



**SPLIT "L" SERIES SYSTEMS**

**072, 090, 120, 180 & 240 MODELS**  
**"C" SERIES CONDENSING UNITS**  
**"P" SERIES HEAT PUMPS**

**LSA**  
*Condensing Units – 6 Thru 20 Ton*  
*(21.1 Thru 70.3 kW)*  
*Heat Pumps – 7.5 & 10 Ton*  
*(26.4 & 35.2 kW)*  
 Bulletin #210164  
 February 1997



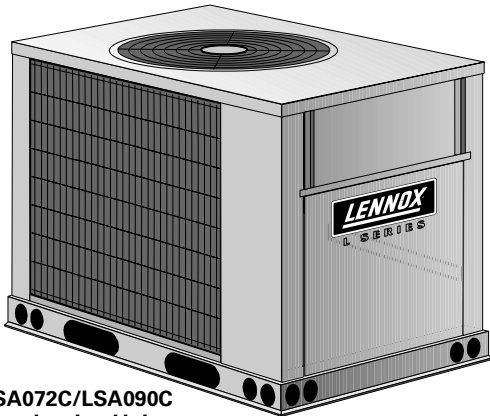
CERTIFICATION APPLIES ONLY  
 WHEN THE COMPLETE  
 SYSTEM IS LISTED  
 WITH ARI



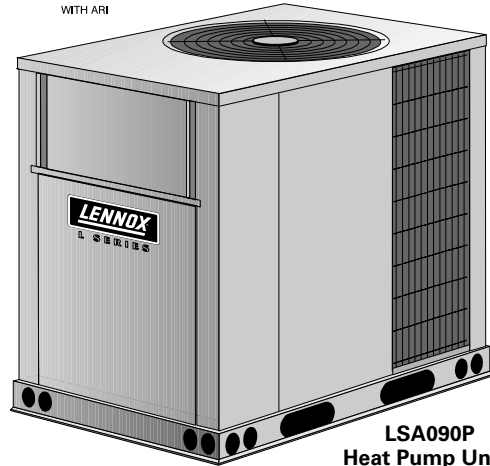
CERTIFICATION APPLIES ONLY  
 WHEN USED WITH PROPER  
 COMPONENTS AS LISTED  
 WITH ARI



CERTIFICATION APPLIES ONLY  
 WHEN THE COMPLETE  
 SYSTEM IS LISTED  
 WITH ARI



**LSA072C/LSA090C**  
**Condensing Units**



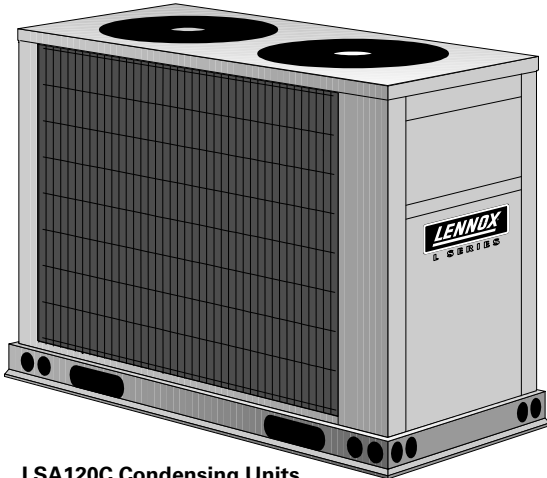
**LSA090P**  
**Heat Pump Units**



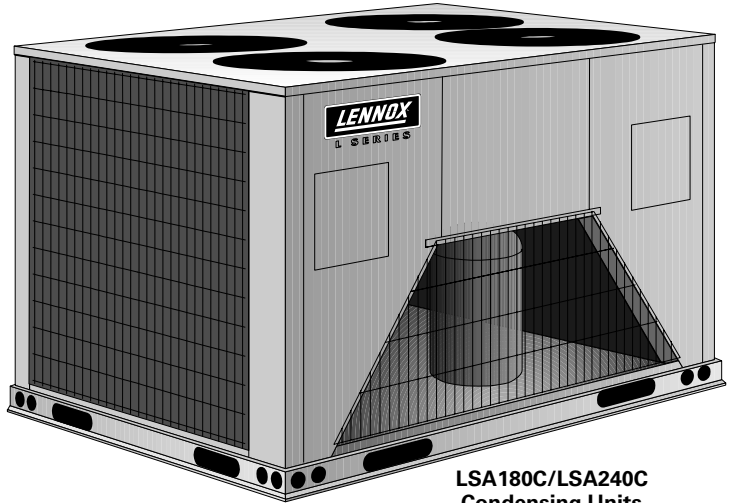
LISTED



LISTED

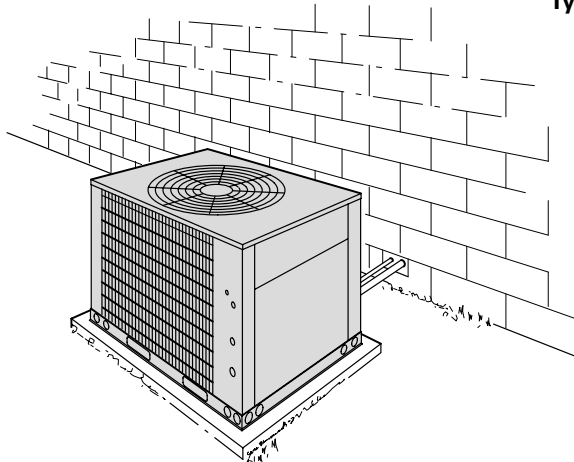


**LSA120C Condensing Units**  
**LSA120P Heat Pump Units**

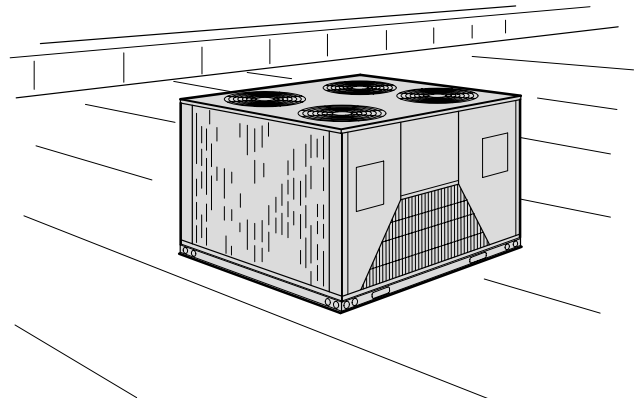


**LSA180C/LSA240C**  
**Condensing Units**

**Typical Applications**



Unit on a slab at grade level



Rooftop Installation

♣ The maple leaf symbol in this bulletin denotes Canadian only usage where applicable  
 NOTE – Due to Lennox' ongoing commitment to quality, Specifications, Ratings and Dimensions subject to change without notice and without incurring liability.

## FEATURES

### Applications

- Condensing units available in 6, 7.5, 10, 15 and 20 ton (21.1, 26.4, 35.2, 52.8 and 70.3 kW) nominal sizes.
- Heat pump units available in 7.5 and 10 ton (26.4 and 35.2 kW) nominal sizes.
- Designed for applications with remotely located blower-coil unit (condensing and heat pump units) or furnace with add-on evaporator coil (condensing units only).
- See ARI rating tables for efficiencies and capacities.
- For blower coil unit or evaporator unit data, see bulletins indexed in tab section Coils-Blower Coil Units.
- All units shipped factory assembled, piped and wired.
- Test operated at factory to ensure dependable operation.

### Approvals

- All units tested in Lennox Research Laboratory environmental test room.
- LSA072C, LSA090C, LSA120C condensing units rated in accordance with ARI Standard 210/240-94.
- LSA180C, LSA240C condensing units rated in accordance with ARI Standard 365-87.
- LSA090P, LSA120P heat pump units rated in accordance with ARI Standard 210/240-94.
- Sound tested in Lennox reverberant sound test room in accordance with test conditions included in ARI Standard 270-95
- Units and components within are bonded for grounding to meet safety standards for servicing required by U.L., U.L.C., N.E.C. and C.E.C.
- All units are U.L. listed and U.L.C. certified.

### Equipment Warranty

- Compressor – Five years.
- All other covered components – One year.
- Refer to Lennox Equipment Limited Warranty included with unit for details.

### Compressors

- LSA072C features single scroll compressor.  
**Scroll compressor features:**
  - Compressor features high efficiency with uniform suction flow, constant discharge flow and high volumetric efficiency and quiet operation.
  - Scroll compressor technology eliminates need for start capacitor and start relay.
  - Compressor consists of two involute spiral scrolls matched together to generate a series of crescent shaped gas pockets between them.
  - During compression, one scroll remains stationary while the other scroll orbits around it.
  - Gas is drawn into the outer pocket, the pocket is sealed as the scroll rotates.
  - As the spiral movement continues, gas pockets are pushed to the center of the scrolls. Volume between the pockets is simultaneously reduced.
  - When pocket reaches the center, gas is now at high pressure and is forced out of a port located in the center of the fixed scrolls.
  - During compression, several pockets are compressed simultaneously resulting in a smooth continuous compression cycle.
  - Continuous flank contact, maintained by centrifugal force, minimizes gas leakage and maximizes efficiency.
  - Scroll compressor is tolerant to the effects of slugging and contaminants. If this occurs, scrolls separate, allowing liquid or contaminants to be worked toward the center and discharged.
  - Low gas pulses during compression reduces operational sound levels.
  - Compressor motor is internally protected from excessive current and temperature.
  - Compressor is installed in the unit on resilient rubber mounts for vibration free operation.

### Compressors – continued

- LSA090C, LSA120C, LSA090P, LSA120P, have single reciprocating compressor.
- LSA180C, LSA240C have two reciprocating compressors.  
**Reciprocating compressor features:**
  - Hermetically sealed steel shell.
  - Cast iron compressor housing for long life.
  - Internal overload protection assures protection from excessive current and temperature. Automatic reset.
  - Aluminum pistons and connecting rods.
  - Ringed valves.
  - Stainless steel discharge valves.
  - Large internal muffler for quiet operation.
  - Patented internal spring mounting for vibration free operation.
  - Compressor installed in unit on resilient rubber mounts for quiet, vibration free operation.

### Crankcase Heater (All Models)

- Assures proper compressor lubrication at all times.

### Cabinet

- Heavy gauge steel cabinet with five station metal wash process.
- Pre-painted panels provides superior rust and corrosion protection.
- Removeable panels allow access for unit servicing. See dimension drawings.
- Heavy duty steel base channels raise the unit off of mounting surface away from damaging moisture.
- Unit lifting holes and forklift slots furnished in base rails. See dimension drawings.

### Control Box

- Control box located in separate compartment in unit cabinet (072, 090, 120 models).
- Hinged panel with quarter turn fastener for easy access.
- Slide out control box allows easy access to controls (180, 240 models).
- All controls are pre-wired at the factory.

