.96	1138	8.23	1159	8.52	--	--	--	--	--	--	--	--	--	--
11000	1107	8.23	1127	8.50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7.5-hp Oversized Motor & Drive																				

Notes:

1. For Standard Evaporator Fan Speed (rpm), reference [Table 14, p. 30](#).
2. For High Evaporator Fan Speed (rpm), reference [Table 16, p. 30](#).
3. For Oversized Evaporator Fan Speed (rpm), reference [Table 17, p. 30](#).
4. Fan motor heat (MBh) = 3.15 x Fan bhp.
5. Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data.
6. For all non-standard sheave combinations, please refer to accessory installer's guides ACC-SVN163*-EN and ACC-SVN169*-EN.
7. 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.

(a) Field supplied BK160 x 1.4375" fan sheave, 1VP44 x 1.125" motor sheave, and BX60 belt.

(b) 5-hp Standard Motor & Drive



Performance Data

Table 12. Evaporator fan performance - 22 ton cooling only unit - EAC270AD- downflow airflow

External Static Pressure (Inches of Water)																					
		0.10		0.20		0.30		0.40		0.50		0.60		0.70		0.80		0.90		1.00	
cfm	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	
5-hp Standard Motor & Field Supplied Drive ^(a)											5-hp Standard Motor & Low Static Drive Accessory										
7000	---	---	---	---	601	1.57	640	1.74	676	1.91	708	2.07	738	2.23	766	2.39	793	2.55	820	2.70	
7500	---	---	---	---	627	1.84	665	2.03	700	2.21	732	2.39	761	2.56	790	2.74	816	2.91	842	3.08	
8000	---	---	614	1.93	654	2.14	690	2.35	724	2.55	756	2.75	786	2.93	813	3.12	839	3.30	864	3.49	
8500	598	1.99	641	2.24	681	2.49	716	2.71	749	2.93	780	3.13	810	3.34	838	3.54	863	3.74	888	3.93	
9000	629	2.33	670	2.60	708	2.87	742	3.10	774	3.33	805	3.57	834	3.79	862	4.00	888	4.21	912	4.41	
9500	659	2.71	698	2.98	735	3.27	769	3.53	801	3.79	830	4.03	858	4.26	886	4.49	912	4.73	936	4.95	
10000	690	3.13	728	3.43	763	3.72	796	4.01	827	4.27	855	4.53	883	4.78	910	5.04	936	5.28	961	5.52	
10500	718	3.56	758	3.92	791	4.21	823	4.50	854	4.81	881	5.06	909	5.36	934	5.61	960	5.87	985	6.12	
11000	751	4.09	788	4.46	819	4.75	851	5.09	879	5.35	908	5.67	934	5.95	959	6.23	985	6.51	1009	6.79	
5-hp Standard Motor & Drive											7.5-hp Oversized Motor & Drive										

Continued

External Static Pressure (Inches of Water)																					
		1.10		1.20		1.30		1.40		1.50		1.60		1.70		1.80		1.90		2.00	
cfm	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	
5-hp Standard Motor & Drive																					
7000	846	2.86	872	3.02	898	3.18	923	3.35	949	3.53	973	3.72	998	3.92	1021	4.12	1045	4.33	1068	4.54	
7500	867	3.25	891	3.42	915	3.58	940	3.75	964	3.93	988	4.11	1011	4.30	1035	4.50	1057	4.71	1080	4.93	
8000	889	3.67	913	3.85	936	4.03	959	4.21	981	4.39	1004	4.57	1027	4.75	1049	4.94	1071	5.14	1093	5.36	
8500	912	4.13	935	4.32	957	4.51	979	4.70	1001	4.89	1023	5.08	1044	5.28	1066	5.47	1087	5.66	1108	5.86	
9000	936	4.63	958	4.82	980	5.03	1001	5.24	1022	5.44	1043	5.64	1064	5.85	1084	6.05	1104	6.25	1125	6.45	
9500	960	5.17	982	5.39	1003	5.60	1024	5.81	1045	6.03	1065	6.24	1085	6.46	1104	6.66	1124	6.89	1143	7.10	
10000	984	5.74	1006	5.98	1028	6.22	1048	6.44	1068	6.66	1088	6.90	1107	7.11	1126	7.34	1145	7.57	1163	7.79	
10500	1008	6.37	1030	6.62	1052	6.87	1072	7.12	1092	7.35	1112	7.60	1130	7.83	1149	8.07	---	---	---	---	
11000	1032	7.04	1054	7.30	1076	7.56	1096	7.82	1116	8.09	1135	8.34	1154	8.59	---	---	---	---	---	---	
7.5-hp Oversized Motor & Drive																					

Notes:

1. For Standard Evaporator Fan Speed (rpm), reference [Table 14, p. 30](#).
2. For High Evaporator Fan Speed (rpm), reference [Table 16, p. 30](#).
3. For Oversized Evaporator Fan Speed (rpm), reference [Table 17, p. 30](#).
4. Fan motor heat (MBh) = 3.15 x Fan bhp.
5. Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data.
6. For all non-standard sheave combinations, please refer to accessory installer's guides ACC-SVN163*-EN and ACC-SVN169*-EN.
7. 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.
8. For multi-speed fan operation, max allowable bhp is 10.0.

(a) Field supplied BK160 x 1.4375" fan sheave, 1VP44 x 1.125" motor sheave, and BX60 belt.

