TECHNICAL SYSTEMS
DIVISION RAE CORPORATION

Series 20
Air Cooled Condensing Units

- *Built-to-order*
- *Compact footprint*
- *Acoustic packages*
- *Digital compressors available*
- *Explosion proof with ETL listing*
- *Corrosive environment protection*
- *Low ambient mechanical operation*
- *Wider fin spacing for long-term efficiency*

ETL LISTED

Engineered Solutions for Value Driven Customers

Value That Differentiates

Standard Definition of Value

¹val•ue - *noun* - \ˈval-(ˌ)yü\

1: a fair return or equivalent in goods, services, or money for something exchanged

2: the monetary worth of something; market price

3: relative worth, utility, or importance <a good value at the price>

Our Definition of Value

TECHNICAL SYSTEMS

DIVISION RAE CORPORATION

Our Product

- Factory-mounted accessories
- Acoustic packages
- Wide fin spacing for cleanable coils
- Corrosive environment solutions
- Variable capacity compressors

Our Promise

Built-to-order equipment for long-lasting energy efficiency, applied by leading industry experts

Our Experience

- Application expertise
- Understanding of refrigeration
- Diverse knowledge across multiple industries
- Balanced system matched with RAE Coils

Customer Value

- Fewer field-installed components
- Faster installation time
- Lower overall project costs
- Reduced maintenance costs
- Increased, reliable, consistent equipment life
- Assurance of system balance
- True low-ambient mechnical operation
- Long lasting equipment designed for your environment
- Diverse equipment placement through acoustical solutions

Contact Technical Systems

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The Technical Systems Value

Do your customers expect you to reduce cost and complete jobs faster than ever before?

Could saving engineering time on a project result in overall cost savings?

Could saving installation time allow you to complete projects faster?

Could reduced time and energy free up resources allowing you to take on more work?

If you answered yes to those questions, look no further than the Technical Systems Sales and Engineering experts! At Technical Systems, we recognize that time is often the most valuable commodity we have in today's economic climate. Let us save you time and money with our:

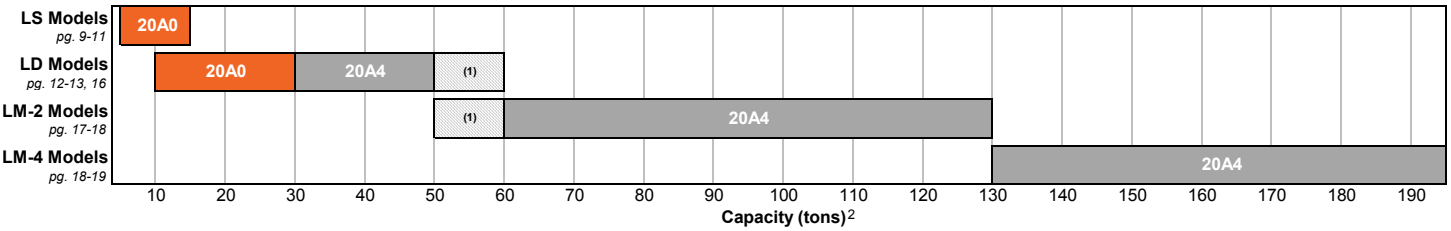
- ***Knowledgable, Experienced Sales and Engineering Teams***
  We have a long history of designing and building equipment for multiple HVAC-R applications, giving us a unique understanding of how to properly apply our products to your specific project.
- ***Industrial-Duty Manufacturing Capabilities***
  Technical Systems is able to easily manufacture quality equipment with long-term reliability, reduced maintenance, and the assurance of proper field performance.
- ***Built-To-Order Products***
  Whether you're facing an acoustical issue, an environmental concern, or the worry of maintaining a completely balanced system, let our experts save you time and money with products built to meet your exact needs!

About Technical Systems

As a division of RAE Corporation, Technical Systems has been a manufacturer specializing in the production of engineered compressorized cooling systems since 1971. Our extensive versatility enables us to provide product to a broad spectrum of standard and unique customer applications. With flexibility and versatility in design, Technical Systems has the *longest* track record in the industry for acoustical, low-noise products. Our engineering department is comprised of experienced mechanical and design engineers committed to providing equipment that meets demanding requirements.

Technical Systems operates a 250,000 square foot manufacturing facility located in Pryor, Oklahoma

Series 20 Quick Reference Chart



1 - Contact factory for an LD or LM model offering in this capacity range.
2 - Capacity at 45ºF suction temperature, 95ºF ambient. 60 Hz ratings.

Acoustical Designs for Every Budget

By using industry-leading acoustical technology, Technical Systems can fine-tune our components to meet the exact sound performance required on your project!

We provide three different acoustical option packages for different levels of acoustical performance. Each of these packages is designed to match your system requirements as well as your project budget. Technical systems can provide anything from an economical solution for low-level needs to an aggressive sound performance solution that could help avoid the need for costly attenuation walls in the field. No matter your sound needs, Technical Systems has an acoustical package for you!

Meet local sound codes • Eliminate costly attenuation walls
Reduce installation costs

Economy Package - *6 to 9 DBA Reduction*

When a moderate level of sound performance is required, yet initial cost is important, the Economy Package provides that extra value. By utilizing uniquely-shaped fan blades made of non-flexing composite material, the fan sound is greatly reduced. Additionally, fiberglass compressor wrappings further reduce compressor sound, providing competitive performance at a reasonable price.

Uniquely-shaped fan blades and compressor wraps provide budget-friendly, low-sound options.

Premium Package - *15 to 20 DBA Reduction*

For applications demanding a more significant reduction in sound, the Premium Package and its *Whispair™ Fan Technology* provide the latest in sound and fan efficiency. The specially-shaped, all-aluminum airfoil blades and motor assemblies are specifically designed for sound performance. Compressors are surrounded by a fiberglass enclosure.

For more advanced sound reduction, specially-shaped fan blade and compressor enclosures are available.

Ultra Package - *Contact Representative for Details*

For applications demanding the most stringent acoustic performance, Technical Systems has the engineering expertise to create a wide variety of solutions. Contact your local Technical Systems Representative to custom select and design a system to meet your exact project needs.

Long Lasting Designs for Every Environment

Technical Systems utilizes a variety of corrosion protection methods to ensure the long life of your equipment!

Many production facilities have harsh chemicals in the air that attack the fragile coils and steel casings of standard commercial cooling equipment, causing them to be replaced or repaired after only a few years. By using special materials and corrosion protection methods unavailable to most manufacturers, Technical Systems provides long-lasting equipment for chemical production facilities, wastewater treatment plants, off-shore oil platforms, and a multitude of other harsh or salty environments.

Epoxy Polymer Coil Coating

Electro-coated epoxy polymer coatings are the ultimate choice in coil protection. Applied via a dipping process, the coatings cover not just the fins, but all of the coil's tubes, return bends, headers, and casings, including cut edges. You can rest assured that your electro-coated coil will protect coil surfaces exposed to the harsh environment of your application.

Additional coil coatings available. Contact factory for details.

Alternative Paint Colors

Custom paint coatings are available in a variety of enamel colors, though beige is the standard. Custom paint coatings include an exterior unit paint that is able to provide a 1,500 hour salt spray rating per ASTM B117.

Custom enamel coatings provide an additional defense against corrosive atmospheres.

Stainless Steel Construction

When a painted exterior is not enough to protect against the corrosive environment of your application, Technical Systems is able to construct unit cabinets out of 304, 316, or 316L-grade stainless steel. This option provides the ultimate protection for your equipment.

Stainless steel construction provides a safeguard against a wide array of corrosive environments.

Coated Refrigerant Piping

Even copper piping and brass components can oxidize and corrode over time causing costly equipment failures. However, Technical Systems offers optional Heresite and Phenolic coated piping configurations to prevent oxidation and corrosion.

Painting piping prevents corrosion and general wear and tear for your corrosive environment applications.

Systems Selected for Each Application

Engineered systems, not selected components.

Coil circuiting, refrigerant pressure drop, and good distribution are all critical components to having a system that operates properly. Technical Systems understands these challenges, and has the experience and resources needed to provide you with a complete, high-quality system. Through our sister division RAE Coils, we can provide both the condensing unit and the cooling coils for your system, balanced together for perfect performance. Utilizing a matched system by one manufacturer can be a critical step in avoiding a system that does not operate in the field as expected, or avoiding damaged compressors and reduced equipment life.

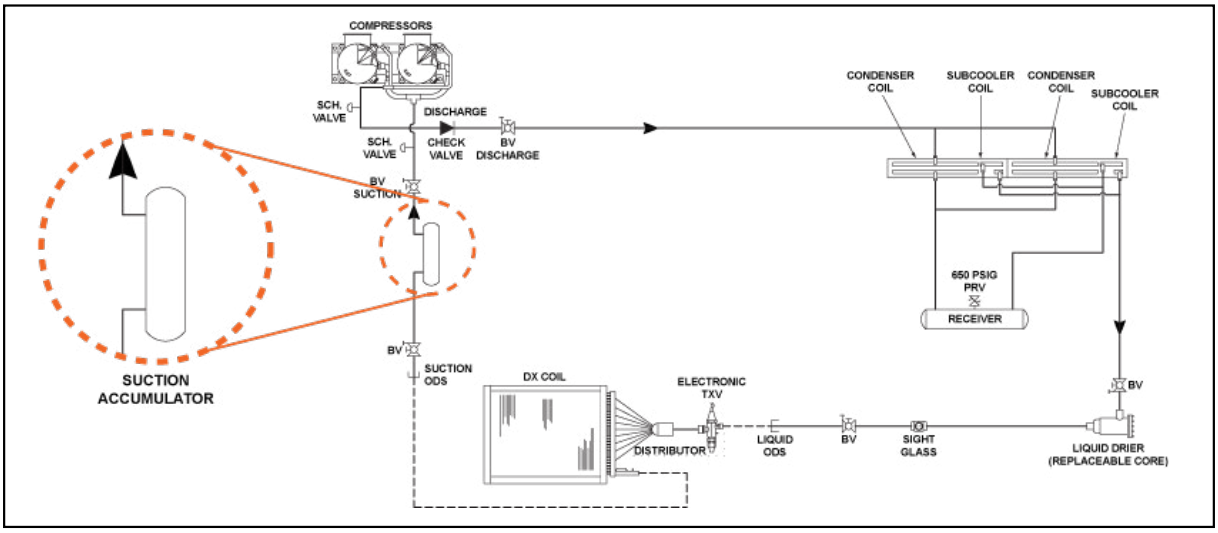
Line Loss

Have you been taking line loss into consideration when selecting your air cooled condensing units? The experts at Technical Systems have! Line loss is an important factor in ensuring that your equipment is providing the proper capacity. Line loss is the pressure drop associated with the refrigerant traveling from the evaporator coil to the compressor. The industry standard for line loss is approximately 2°F-3°F. If your line loss is not properly calculated, your equipment may not perform as expected.