### Copper Tube/Enhanced Fin Coil(s)

- LSA072C equipped with single "L" shaped coil.
- LSA090C, LSA090P equipped with single "U" shaped coil.
- LSA120, LSA120P equipped with two slab coils.
- LSA180C, LSA240C equipped with four slab coils.
- Lennox designed and fabricated coils constructed of precisely spaced ripple-edge aluminum fins machine fitted to seamless copper tubes.
- Lanced fins provide maximum exposure of fin surface to air stream resulting in excellent heat transfer.
- Fins equipped with collars that grip tubing for maximum contact area.
- Flared shoulder tubing connections and silver soldering provide tight, leakproof joints.
- Long life copper tubing is corrosion-resistant and easy to field service.
- Thoroughly factory tested under high pressure to insure leakproof construction.
- Completely accessible for cleaning.

### Coil Guard

- Corrosion resistant PVC (polyvinyl chloride) coated steel wire guard(s) furnished as standard.

## **FEATURES – continued**

### **Outdoor Fan(s)**

- LSA072C, LSA090C, LSA090P units have one outdoor fan.
- LSA120C, LSA120P units have two outdoor fans.
- LSA180C, LSA240C units have four outdoor fans.
- Direct drive fan(s) moves large volumes of air uniformly through entire condenser coil(s) for high refrigerant cooling capacity.
- Upward discharge of air reduces operating sound levels and prevents damage to lawns, shrubs and walkways.
- Fan motors are totally enclosed, inherently protected and equipped with a rain shield.
- Fan service access is accomplished by removal of fan guards.

### **Minimum Run Time Control (Condensing Units)**

- Prevents compressor short cycling and allows time for suction and discharge pressures to equalize and assures oil return to compressor.
- 5 minute minimum run time regardless of cooling demand.

### **Defrost Control/Timed-Off Control (Heat Pump Units)**

- Solid-state time/temperature defrost control is furnished as standard equipment.
- Control initiates a defrost cycle every 30, 60 or 90 minutes of compressor "on" time at outdoor temperatures below 35° F (2°C) (factory setting 60 minutes).
- Maximum defrost cycle 14 minutes.
- Defrost thermostat mounted on liquid line determines when defrost cycle is required.
- Pressure switch mounted on discharge line determines when defrost cycle is terminated.
- Timed off function prevents compressor short cycling.
- Provides 5 minute delay between compressor shutoff and start-up.
- Allows suction and discharge pressure to equalize, permitting compressor to start in unloaded condition.
- Automatic reset.
- Connections for ambient compensating thermistor and service light thermostat.

### **Reversing Valve (Heat Pump Units)**

- Factory installed 4-way reversing valve provides rapid change in refrigerant flow direction resulting in quick changeover from cooling to heating and vice-versa.
- Valve operates on pressure differential between outdoor unit and indoor unit.

### **Refrigerant Lines and Service Valves**

- Sweat connections.
- Fully serviceable brass service valves prevent corrosion and provide complete service access to refrigerant system. Suction valve can be fully shut off, while liquid valve can be front seated to manage refrigerant charge while servicing system.
- Thermometer well is provided for checking refrigerant charge. Refrigerant lines and field wiring inlets are located in one central area of the unit cabinet.

### **Hi-Capacity Drier**

- Furnished for field installation. Drier traps any moisture or dirt that could contaminate the refrigerant system.

### **High Pressure Switch**

- Shuts off unit if abnormal operating conditions cause discharge pressure to rise above setting.
- Protects the compressor from excessive condensing pressure.
- Manual reset.

### **Low Pressure Switch**

- Shuts off unit if suction pressure falls below setting.
- Provides loss of charge and freeze-up protection.
- Automatic reset.

### **Low Ambient Operation**

- Units will operate satisfactorily down to 0°F (-17.7°C) outdoor air temperature without any additional controls.

## **OPTIONS (Must be Ordered Extra)**

### **Thermostat (Optional)**

- Thermostat is not furnished with unit and must be ordered extra.
- See Thermostats bulletin and Lennox Price Book.

### **Hail Guard Protection (Optional)**

- Heavy duty field installed coil guard protects coils from damage.
- LSA072C uses (83K36).
- LSA090C, LSA090P use (83K37).
- LSA120C, LSA120P, LSA180C, LSA240C use (79K91).

### **Hot Gas Bypass (Factory or Field Installed)**

- Available for LSA072C, LSA090C, LSA120C only.
- Factory or field installed kit (79K90) contains hot gas bypass valve and superheat valve for reduced capacity control of condensing units.

### **Corrosion Protection (Factory Installed)**

- Phenolic epoxy coating applied to condenser coils and base section.

### **Disconnect Switch (Factory Installed)**

- Accessible from outside of unit.
- Spring loaded weatherproof cover.

### **Service Outlets(2) (Factory Installed)**

- 115v ground fault circuit interrupter (GFCI) type.
- Field wired.

**SPECIFICATIONS**

**CONDENSING UNITS**

Model No.			LSA072C	LSA090C	LSA120C	LSA180C	LSA240C
Nominal Size – Tons (kW)			6 (21.1)	7.5 (26.4)	10 (35.2)	15 (52.8)	20 (70.3)
Condenser Coil	Net face area – sq. ft. (m <sup>2</sup> )	Outer coil	12.92 (1.20)	16.35 (1.52)	29.36 (2.73) total	58.68 (5.45) total	
		Inner coil	12.59 (1.17)	15.70 (1.46)	-----		
	Tube diameter – in. (mm) & no. of rows		3/8 (9.5) – 2			3/8 (9.5) – 1	3/8 (9.5) – 2
	Fins per inch (m)		20 (787)		15 (630)	20 (787)	15 (630)
Condenser Fans	Diameter – in. (mm) & no. of blades		(1) 24 (610) – 4		(2) 24 (610) – 3	(4) 24 (610) – 3	
	Motor hp (W)		(1) 1/2 (373)		(2) 1/3 (249)	(4) 1/3 (249)	
	Cfm (L/s) total air volume		4500 (2125)	4800 (2265)	8200 (3870)	16,000 (7550)	
	Rpm		1060		1100	1075	
	Watts		620	610	740 total	1400 total	
Refrigerant charge			dry air				
Liquid line (o.d.) – in. (mm) connection (sweat)			5/8 (15.9)			(2) 5/8 (15.9)	
Suction line (o.d.) – in. (mm) connection (sweat)			1–1/8 (28.6)	1–3/8 (34.9)		(2) 1–3/8 (34.9)	
Shipping weight – lbs. (kg) 1 package			354 (161)	427 (193)	555 (251)	968 (439)	1096 (497)

**ELECTRICAL DATA**

**CONDENSING UNITS**

Model No.		LSA072C			LSA090C			LSA120C		
Line voltage data – 60 hz		208/230v 3ph	460v 3ph	575v 3ph	208/230v 3ph	460v 3ph	575v 3ph	208/230v 3ph	460v 3ph	575v 3ph
Compressors (1)	Rated load amps	18.6	9	7.4	24.7	10.4	8.1	34.4	13.9	11.1
	Locked rotor amps	156	70	54	164	79	63	195	98	78
Condenser Coil Fan Motor (1 phase)	Full load amps (total)	3	1.5	1.2	3	1.5	1.2	2.4 (4.8)	1.3 (2.6)	1 (2)
	Locked rotor amps (total)	6	3	2.9	6	3	2.9	4.7 (9.4)	2.4 (4.8)	1.9 (3.8)
Recommended maximum fuse or ☐circuit breaker size (amps)		40	20	15	50	20	15	80	30	25
†Minimum circuit ampacity		27	13	11	34	15	12	48	20	16

†Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements.

NOTE – Extremes of operating range are plus and minus 10% of line voltage.

☐HACR type (under 100 amps). U.S. only.

**ELECTRICAL DATA**

**CONDENSING UNITS**

Model No.		LSA180C			LSA240C		
Line voltage data – 60 hz		208/230v 3ph	460v 3ph	575v 3ph	208/230v 3ph	460v 3ph	575v 3ph
Compressors (2)	Rated load amps – each (total)	24.7 (49.4)	10.4 (20.8)	8.1 (16.2)	34.4 (68.8)	13.9 (27.8)	11.1 (22.2)
	Locked rotor amps – each (total)	164 (328)	79 (158)	63 (126)	195 (390)	98 (196)	78 (156)
Condenser Coil Fan Motor (1 phase)	Full load amps – each (total)	2.4 (9.6)	1.3 (5.2)	1 (4)	2.4 (9.6)	1.3 (5.2)	1 (4)
	Locked rotor amps – each (total)	4.7 (18.8)	2.4 (9.6)	1.9 (7.6)	4.7 (18.8)	2.4 (9.6)	1.9 (7.6)
Recommended maximum fuse or ☐circuit breaker size (amps)		80	35	30	110	50	40
†Minimum circuit ampacity		66	29	23	87	37	29

†Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements.

NOTE – Extremes of operating range are plus and minus 10% of line voltage.

☐HACR type (under 100 amps). U.S. only.

**SPECIFICATIONS**
**HEAT PUMPS**

Model No.			LSA090P		LSA120P	
Nominal Size – Tons (kW)			7.5 (26.4)		10 (35.2)	
Outdoor Coil	Net face area – sq. ft. (m <sup>2</sup> )	Outer coil	21.80 (2.03)		29.34 (2.73)	
		Inner coil	20.94 (1.95)		-----	
	Tube diameter – in. (mm) & no. of rows		3/8 (9.5) – 2			
	Fins per inch (m)		20 (787)			
Outdoor Coil Fan(s)	Diameter – in. (mm) & no. of blades		(1) 24 (610) – 4		(2) 24 (610) – 3	
	Motor hp (W)		(1) 1/2 (373)		(2) 1/3 (249)	
	Cfm (L/s) total air volume		5300 (2500)		8200 (3870)	
	Rpm		1075		1100	
	Watts		600		740	
Refrigerant charge			dry air			
Liquid line (o.d.) – in. (mm) connection (sweat)			5/8 (15.9)			
Vapor line (o.d.) – in. (mm) connection (sweat)			1–3/8 (34.9)			
Shipping weight – lbs. (kg) 1 package			490 (222)		604 (274)	

**ELECTRICAL DATA**
**HEAT PUMPS**

Model No.		LSA090P			LSA120P		
Line voltage data – 60 hz		208/230v 3ph	460v 3ph	575v 3ph	208/230v 3ph	460v 3ph	575v 3ph
Compressor (1)	Rated load amps	24.7	10.4	8.1	34.4	13.9	11.1
	Locked rotor amps	164	79	63	195	98	78
Condenser Coil Fan Motor (1 phase)	Full load amps (total)	3	1.5	1.2	2.4 (4.8)	1.3 (2.6)	1 (2)
	Locked rotor amps (total)	6	3	2.9	4.7 (9.4)	2.4 (4.8)	1.9 (3.8)
Rec. max. fuse or <input type="checkbox"/> circuit breaker size (amps)		50	20	15	80	30	25
†Minimum circuit ampacity		34	15	17	48	20	16

†Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements.

NOTE – Extremes of operating range are plus and minus 10% of line voltage.

 HACR type (under 100 amps). U.S. only.