Table 13. Evaporator fan performance - 22 ton cooling only unit - EAC270AD - horizontal airflow

External Static Pressure (Inches of Water)																					
		0.10		0.20		0.30		0.40		0.50		0.60		0.70		0.80		0.90		1.00	
cfm	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	
5hp Standard motor & Field Supplied Drive ^(a)												5-hp Standard Motor & Low Static Drive Accessory									
7000	---	---	617	1.67	657	1.87	691	2.05	722	2.22	752	2.40	783	2.59	813	2.79	843	3.00	872	3.21	
7500	603	1.74	649	1.99	689	2.22	723	2.42	752	2.60	781	2.78	809	2.97	838	3.18	866	3.39	894 ^(b)	3.62	
8000	637	2.08	681	2.34	720	2.59	753	2.81	783	3.01	811	3.21	837	3.40	864	3.62	891	3.83	917	4.06	
8500	671	2.45	714	2.75	751	3.00	785	3.26	815	3.49	842	3.70	867	3.89	891	4.10	917	4.33	943	4.56	
9000	706	2.88	747	3.19	783	3.47	816	3.73	846	3.99	874	4.23	898	4.45	921	4.64	945	4.87	969	5.11	
9500	741	3.35	779	3.66	814	3.96	848	4.27	878	4.55	905	4.81	929	5.04	953	5.28	975	5.50	997	5.72	
10000	773	3.84	811	4.19	846	4.51	880	4.86	909	5.16	936	5.44	961	5.70	984	5.94	1005	6.17	1026	6.42	
10500	811	4.45	846	4.79	878	5.12	910	5.46	940	5.79	968	6.12	992	6.39	1015	6.66	1036	6.91	1057	7.17	
11000	846	5.07	880	5.44	911	5.78	943	6.17	972	6.53	999	6.85	1024	7.17	1047	7.47	1069	7.74	1088	7.99	
7.5-hp Oversized Motor & Drive																					

Continued

External Static Pressure (Inches of Water)																					
		1.10		1.20		1.30		1.40		1.50		1.60		1.70		1.80		1.90		2.00	
cfm	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	
5-hp Standard Motor & Drive												7.5-hp Oversized Motor & Drive									
7000	900	3.43	927	3.64	953	3.86	977	4.07	1001	4.28	1024	4.51	1047	4.73	1069	4.95	1090	5.17	1111	5.39	
7500	921	3.84	948	4.08	974	4.31	998	4.53	1022	4.76	1046	4.99	1068	5.22	1090	5.45	1111	5.69	1132	5.93	
8000	944	4.29	970	4.54	995	4.78	1020	5.03	1044	5.27	1067	5.52	1089	5.77	1111	6.00	1132	6.25	1153	6.50	
8500	968	4.80	993	5.05	1017	5.30	1041	5.56	1065	5.83	1088	6.08	1111	6.35	1132	6.60	1153	6.86	--	--	
9000	993	5.35	1017	5.61	1040	5.87	1064	6.14	1087	6.41	1109	6.68	1132	6.96	1154	7.25	--	--	--	--	
9500	1019	5.97	1042	6.24	1065	6.50	1087	6.78	1109	7.04	1131	7.33	1153	7.62	--	--	--	--	--	--	
10000	1048	6.67	1069	6.93	1091	7.19	1112	7.48	1133	7.75	1155	8.04	--	--	--	--	--	--	--	--	
10500	1076	7.40	1097	7.68	1118	7.96	1138	8.23	1159	8.52	--	--	--	--	--	--	--	--	--	--	
11000	1107	8.23	1127	8.50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
7.5-hp Oversized Motor & Drive																					

Notes:

1. For Standard Evaporator Fan Speed (rpm), reference [Table 14, p. 30](#).
2. For High Evaporator Fan Speed (rpm), reference [Table 16, p. 30](#).
3. For Oversized Evaporator Fan Speed (rpm), reference [Table 17, p. 30](#).
4. Fan motor heat (MBh) = 3.15 x Fan bhp.
5. Data includes pressure drop due to standard filters and wet coils. No accessories or options are included in pressure drop data.
6. For all non-standard sheave combinations, please refer to accessory installer's guides ACC-SVN163*-EN and ACC-SVN169*-EN.
7. 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.
8. For multi-speed fan operation, max allowable bhp is 10.0.

(a) Field supplied BK160 x 1.4375" fan sheave, 1VP44 x 1.125" motor sheave, and BX60 belt.
 (b) 5-hp Standard Motor & Drive



Performance Data

Table 14. Standard motor and drive/fan speed (rpm)

Tons	Unit Model Number	6 Turns Open	5 Turns Open	4 Turns Open	3 Turns Open	2 Turns Open	1 Turn Open	Closed
15	EAC180AD	621	667	713	758	804	850	N/A
17½	EAC210AD	706	758	811	863	915	967	N/A
20	EAC240AD	830	884	938	991	1045	1098	N/A
22	EAC270AD	830	884	938	991	1045	1098	N/A

Note: Factory set at 3 turns open.

Table 15. Standard motor and low static drive accessory sheave / fan speed (rpm)

Tons	Unit Model Number	6 Turns Open	5 Turns Open	4 Turns Open	3 Turns Open	2 Turns Open	1 Turn Open	Closed
15	EAC180AD	500	537	574	611	648	685	N/A
17½	EAC210AD	N/A	552	598	644	690	735	N/A
20	EAC240AD	730	777	824	871	918	965	N/A
22	EAC270AD	730	777	824	871	918	965	N/A

Table 16. Standard motor and high static drive accessory sheave / fan speed (rpm)

Tons	Unit Model Number	6 Turns Open	5 Turns Open	4 Turns Open	3 Turns Open	2 Turns Open	1 Turn Open	Closed
15	EAC180AD	850	896	942	988	1034	1080	N/A
17½	EAC210AD	N/A	N/A	N/A	N/A	N/A	N/A	N/A
20	EAC240AD	N/A	N/A	N/A	N/A	N/A	N/A	N/A
22	EAC270AD	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Table 17. Oversized motor and drive/fan speed (rpm)

Tons	Unit Model Number	6 Turns Open	5 Turns Open	4 Turns Open	3 Turns Open	2 Turns Open	1 Turn Open	Closed
15	EAC180AD	N/A	N/A	N/A	N/A	N/A	N/A	N/A
17½	EAC210AD	948	999	1050	1101	1153	1204	N/A
20	EAC240AD	927	967	1006	1046	1085	1125	N/A
22	EAC270AD	927	967	1006	1046	1085	1125	1164

Table 18. Static pressure drop through accessories (inches water column)