Suction Accumulators

Though not commonly thought of in split systems, suction accumulators can add critical compressor protection. By preventing liquid refrigerant from entering the compressor, suction accumulators can easily help you avoid costly equipment damage. This protection is especially important in 100% Outside Air or Variable Air Volume system designs. Low loads or sudden changes in these systems can cause the cooling coil to fill with liquid and spill over into the suction lines, damaging compressor bearings and causing failures.

Contact your local Technical Systems Representative to discuss the suction accumulator needs for your application.



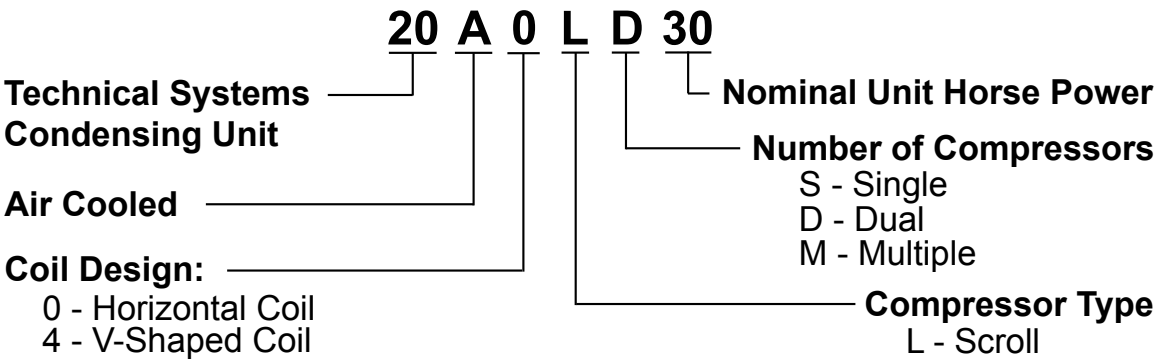
Suction accumulators help protect your compressor from liquid damage

Digital Scroll Compressors

Applications such as VAV or outside air units often have large fluctuations in loads. Using fixed capacity equipment can cause temperature and humidity swings as compressors are cycled. Hot gas bypass adds installation costs and reduces efficiency. Fortunately, digital scroll compressors can be a simpler solution to these problems.

By allowing the compressors to unload, digital scroll technology can eliminate hot gas bypass valves and piping and can reduce the frequency of cycling. Digital scroll compressors can increase the efficiency and reliability of your system, while still providing the precise control required in the occupied space.

Nomenclature



Construction

Technical Systems air cooled condensing units are designed for easy handling and reduced installation costs. All condensing units are pressure tested prior to shipment. Units are ETL certified and labeled. Internal power and control wiring are ready for field connection to utilities.

Cabinet

All Technical Systems condensing units are constructed of heavy duty mill galvanized steel panels. Units are base rail configured for distributed roof loadings, convenient handling and easier installation. Lifting points and mounting holes are available on each unit.

Compressors

All condensing unit models incorporate reliable Copeland Scroll® compressors. The heremetic sealed scroll compressors are statically and dynamically balanced with full pressure lubrication and charged with oil for smooth and quiet operation. Each compressor is equipped with a crankcase heater, suction and discharge service valves, and inherent overload and overheat protector consisting of winding embedded sensors. Compressor motors are suction gas cooled. Compressors are rated in accordance with ASHRAE 23.1.

Condenser(s)

Condenser coils are constructed of seamless copper tubes with die-formed tempered aluminum plate fins. Tubes are arranged in a staggered row pattern and mechanically expanded into fins for full contact and optimum heat transfer. Fins are formed with full collars and completely cover tube surface.

Condenser casings are heavy duty, corrosion resistant, mill galvanized 16-gauge steel. Coils are circuited to match refrigeration circuits. Fans are baffled to prevent crossover air flow. Headers are constructed of heavy wall seamless copper tubing. Coils are leak tested underwater.

“True” Subcooling Coil

A separate “true” subcooling coil, integral with the condenser, is provided on each circuit to eliminate the possibility of liquid flashing and to increase unit efficiency. Subcooling coil comes out at condenser “P” traps, then enters subcooling circuit.

Condenser Fans

Fans are direct drive propeller type with steel hubs and aluminum blades. Fans discharge vertically to minimize noise generation and air recirculation. Fans rotate within a formed (spun) venturi and are protected with an epoxy powder coated fan guard. Condenser plenum is compartmentalized to prevent air crossover.

Fan motors are three-phase, 1140 RPM and are specifically designed for vertical shaft and direct drive applications. Motors feature permanently lubricated ball bearings and have inherent overload protection. Fan/motor assembly is mounted using sheet metal mounts.

Refrigeration Circuit

All units utilize 410a refrigerant. Dual compressor models have independent refrigeration circuits with a liquid line shut off and charging connection. All refrigerant containing vessels are constructed in accordance with UL or ASME Section VIII.

Controls

All unit operating and safety controls are UL and ETL certified. Controls include branch and subcircuit fusing, contactors, relays and pressure controls. Manual high pressure safety control and automatic low pressure operating control are standard. Control panels are constructed to NEMA 3R requirements and are UL 508 listed and labeled.

Standard Features

- ETL certified unit label
- NEMA 3R panel with UL 508 label
- Shipped with dry Nitrogen holding charge
- High-efficiency scroll compressors with crankcase heaters
- Rubber in-shear compressor mounting
- Suction and discharge compressor service valves
- Direct drive condenser fan motors
- Baffled condenser plenum to prevent backwards rotation
- Heavy-gauge G-90 galvanized cabinetry
- Powder-coated fan guards
- Plate fin condenser coils with copper tubes and aluminum fins
- True sub-cooling circuit for increased efficiency
- Fan cycling head pressure control to +20°F
- Internal overload protection for compressors and fans
- Compressor and fan motor fusing
- Compressor and fan motor contactors
- High refrigerant pressure safety
- Low refrigerant pressure safety
- Time delay between compressor starts
- 115V dry contacts for compressor staging by field provided thermostat
- 1/2” closed-cell foam insulation on suction piping
- Factory operational test

Available Options

Pre-Engineered

- Economy acoustics package
- Factory-mounted refrigerant trim, driers, and sight glasses
- Variable capacity compressors
- VAV and 100% outside air protection
- ElectroFin epoxy polymer coil coating
- Copper fin coil
- Painted cabinet
- Low ambient head pressure control to -20°F
- Liquid recievers
- Standard hot gas bypass
- Sealed or replaceable core driers
- 3-valve bypass for replaceable core driers
- Liquid line solenoid (mounted or shipped loose)
- High altitude fan assemblies
- Unit circuit break or disconnect
- Liquid tight flexible conduit
- Control circuit transformers
- Unit phase failure protection
- Electrical panel door latches and indicator lights
- Compressor lead/lag switches and timers
- Alarm circuits with dry contacts

Factory Supported

- Premium or custom acoustic packages selected to meet your requirements
- Explosion-proof, Class 1, Division 2 construction with ETL listing
- Special coatings or treatments for any corrosive envoronment
- Stainless steel unit construction
- Variable speed fan systems
- Special designs for dirty and dusty environments
- Cooling coil matching and system balancing
- Horizontal airflow configurations

Serviceability Options

The following options are available on the Series 20 to best suit your system maintenance needs:

- 3-valve bypass kits
  Allow the liquid driers to be bypassed and changed without shutting off compressors
- Reciever hand valves
  Allow refrigerant to be isolated within the receiver and condenser, reducing labor to repair a field issue
- Open door latch assemblies
  Hold the electrical panel doors into the fully open position in windy conditions
- Door latch with key locks
  Provide electrical panels with easy access handles and key locks
- Oil stabilized gauges
  Factory mounted and show high / low pressure in each circuit

20A0LS Model Ratings

		20A0LS3	20A0LS5	20A0LS8
Refrigerant Type		R410a	R410a	R410a
Number of Ref. Circuits		1	1	1
Compressor Data	**Model**	ZP36K5E	ZP61KCE	ZP90KCE
	Type	Single Scroll	Single Scroll	Single Scroll
	HP[1]	3	5	7.5
	# per Circuit	1	1	1
Fan Data	**Qty.**	1	1	1
	HP	1/2	1/2	1
	Dia. (in.)	24	24	28
	RPM	1,140	1,140	1,140
Unit Electrical Data[2]	**RLA**	10	14	20
	MCA[3]	15	16	24
	MOCP	20	25	40
Coil Data	**Rows**	2	3	3
	FPI	14	14	14
	FH (in.)	25	32-1/2	32-1/2
	FL (in.)	28-3/4	28-3/4	48
Dimensions[4] (in. & lbs.)	**Length**	76	76	87
	Width	34	34	34
	Height	46	46	46
	Shipping Wt.	711	759	977
	Operating Wt.	564	612	819

Capacity Ratings		Cond. Temp. (°F)	Capacity (tons)	KW	EER	Cond. Temp. (°F)	Capacity (tons)	KW	EER	Cond. Temp. (°F)	Capacity (tons)	KW	EER
Suction Temp.	**Ambient Temp.**												
39°F	**90°F**	118.1	3.1	3.6	10.4	119.4	5.2	5.6	11.1	117.0	7.7	8.3	11.2
	95°F	122.6	2.9	3.7	9.4	123.8	5.0	5.9	10.1	121.6	7.4	8.7	10.3
	100°F	127.2	2.8	4.0	8.5	128.3	4.7	6.2	9.1	126.2	7.1	9.1	9.4
	105°F	131.8	2.7	4.2	7.7	132.7	4.5	6.5	8.2	130.8	6.8	9.5	8.6
41°F	**90°F**	118.8	3.2	3.6	10.7	120.2	5.4	5.7	11.4	117.8	8.0	8.4	11.5
	95°F	123.4	3.0	3.8	9.7	124.6	5.2	5.9	10.4	122.4	7.7	8.7	10.5
	100°F	127.9	2.9	4.0	8.8	129.0	4.9	6.2	9.5	126.9	7.4	9.1	9.7
	105°F	132.5	2.8	4.2	7.9	133.4	4.7	6.5	8.5	131.4	7.0	9.6	8.8
43°F	**90°F**	119.6	3.3	3.6	11.0	121.0	5.6	5.7	11.8	118.6	8.3	8.4	11.8
	95°F	124.1	3.2	3.8	10.0	125.4	5.3	6.0	10.7	123.1	8.0	8.8	10.8
	100°F	128.6	3.0	4.0	9.1	129.8	5.1	6.3	9.8	127.6	7.6	9.2	9.9
	105°F	133.1	2.9	4.2	8.2	134.1	4.8	6.6	8.8	132.1	7.3	9.7	9.1
45°F	**90°F**	120.4	3.4	3.6	11.3	121.9	5.8	5.7	12.1	119.4	8.6	8.5	12.1
	95°F	124.8	3.3	3.8	10.3	126.2	5.5	6.0	11.1	123.9	8.2	8.9	11.1
	100°F	129.3	3.1	4.0	9.4	130.6	5.3	6.3	10.1	128.4	7.9	9.3	10.2
	105°F	133.8	3.0	4.2	8.4	134.9	5.0	6.6	9.1	132.8	7.5	9.7	9.3
47°F	**90°F**	121.1	3.5	3.6	11.6	122.7	6.0	5.7	12.5	120.2	8.9	8.6	12.4
	95°F	125.6	3.4	3.8	10.6	127.1	5.7	6.0	11.4	124.6	8.5	8.9	11.4
	100°F	130.1	3.2	4.0	9.6	131.4	5.5	6.3	10.4	129.1	8.2	9.4	10.5
	105°F	134.5	3.1	4.2	8.7	135.7	5.2	6.6	9.4	133.6	7.8	9.8	9.6
49°F	**90°F**	121.9	3.6	3.7	11.9	123.6	6.1	5.8	12.8	121.0	9.2	8.6	12.7
	95°F	126.4	3.5	3.8	10.9	127.9	5.9	6.0	11.7	125.4	8.8	9.0	11.7
	100°F	130.8	3.3	4.0	9.9	132.2	5.6	6.3	10.7	129.9	8.5	9.4	10.8
	105°F	135.3	3.2	4.3	8.9	136.4	5.4	6.6	9.7	134.3	8.1	9.9	9.8

60 HZ rating

1 - HP shown is for each individual compressor motor.