**ARI RATINGS**

**CONDENSING UNITS**

Unit Size & Model No. *Sound Rating Number (db)	Gross Cooling Capacity		★ARI Standard 210 or 365 Ratings						Evaporator Unit			Expansion Valve Kit
			Net Cooling Capacity		EER (Btuh/Watts)	SEER (Btuh/Watts)	Total Unit Watts	Integrated Part Load Value	Up-Flow	Down-Flow	Horizontal	
	Btuh	kW	Btuh	kW								
(6T) LSA072C (86)	69,000	20.2	66,000	19.3	9.4	----	7110	----	C26-65EAP(FC)	----	----	●Factory Installed
	63,000	18.5	61,000	17.8	9.0	10.5	6820	----	----	CR26-65(N)(W)	----	LB-85663K (26K35)
	68,000	19.9	65,000	19.0	9.3	----	7000	----	----	----	CH23-68	
	<b>Btuh</b>	<b>kW</b>	<b>Btuh</b>	<b>kW</b>	<b>EER</b>	<b>SEER</b>	<b>Watts</b>	----	<b>Blower Coil Units</b>			<b>Valve</b>
	64,000	18.6	62,000	18.2	9.0	10.2	7020	----	CB29M-65 (Multi-Position)			●Factory Installed
	67,000	19.6	65,000	19.0	9.2	----	7040	----	CB30M-65 (Multi-Position)			
	67,000	19.6	65,000	19.0	9.3	----	6960	----	CB30U-65	----	----	
	76,000	22.3	74,000	21.7	10.2	----	7230	----	CB17-95	----	CBH17-95	
(7.5T) LSA090C (87)	<b>Btuh</b>	<b>kW</b>	<b>Btuh</b>	<b>kW</b>	<b>EER</b>	----	<b>Watts</b>	----	<b>Evaporator Coils</b>			<b>Valve</b>
	95,000	27.8	92,000	27.0	9.7	----	9500	----	C17-090/120	----	----	●Factory Installed
	<b>Btuh</b>	<b>kW</b>	<b>Btuh</b>	<b>kW</b>	<b>EER</b>	----	<b>Watts</b>	----	<b>Blower Coil Units</b>			<b>Valve</b>
	94,000	27.5	91,000	26.7	9.3	----	9760	----	CB17-95	----	CBH17-95	●Factory Installed
(10T) LSA120C (90)	96,000	28.1	93,000	27.2	9.5	----	9780	----	CB17-135	----	CBH17-135	●Factory Installed
	<b>Btuh</b>	<b>kW</b>	<b>Btuh</b>	<b>kW</b>	<b>EER</b>	----	<b>Watts</b>	----	<b>Evaporator Coils</b>			<b>Valve</b>
	123,000	36.0	118,000	34.6	9.4	----	12,600	----	C17-090/120	----	----	●Factory Installed
(15T) LSA180C	<b>Btuh</b>	<b>kW</b>	<b>Btuh</b>	<b>kW</b>	<b>EER</b>	----	<b>Watts</b>	----	<b>Blower Coil Units</b>			<b>Valve</b>
	180,000	52.7	174,000	51.0	9.2	----	18,820	10.0	CB17-185	----	CBH17-185	●Factory Installed
	185,000	54.2	180,000	52.7	9.4	----	19,140	10.0	(2)CB17-95	----	(2)CBH17-95	
(20T) LSA240C	<b>Btuh</b>	<b>kW</b>	<b>Btuh</b>	<b>kW</b>	<b>EER</b>	----	<b>Watts</b>	----	<b>Blower Coil Units</b>			<b>Valve</b>
	248,000	72.7	240,000	70.3	9.2	----	26,000	10.0	CB17-275	----	CBH17-275	●Factory Installed
	249,000	73.0	242,000	70.9	9.2	----	26,200	10.0	(2)CB17-135	----	(2)CBH17-135	

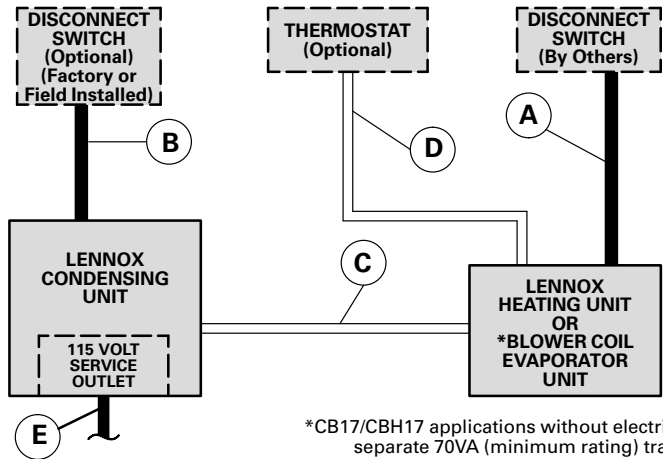
\*Sound rating Number in accordance with test conditions included in ARI Standard 270. For units below 135,000 Btuh (39.6 kW).  
 ★Rated in accordance with ARI Standard 210:  
 □ Rated in accordance with ARI Standard 365:  
 95°F (35°C) outdoor air temperature, 80°F (27°C) db/67°F (19°C) wb entering evaporator air (2) minimum external duct static pressure) with 25 ft. (7.6m) of connecting refrigerant lines.  
 ●Furnished as standard with coil.  
 NOTE – Net capacity includes indoor blower motor heat deduction. Gross capacity does not include indoor blower motor heat deduction.

**ARI RATINGS**

**HEAT PUMPS**

Unit Size & Model No. *Sound Rating Number (db)	Gross Cool. Cap. Btuh (kW)	★ARI Standard 210/240 Ratings										Blower Coil Unit		Check Valve Kit Required
		Net Cool. Cap. Btuh (kW)	High Temp. Htg. Cap. Btuh (kW)	Low Temp. Htg. Cap. Btuh (kW)	Total Unit Cool. Watts	EER (Btuh/Watt)	Cool. C.O.P.	Total Unit High Temp. Htg. Watts	High Temp. Htg. C.O.P.	Total Unit Low Temp. Htg. Watts	Low Temp. Htg. C.O.P.	Up-Flow	Horizontal	
(7.5T) LSA090P (92)	94,000 (27.5)	91,000 (26.6)	86,000 (25.2)	44,000 (12.9)	9680	9.4	2.8	7875	3.2	5920	2.2	CB17-95V	CBH17-95V	□LB-51486CA
(10T) LSA120P (90)	123,000 (36.0)	119,000 (34.9)	119,000 (34.9)	67,000 (19.6)	12,800	9.3	2.7	11,250	3.1	8325	2.3	CB17-135V	CBH17-135V	□LB-51486CA

\*Sound Rating Number in accordance with ARI Standard 270.  
 ★Rated in accordance with ARI Standard 210/240;  
**Cooling Ratings** – 95°F (35°C) outdoor air temperature and 80°F (27°C) db/67°F (19°C) wb entering indoor coil air.  
**High Temperature Heating Ratings** – 47°F (8°C) db/43°F (6°C) wb outdoor air temperature and 70°F (21°C) db entering indoor coil air.  
**Low Temperature Heating Ratings** – 17°F db/15°F wb outdoor air temperature and 70°F db (21°C) entering indoor coil air.  
 □Kit contains two valves, must be ordered extra.  
 NOTE – Net capacity includes indoor blower motor heat deduction. Gross capacity does not include indoor blower motor heat deduction.



- A — Three Wire Power (not furnished)
  - B — Three Wire Power (not furnished) — See Electrical Data
  - C — Two Wire Low Voltage (not furnished) — 18 ga. minimum
  - D — Four Wire Low Voltage (not furnished) — 18 ga. minimum
  - E — Two Wire Power (115 volt)
- All wiring must conform to NEC or CEC and local electrical codes.

\*CB17/CBH17 applications without electric heat require a separate 70VA (minimum rating) transformer.

**GUIDE SPECIFICATIONS**

**CONDENSING UNITS**

**Prepared for the guidance of architects, consulting engineers and mechanical contractors.**

**General** — Furnish and install an air cooled condensing unit. The unit shall be shipped completely factory assembled, piped and wired internally ready for field connections. In addition, manufacturer shall test operate unit at the factory before shipment. The condensing unit shall be a standard product of a firm regularly engaged in the manufacture of heating-cooling equipment. The manufacturer shall have parts and service available throughout the United States and Canada.

The installed weight shall not be more than . . . . . lbs. (kg). Entire unit shall have a width of not more than . . . . . inches (mm), a depth of not more than . . . . . inches (mm) and an overall height of not more than . . . . . inches (mm).

**Approvals** — All wiring shall be in compliance with NEC or CEC. Shall be rated in accordance with ARI Standard 210/240-94 or 365-87. All models shall have U.L. listing and be U.L.C. certified.

**Equipment Warranty** — The compressor shall have a limited warranty for five years. All other covered components shall have a limited warranty for one year. Refer to Lennox Equipment Limited Warranty Certificate furnished with unit for details.

**Cooling Capacity** — The total cooling capacity shall be . . . . . Btuh (kW) at . . . . . ° F (C°) evaporating temperature and outdoor air temperature of . . . . . ° F (C°). The compressor power input shall not exceed . . . . . kw at the above conditions. All models shall have low ambient operation down to 0° F (-17.7° C).

**Compressor** — LSA072C shall have single speed scroll compressor. LSA090C, LSA120C shall have single speed reciprocating compressor. LSA180C, LSA240C shall have two single speed reciprocating compressors. Compressors shall be resiliently mounted, suction cooled, overload protected, and have internal excessive current and temperature protection. All compressors shall have crankcase heater.

**Refrigerant System** — Shall include fully serviceable liquid and suction line service valves, gauge ports, hi-capacity drier (field installed), thermometer well, high pressure switch, low pressure switch and timed-off control. Control options available shall include thermostat.

**Condenser Coil(s)** — Coil(s) shall be non-ferrous construction with aluminum enhanced fins mechanically bonded to durable rifled copper tubes. Coil(s) shall be pressure leak tested. Coil face area shall be not less than . . . . . sq. ft. (m<sup>2</sup>) Coil(s) shall be protected with steel guard(s).

**Cabinet** — Shall be constructed of galvanized steel which has been through a metal wash preparation and have a pre-painted finish. Openings shall be provided for refrigerant lines and power connection entry.

**Air Mover** — Shall be direct drive propeller type fan(s). Motor(s) shall have inherent protection devices and shall be protected from moisture. Motor(s) shall be . . . . . hp (W) with not more than . . . . . watts input. Fan(s) shall be protected with steel guard(s).

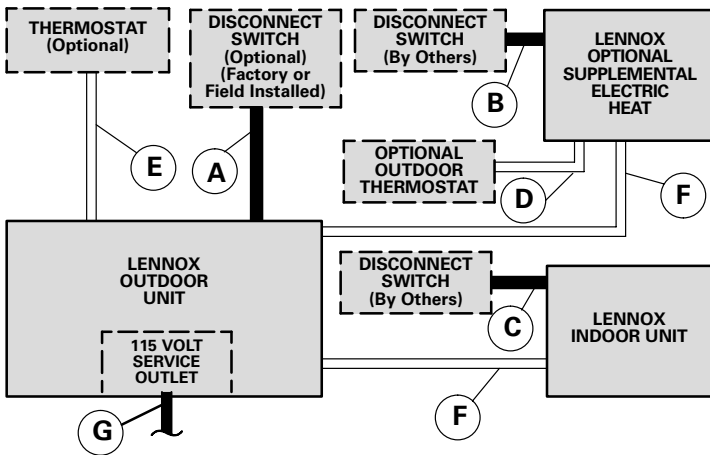
**OPTIONS**

**Corrosion Protection** — Furnish and factory apply phenolic epoxy coating to condenser coils and base section.

**Disconnect Switch** — Furnish and factory install unit disconnect switch. Shall have spring loaded weatherproof cover.

**Service Outlets** — Furnish and factory install dual 115v ground fault circuit interrupter (GFCI) type. Shall have spring loaded weatherproof cover. Power wiring shall be field provided.