Tons	Unit Model Number	cfm	2" Standard Filters	2" MERV 13 Filters	Electric Heater Accessory (kW)			
					18	27	41	54
15	EAC180A (Downflow)	4800	0.03	0.10	-	0.01	-	-
		6000	0.05	0.14	-	0.02	-	-
		7200	0.07	0.17	-	0.03	-	-
	EAC180A (Horizontal)	4800	0.03	0.10	0.01	0.01	-	-
		6000	0.05	0.14	0.02	0.02	-	-
		7200	0.07	0.17	0.04	0.04	-	-
17½	EAC210A (Downflow)	5600	0.05	0.12	-	0.03	0.04	0.04
		7000	0.07	0.16	-	0.05	0.05	0.06
		8400	0.10	0.20	-	0.06	0.07	0.09
	EAC210A (Horizontal)	5600	0.05	0.12	-	0.03	0.04	0.04
		7000	0.07	0.16	-	0.05	0.06	0.07
		8400	0.10	0.20	-	0.07	0.09	0.11
20	EAC240A (Downflow)	6400	0.07	0.15	-	0.04	0.05	0.05
		8000	0.10	0.19	-	0.05	0.07	0.08
		9600	0.17	0.24	-	0.06	0.08	0.11
	EAC240A (Horizontal)	6400	0.07	0.15	-	0.04	0.05	0.06
		8000	0.10	0.19	-	0.07	0.08	0.10
		9600	0.17	0.24	-	0.09	0.11	0.14
22	EAC270A (Downflow)	7000	0.07	0.16	-	0.05	0.05	0.06
		9000	0.10	0.22	-	0.06	0.08	0.10
		11000	0.17	0.28	-	0.07	0.10	0.12
	EAC270A (Horizontal)	7000	0.07	0.16	-	0.05	0.06	0.07
		9000	0.10	0.22	-	0.08	0.10	0.12
		11000	0.17	0.28	-	0.13	0.18	0.23

Table 19. Auxiliary electric heat capacity

Tons	Unit Model Number.	Total ^(a)		No. of Stages	Stage1		Stage 2	
		kW Input ^(b)	MBh Output		kW Input	MBh Output	kW Input	MBh Output
15-22	EAC180-270AD	27	122.9	2	13.5	61.5	13.5	61.5
		41	184.4	2	27	122.9	13.5	61.5
		54	245.9	2	27	122.9	27	122.9

(a) Heaters are rated at 415V. For other than rated voltage, CAP = (voltage/rated voltage)² x rated cap.

(b) For all input/output categories, does not include fan power or heat.



Performance Data

Table 20. Electric heater voltage correction factors (applicable to auxiliary heat capacity)

Nominal Voltage	Distribution Voltage	Capacity Multiplier
480	380	0.63
	415	0.75
	440	0.84
	460	0.94
	480	1.00

Table 21. Air temperature rise across electric heaters (°F)

kW	Stages	15 Tons 6000 cfm EAC180AD	17½ Tons 5600 cfm EAC210AD	20 Tons 7000 cfm EAC240AD	22 Tons 7000 cfm EAC270AD
13	1	6.9	-	-	-
27	2	14.2	15.2	14.2	14.2
41	2	21.6	23.2	18.5	18.5
54	2	28.5	30.5	24.4	24.4

Note: For minimum design airflow, see airflow performance table for each unit. To calculate temp rise at different airflow, use the following formula:
 Temp. rise across Electric Heater = kW x 3414/1.08 x cfm.



Controls

Thermostats

Model #	Type	Stages	Display Type	Other
TCONT302AS42DA	Programmable	4H/2C	Touchscreen	Common preferred, not required 2/ 2 AA battery power
TCONT402AN32DA	Non-Programmable	3H/2C	Backlit Display and Keys	Outdoor Temperature Sensor included
BAYSTAT814	Touchscreen	3H/2C	Touchscreen	Remote access via Pivot Mobile App
BAYSTAT300	Programmable	3H/2C	Backlit Display and Keys	BACnet MS-TP enabled



Electrical Data

Table 22. Unit wiring with cooling (no electric heat)

Tons	Unit Model Number	Unit Operating Voltage Range	Standard Indoor Fan Motor		Oversize Indoor Fan Motor	
			Minimum Circuit Ampacity ^(a)	Maximum Fuse Size or Maximum Circuit Breaker	Minimum Circuit Ampacity	Maximum Fuse Size or Maximum Circuit Breaker
15	EAC180AD	380-415	42	50	-	-
17½	EAC210AD		50	70	52	70
20	EAC240AD		62	80	-	-
22	EAC270AD		62	80	-	-

(a) For Standard and Oversized Indoor Fan Motor, values do not include power exhaust accessory.

Table 23. Unit wiring with electric heat (single point connection)

Tons	Unit Model Number	Heater Model Number	Heater kW Rating	Control Stages	Standard Indoor Motor		Oversize Indoor Motor	
					MCA	Max Fuse Size or Max Circuit Breaker	MCA	Max Fuse Size or Max Circuit Breaker ^(a)
380-415 Volts Three Phase								
15	EAC180AD	BAYHTFBK18A	11.3/13.5	1	42	50	-	-
		BAYHTFCK36A	22.6/26.9	2	50	50	-	-
		BAYHTFCK54A	33.8/40.4	2	71	80	-	-
17½	EAC210AD	BAYHTFCK36A	22.6/26.9	2	50	70	53	70
		BAYHTFCK54A	33.8/40.4	2	71	80	74	80
		BAYHTFCK72A	45.1/53.8	2	93	100	96	100
20	EAC240AD	BAYHTFDK36A	22.6/26.9	2	62	80	-	-
		BAYHTFDK54A	33.8/40.4	2	74	80	-	-
		BAYHTFDK72A	45.1/53.8	2	96	100	-	-
22	EAC270AD	BAYHTFDK36A	22.6/26.9	2	62	80	-	-
		BAYHTFDK54A	33.8/40.4	2	74	80	-	-
		BAYHTFDK72A	45.1/53.8	2	96	100	-	-

(a) Values do not include power exhaust accessory.