2 - Value shown is for 460v/3-phase motor. For 208v motor, double the values shown.

3- If MCA is greater than 500, dual power feeds are required.

4 - All dimensions +/- 1/2".

20A0LS Model Ratings

		20A0LS9	20A0LS10	20A0LS13
Refrigerant Type		R410a	R410a	R410a
Number of Ref. Circuits		1	1	1
Compressor Data	**Model**	ZP103KCE	ZP120KCE	ZP154KCE
	Type	Single Scroll	Single Scroll	Single Scroll
	HP[1]	9	10	13
	# per Circuit	1	1	1
Fan Data	**Qty.**	1	1	2
	HP	1	1	1
	Dia. (in.)	28	28	28
	RPM	1,140	1,140	1,140
Unit Electrical Data[2]	**RLA**	23	24	32
	MCA[3]	27	29	38
	MOCP	45	45	60
Coil Data	**Rows**	3	4	2
	FPI	14	14	14
	FH (in.)	32-1/2	32-1/2	32-1/2
	FL (in.)	48	48	83-1/2
Dimensions[4] (in. & lbs.)	**Length**	87	87	120
	Width	34	34	34
	Height	46	46	46
	Shipping Wt.	1,005	1,029	1,199
	Operating Wt.	847	871	1,008

Capacity Ratings		Cond. Temp. (°F)	Capacity (tons)	KW	EER	Cond. Temp. (°F)	Capacity (tons)	KW	EER	Cond. Temp. (°F)	Capacity (tons)	KW	EER
Suction Temp.	**Ambient Temp.**												
39°F	**90°F**	120.8	8.7	9.6	10.9	122.9	10.1	11.2	10.8	122.2	12.8	15.0	10.3
	95°F	125.3	8.4	10.1	10.0	127.3	9.7	11.8	9.8	126.6	12.3	15.6	9.5
	100°F	129.8	8.0	10.6	9.1	131.7	9.2	12.5	8.9	131.0	11.8	16.3	8.7
	105°F	134.3	7.6	11.2	8.2	136.0	8.7	13.1	8.0	135.4	11.2	17.0	7.9
41°F	**90°F**	121.6	9.0	9.7	11.2	123.8	10.4	11.3	11.0	123.0	13.2	15.1	10.5
	95°F	126.1	8.7	10.2	10.2	128.2	10.0	11.9	10.0	127.4	12.7	15.8	9.7
	100°F	130.6	8.3	10.7	9.3	132.5	9.5	12.6	9.1	131.8	12.2	16.5	8.9
	105°F	135.1	7.9	11.3	8.4	136.9	9.0	13.2	8.1	136.2	11.6	17.2	8.1
43°F	**90°F**	122.5	9.3	9.8	11.4	124.7	10.8	11.5	11.3	123.9	13.6	15.3	10.7
	95°F	126.9	9.0	10.3	10.4	129.1	10.3	12.1	10.2	128.3	13.1	15.9	9.9
	100°F	131.4	8.6	10.8	9.5	133.4	9.8	12.7	9.3	132.6	12.5	16.6	9.0
	105°F	135.8	8.2	11.4	8.6	137.7	9.3	13.4	8.3	136.9	11.9	17.3	8.3
45°F	**90°F**	123.3	9.6	9.9	11.7	125.7	11.1	11.6	11.5	124.8	14.1	15.4	10.9
	95°F	127.8	9.2	10.4	10.7	130.0	10.6	12.2	10.5	129.1	13.5	16.1	10.1
	100°F	132.2	8.8	10.9	9.7	134.2	10.1	12.8	9.5	133.4	12.9	16.8	9.2
	105°F	136.6	8.4	11.5	8.8	138.5	9.6	13.5	8.5	137.7	12.3	17.5	8.4
47°F	**90°F**	124.2	9.9	10.0	11.9	126.6	11.4	11.7	11.7	125.7	14.5	15.6	11.1
	95°F	128.6	9.5	10.5	10.9	130.9	10.9	12.3	10.7	130.0	13.9	16.3	10.3
	100°F	133.0	9.1	11.0	9.9	135.1	10.4	12.9	9.7	134.2	13.3	16.9	9.4
	105°F	137.4	8.7	11.6	9.0	139.3	9.9	13.6	8.7	138.5	12.6	17.7	8.6
49°F	**90°F**	125.1	10.2	10.1	12.2	127.5	11.8	11.8	12.0	126.6	14.9	15.8	11.3
	95°F	129.5	9.8	10.6	11.1	131.8	11.3	12.4	10.9	130.8	14.3	16.4	10.5
	100°F	133.8	9.4	11.1	10.2	136.0	10.7	13.1	9.9	135.1	13.7	17.1	9.6
	105°F	138.2	9.0	11.7	9.2	140.2	10.2	13.7	8.9	139.3	13.0	17.9	8.7

60 HZ rating
1 - HP shown is for each individual compressor motor.
2 - Value shown is for 460v/3-phase motor. For 208v motor, double the values shown.
3- If MCA is greater than 500, dual power feeds are required.
4 - All dimensions +/- 1/2".

20A0LS Model Ratings

		20A0LS15
Refrigerant Type		R410a
Number of Ref. Circuits		1
Compressor Data	Model	ZP182KCE
	Type	Single Scroll
	HP[1]	15
	# per Circuit	1
Fan Data	Qty.	2
	HP	1
	Dia. (in.)	28
	RPM	1,140
Unit Electrical Data[2]	RLA	37
	MCA[3]	44
	MOCP	70
Coil Data	Rows	3
	FPI	14
	FH (in.)	32-1/2
	FL (in.)	83-1/2
Dimensions[4] (in. & lbs.)	Length	120
	Width	34
	Height	46
	Shipping Wt.	1,288
	Operating Wt.	1,097

Capacity Ratings		Cond. Temp. (°F)	Capacity (tons)	KW	EER
Suction Temp.	Ambient Temp.				
39°F	90°F	119.9	15.4	16.7	11.1
	95°F	124.4	14.8	17.4	10.2
	100°F	128.8	14.1	18.2	9.3
	105°F	133.3	13.4	19.0	8.5
41°F	90°F	120.8	15.9	16.9	11.3
	95°F	125.2	15.3	17.6	10.4
	100°F	129.6	14.6	18.3	9.6
	105°F	134.0	13.9	19.2	8.7
43°F	90°F	121.6	16.4	17.0	11.6
	95°F	126.0	15.8	17.8	10.7
	100°F	130.4	15.1	18.5	9.8
	105°F	134.7	14.4	19.3	8.9
45°F	90°F	122.4	16.9	17.2	11.8
	95°F	126.8	16.3	17.9	10.9
	100°F	131.2	15.6	18.7	10.0
	105°F	135.5	14.8	19.5	9.1
47°F	90°F	123.3	17.4	17.4	12.0
	95°F	127.6	16.7	18.1	11.1
	100°F	131.9	16.0	18.9	10.2
	105°F	136.2	15.3	19.7	9.3
49°F	90°F	124.2	17.9	17.6	12.2
	95°F	128.5	17.2	18.3	11.3
	100°F	132.7	16.5	19.1	10.4
	105°F	137.0	15.7	19.9	9.5

60 HZ rating
1 - HP shown is for each individual compressor motor.
2 - Value shown is for 460v/3-phase motor. For 208v motor, double the values shown.
3- If MCA is greater than 500, dual power feeds are required.
4 - All dimensions +/- 1/2".

20A0LD Model Ratings

		20A0LD10		20A0LD15		20A0LD18	
Refrigerant Type		R410a		R410a		R410a	
Number of Ref. Circuits		2		2		2	
Compressor Data	**Model**	ZP61KCE		ZP90KCE		ZP103KCE	
	Type	Single Scrolls		Single Scrolls		Single Scrolls	
	HP[1]	5	5	7.5	7.5	9	9
	# per Circuit	1	1	1	1	1	1
Fan Data	**Qty.**	2		2		2	
	HP	1		1		1	
	Dia. (in.)	24		28		28	
	RPM	1,140		1,140		1,140	
Unit Electrical Data[2]	**RLA**	26		39		44	
	MCA[3]	28		43		48	
	MOCP	35		50		60	
Coil Data	**Rows**	3		3		3	
	FPI	14		14		14	
	FH (in.)	32-1/2		32-1/2		32-1/2	
	FL (in.)	28-3/4		48-1/4		48-1/4	
Dimensions[4] (in. & lbs.)	**Length**	76		87		87	
	Width	68		68		68	
	Height	63		63		63	
	Shipping Wt.	1,604		2,056		2,080	
	Operating Wt.	1,358		1,800		1,824	