**Hail Guard Protection** — Furnish and field install heavy duty coil guard to protect coils.



- A – Three Wire Power (see Electrical Data)
- B – Three Wire Power (size to heater capacity)
- C – Three Wire Power (size to indoor coil blower motor)
- D – Two Wire Low Voltage – 18 ga. minimum
- E – Seven Wire Low Voltage – 18 ga. minimum – with Electric Heat  
– Nine Wire Low Voltage with Optional Outdoor Thermostat
- F – Four Wire Low Voltage – 18 ga. minimum
- G – Two Wire Power (115 volt)

– Field Wiring Not Furnished –

All wiring must conform to NEC or CEC and local electrical codes.

**GUIDE SPECIFICATIONS**

**HEAT PUMPS**

**Prepared for the guidance of architects, consulting engineers and mechanical contractors.**

**General** – Furnish and install an air cooled heat pump outdoor unit. The unit shall be shipped completely factory assembled, piped and wired internally ready for field connections. In addition, manufacturer shall test operate unit at the factory before shipment. The outdoor unit shall be a standard product of a firm regularly engaged in the manufacture of heating-cooling equipment. The manufacturer shall have parts and service available throughout the United States and Canada.

The installed weight shall not be more than . . . . . lbs. (kg). Entire unit shall have a width of not more than . . . . . inches (mm), a depth of not more than . . . . . inches (mm) and an overall height of not more than . . . . . inches (mm).

**Approvals** – All wiring shall be in compliance with NEC and CEC. Shall be rated in accordance with ARI Standard 210/240-94. All models shall have U.L. listing and be U.L.C. certified.

**Equipment Warranty** – The compressor shall have a limited warranty for five years. All other covered components shall have a limited warranty for one year. Refer to Lennox Equipment Limited Warranty Certificate furnished with unit for details.

**Cooling Capacity** – The total cooling capacity shall be . . . . . Btuh (kW) at . . . . . °F (°C) evaporating temperature and outdoor air temperature of . . . . . °F (°C). The compressor power input shall not exceed . . . . . kw at the above conditions. All models shall have low ambient cooling operation down to 0° F (-17.7° C).

**Heating Capacity** – The total certified heating capacity shall be . . . . . Btuh (kW) at . . . . . °F (°C) condensing temperature and . . . . . °F (°C) outdoor air temperature. The compressor watts input shall not be more than . . . . . watts at the above conditions.

**Outdoor Coil(s)** – Coil(s) shall be non-ferrous construction with aluminum enhanced fins mechanically bonded to rifled copper tubes. Coil(s) shall be pressure leak tested. Coil face area shall be not less than . . . . . sq. ft. (m<sup>2</sup>) Coil(s) shall be protected with steel guard(s).

**Compressor** – LSA090P, LSA120P shall have single speed reciprocating compressor. Compressor shall be resiliently mounted, suction cooled, overload protected, and have internal excessive current and temperature protection. Compressor shall have crankcase heater.

**Refrigerant System** – Shall include fully serviceable liquid and vapor line service valves, gauge ports, hi-capacity driers, thermometer well, high pressure switch, low pressure switch, suction line accumulator, expansion valve, reversing valve and defrost/timed-off control. Control options available shall include thermostat and outdoor thermostat.

**Cabinet** – Shall be constructed of galvanized steel which has been through a metal wash preparation and have a pre-painted finish. Openings shall be provided for refrigerant lines and power connection entry.

**Air Mover** – Shall be direct drive blade type fan(s). Motor(s) shall have inherent protection devices and shall be protected from moisture. Motor(s) shall be . . . . . hp (W) with not more than . . . . . watts input. Fan(s) shall be protected with steel guard(s).

**OPTIONS**

**Corrosion Protection** – Furnish and factory apply phenolic epoxy coating to outdoor coils and base section.

**Disconnect Switch** – Furnish and factory install unit disconnect switch. Shall have spring loaded weatherproof cover.

**Service Outlets** – Furnish and factory install dual 115v ground fault circuit interrupter (GFCI) type. Shall have spring loaded weatherproof cover. Power wiring shall be field provided.

**Hail Guard Protection** – Furnish and field install heavy duty coil guard to protect coils.

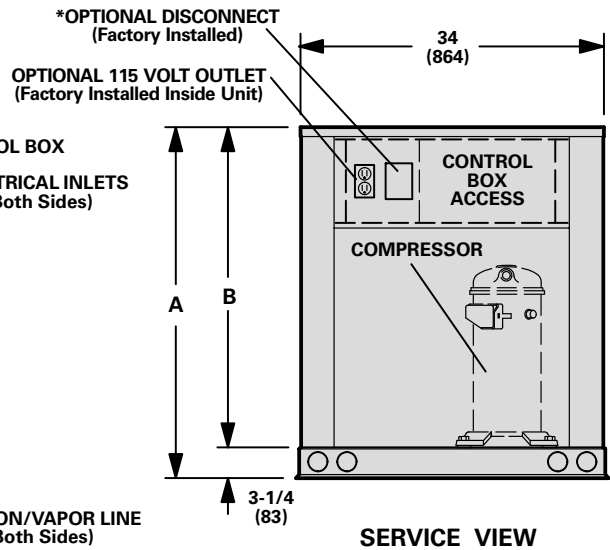
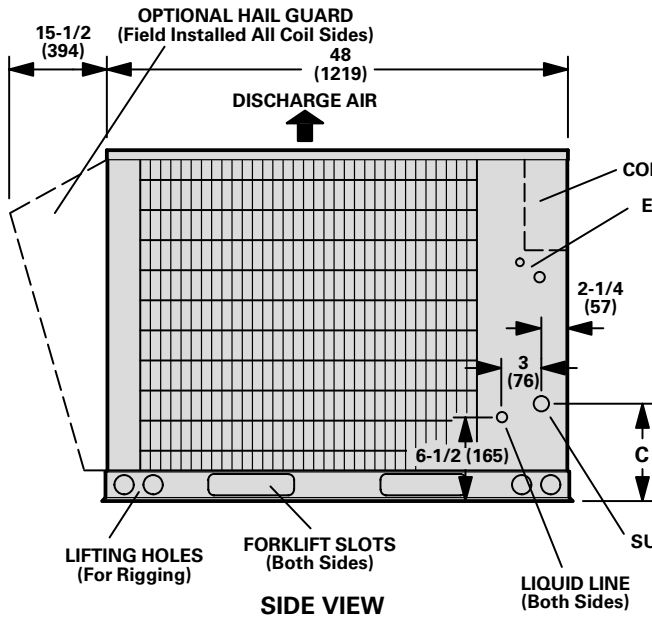
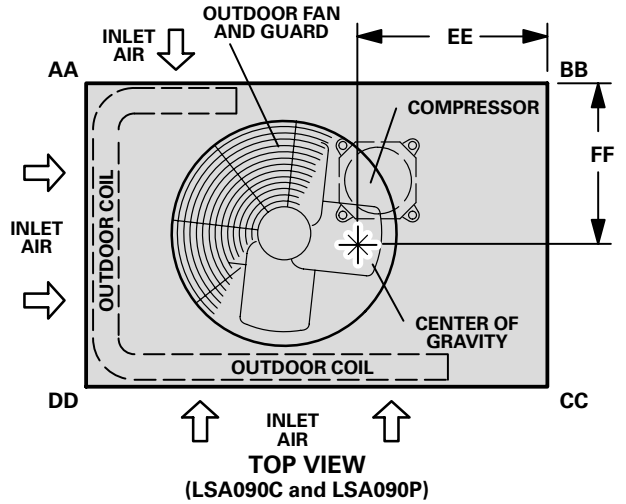
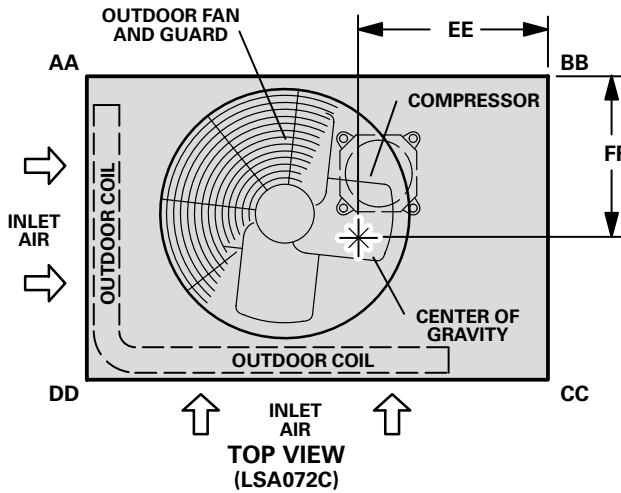


**CORNER WEIGHT – lbs. (kg)**

Model No.	AA		BB		CC		DD	
	lbs.	kg	lbs.	kg	lbs.	kg	lbs.	kg
LSA072C	79	36	93	42	83	38	70	32
LSA090C	99	45	121	55	98	44	80	36
LSA090P	101	46	119	54	133	60	113	51

**CENTER OF GRAVITY – in. (mm)**

Model No.	EE		FF	
	inch	mm	inch	mm
LSA072C	22-5/8	575	16-5/8	422
LSA090C	22-1/8	562	15-3/4	400
LSA090P	22-5/8	575	18-5/8	473



\*NOTE— Disconnect below GFCI outlet on LSA090P.