Table 24. Electrical characteristics—compressor motor and condenser motor

Tons	Unit Model No.	No.	Compressor Motors						Condenser Fan Motors				
			Volts	Phase	hp ^(b)	rpm	Amps ^(a)		No.	Phase	hp	Amps ^(a)	
							RLA	LRA				FLA	LRA
15	EAC180AD	2	380-415	3	9.2 / 9.2	2900	14.5 / 14.5	101 / 101	2	1	0.75	1.9	5.8
17½	EAC210AD	2	380-415	3	14.2 / 7.9	2900	21.4 / 13.6	147 / 100	2	1	0.75	1.9	5.8
20	EAC240AD	2	380-415	3	16.3 / 12.6	2900	23.6 / 20.7	158 / 142	2	1	0.75	1.9	5.8
22	EAC270AD	2	380-415	3	16.3 / 12.6	2900	23.6 / 20.7	158 / 142	2	1	0.75	1.9	5.8

(a) For Compressor Motors and Condenser Fan Motors: Amp draw for each motor; multiply value by number of motors to determine total amps.

(b) Horsepower for each compressor.

Table 25. Electrical characteristics—evaporator fan motor

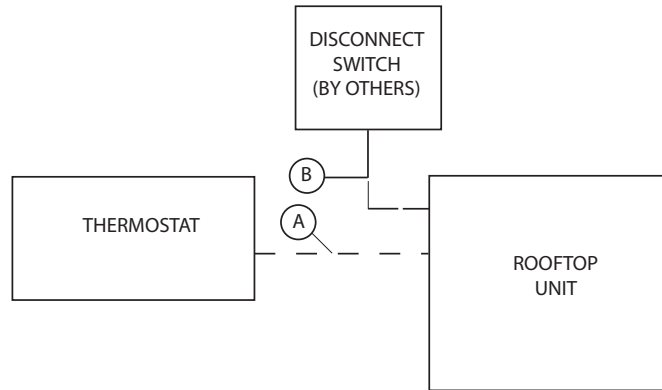
Tons	Unit Model Number	Standard Evaporator Fan Motor						Oversized Evaporator Fan Motor					
		No.	Volts	Phase	hp	Amps		No.	Volts	Phase	hp	Amps	
						FLA	LRA					FLA	LRA
15	EAC180AD	1	380-415	3	3.00	5.0	57.0	-	-	-	-	-	-
17½	EAC210AD	1	380-415	3	3.00	5.0	57.0	1	380-415	3	5.0	7.4	71.9
20	EAC240AD	1	380-415	3	5.00	7.4	71.9	-	-	-	-	-	-
22	EAC270AD	1	380-415	3	5.00	7.4	71.9	-	-	-	-	-	-

Jobsite Connections

Table 26. Typical number of wires

Thermostats

B 3 Power Wires + 1 Ground Wire (three phase)



Notes:

- For specific wiring information, see the installation instructions.
- All wiring except power wire is low voltage.
- All customer supplied wiring to be copper and must conform to applicable electrical codes and local electric codes. Wiring shown dotted is to be furnished and installed by the customer.



Dimensional Data

Figure 1. Cooling with optional electrical heat units — overview

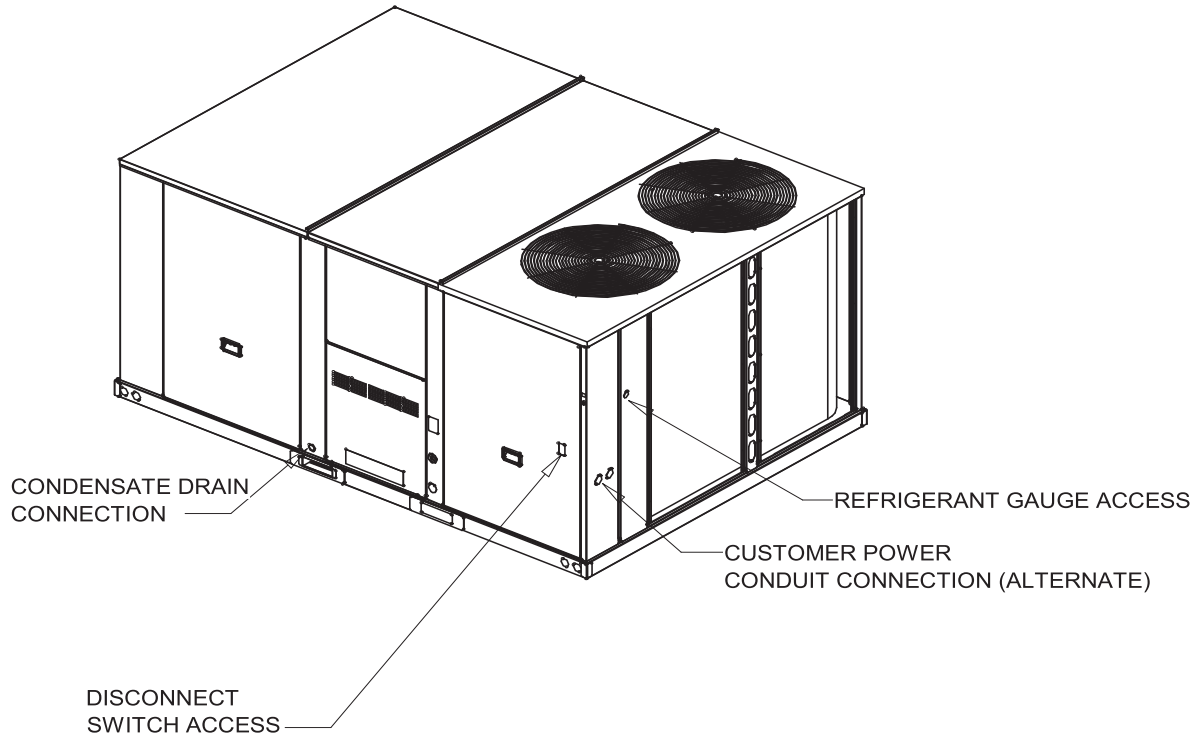
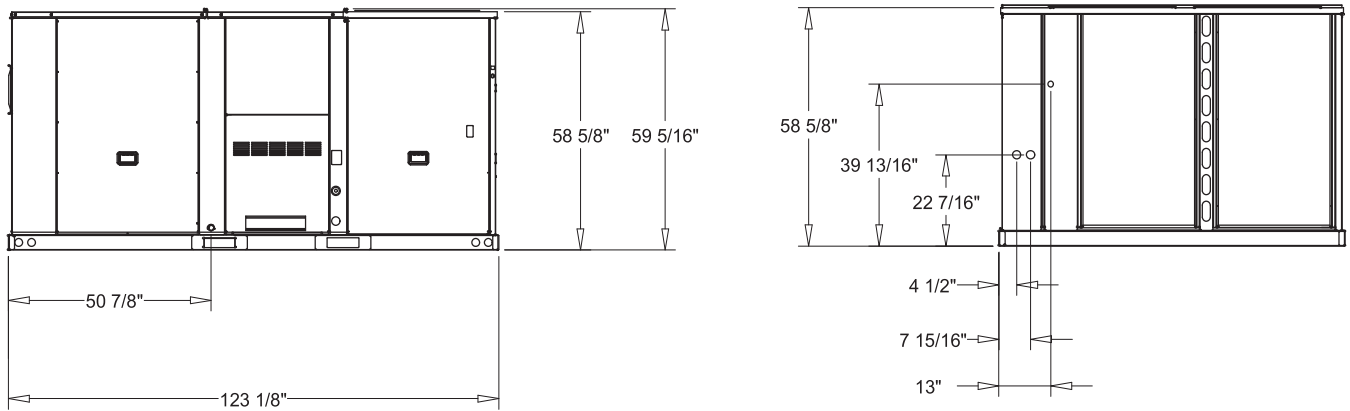