Capacity Ratings		Cond. Temp. (°F)	Capacity (tons)	KW	EER	Cond. Temp. (°F)	Capacity (tons)	KW	EER	Cond. Temp. (°F)	Capacity (tons)	KW	EER
Suction Temp.	**Ambient Temp.**												
39°F	**90°F**	119.4	10.4	11.3	11.1	117.0	15.4	16.6	11.2	120.8	17.5	19.2	10.9
	95°F	123.8	9.9	11.8	10.1	121.6	14.8	17.3	10.3	125.3	16.8	20.2	10.0
	100°F	128.3	9.5	12.4	9.1	126.2	14.2	18.2	9.4	129.8	16.1	21.3	9.1
	105°F	132.7	9.0	13.0	8.2	130.8	13.6	19.1	8.6	134.3	15.3	22.4	8.2
41°F	**90°F**	120.2	10.8	11.3	11.4	117.8	16.0	16.7	11.5	121.6	18.1	19.4	11.2
	95°F	124.6	10.3	11.9	10.4	122.4	15.4	17.5	10.5	126.1	17.4	20.4	10.2
	100°F	129.0	9.8	12.5	9.5	126.9	14.7	18.3	9.7	130.6	16.6	21.5	9.3
	105°F	133.4	9.3	13.1	8.5	131.4	14.1	19.2	8.8	135.1	15.8	22.6	8.4
43°F	**90°F**	121.0	11.2	11.4	11.8	118.6	16.5	16.8	11.8	122.5	18.6	19.6	11.4
	95°F	125.4	10.7	11.9	10.7	123.1	15.9	17.6	10.8	126.9	17.9	20.6	10.4
	100°F	129.8	10.2	12.5	9.8	127.6	15.3	18.4	9.9	131.4	17.1	21.6	9.5
	105°F	134.1	9.7	13.1	8.8	132.1	14.6	19.3	9.1	135.8	16.3	22.8	8.6
45°F	**90°F**	121.9	11.5	11.4	12.1	119.4	17.1	17.0	12.1	123.3	19.2	19.8	11.7
	95°F	126.2	11.1	12.0	11.1	123.9	16.5	17.8	11.1	127.8	18.5	20.8	10.7
	100°F	130.6	10.5	12.6	10.1	128.4	15.8	18.6	10.2	132.2	17.7	21.8	9.7
	105°F	134.9	10.0	13.2	9.1	132.8	15.1	19.5	9.3	136.6	16.9	23.0	8.8
47°F	**90°F**	122.7	11.9	11.5	12.5	120.2	17.7	17.1	12.4	124.2	19.8	20.0	11.9
	95°F	127.1	11.4	12.0	11.4	124.6	17.1	17.9	11.4	128.6	19.1	21.0	10.9
	100°F	131.4	10.9	12.6	10.4	129.1	16.3	18.7	10.5	133.0	18.2	22.0	9.9
	105°F	135.7	10.4	13.2	9.4	133.6	15.6	19.6	9.6	137.4	17.4	23.1	9.0
49°F	**90°F**	123.6	12.3	11.5	12.8	121.0	18.3	17.3	12.7	125.1	20.5	20.2	12.2
	95°F	127.9	11.8	12.1	11.7	125.4	17.6	18.0	11.7	129.5	19.6	21.2	11.1
	100°F	132.2	11.3	12.7	10.7	129.9	16.9	18.9	10.8	133.8	18.8	22.2	10.2
	105°F	136.4	10.7	13.3	9.7	134.3	16.2	19.8	9.8	138.2	17.9	23.3	9.2

60 HZ rating
1 - HP shown is for each individual compressor motor.
2 - Value shown is for 460v/3-phase motor. For 208v motor, double the values shown.
3- If MCA is greater than 500, dual power feeds are required.
4 - All dimensions +/- 1/2".

20A0LD Model Ratings

		20A0LD20		20A0LD26		20A0LD30	
Refrigerant Type		R410a		R410a		R410a	
Number of Ref. Circuits		2		2		2	
Compressor Data	**Model**	ZP120KCE		ZP154KCE		ZP182KCE	
	Type	Single Scrolls		Single Scrolls		Single Scrolls	
	HP[1]	10	10	13	13	15	15
	# per Circuit	1	1	1	1	1	1
Fan Data	**Qty.**	2		4		4	
	HP	1		1		1	
	Dia. (in.)	28		28		28	
	RPM	1,140		1,140		1,140	
Unit Electrical Data[2]	**RLA**	47		64		72	
	MCA[3]	52		70		79	
	MOCP	70		90		100	
Coil Data	**Rows**	4		2		3	
	FPI	14		14		14	
	FH (in.)	32-1/2		32-1/2		32-1/2	
	FL (in.)	48-1/4		83-3/4		83-3/4	
Dimensions[4] (in. & lbs.)	**Length**	87		123		123	
	Width	68		68		68	
	Height	63		63		63	
	Shipping Wt.	2,132		2,431		2,614	
	Operating Wt.	1,876		2,142		2,325	

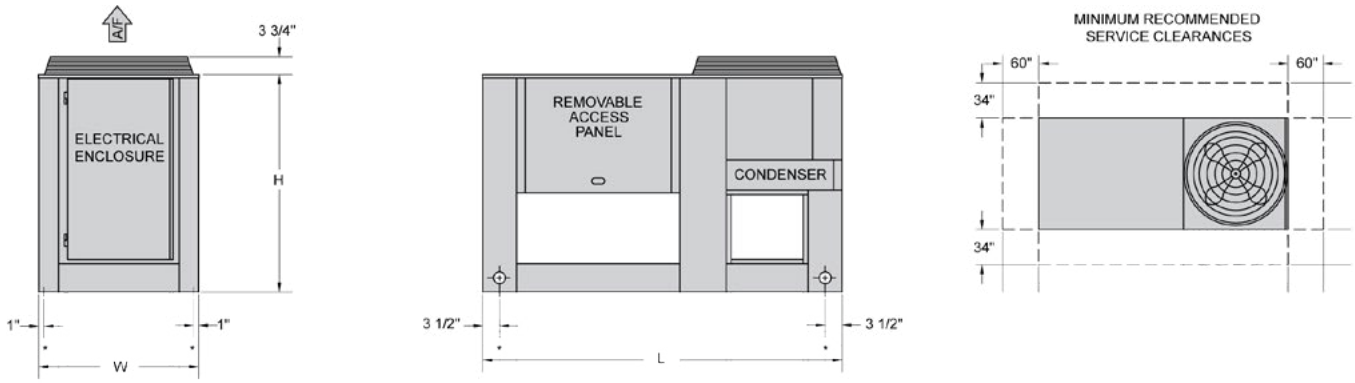
Capacity Ratings		Cond. Temp. (°F)	Capacity (tons)	KW	EER	Cond. Temp. (°F)	Capacity (tons)	KW	EER	Cond. Temp. (°F)	Capacity (tons)	KW	EER
Suction Temp.	**Ambient Temp.**												
39°F	**90°F**	122.9	20.2	22.4	10.8	122.2	25.7	29.9	10.3	119.9	30.8	33.3	11.1
	95°F	127.3	19.3	23.6	9.8	126.6	24.6	31.2	9.5	124.4	29.6	34.8	10.2
	100°F	131.7	18.4	24.9	8.9	131.0	23.6	32.6	8.7	128.8	28.3	36.3	9.3
	105°F	136.0	17.4	26.2	8.0	135.4	22.5	34.1	7.9	133.3	26.9	38.0	8.5
41°F	**90°F**	123.8	20.9	22.7	11.0	123.0	26.5	30.2	10.5	120.8	31.8	33.7	11.3
	95°F	128.2	19.9	23.9	10.0	127.4	25.4	31.5	9.7	125.2	30.6	35.1	10.4
	100°F	132.5	19.0	25.1	9.1	131.8	24.3	32.9	8.9	129.6	29.2	36.7	9.6
	105°F	136.9	18.0	26.5	8.1	136.2	23.1	34.4	8.1	134.0	27.8	38.3	8.7
43°F	**90°F**	124.7	21.5	22.9	11.3	123.9	27.3	30.5	10.7	121.6	32.8	34.1	11.6
	95°F	129.1	20.6	24.1	10.2	128.3	26.2	31.9	9.9	126.0	31.5	35.5	10.7
	100°F	133.4	19.6	25.4	9.3	132.6	25.1	33.2	9.0	130.4	30.2	37.0	9.8
	105°F	137.7	18.6	26.7	8.3	136.9	23.9	34.7	8.3	134.7	28.8	38.6	8.9
45°F	**90°F**	125.7	22.2	23.2	11.5	124.8	28.1	30.9	10.9	122.4	33.8	34.4	11.8
	95°F	130.0	21.2	24.4	10.5	129.1	27.0	32.2	10.1	126.8	32.5	35.9	10.9
	100°F	134.2	20.2	25.6	9.5	133.4	25.8	33.6	9.2	131.2	31.1	37.4	10.0
	105°F	138.5	19.2	26.9	8.5	137.7	24.6	35.0	8.4	135.5	29.7	39.0	9.1
47°F	**90°F**	126.6	22.9	23.4	11.7	125.7	29.0	31.2	11.1	123.3	34.9	34.8	12.0
	95°F	130.9	21.9	24.6	10.7	130.0	27.8	32.5	10.3	127.6	33.5	36.2	11.1
	100°F	135.1	20.9	25.9	9.7	134.2	26.6	33.9	9.4	131.9	32.1	37.8	10.2
	105°F	139.3	19.8	27.2	8.7	138.5	25.3	35.4	8.6	136.2	30.6	39.4	9.3
49°F	**90°F**	127.5	23.6	23.7	12.0	126.6	29.8	31.5	11.3	124.2	35.9	35.2	12.2
	95°F	131.8	22.6	24.9	10.9	130.8	28.6	32.8	10.5	128.5	34.5	36.7	11.3
	100°F	136.0	21.5	26.1	9.9	135.1	27.3	34.3	9.6	132.7	33.0	38.2	10.4
	105°F	140.2	20.4	27.4	8.9	139.3	26.0	35.7	8.7	137.0	31.5	39.8	9.5

60 HZ rating
1 - HP shown is for each individual compressor motor.
2 - Value shown is for 460v/3-phase motor. For 208v motor, double the values shown.
3- If MCA is greater than 500, dual power feeds are required.
4 - All dimensions +/- 1/2".