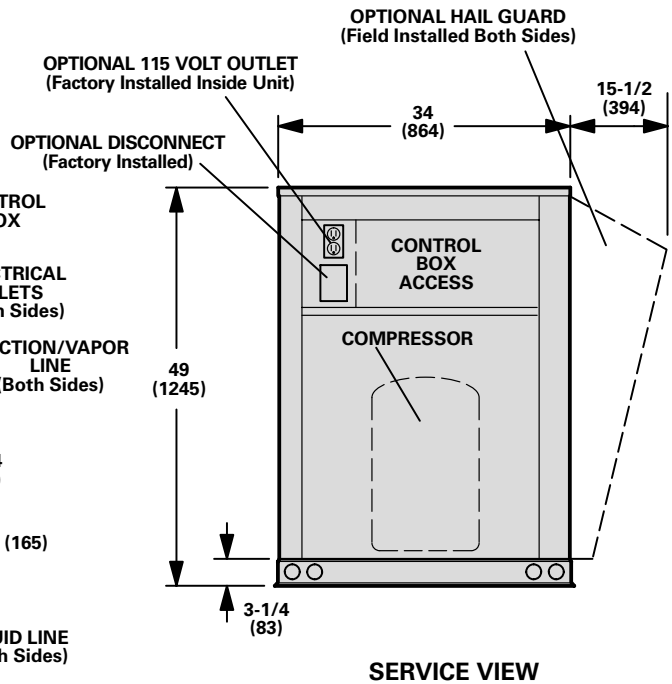
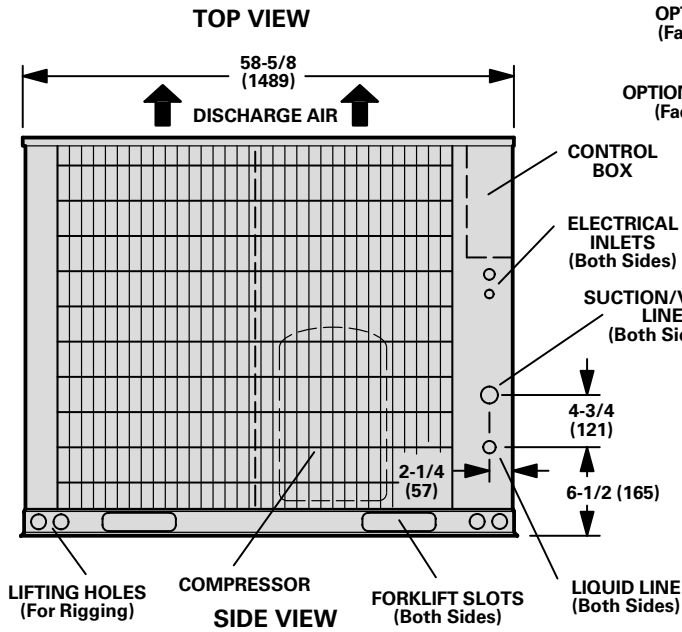
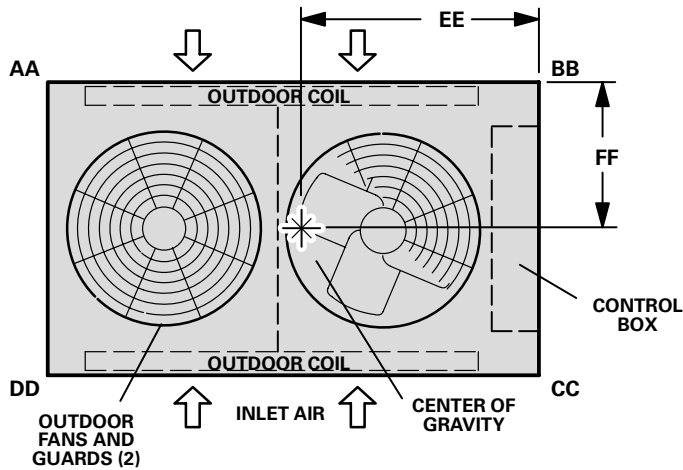
Model No.	A		B		C	
	in.	mm	in.	mm	in.	mm
LSA072C	36-1/4	921	33	838	9-1/4	235
LSA090C	36-1/4	921	33	838	14-1/2	368
LSA090P	46-1/2	1181	43-1/4	1099	11-1/4	286

**CORNER WEIGHT – lbs. (kg)**

Model No.	AA		BB		CC		DD	
	lbs.	kg	lbs.	kg	lbs.	kg	lbs.	kg
LSA120C	119	54	141	64	141	64	119	54
LSA120P	124	56	148	67	148	67	124	56

**CENTER OF GRAVITY – in. (mm)**

Model No.	EE		FF	
	inch	mm	inch	mm
LSA120C	27-1/2	699	16-3/8	162
LSA120P	27-1/2	699	16-3/8	162

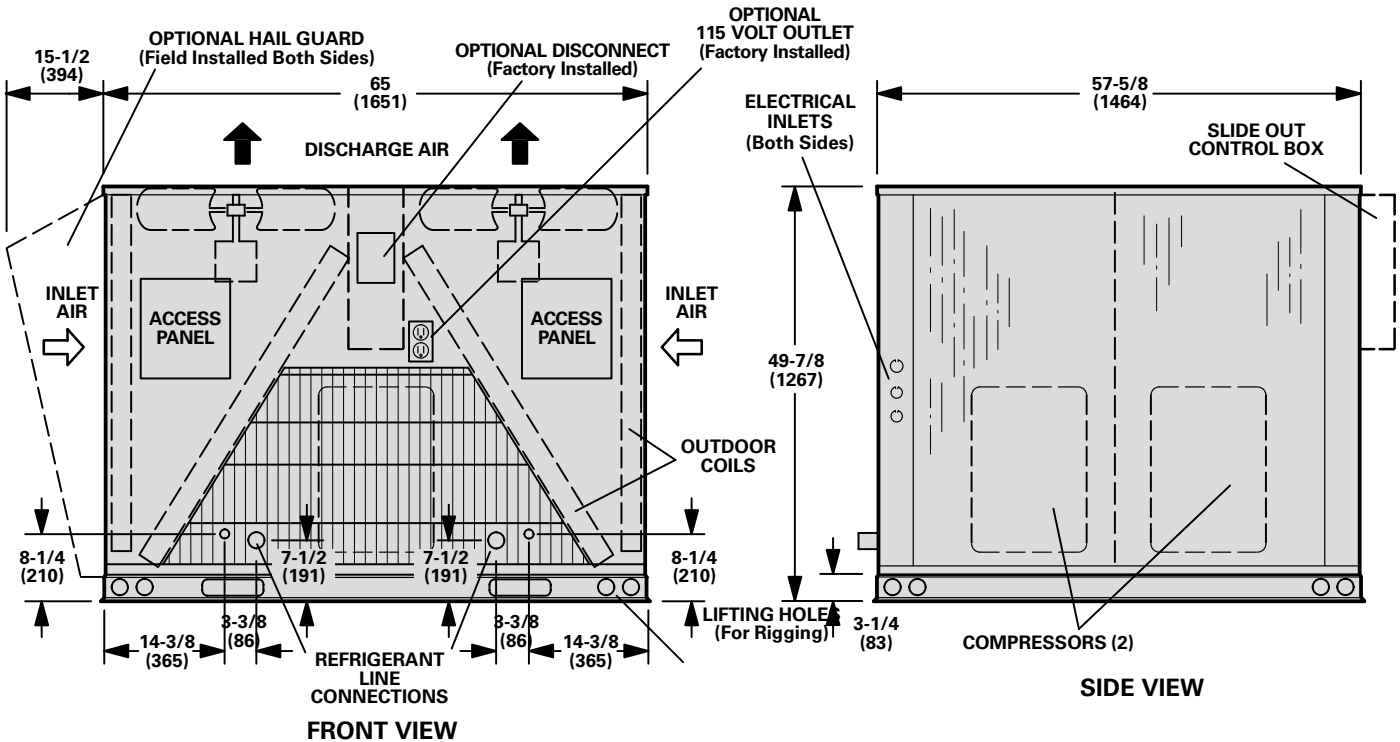
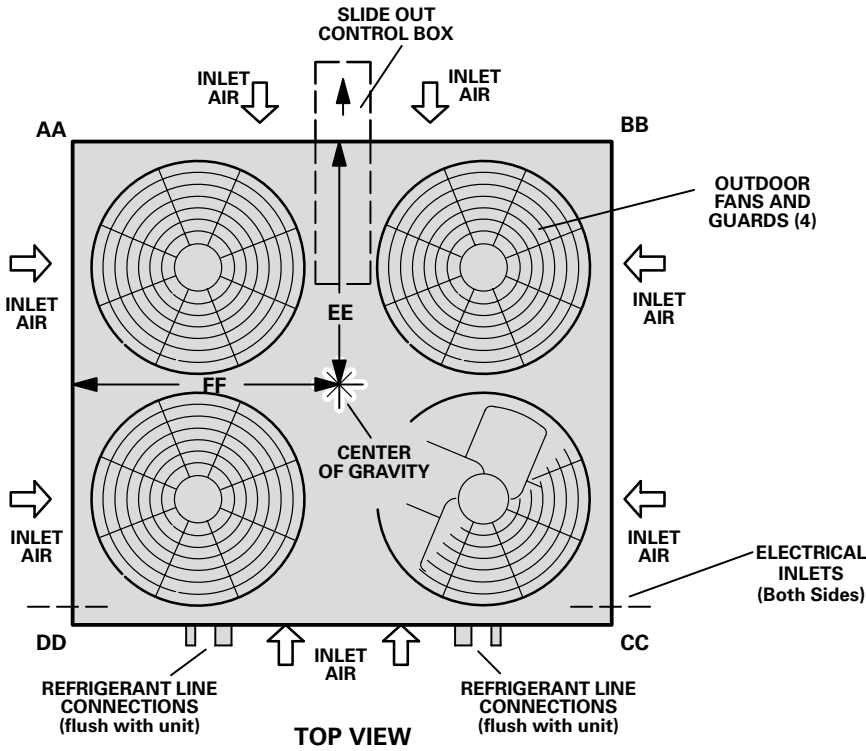


**CORNER WEIGHT – lbs. (kg)**

Model No.	AA		BB		CC		DD	
	lbs.	kg	lbs.	kg	lbs.	kg	lbs.	kg
LSA180C	230	104	230	104	230	104	230	104
LSA240C	262	119	262	119	262	119	262	119

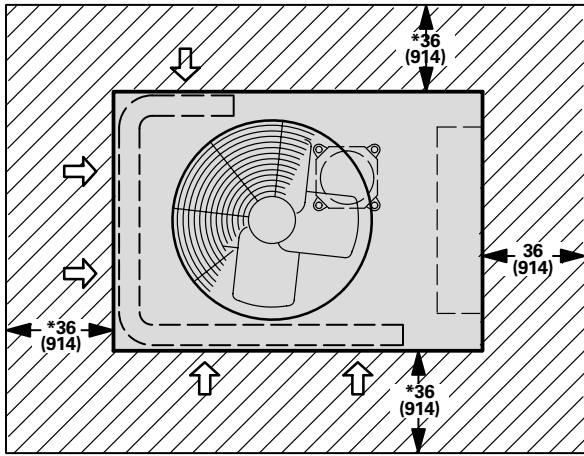
**CENTER OF GRAVITY – in. (mm)**

Model No.	EE		FF	
	inch	mm	inch	mm
LSA180C	29-5/16	745	32-1/2	826
LSA240C	29-5/16	745	32-1/2	826



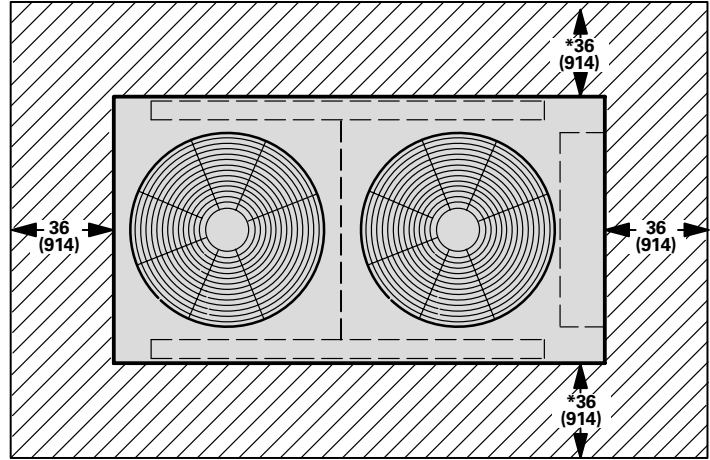
# INSTALLATION CLEARANCES — inches (mm)