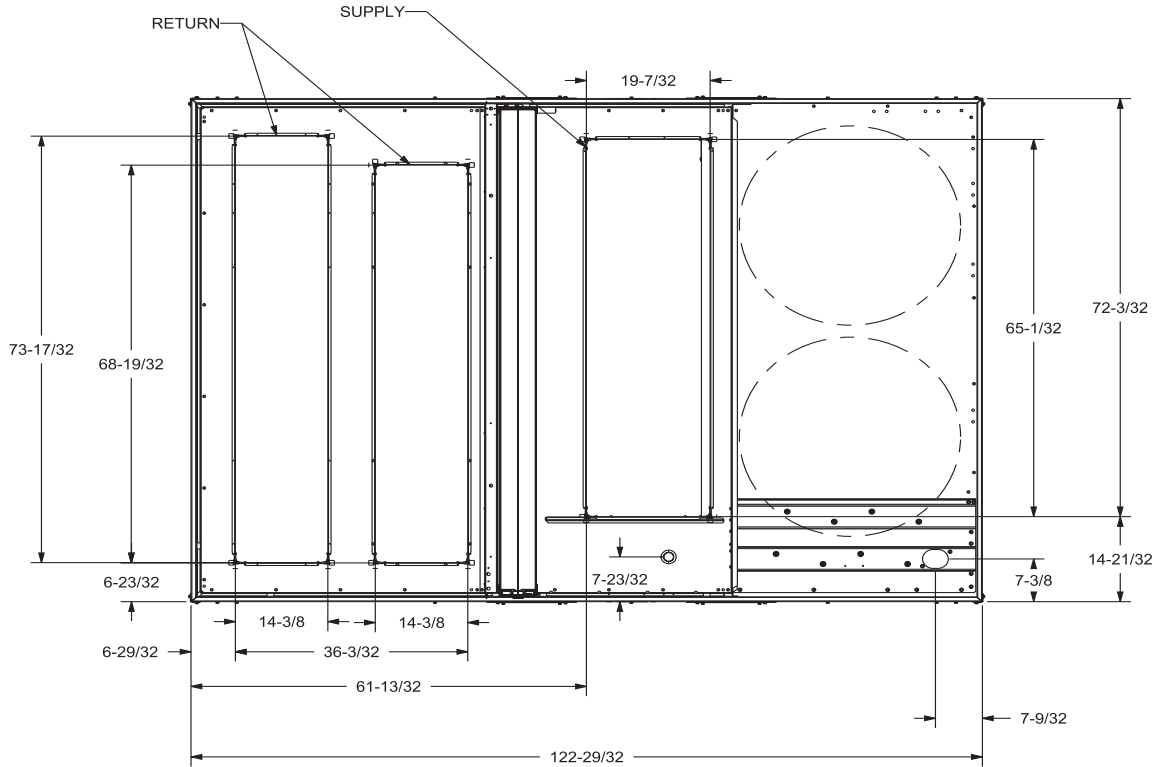
Figure 2. Cooling with optional electrical heat electric units — front & side views — 15–22 tons



NOTE:
 VERIFY WEIGHT, CONNECTION, AND ALL DIMENSION WITH
 INSTALLER DOCUMENTS BEFORE INSTALLATION

Dimensional Data

Figure 3. Cooling with optional electrical heat units — plan view — 15–22 tons



NOTE:
VERIFY WEIGHT, CONNECTIONS, AND ALL OTHER DIMENSION WITH
INSTALLER DOCUMENTS BEFORE INSULATION.

Figure 4. Cooling with optional electrical heat units — back view (horizontal configuration) — 15–22 tons