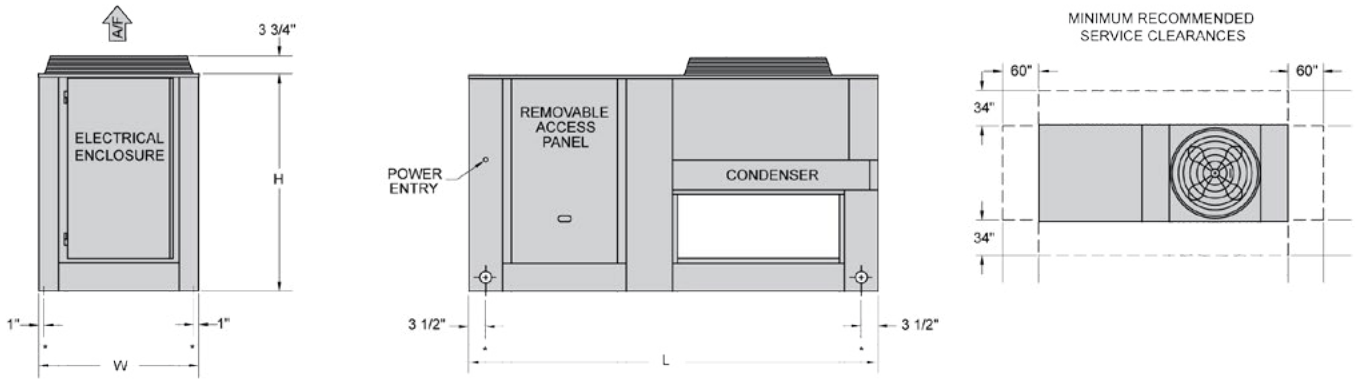
20A0LS Model Drawings

One Fan Models

DRAWING A

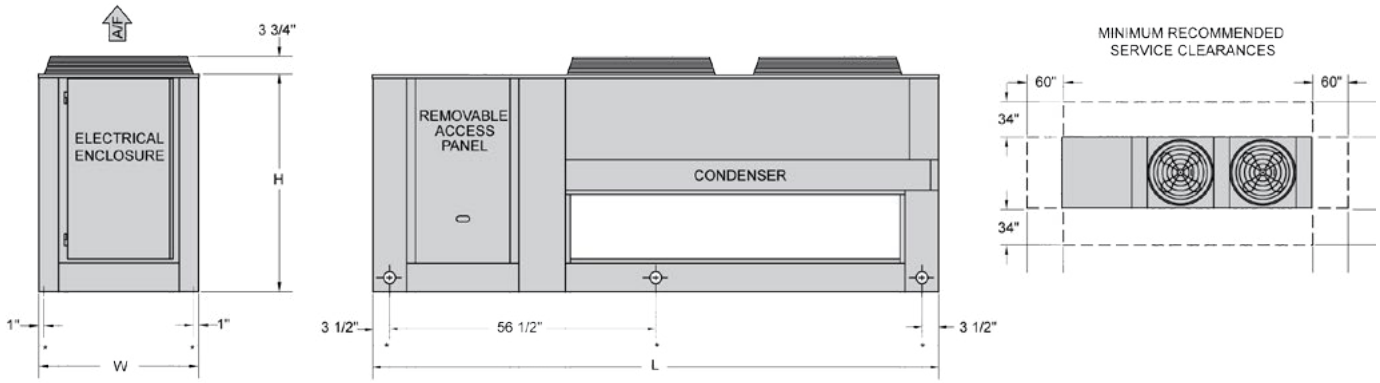


DRAWING B



Two Fan Models

DRAWING C



⊕ 2 1/2" DIAMETER RIGGING HOLES ★ 5/8" DIAMETER UNIT MOUNTING HOLES

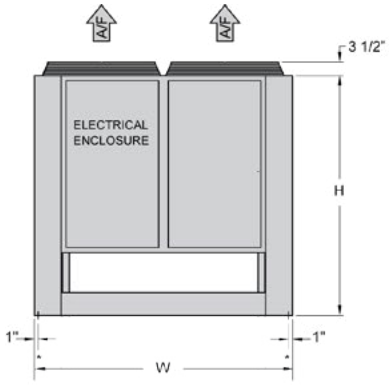
Model	Drawing	Dimensions[1] (in.)			Weights (lbs.)	
		L	W	H	Shipping	Operating
20A0LS3	A	76	34	46	711	564
20A0LS5	A	76	34	46	759	612
20A0LS8	B	87	34	46	977	819
20A0LS9	B	87	34	46	1,005	847
20A0LS10	B	87	34	46	1,029	871
20A0LS13	C	120	34	46	1,199	1,008
20A0LS15	C	120	34	46	1,288	1,097

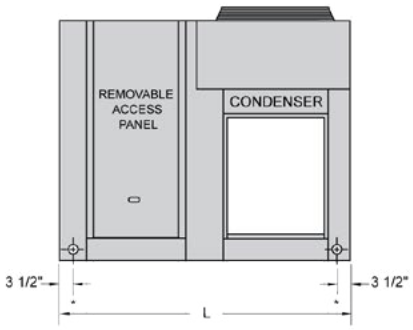
1 - All dimensions +/- 1/2"

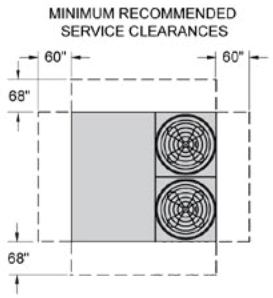
20A0LD Model Drawings

Two Fan Models

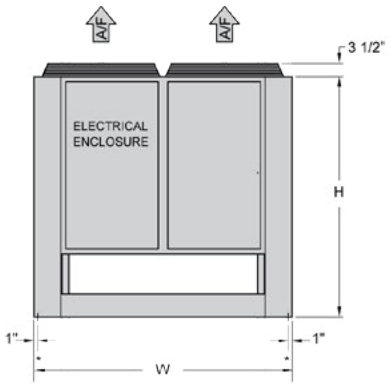
DRAWING D

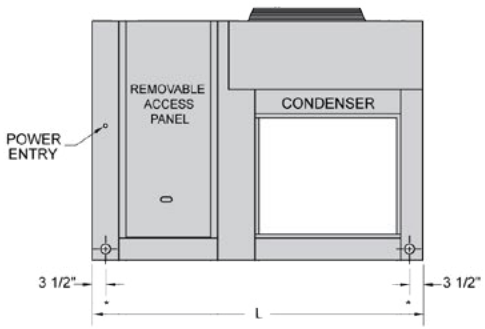


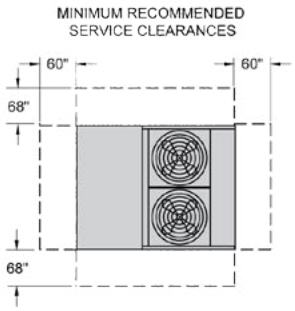




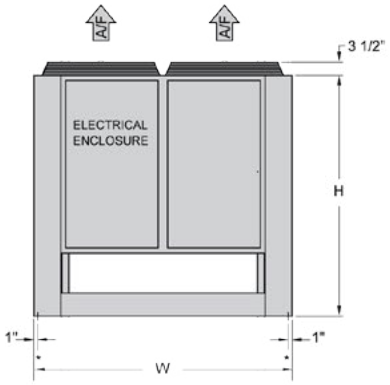
DRAWING E

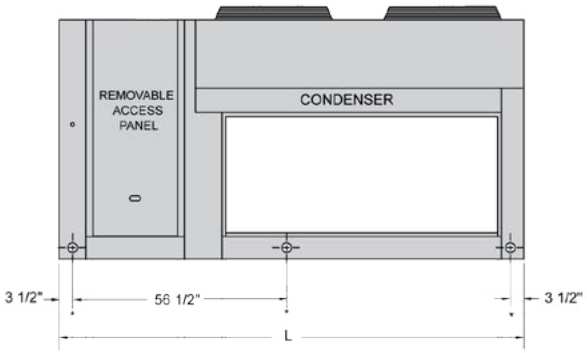


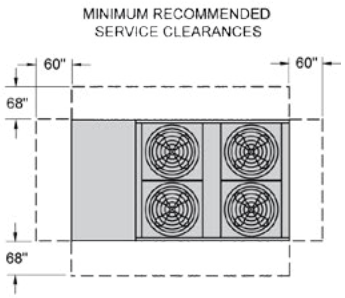




DRAWING F







⊕ 2 1/2" DIAMETER RIGGING HOLES ★ 5/8" DIAMETER UNIT MOUNTING HOLES

Model	Drawing	Dimensions[1] (in.)			Weights (lbs.)	
		L	W	H	Shipping	Operating
20A0LD10	D	76	68	63	1,604	1,358
20A0LD15	E	87	68	63	2,056	1,800
20A0LD18	E	87	68	63	2,080	1,824
20A0LD20	E	87	68	63	2,132	1,876
20A0LD26	F	120	68	63	2,431	2,142
20A0LD30	F	120	68	63	2,614	2,325

1 - All dimensions +/- 1/2"

20A4LD Model Ratings

		20A4LD30		20A4LD40		20A4LD50	
Refrigerant Type		R410a		R410a		R410a	
Number of Ref. Circuits		2		2		2	
Compressor Data	**Model**	ZP182KCE		ZP235KCE		ZP285KCE	
	Type	Single Scrolls		Single Scrolls		Single Scrolls	
	HP[1]	15	15	20	20	25	25
	# per Circuit	1	1	1	1	1	1
Fan Data	**Qty.**	3		3		3	
	HP	1		2		2	
	Dia. (in.)	28		28		28	
	RPM	1,140		1,140		1,140	
Unit Electrical Data[2]	**RLA**	70		81		109	
	MCA[3]	77		89		121	
	MOCP	100		110		150	
Coil Data	**Rows**	3		4		4	
	FPI	14		14		14	
	FH (in.)	85		85		85	
	FL (in.)	96		96		96	
Dimensions[4] (in. & lbs.)	**Length**	51		51		51	
	Width	106		106		106	
	Height	101-3/8		101-3/8		101-3/8	
	Shipping Wt.	2,857		3,511		3,706	
	Operating Wt.	2,944		3,637		3,858	

Capacity Ratings		Cond. Temp. (°F)	Capacity (tons)	KW	EER	Cond. Temp. (°F)	Capacity (tons)	KW	EER	Cond. Temp. (°F)	Capacity (tons)	KW	EER
Suction Temp.	**Ambient Temp.**												
39°F	**90°F**	115.6	31.5	30.9	12.2	116.7	40.1	41.0	11.6	120.9	46.3	49.5	11.2
	95°F	120.2	30.3	32.3	11.2	121.2	38.6	43.2	10.7	125.4	44.5	51.6	10.4
	100°F	124.7	29.0	33.8	10.3	125.7	36.9	45.1	9.8	129.9	42.7	53.8	9.5
	105°F	129.2	27.7	35.4	9.4	130.3	35.3	47.2	9.0	134.3	40.7	56.2	8.7
41°F	**90°F**	116.3	32.6	31.2	12.5	117.5	41.6	41.8	11.9	121.8	47.8	50.0	11.5
	95°F	120.9	31.4	32.6	11.5	122.0	40.0	43.7	11.0	126.2	46.0	52.1	10.6
	100°F	125.4	30.1	34.1	10.6	126.5	38.3	45.6	10.1	130.6	44.1	54.3	9.8
	105°F	129.9	28.7	35.7	9.6	131.0	36.6	47.7	9.2	135.0	42.1	56.7	8.9
43°F	**90°F**	117.1	33.8	31.6	12.8	118.3	43.1	42.3	12.2	122.6	49.3	50.5	11.7
	95°F	121.6	32.5	33.0	11.8	122.7	41.4	44.1	11.3	127.1	47.4	52.6	10.8
	100°F	126.1	31.1	34.4	10.8	127.2	39.7	46.1	10.3	131.4	45.5	54.8	10.0
	105°F	130.5	29.7	36.0	9.9	131.7	37.9	48.2	9.4	135.8	43.4	57.2	9.1
45°F	**90°F**	117.8	34.9	31.9	13.1	119.1	44.7	42.8	12.5	123.5	50.9	51.0	12.0
	95°F	122.3	33.6	33.3	12.1	123.5	42.9	44.6	11.6	127.9	49.0	53.1	11.1
	100°F	126.7	32.2	34.7	11.1	128.0	41.1	46.6	10.6	132.3	46.9	55.4	10.2
	105°F	131.2	30.7	36.3	10.1	132.4	39.3	48.7	9.7	136.6	44.8	57.8	9.3
47°F	**90°F**	118.6	36.1	32.3	13.4	119.9	46.3	43.3	12.8	124.4	52.5	51.5	12.2
	95°F	123.0	34.7	33.6	12.4	124.3	44.5	45.1	11.8	128.8	50.5	53.7	11.3
	100°F	127.5	33.3	35.1	11.4	128.7	42.6	47.1	10.9	133.1	48.4	56.0	10.4
	105°F	131.9	31.8	36.7	10.4	133.2	40.6	49.3	9.9	137.4	46.1	58.4	9.5
49°F	**90°F**	119.3	37.3	32.6	13.7	120.7	47.8	43.7	13.1	125.3	54.1	52.1	12.5
	95°F	123.8	35.9	34.0	12.7	125.1	46.0	45.6	12.1	129.6	52.0	54.2	11.5
	100°F	128.2	34.4	35.5	11.6	129.5	44.1	47.6	11.1	133.9	49.8	56.5	10.6
	105°F	132.6	32.8	37.0	10.6	133.9	42.1	49.8	10.1	138.2	47.5	59.0	9.7

60 HZ rating
1 - HP shown is for each individual compressor motor.
2 - Value shown is for 460v/3-phase motor. For 208v motor, double the values shown.
3- If MCA is greater than 500, dual power feeds are required.
4 - All dimensions +/- 1/2".