LSA072 AND LSA090



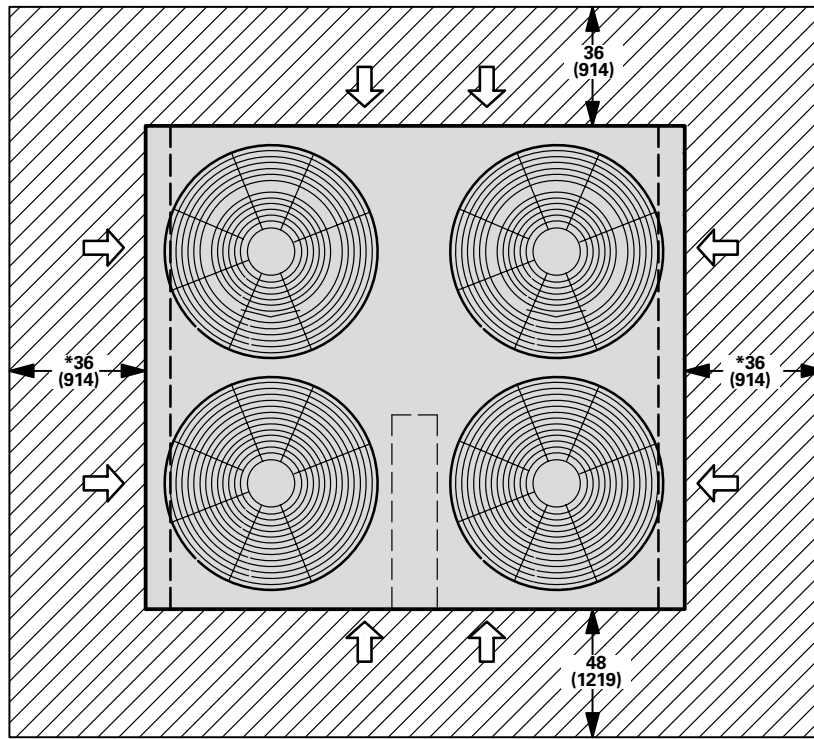
NOTE—48 inches (1219 mm) clearance required on top of unit.  
\*NOTE—One side of coil may be 12 inches (305 mm).

LSA120



NOTE—48 inches (1219 mm) clearance required on top of unit.  
\*NOTE—One side of coil may be 12 inches (305 mm).

LSA180 AND LSA240



NOTE—48 inches (1219 mm) clearance required on top of unit.  
\*NOTE—One side of coil may be 12 inches (305 mm).

## COOLING RATINGS

## CONDENSING UNITS

NOTE — For Temperatures and Capacities not shown in tables, see bulletin — Cooling Unit Rating Table Correction Factor Data in Miscellaneous Engineering Data section.

LSA072C — C26-65(FC)EAP

Outdoor Air Temperature Entering Outdoor Coil

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)			95°F (35°C)			105°F (41°C)			115°F (46°C)														
			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb								
						75°F 24°C	80°F 27°C	85°F 29°C				75°F 24°C	80°F 27°C	85°F 29°C				75°F 24°C	80°F 27°C	85°F 29°C	75°F 24°C	80°F 27°C	85°F 29°C			
L/s	cfm	kW	Btuh	Watts	kW	Btuh	Watts	kW	Btuh	Watts	kW	Btuh	Watts	kW	Btuh	Watts	kW	Btuh	Watts	kW	Btuh	Watts				
63°F (17°C)	905	1920	19.7	67,100	5060	.71	.85	.98	18.9	64,600	5680	.73	.87	.99	18.2	62,000	6370	.74	.89	1.0	17.3	59,200	7160	.75	.91	1.0
	1135	2400	20.4	69,500	5120	.76	.92	1.0	19.6	67,000	5740	.78	.94	1.0	18.9	64,400	6430	.8	.96	1.0	18.1	61,600	7220	.82	.98	1.0
	1360	2880	21.0	71,600	5180	.82	.98	1.0	20.3	69,100	5780	.83	.99	1.0	19.5	66,500	6490	.85	1.0	1.0	18.7	63,800	7290	.87	1.0	1.0
67°F (19°C)	905	1920	20.9	71,300	5160	.56	.69	.82	20.1	68,700	5780	.57	.70	.84	19.3	65,900	6470	.57	.71	.85	18.4	62,900	7270	.58	.73	.88
	1135	2400	21.5	73,400	5210	.59	.74	.89	20.7	70,700	5820	.6	.76	.91	19.9	67,800	6530	.61	.77	.93	19.0	64,700	7320	.62	.79	.95
	1360	2880	22.0	75,000	5250	.62	.80	.95	21.1	72,100	5870	.63	.81	.97	20.3	69,200	6560	.64	.83	.98	19.3	66,000	7350	.65	.85	1.0
71°F (22°C)	905	1920	22.3	76,000	5280	.42	.54	.67	21.5	73,200	5890	.42	.55	.68	20.6	70,200	6590	.42	.56	.69	19.7	67,100	7380	.43	.57	.70
	1135	2400	22.9	78,100	5330	.43	.58	.72	22.0	75,200	5950	.43	.58	.73	21.1	72,000	6650	.44	.59	.75	20.2	68,800	7440	.44	.61	.77
	1360	2880	23.3	79,500	5370	.44	.61	.78	22.4	76,500	5990	.45	.62	.79	21.5	73,300	6690	.45	.63	.81	20.5	70,000	7480	.46	.65	.83

NOTE — All values are gross capacities and do not include indoor coil blower motor heat deduction.

**COOLING RATINGS**

**CONDENSING UNITS**

NOTE — For Temperatures and Capacities not shown in tables, see bulletin — Cooling Unit Rating Table Correction Factor Data in Miscellaneous Engineering Data section.

**LSA072C – CR26–65(N)(W)**

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)		
						Dry Bulb						Dry Bulb						Dry Bulb						Dry Bulb		
L/s	cfm	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	Watts Input	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	Watts Input	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	Watts Input	75°F/24°C	80°F/27°C	85°F/29°C		
63°F (17°C)	905	1920	18.5	63,100	5000	.74	.88	.99	17.8	60,900	5610	.75	.89	1.0	17.1	58,500	6300	.76	.91	1.0	16.4	55,900	7080	.78	.93	1.0
	1135	2400	19.2	65,400	5050	.79	.94	1.0	18.5	63,100	5660	.8	.96	1.0	17.8	60,600	6360	.82	.97	1.0	17.0	58,000	7140	.84	.99	1.0
	1360	2880	19.7	67,300	5100	.84	.99	1.0	19.0	65,000	5710	.85	1.0	1.0	18.4	62,700	6400	.87	1.0	1.0	17.6	60,100	7200	.89	1.0	1.0
67°F (19°C)	905	1920	19.7	67,100	5090	.58	.71	.84	19.0	64,700	5700	.58	.72	.86	18.2	62,100	6390	.59	.74	.88	17.4	59,300	7160	.6	.75	.90
	1135	2400	20.2	69,000	5130	.61	.77	.91	19.5	66,500	5740	.62	.78	.93	18.7	63,800	6430	.63	.80	.95	17.8	60,800	7230	.64	.82	.97
	1360	2880	20.6	70,400	5170	.64	.82	.97	19.9	67,800	5780	.65	.84	.98	19.0	65,000	6480	.66	.85	1.0	18.2	62,100	7260	.67	.87	1.0
71°F (22°C)	905	1920	20.9	71,400	5190	.43	.56	.69	20.2	68,900	5810	.43	.57	.70	19.4	66,100	6500	.44	.57	.71	18.5	63,200	7290	.44	.58	.73
	1135	2400	21.5	73,300	5240	.44	.59	.74	20.7	70,700	5860	.45	.60	.76	19.9	67,800	6550	.45	.61	.77	19.0	64,800	7330	.45	.62	.79
	1360	2880	21.9	74,700	5280	.46	.63	.80	21.1	71,900	5890	.46	.64	.81	20.2	69,000	6590	.46	.65	.83	19.3	65,800	7380	.47	.66	.85

NOTE — All values are gross capacities and do not include indoor coil blower motor heat deduction.

**LSA072C – CH23–68**

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)		
						Dry Bulb						Dry Bulb						Dry Bulb						Dry Bulb		
L/s	cfm	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	Watts Input	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	Watts Input	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	Watts Input	75°F/24°C	80°F/27°C	85°F/29°C		
63°F (17°C)	905	1920	19.7	67,100	5060	.73	.87	.98	19.0	64,700	5670	.74	.88	.99	18.2	62,000	6360	.75	.90	1.0	17.4	59,300	7140	.77	.92	1.0
	1135	2400	20.4	69,700	5130	.78	.94	1.0	19.7	67,100	5730	.8	.95	1.0	18.9	64,500	6430	.81	.97	1.0	18.1	61,700	7210	.83	.99	1.0
	1360	2880	21.1	71,900	5180	.84	.99	1.0	20.3	69,400	5790	.85	1.0	1.0	19.6	66,800	6490	.87	1.0	1.0	18.8	64,100	7280	.89	1.0	1.0
67°F (19°C)	905	1920	20.9	71,300	5160	.57	.70	.83	20.1	68,600	5770	.58	.72	.85	19.3	65,800	6470	.58	.73	.87	18.4	62,800	7250	.59	.75	.89
	1135	2400	21.5	73,400	5220	.6	.76	.91	20.7	70,700	5840	.61	.78	.92	19.9	67,800	6520	.62	.79	.94	18.9	64,600	7300	.63	.81	.96
	1360	2880	22.0	75,100	5260	.64	.82	.97	21.2	72,200	5870	.65	.83	.98	20.3	69,200	6570	.66	.85	.99	19.3	65,900	7360	.67	.88	1.0
71°F (22°C)	905	1920	22.2	75,900	5280	.43	.55	.68	21.4	73,100	5890	.43	.56	.69	20.5	70,100	6590	.43	.57	.70	19.6	66,900	7390	.43	.58	.72
	1135	2400	22.9	78,000	5340	.44	.59	.74	22.0	75,100	5950	.44	.60	.75	21.1	71,900	6650	.45	.61	.77	20.1	68,500	7430	.45	.62	.79
	1360	2880	23.3	79,500	5380	.45	.63	.80	22.4	76,400	5990	.46	.64	.81	21.5	73,200	6690	.46	.65	.83	20.4	69,700	7480	.47	.67	.85

NOTE — All values are gross capacities and do not include indoor coil blower motor heat deduction.