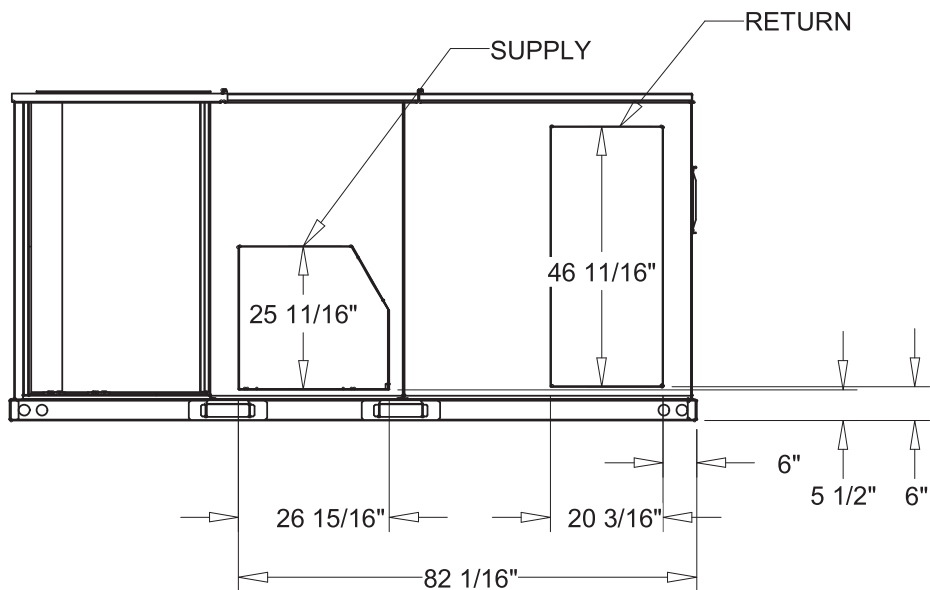


Figure 5. Cooling with optional electric heat models – roof curb – 15–22 tons

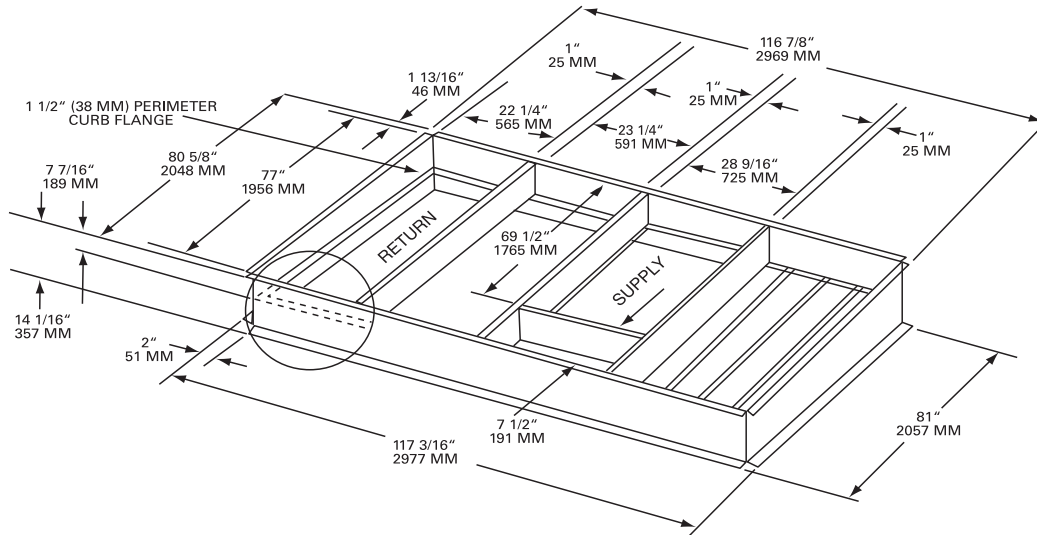
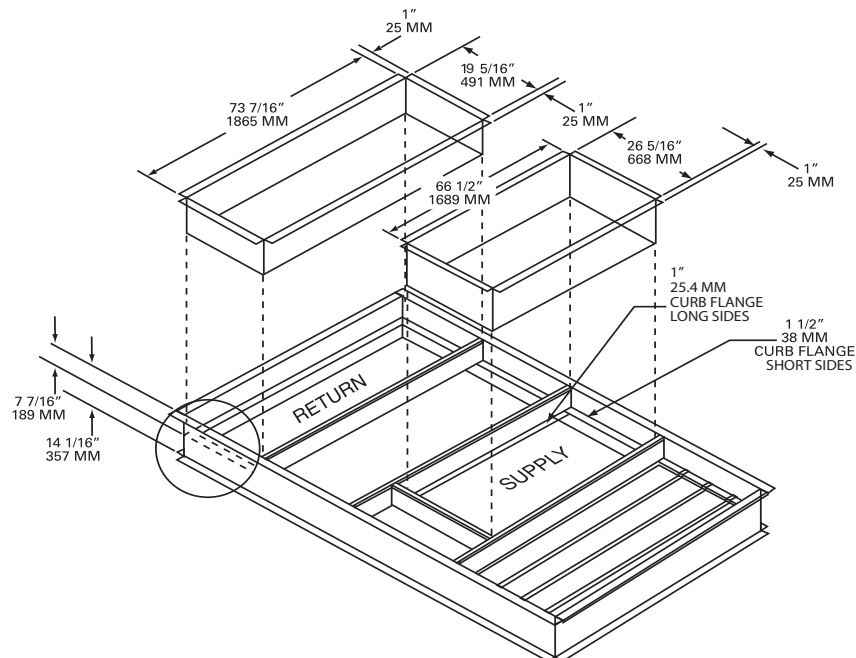


Figure 6. Cooling with optional electric heat models – downflow duct connections—field fabricated 15–22 tons



Notes:

- Duct flanges mount 7-7/16" down inside the curb on the 1-1/2" curb flanges.
- Roofcurb is intended for downflow use only.

Dimensional Data

Figure 7. Cooling with optional electric heat models – downflow unit clearance – 15–22 tons