20A4LM Model Ratings

		20A4LM60		20A4LM80		20A4LM100	
Refrigerant Type		R410a		R410a		R410a	
Number of Ref. Circuits		2		2		2	
Compressor Data	**Model**	ZPT364KCE		ZPT470KCE		ZPT570KCE	
	Type	Tandem Scrolls		Tandem Scrolls		Tandem Scrolls	
	HP[1]	15	15	20	20	25	25
	# per Circuit	2	2	2	2	2	2
Fan Data	**Qty.**	6		6		6	
	HP	1		2		2	
	Dia. (in.)	28		28		28	
	RPM	1,140		1,140		1,140	
Unit Electrical Data[2]	**RLA**	137		159		217	
	MCA[3]	144		167		229	
	MOCP	150		200		275	
Coil Data	**Rows**	3		4		4	
	FPI	14		14		14	
	FH (in.)	85		85		85	
	FL (in.)	96		96		96	
Dimensions[4] (in. & lbs.)	**Length**	102		102		102	
	Width	106		106		106	
	Height	101-3/8		101-3/8		101-3/8	
	Shipping Wt.	5,354		6,847		7,296	
	Operating Wt.	5,545		7,076		7,558	

Capacity Ratings		Cond. Temp. (°F)	Capacity (tons)	KW	EER	Cond. Temp. (°F)	Capacity (tons)	KW	EER	Cond. Temp. (°F)	Capacity (tons)	KW	EER
Suction Temp.	**Ambient Temp.**												
39°F	**90°F**	115.6	62.7	62.1	12.1	116.4	79.4	81.9	11.6	120.6	91.6	98.0	11.2
	95°F	120.1	60.3	64.8	11.2	120.9	76.2	85.4	10.7	125.1	88.1	102.1	10.4
	100°F	124.6	57.9	67.8	10.2	125.5	73.0	89.3	9.8	129.5	84.5	106.4	9.5
	105°F	129.2	55.2	71.0	9.3	130.0	69.8	93.5	9.0	134.0	80.5	111.1	8.7
41°F	**90°F**	116.3	65.0	62.7	12.4	117.2	82.3	82.8	11.9	121.4	94.6	99.0	11.5
	95°F	120.8	62.5	65.4	11.5	121.7	79.1	86.4	11.0	125.9	91.0	103.1	10.6
	100°F	125.3	59.9	68.4	10.5	126.2	75.7	90.2	10.1	130.3	87.4	107.5	9.8
	105°F	129.8	57.2	71.5	9.6	130.7	72.4	94.4	9.2	134.7	83.4	112.1	8.9
43°F	**90°F**	117.0	67.3	63.3	12.7	118.0	82.3	83.7	12.2	122.3	97.6	100.0	11.7
	95°F	121.5	64.7	66.1	11.7	122.4	82.0	87.3	11.3	126.7	94.0	104.1	10.8
	100°F	126.0	62.0	69.1	10.8	126.9	78.5	91.2	10.3	131.1	90.1	108.5	10.0
	105°F	130.5	59.2	72.2	9.8	131.4	75.0	95.4	9.4	135.5	86.0	113.2	9.1
45°F	**90°F**	117.7	69.6	64.0	13.1	118.8	88.4	84.7	12.5	123.2	100.7	101.0	12.0
	95°F	122.2	66.9	66.7	12.0	123.2	84.9	88.3	11.5	127.6	96.9	105.2	11.0
	100°F	126.7	64.1	69.7	11.0	127.7	81.3	92.2	10.6	131.9	92.9	109.6	10.2
	105°F	131.1	61.2	72.8	10.1	132.1	77.7	96.4	9.7	136.2	88.8	114.2	9.3
47°F	**90°F**	118.5	71.9	64.7	13.3	119.6	91.6	85.6	12.8	124.1	103.8	102.1	12.2
	95°F	123.0	69.1	67.5	12.3	124.0	88.0	89.3	11.8	128.4	99.9	106.2	11.3
	100°F	127.4	66.3	70.4	11.3	128.4	84.3	93.2	10.9	132.7	95.8	110.6	10.4
	105°F	131.8	63.3	73.5	10.3	132.9	80.4	97.5	9.9	137.0	91.5	115.3	9.5
49°F	**90°F**	119.3	74.3	65.5	13.6	120.4	94.7	86.6	13.1	125.0	107.0	103.1	12.5
	95°F	123.7	71.5	68.2	12.6	124.8	91.0	90.3	12.1	129.3	102.9	107.4	11.5
	100°F	128.1	68.5	71.1	11.6	129.2	87.2	94.2	11.1	133.6	98.6	111.8	10.6
	105°F	132.5	65.4	74.3	10.6	133.6	83.3	98.5	10.1	137.8	94.2	116.5	9.7

60 HZ rating
1 - HP shown is for each individual compressor motor.
2 - Value shown is for 460v/3-phase motor. For 208v motor, double the values shown.
3- If MCA is greater than 500, dual power feeds are required.
4 - All dimensions +/- 1/2".

20A4LM Model Ratings

		20A4LM120-2		20A4LM120-4				20A4LM160			
Refrigerant Type		R410a		R410a				R410a			
Number of Ref. Circuits		2		4				4			
Compressor Data	**Model**	ZPT770KCE		ZPT364KCE				ZOT470KCE			
	Type	Tandem Scrolls		Tandem Scrolls				Tandem Scrolls			
	HP[1]	30	30	15	15	15	15	20	20	20	20
	# Per Circuit	2	2	2	2	2	2	2	2	2	2
Fan Data	**Qty.**	8		12				12			
	HP	2		1				2			
	Dia. (in.)	28		28				28			
	RPM	1,140		1,140				1,140			
Unit Electrical Data[2]	**RLA**	275		273				317			
	MCA[3]	290		280				325			
	MOCP	350		300				350			
Coil Data	**Rows**	4		3				4			
	FPI	14		14				14			
	FH (in.)	85		170				170			
	FL (in.)	128		96				96			
Dimensions[4] (in. & lbs.)	**Length**	102		204				204			
	Width	138		106				106			
	Height	101-3/8		101-3/8				101-3/8			
	Shipping Wt.	8,131		10,109				13,094			
	Operating Wt.	8,442		10,436				13,552			

Capacity Ratings		Cond. Temp. (°F)	Capacity (tons)	KW	EER	Cond. Temp. (°F)	Capacity (tons)	KW	EER	Cond. Temp. (°F)	Capacity (tons)	KW	EER
Suction Temp.	**Ambient Temp.**												
39°F	**90°F**	122.1	126.8	140.2	10.9	115.6	125.5	124.1	12.1	116.4	158.7	163.8	11.6
	95°F	126.5	121.7	146.5	10.0	120.1	120.7	129.6	11.2	120.9	152.5	170.8	10.7
	100°F	130.9	116.5	153.1	9.1	124.6	115.7	135.5	10.2	125.5	146.0	178.7	9.8
	105°F	135.4	110.9	160.3	8.3	129.2	110.4	141.9	9.3	130.0	139.5	187.0	9.0
41°F	**90°F**	122.9	130.8	141.7	11.1	116.3	129.9	125.4	12.4	117.2	164.6	165.6	11.9
	95°F	127.4	125.5	148.2	10.2	120.8	125.0	130.9	11.5	121.7	158.1	172.8	11.0
	100°F	131.7	120.2	154.7	9.3	125.3	119.8	136.8	10.5	126.2	151.5	180.5	10.1
	105°F	136.1	114.5	161.8	8.5	129.8	114.4	143.1	9.6	130.7	144.7	188.9	9.2
43°F	**90°F**	123.8	134.8	143.3	11.3	117.0	134.5	126.6	12.7	118.0	170.7	167.5	12.2
	95°F	128.2	129.4	149.8	10.4	121.5	129.4	132.2	11.7	122.4	164.0	174.5	11.3
	100°F	132.5	123.9	156.4	9.5	126.0	124.0	138.1	10.8	126.9	157.1	182.3	10.3
	105°F	136.9	118.0	163.6	8.7	130.5	118.3	144.4	9.8	131.4	150.0	190.8	9.4
45°F	**90°F**	124.7	138.9	145.1	11.5	117.7	139.2	127.9	13.1	118.8	176.8	169.3	12.5
	95°F	129.0	133.3	151.4	10.6	122.2	133.8	133.5	12.0	123.2	169.9	176.5	11.5
	100°F	133.4	127.5	158.2	9.7	126.7	128.2	139.4	11.0	127.7	162.7	184.4	10.6
	105°F	137.7	121.5	165.3	8.8	131.1	122.5	145.7	10.1	132.1	155.4	192.7	9.7
47°F	**90°F**	125.6	142.9	146.8	11.7	118.5	143.9	129.4	13.3	119.6	183.2	171.2	12.8
	95°F	129.9	137.2	153.2	10.7	123.0	138.3	135.0	12.3	124.0	175.9	178.5	11.8
	100°F	134.2	131.2	160.0	9.8	127.4	132.5	140.8	11.3	128.4	168.5	186.3	10.9
	105°F	138.5	125.0	167.1	9.0	131.8	126.6	147.1	10.3	132.9	160.8	194.9	9.9
49°F	**90°F**	126.5	147.1	148.6	11.9	119.3	148.6	130.9	13.6	120.4	189.4	173.2	13.1
	95°F	130.8	141.1	155.1	10.9	123.7	142.9	136.4	12.6	124.8	182.1	180.5	12.1
	100°F	135.0	135.1	161.7	10.0	128.1	137.0	142.3	11.6	129.2	174.4	188.5	11.1
	105°F	139.3	128.6	168.9	9.1	132.5	130.8	148.5	10.6	133.6	166.5	197.0	10.1

60 HZ rating
1 - HP shown is for each individual compressor motor.
2 - Value shown is for 460v/3-phase motor. For 208v motor, double the values shown.
3- If MCA is greater than 500, dual power feeds are required.
4 - All dimensions +/- 1/2".