**LSA072C – CB29M–65**

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)		
						Dry Bulb						Dry Bulb						Dry Bulb						Dry Bulb		
L/s	cfm	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	Watts Input	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	Watts Input	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	Watts Input	75°F/24°C	80°F/27°C	85°F/29°C		
63°F (17°C)	905	1920	18.4	62,900	4990	.73	.87	.98	17.8	60,800	5600	.74	.88	.99	17.1	58,400	6300	.75	.90	1.0	16.4	55,900	7080	.77	.92	1.0
	1135	2400	19.1	65,200	5030	.78	.93	1.0	18.4	62,900	5650	.79	.94	1.0	17.7	60,500	6350	.81	.96	1.0	17.0	57,900	7140	.83	.98	1.0
	1360	2880	19.6	66,900	5070	.83	.98	1.0	19.0	64,700	5690	.84	.99	1.0	18.3	62,400	6390	.86	1.0	1.0	17.6	59,900	7200	.88	1.0	1.0
67°F (19°C)	905	1920	19.6	66,800	5060	.57	.70	.84	18.9	64,400	5680	.58	.72	.85	18.1	61,900	6380	.58	.73	.87	17.3	59,100	7170	.59	.74	.89
	1135	2400	20.1	68,600	5100	.6	.76	.90	19.4	66,100	5720	.61	.77	.92	18.6	63,500	6420	.62	.79	.93	17.8	60,700	7200	.63	.81	.95
	1360	2880	20.5	69,900	5140	.63	.81	.95	19.8	67,400	5750	.64	.82	.97	19.0	64,800	6450	.65	.84	.98	18.1	61,900	7240	.66	.86	.99
71°F (22°C)	905	1920	20.8	71,000	5160	.43	.55	.68	20.1	68,500	5780	.43	.56	.69	19.3	65,900	6480	.43	.57	.71	18.5	63,000	7280	.43	.58	.72
	1135	2400	21.3	72,800	5200	.44	.59	.73	20.6	70,300	5820	.44	.59	.75	19.8	67,500	6520	.44	.60	.76	18.9	64,500	7320	.45	.62	.78
	1360	2880	21.7	74,100	5230	.45	.62	.79	20.9	71,400	5850	.45	.63	.80	20.1	68,600	6550	.46	.64	.82	19.2	65,500	7350	.46	.65	.84

NOTE — All values are gross capacities and do not include indoor coil blower motor heat deduction.

**LSA072C – CB30M–65**

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)		
						Dry Bulb						Dry Bulb						Dry Bulb						Dry Bulb		
L/s	cfm	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	Watts Input	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	Watts Input	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	Watts Input	75°F/24°C	80°F/27°C	85°F/29°C		
63°F (17°C)	905	1920	19.3	65,900	5050	.72	.86	.97	18.6	63,600	5670	.74	.88	.99	17.9	61,000	6360	.75	.89	1.0	17.1	58,300	7150	.76	.91	1.0
	1135	2400	20.0	68,300	5110	.78	.93	1.0	19.3	65,900	5730	.79	.94	1.0	18.6	63,300	6420	.81	.96	1.0	17.7	60,500	7210	.82	.98	1.0
	1360	2880	20.6	70,300	5160	.83	.98	1.0	19.9	68,000	5770	.84	.99	1.0	19.2	65,400	6480	.86	1.0	1.0	18.4	62,800	7270	.88	1.0	1.0
67°F (19°C)	905	1920	20.5	70,100	5150	.57	.70	.83	19.8	67,500	5760	.57	.71	.84	19.0	64,800	6460	.58	.72	.86	18.1	61,800	7240	.59	.74	.88
	1135	2400	21.1	72,100	5200	.6	.75	.90	20.4	69,500	5810	.61	.77	.91	19.5	66,600	6520	.62	.78	.93	18.6	63,500	7300	.63	.80	.95
	1360	2880	21.6	73,600	5230	.63	.81	.95	20.8	70,900	5860	.64	.82	.97	19.9	67,900	6560	.65	.84	.98	19.0	64,800	7340	.66	.86	1.0
71°F (22°C)	905	1920	21.9	74,600	5260	.43	.55	.67	21.1	71,900	5880	.43	.56	.69	20.2	69,000	6580	.43	.57	.70	19.3	65,900	7370	.43	.58	.72
	1135	2400	22.5	76,700	5320	.44	.58	.73	21.7	73,900	5930	.44	.59	.74	20.7	70,800	6630	.44	.60	.76	19.8	67,600	7430	.45	.62	.78
	1360	2880	22.9	78,100	5350																					

**COOLING RATINGS**

**CONDENSING UNITS**

NOTE — For Temperatures and Capacities not shown in tables, see bulletin — Cooling Unit Rating Table Correction Factor Data in Miscellaneous Engineering Data section.

**LSA072C – CB30U–65**

Outdoor Air Temperature Entering Outdoor Coil

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)				95°F (35°C)				105°F (41°C)				115°F (46°C)											
			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb								
						75°F 24°C	80°F 27°C	85°F 29°C				75°F 24°C	80°F 27°C	85°F 29°C				75°F 24°C	80°F 27°C	85°F 29°C	75°F 24°C	80°F 27°C	85°F 29°C			
L/s	cfm	kW	Btuh				kW	Btuh				kW	Btuh				kW	Btuh								
63°F (17°C)	905	1920	19.5	66,600	5040	.71	.85	.97	18.8	64,200	5660	.73	.87	.99	18.1	61,700	6350	.74	.89	1.0	17.3	58,900	7140	.75	.91	1.0
	1135	2400	20.3	69,100	5100	.77	.92	1.0	19.5	66,600	5720	.78	.94	1.0	18.7	63,900	6420	.8	.96	1.0	17.9	61,200	7190	.82	.98	1.0
	1360	2880	20.8	71,100	5150	.82	.98	1.0	20.1	68,700	5760	.83	.99	1.0	19.4	66,100	6460	.85	1.0	1.0	18.6	63,400	7260	.87	1.0	1.0
67°F (19°C)	905	1920	20.7	70,800	5140	.56	.69	.82	20.0	68,200	5750	.57	.70	.84	19.2	65,500	6450	.57	.71	.85	18.3	62,500	7230	.58	.73	.87
	1135	2400	21.4	72,900	5190	.59	.74	.89	20.6	70,200	5800	.6	.76	.91	19.7	67,300	6500	.61	.77	.93	18.8	64,200	7290	.62	.79	.95
	1360	2880	21.8	74,400	5230	.62	.80	.95	21.0	71,600	5840	.63	.81	.97	20.1	68,700	6540	.64	.83	.98	19.2	65,500	7330	.66	.85	1.0
71°F (22°C)	905	1920	22.1	75,400	5250	.42	.54	.67	21.3	72,700	5870	.42	.55	.68	20.5	69,800	6570	.42	.56	.69	19.5	66,600	7350	.43	.57	.70
	1135	2400	22.7	77,500	5310	.43	.58	.72	21.9	74,700	5920	.43	.58	.73	21.0	71,600	6610	.44	.59	.75	20.0	68,300	7420	.44	.61	.77
	1360	2880	23.1	78,900	5340	.44	.61	.77	22.3	76,000	5950	.45	.62	.79	21.3	72,800	6660	.45	.63	.81	20.4	69,500	7440	.46	.65	.83

NOTE — All values are gross capacities and do not include indoor coil blower motor heat deduction.

**LSA072C – CB17/CBH17–95**

Outdoor Air Temperature Entering Outdoor Coil

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)				95°F (35°C)				105°F (41°C)				115°F (46°C)											
			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb								
						75°F 24°C	80°F 27°C	85°F 29°C				75°F 24°C	80°F 27°C	85°F 29°C				75°F 24°C	80°F 27°C	85°F 29°C	75°F 24°C	80°F 27°C	85°F 29°C			
L/s	cfm	kW	Btuh				kW	Btuh				kW	Btuh				kW	Btuh								
63°F (17°C)	905	1920	20.7	70,700	5130	.7	.84	.97	19.9	68,000	5750	.71	.86	.99	19.1	65,200	6450	.72	.88	1.0	18.2	62,200	7230	.74	.90	1.0
	1135	2400	21.5	73,500	5200	.75	.91	1.0	20.7	70,800	5810	.77	.93	1.0	19.9	67,800	6520	.78	.95	1.0	19.0	64,700	7310	.8	.98	1.0
	1360	2880	22.2	75,800	5260	.81	.98	1.0	21.4	73,100	5880	.82	.99	1.0	20.6	70,300	6580	.84	1.0	1.0	19.7	67,300	7380	.87	1.0	1.0
67°F (19°C)	905	1920	22.1	75,400	5240	.55	.67	.81	21.2	72,500	5870	.56	.69	.82	20.4	69,500	6570	.56	.70	.84	19.4	66,300	7350	.57	.71	.86
	1135	2400	22.8	77,900	5310	.58	.73	.88	22.0	74,900	5930	.59	.74	.90	21.0	71,700	6630	.6	.76	.92	20.0	68,300	7420	.61	.78	.95
	1360	2880	23.4	79,700	5360	.61	.78	.95	22.4	76,600	5970	.62	.80	.97	21.5	73,300	6670	.63	.82	.99	20.4	69,700	7470	.64	.85	1.0
71°F (22°C)	905	1920	23.6	80,400	5370	.41	.53	.65	22.7	77,400	6000	.42	.54	.66	21.7	74,200	6710	.42	.55	.67	20.7	70,800	7490	.42	.55	.69
	1135	2400	24.3	83,000	5450	.42	.56	.70	23.4	79,800	6060	.43	.57	.72	22.4	76,400	6770	.43	.58	.74	21.3	72,800	7560	.44	.60	.76
	1360	2880	24.8	84,700	5500	.44	.60	.76	23.9	81,400	6110	.44	.61	.78	22.8	77,900	6810	.44	.62	.80	21.7	74,100	7610	.45	.64	.82

NOTE — All values are gross capacities and do not include indoor coil blower motor heat deduction.

**LSA090C – C17–090/120**

Outdoor Air Temperature Entering Outdoor Coil

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)				95°F (35°C)				105°F (41°C)				115°F (46°C)											
			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb								
						75°F 24°C	80°F 27°C	85°F 29°C				75°F 24°C	80°F 27°C	85°F 29°C				75°F 24°C	80°F 27°C	85°F 29°C	75°F 24°C	80°F 27°C	85°F 29°C			
L/s	cfm	kW	Btuh				kW	Btuh				kW	Btuh				kW	Btuh								
63°F (17°C)	1135	2400	26.7	91,000	7250	.71	.84	.96	25.2	86,000	7690	.72	.86	.98	23.7	80,800	8100	.74	.88	1.0	22.1	75,400	8470	.76	.91	1.0
	1415	3000	27.8	94,900	7430	.76	.91	1.0	26.3	89,600	7900	.78	.93	1.0	24.7	84,200	8320	.8	.96	1.0	23.1	78,900	8710	.83	.99	1.0
	1700	3600	28.7	98,000	7580	.81	.97	1.0	27.2	92,700	8070	.83	.99	1.0	25.7	87,600	8540	.86	1.0	1.0	24.2	82,600	8970	.89	1.0	1.0
67°F (19°C)	1135	2400	28.5	97,100	7540	.56	.68	.80	26.9	91,700	8020	.57	.70	.82	25.3	86,300	8440	.58	.71	.85	23.6	80,500	8830	.59	.74	.88
	1415	3000	29.5	100,600	7710	.59	.73	.87	27.8	95,000	8190	.6	.75	.90	26.1	89,200	8620	.61	.78	.93	24.4	83,100	9010	.63	.81	.96
	1700	3600	30.2	103,000	7830	.62	.79	.94	28.5	97,200	8320	.63	.81	.97	26.7	91,200	8760	.65	.84	.99	24.9	85,000	9150	.67	.87	1.0
71°F (22°C)	1135	2400	30.4	103,600	7860	.42	.54	.65	28.7	98,000	8360	.43	.55	.67	27.0	92,100	8810	.43	.56	.69	25.2	86,100	9230	.43	.57	.71
	1415	3000	31.4	107,000	8020	.43	.57	.71	29.6	101,000	8530	.44	.58	.73	27.8	94,900	8990	.44	.60	.75	25.9	88,500	9400	.45	.62	.78
	1700	3600	32.0	109,100	8130	.45	.61	.77	30.2	103,000	8640	.45	.62	.79	28.3	96,700	9100	.46	.64	.82	26.4	90,100	9510	.47	.66	.85

NOTE — All values are gross capacities and do not include indoor coil blower motor heat deduction.