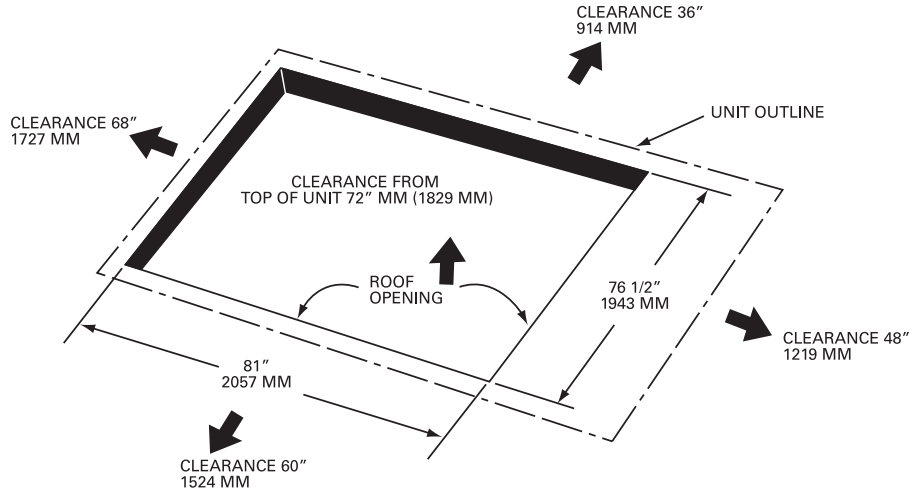
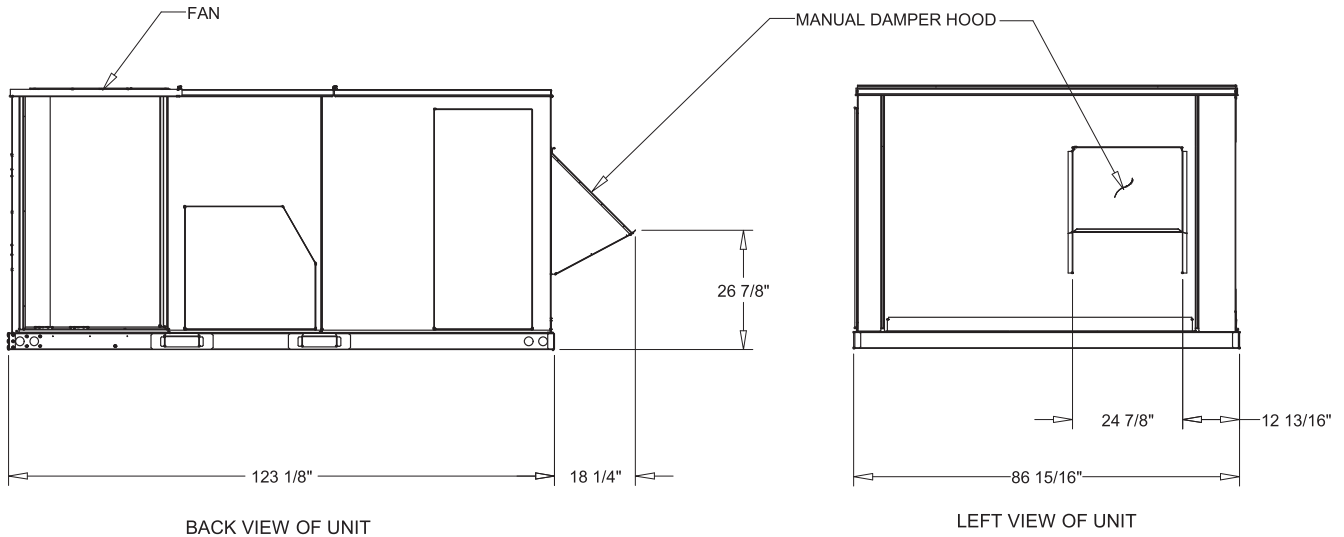


Figure 8. Cooling with optional electric heat – manual damper – 15–22 tons



NOTE:
 VERIFY WEIGHT, CONNECTION, AND ALL DIMENSION
 WITH INSTALLER DOCUMENTS BEFORE INSTALLATION

Weights

Table 27. Maximum unit & corner weights (lb) and center of gravity dimensions (in.) cooling with optional electric heat units only

Tons	Unit Model No.	Weights (lb) ^{(a), (b)}		Corner Weights ^(c)				Center of Gravity (in.)	
		Shipping	Net	A	B	C	D	Length	Width
15	EAC180AD	2077	1758	581	418	358	400	55"	38"
17½	EAC210AD	2163	1844	632	438	357	416	54"	37"
20	EAC240AD	2208	1888	664	457	345	422	53"	35"
22	EAC270AD	2208	1888	664	457	345	422	53"	35"

(a) Weights are approximate. Horizontal and downflow unit and corner weights may vary slightly.

(b) Weights do not include additional factory or field installed options/accessories. For option/accessory additional weights, reference [Table 28, p. 41](#) to be added to unit weights.

(c) Corner weights are given for information only. 15–22 ton models must be supported continuously by a curb or equivalent frame support.

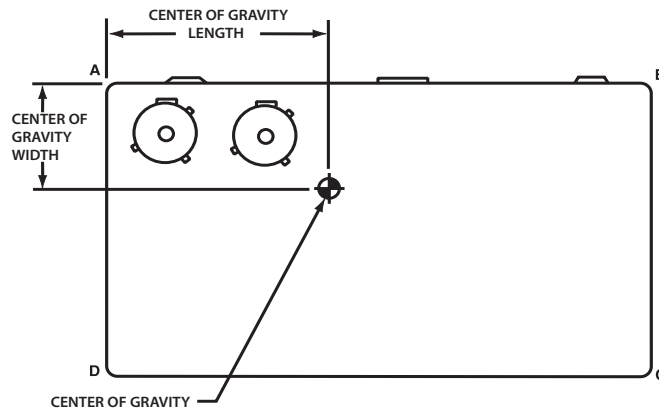


Table 28. Accessory net weight (lb)^{(a), (b)}

Accessories	EAC180	EAC210	EAC240	EAC270
Manual Outside Air Damper	15	15	15	15
Roof Curb	235	235	235	235
Oversize Motor				
3 HP	2	--	--	--
5.0 HP	--	20	--	--
7.5 HP	--	--	60	60
Hail Guard	43	43	43	43
High Static Drive Kit ^(c)	2	2	2	2
Low Static Drive Kit ^(c)	2	2	2	2
Electric Heaters ^(d)				
27 KW (380-415V)	41 / 35	41 / 35	41 / 35	41 / 35
41 KW (380-415V)	48 / 40	48 / 40	48 / 40	48 / 40
54 KW (380-415V)	51 / 42	51 / 42	51 / 42	51 / 42

(a) Net weight should be added to unit weight when ordering factory-installed accessories.