20A4LM Model Ratings

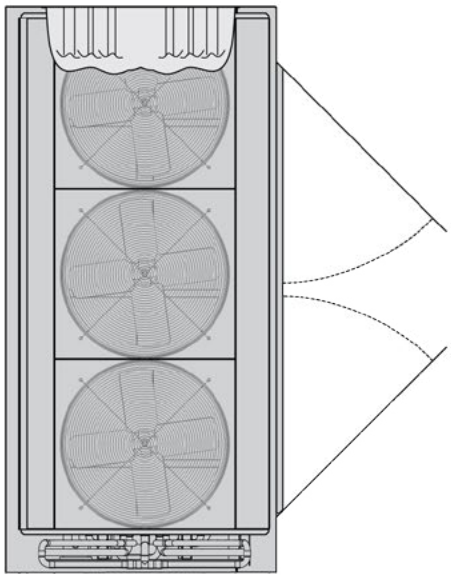
		20A4LM200			
Refrigerant Type		R410a			
Number of Ref. Circuits		4			
Compressor Data	Model	ZPT570KCE			
	Type	Tandem Scrolls			
	HP[1]	25	25	25	25
	# per Circuit	2	2	2	2
Fan Data	Qty.	12			
	HP	2			
	Dia. (in.)	28			
	RPM	1,140			
Unit Electrical Data[2]	RLA	429			
	MCA[3]	441			
	MOCP	450			
Coil Data	Rows	4			
	FPI	14			
	FH (in.)	170			
	FL (in.)	96			
Dimensions[4] (in. & lbs.)	Length	204			
	Width	106			
	Height	101-3/8			
	Shipping Wt.	13,992			
	Operating Wt.	14,515			

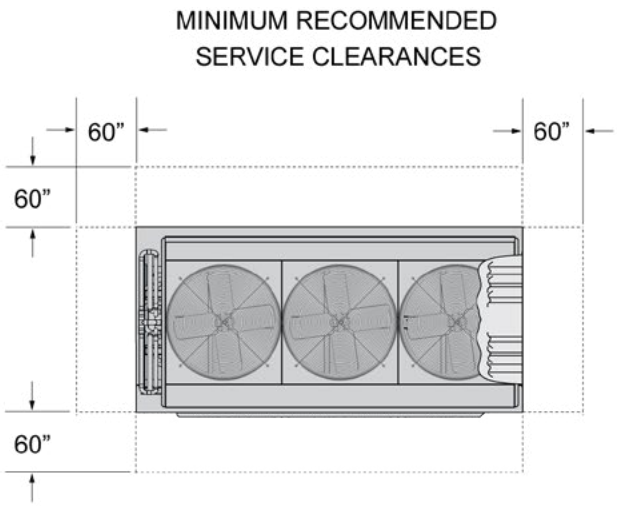
Capacity Ratings		Cond. Temp. (°F)	Capacity (tons)	KW	EER
Suction Temp.	Ambient Temp.				
39°F	90°F	120.6	183.1	196.1	11.2
	95°F	125.1	176.3	204.3	10.4
	100°F	129.5	169.0	212.9	9.5
	105°F	134.0	161.1	222.3	8.7
41°F	90°F	121.4	189.2	197.9	11.5
	95°F	125.9	182.1	206.3	10.6
	100°F	130.3	174.7	214.9	9.8
	105°F	134.7	166.7	224.2	8.9
43°F	90°F	122.3	195.2	200.0	11.7
	95°F	126.7	187.9	208.3	10.8
	100°F	131.1	180.2	217.0	10.0
	105°F	135.5	172.1	226.4	9.1
45°F	90°F	123.2	201.4	202.1	12.0
	95°F	127.6	193.8	210.5	11.0
	100°F	131.9	185.9	219.1	10.2
	105°F	136.2	177.6	228.4	9.3
47°F	90°F	124.1	207.7	204.2	12.2
	95°F	128.4	199.9	212.5	11.3
	100°F	132.7	191.6	221.3	10.4
	105°F	137.0	182.9	230.6	9.5
49°F	90°F	125.0	214.1	206.3	12.5
	95°F	129.3	205.9	214.7	11.5
	100°F	133.6	197.3	223.7	10.6
	105°F	137.8	188.4	232.9	9.7

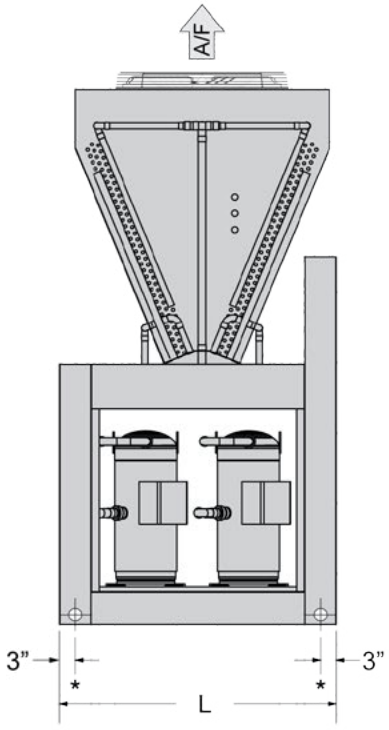
60 HZ rating
1 - HP shown is for each individual compressor motor.
2 - Value shown is for 460v/3-phase motor. For 208v motor, double the values shown.
3- If MCA is greater than 500, dual power feeds are required.
4 - All dimensions +/- 1/2".

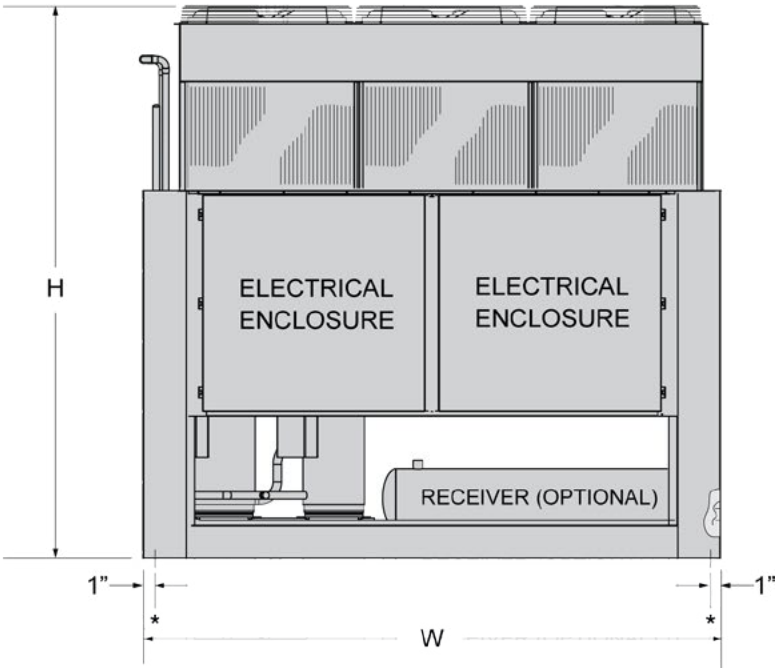
20A4LD Model Drawings

Three Fan Models







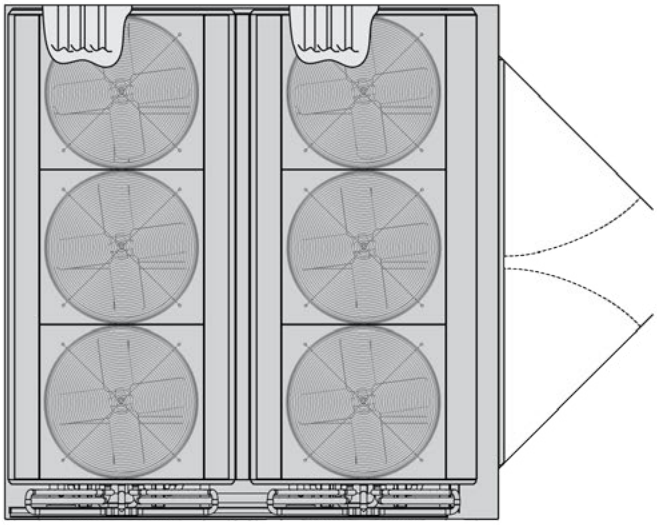


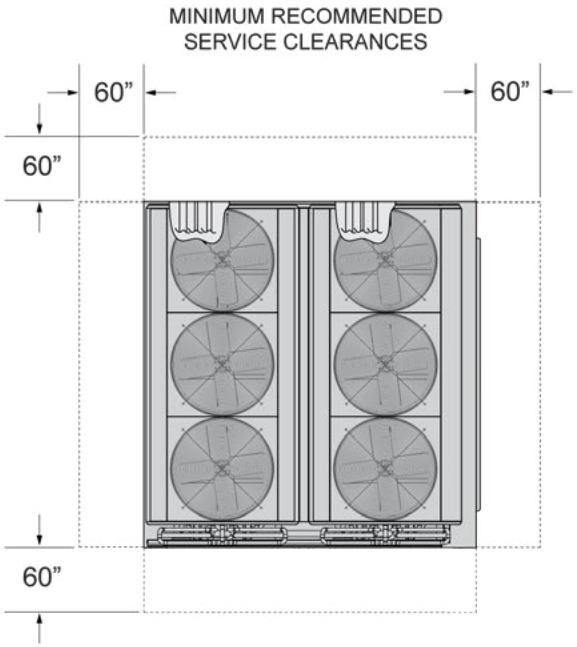
⊕ 2 1/2” DIAMETER RIGGING HOLES * 5/8” DIAMETER UNIT MOUNTING HOLES

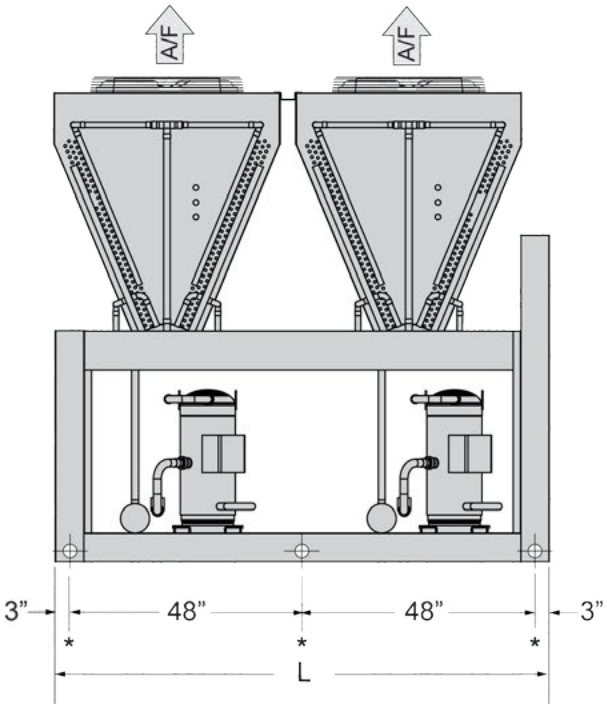
Model	Dimensions[1] (in.)			Weights (lbs.)	
	L	W	H	Shipping	Operating
20A4LD30	51	106	101 3/8	2,857	2,944
20A4LD40	51	106	101 3/8	3,511	3,637
20A4LD50	51	106	101 3/8	3,706	3,858

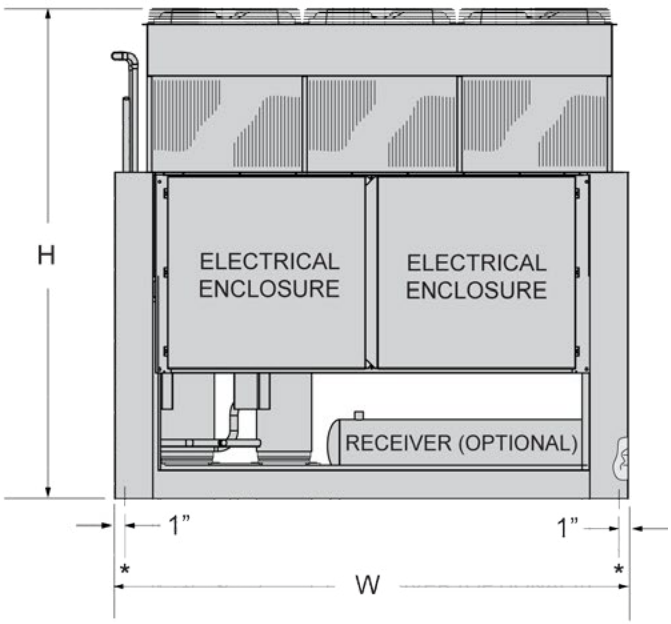
20A4LM Model Drawings

Six Fan Models







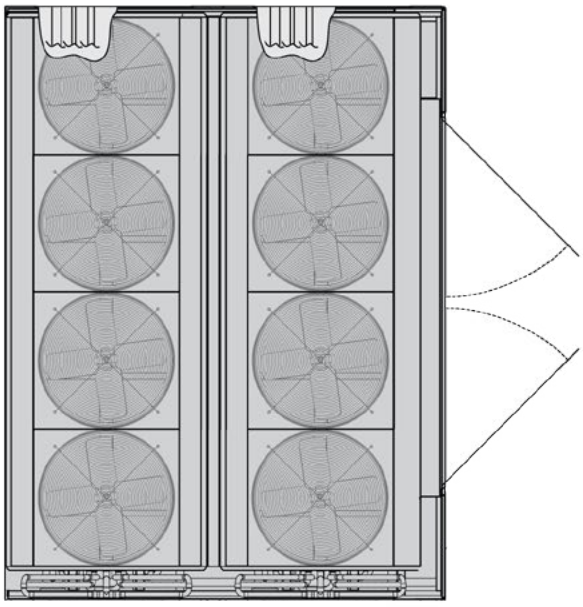


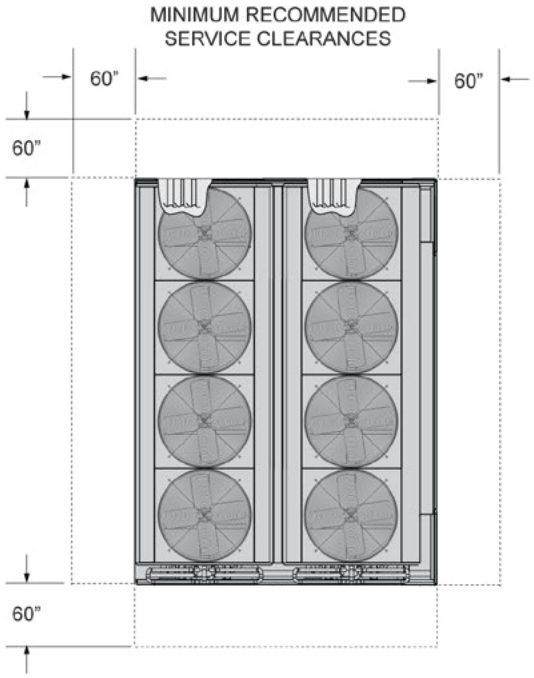
2 1/2” DIAMETER RIGGING HOLES

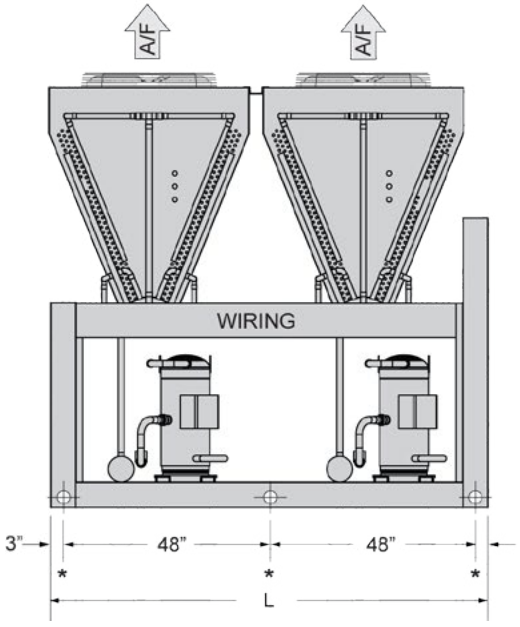
* 5/8” DIAMETER UNIT MOUNTING HOLES

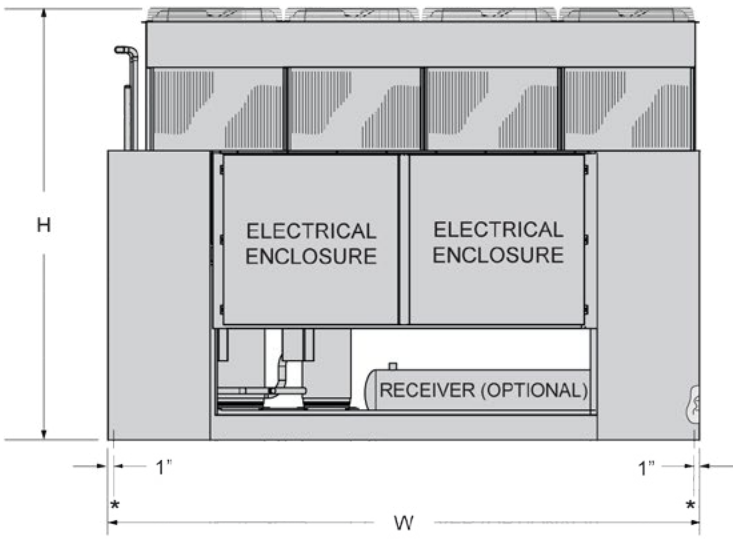
Model	Dimensions[1] (in.)			Weights (lbs.)	
	L	W	H	Shipping	Operating
20A4LM60	102	106	101 3/8	5,354	5,545
20A4LM80	102	106	101 3/8	6,847	7,076
20A4LM100	102	106	101 3/8	7,296	7,558

Eight Fan Models







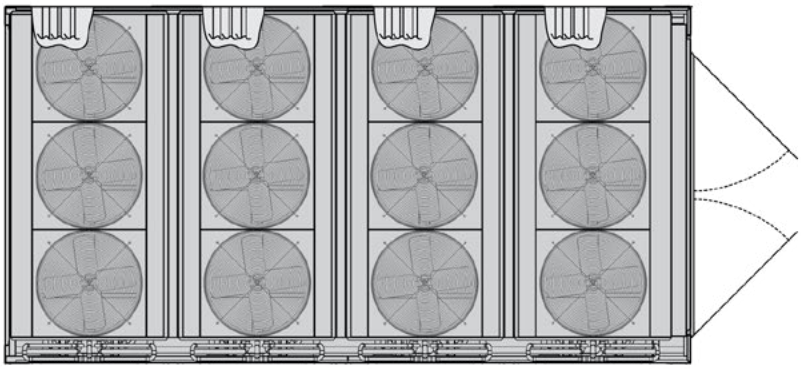


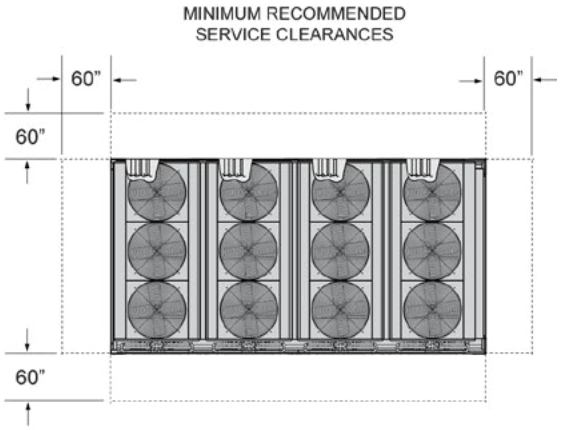
⊕ 2 1/2" DIAMETER RIGGING HOLES * 5/8" DIAMETER UNIT MOUNTING HOLES

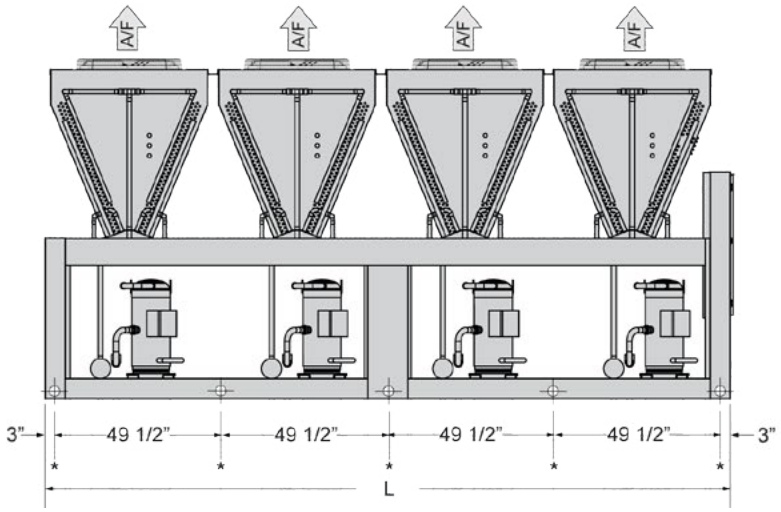
Model	Dimensions[1] (in.)			Weights (lbs.)	
	L	W	H	Shipping	Operating
20A4LM120-2	102	138	101 3/8	8,131	8,442

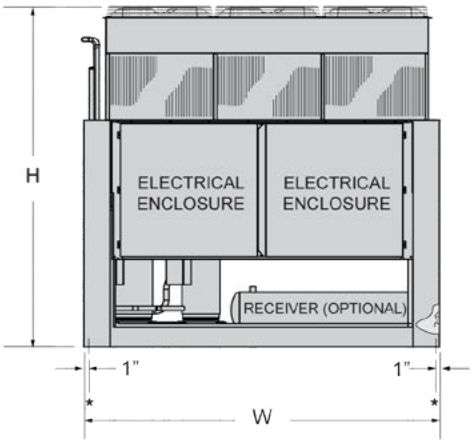
20A4LM Model Drawings

Twelve Fan Models









⊕ 2 1/2" DIAMETER RIGGING HOLES * 5/8" DIAMETER UNIT MOUNTING HOLES

Model	Dimensions[1] (in.)			Weights (lbs.)	
	L	W	H	Shipping	Operating
20A4LM120-4	204	106	101 3/8	10,109	10,436
20A4LM160	204	106	101 3/8	13,094	13,552
20A4LM200	204	106	101 3/8	13,992	14,515

VALUE
That Differentiates

The Standard Definition of Value

¹val•ue - *noun* - \ˈval-(ˌ)yü\

1: a fair return or equivalent in goods, services, or money for something exchanged

2: the monetary worth of something; market price

3: relative worth, utility, or importance <a good value at the price>

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