(b) Weights for factory installed options and field installed accessories not listed are < 5 lb.

(c) Not available on all models (see Fan Performance tables for specific models).

(d) To estimate shipping weight add 5 lb to net weight.



Mechanical Specifications

General

The units shall be dedicated downflow or horizontal airflow. The operating range shall be between 125°F and 40°F in cooling as standard from the factory for all units. Cooling performance shall be rated in accordance with AHRI testing procedures. All units shall be 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. Wiring internal to the unit shall be colored and numbered for simplified identification.

Standard Features

Casing

Unit casing shall be constructed of zinc coated, heavy gauge, galvanized steel. Exterior surfaces shall be cleaned, phosphatized, and finished with a weather-resistant baked enamel finish. Unit's surface shall be tested 672 hours in a salt spray test in compliance with ASTM B117. Cabinet construction shall allow for all maintenance on one side of the unit. In order to ensure a water and air tight seal, service panels shall have lifting handles and no more than three screws to remove. All exposed vertical panels and top covers in the indoor air section shall be insulated with a 1/2-inch, 1-pound density foil-faced, fire-resistant, permanent, odorless, glass fiber material. The base of the downflow unit shall be insulated with 1/2-inch, 1-pound density foil-faced, closed-cell material. The downflow unit's base pan shall have no penetrations within the perimeter of the curb other than the raised 11/8-inch high supply/return openings to provide an added water integrity precaution, if the condensate drain backs up. The base of the unit shall have provisions for forklift and crane lifting.

Compressors

All units shall have direct-drive, hermetic, scroll type compressors with centrifugal type oil pumps. Motor shall be suction gas-cooled and shall have a voltage utilization range of plus or minus 10 percent of nameplate voltage. Internal overloads shall be provided with the scroll compressors. All models shall have phase monitors, Low Pressure, High Pressure controls and Locking Safety device as Standard.

Controls

Unit shall be completely factory wired with necessary controls and contactor pressure lugs or terminal block for power wiring. Unit shall provide an external location for mounting a fused disconnect device.

Discharge Line Thermostat

A bi-metal element discharge line thermostat is installed as a standard option on the discharge line of each system. This standard option provides extra protection to the compressors against high discharge temperatures in case of loss of charge, extremely high ambient and other conditions which could drive the discharge temperature higher. Discharge line thermostat is wired in series with high pressure control. When the discharge temperature rises above the protection limit, the bi-metal disc in the thermostat switches to the off position, opening the 24 Vac circuit. When the temperature on the discharge line cools down, the bi-metal disc closes the contactor circuit, providing power to the compressor.

Evaporator and Condenser Coils

Microchannel coils will be burst tested by the manufacturer. Internally finned, 5/16" copper tubes mechanically bonded to a configured aluminum plate fin shall be standard for evaporator coils. Microchannel condenser coils shall be standard on all units. Coils shall be leak tested to ensure the

pressure integrity. The evaporator coil and condenser coil shall be leak tested to 225 psig and pressure tested to 450 psig. Sloped condensate drain pans are standard.

Filters

Two inch standard filters shall be factory supplied on all units.

High Pressure Control

All units include High Pressure Cutout as standard.

Indoor Fan

Units above shall have belt driven, FC centrifugal fans with adjustable motor sheaves. All motors shall be thermally protected. Oversized motors shall be available for high static application. All indoor fan motors comply with US DOE motor efficiency minimum levels.

Locking Safety Device

Pressure switch monitoring allows for lockout in a situation where the switch is opened. By monitoring the Y input as well as the pressure switches, advanced decision making can be made to identify situations where faults/errors occur.

Low Pressure Control

All units include low pressure cutout as standard.

Outdoor Fans

The outdoor fan shall be direct-drive, statically and dynamically balanced, draw-through in the vertical discharge position. The fan motor(s) shall be permanently lubricated and shall have built-in thermal overload protection.

Phase Monitor

The Phase Monitor is a three-phase line monitor module that protects against phase loss, phase reversal and phase unbalance. It is intended to protect compressors from reverse rotation. It has an operating input voltage range of 190–600 Vac, and LED indicators for ON and FAULT. There are no field adjustments and the module will automatically reset from a fault condition.

Refrigerant Circuits

Each refrigerant circuit shall have independent fixed orifice, service pressure ports, and refrigerant line filter driers factory installed as standard. An area shall be provided for replacement suction line driers.

Unit Top

The top cover shall be double hemmed and gasket sealed to prevent water leakage.

Factory Installed Options

Complete Coat™ Microchannel Condenser Coil

The cathodic epoxy type electrodisposition coating is formulated for high edge build to a number of different types of heat exchangers. The coating is selected to provide excellent resistance and durability to corrosive effects of alkalis, acids, alcohols, petroleum, seawater, salty air, and other corrosive environments. This coating shall be available on microchannel condenser coils.



Mechanical Specifications

Factory or Field Installed Options

Condensate Overflow Switch

This option shall shut the unit down in the event that a clogged condensate drain line prevents proper condensate removal from the unit.

Electric Heaters

Electric heat modules shall be available for installation within the basic unit. Electric heater elements shall be constructed of heavy-duty nickel chromium elements internally wye connected for 415 volt. Each heater package shall have temperature high limiting devices that are equipped with an auto-resetting and a single operation switch operating as line break limits. Single operation switch shall act as a backup limit control if the auto resetting switch fail to operate appropriately. All heaters shall be individually fused from the factory, where required, and shall meet all NEC and CEC requirements when properly installed. Power assemblies shall provide single-point connection. Electric heat modules shall be UL listed or CSA certified.

Manual Outside Air Damper

The rain hood and screen shall provide up to 25% outside air.

Oversized Motors

Oversized motors shall be available for high static applications.

Field Installed Options

Crankcase Heaters

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

Low and High Static Drive

The high static drive option shall allow the standard motor on all units to operate at various external static pressure conditions.

Roof Curb—Downflow

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

Tool-less Hail Guards

Tool-less, hail protection quality coil guards are available for condenser coil protection.

Two-Inch Pleated Filters

Two-inch MERV 13 filters shall be available on all models.

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