**LSA090C – CB17/CBH17–95**

Outdoor Air Temperature Entering Outdoor Coil

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)				95°F (35°C)				105°F (41°C)				115°F (46°C)											
			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb								
						75°F 24°C	80°F 27°C	85°F 29°C				75°F 24°C	80°F 27°C	85°F 29°C				75°F 24°C	80°F 27°C	85°F 29°C	75°F 24°C	80°F 27°C	85°F 29°C			
L/s	cfm	kW	Btuh				kW	Btuh				kW	Btuh				kW	Btuh								
63°F (17°C)	1135	2400	26.3	89,600	7390	.7	.83	.94	24.9	84,900	7860	.71	.85	.97	23.4	80,000	8290	.73	.87	.99	22.0	75,000	8690	.75	.90	1.0
	1415	3000	27.3	93,300	7570	.75	.89	1.0	25.9	88,500	8050	.76	.91	1.0	24.4	83,400	8500	.79	.94	1.0	22.9	78,200	8920	.81	.97	1.0
	1700	3600	28.3	96,400	7700	.79	.94	1.0	26.8	91,400	8200	.81	.97	1.0	25.3	86,300	8680	.84	.99	1.0	23.8	81,300	9130	.87	1.0	1.0
67°F (19°C)	1135	2400	28.1	95,900	7680	.55	.67	.79	26.6	90,900	8180	.56	.69	.81	25.1	85,600	8640	.57	.70	.84	23.5	80,200	9060	.58	.73	.86
	1415	3000	29.1	99,300	7840	.58	.72	.86	27.5	94,000	8350	.59	.74	.88	26.0	88,600	8820	.6	.76	.91	24.3	82,800	9240	.62	.79	.94
	1700	3600	29.8	101,700	7950	.61	.77	.92	28.2	96,300	8470	.62	.79	.94	26.5	90,500	8950	.63	.82	.97	24.8	84,700	9370	.65	.84	.99
71°F (22°C)	1135	2400	30.0	102,400	7980	.42	.54	.65	28.5	97,200	8520	.42	.54	.66	26.9	91,700	9010	.43	.55	.68	25.2	86,100	9460	.43	.56	.70
	1415	3000	31.0	105,900	8140	.43	.56	.69	29.4	100,300	8680	.43	.57	.71	27.7	94,600	9180	.44	.59	.73	26.0	88,600	9630	.44	.60	.76
	1700	3600	31.7	108,200	8250																					

**COOLING RATINGS**

**CONDENSING UNITS**

NOTE — For Temperatures and Capacities not shown in tables, see bulletin — Cooling Unit Rating Table Correction Factor Data in Miscellaneous Engineering Data section.

**LSA090C — CB17/CBH17-135**

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)		
	Dry Bulb					Dry Bulb						Dry Bulb						Dry Bulb								
L/s	cfm	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C
63°F (17°C)	1135	2400	26.8	91,300	7500	.7	.83	.94	25.3	86,400	7990	.71	.85	.97	23.9	81,400	8430	.73	.87	.99	22.3	76,000	8840	.75	.90	1.0
	1415	3000	27.9	95,300	7680	.75	.89	1.0	26.4	90,000	8190	.76	.91	1.0	24.9	84,800	8650	.79	.94	1.0	23.2	79,300	9070	.81	.97	1.0
	1700	3600	28.8	98,300	7820	.79	.95	1.0	27.3	93,000	8340	.81	.97	1.0	25.7	87,800	8830	.84	.99	1.0	24.2	82,600	9300	.87	1.0	1.0
67°F (19°C)	1135	2400	28.7	97,800	7790	.55	.67	.79	27.1	92,500	8310	.56	.69	.81	25.6	87,200	8790	.57	.70	.84	23.9	81,500	9220	.58	.73	.86
	1415	3000	29.7	101,400	7960	.58	.72	.86	28.1	95,800	8490	.59	.74	.88	26.4	90,100	8970	.6	.76	.91	24.7	84,200	9400	.62	.79	.94
	1700	3600	30.5	103,900	8080	.61	.77	.92	28.8	98,200	8610	.62	.79	.94	27.1	92,300	9100	.64	.82	.97	25.2	86,100	9540	.65	.85	.99
71°F (22°C)	1135	2400	30.7	104,600	8100	.42	.53	.65	29.0	99,000	8660	.42	.54	.66	27.4	93,400	9170	.43	.55	.68	25.6	87,300	9630	.43	.56	.70
	1415	3000	31.7	108,300	8260	.43	.56	.69	30.0	102,400	8830	.43	.57	.71	28.2	96,300	9350	.44	.59	.74	26.4	90,000	9810	.44	.60	.76
	1700	3600	32.4	110,600	8390	.44	.59	.75	30.7	104,600	8950	.44	.61	.77	28.8	98,300	9470	.45	.62	.79	26.9	91,800	9930	.46	.64	.82

NOTE — All values are gross capacities and do not include indoor coil blower motor heat deduction.

**LSA120C — C17-090/120**

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)		
	Dry Bulb					Dry Bulb						Dry Bulb						Dry Bulb								
L/s	cfm	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C
63°F (17°C)	1510	3200	34.8	118,600	9350	.71	.84	.97	32.8	111,900	10040	.72	.87	.99	30.9	105,500	10700	.74	.89	1.0	29.3	100,000	11300	.76	.92	1.0
	1890	4000	36.2	123,400	9540	.76	.92	1.0	34.1	116,500	10260	.78	.94	1.0	32.3	110,200	10930	.81	.97	1.0	30.8	105,100	11570	.83	.99	1.0
	2265	4800	37.3	127,200	9690	.82	.98	1.0	35.4	120,700	10440	.84	1.0	1.0	33.7	115,100	11160	.87	1.0	1.0	32.4	110,600	11830	.89	1.0	1.0
67°F (19°C)	1510	3200	36.9	125,900	9650	.56	.68	.81	34.9	119,100	10370	.56	.70	.83	33.0	112,700	11050	.57	.72	.85	31.5	107,500	11680	.58	.73	.88
	1890	4000	38.1	130,100	9810	.59	.74	.88	36.0	123,000	10550	.6	.76	.91	34.2	116,700	11240	.61	.78	.94	32.6	111,400	11880	.62	.80	.96
	2265	4800	39.0	133,000	9920	.62	.79	.95	36.9	125,900	10670	.64	.82	.98	35.0	119,500	11380	.65	.84	.99	33.6	114,500	12040	.66	.86	1.0
71°F (22°C)	1510	3200	39.3	134,100	9960	.42	.54	.66	37.2	127,100	10730	.42	.55	.67	35.5	121,100	11450	.42	.56	.69	34.1	116,300	12120	.43	.57	.70
	1890	4000	40.5	138,100	10110	.43	.57	.72	38.4	131,000	10890	.43	.59	.73	36.6	124,800	11630	.44	.60	.75	35.2	120,200	12300	.44	.61	.77
	2265	4800	41.2	140,700	10220	.44	.61	.77	39.1	133,500	11000	.45	.62	.80	37.3	127,400	11750	.45	.64	.82	36.0	123,000	12430	.46	.65	.83

NOTE — All values are gross capacities and do not include indoor coil blower motor heat deduction.

**LSA120C — CB17/CBH17-135**

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)		
	Dry Bulb					Dry Bulb						Dry Bulb						Dry Bulb								
L/s	cfm	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C
63°F (17°C)	1510	3200	35.4	120,900	9880	.7	.83	.95	33.5	114,300	10600	.72	.85	.97	31.5	107,600	11300	.73	.87	.99	29.8	101,600	11950	.75	.90	1.0
	1890	4000	36.8	125,700	10080	.75	.89	1.0	34.8	118,800	10830	.77	.92	1.0	32.9	112,200	11540	.79	.94	1.0	31.2	106,400	12210	.81	.96	1.0
	2265	4800	38.0	129,500	10240	.79	.95	1.0	35.9	122,600	11010	.82	.97	1.0	34.1	116,200	11750	.84	.99	1.0	32.5	111,000	12450	.86	1.0	1.0
67°F (19°C)	1510	3200	37.8	128,900	10210	.56	.68	.80	35.7	121,900	10980	.56	.69	.82	33.8	115,300	11700	.57	.71	.84	32.1	109,500	12370	.58	.72	.86
	1890	4000	39.1	133,300	10390	.58	.72	.86	36.9	126,000	11170	.59	.74	.89	35.0	119,300	11900	.6	.76	.91	33.3	113,600	12580	.61	.78	.93
	2265	4800	39.9	136,300	10500	.61	.77	.92	37.8	129,000	11300	.62	.79	.94	35.8	122,300	12050	.63	.82	.97	34.2	116,600	12740	.65	.84	.98
71°F (22°C)	1510	3200	40.2	137,300	10550	.42	.54	.65	38.2	130,300	11360	.42	.54	.66	36.3	123,900	12130	.43	.55	.68	34.8	118,600	12840	.43	.56	.69
	1890	4000	41.5	141,700	10720	.43	.57	.70	39.4	134,500	11550	.43	.58	.72	37.5	128,000	12330	.44	.59	.74	36.0	122,800	13040	.44	.60	.75
	2265	4800	42.4	144,800	10840	.44	.60	.75	40.2	137,300	11670	.45	.61	.77	38.4	130,900	12460	.45	.62	.79	36.8	125,700	13190	.46	.63	.81

NOTE — All values are gross capacities and do not include indoor coil blower motor heat deduction.

**COOLING RATINGS**

**CONDENSING UNITS**

NOTE — For Temperatures and Capacities not shown in tables, see bulletin — Cooling Unit Rating Table Correction Factor Data in Miscellaneous Engineering Data section.

**LSA180C – CB17/CBH17–185 – ONE COMPRESSOR OPERATING**

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			65°F (18°C)						75°F (24°C)						85°F (29°C)						95°F (35°C)					
			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb		
						75°F	80°F	85°F				75°F	80°F	85°F				75°F	80°F	85°F				75°F	80°F	85°F
L/s	cfm	kW	Btuh	24°C	27°C	29°C	kW	Btuh	24°C	27°C	29°C	kW	Btuh	24°C	27°C	29°C	kW	Btuh	24°C	27°C	29°C					
63°F (17°C)	2265	4800	28.1	96,000	6390	.66	.83	.98	26.9	91,700	6990	.68	.86	1.0	25.6	87,300	7560	.69	.89	1.0	24.3	82,800	8090	.71	.92	1.0
	2830	6000	29.3	99,900	6500	.72	.93	1.0	28.0	95,400	7130	.74	.95	1.0	26.7	91,100	7720	.77	.98	1.0	25.4	86,600	8280	.8	1.0	1.0
	3400	7200	30.2	103,200	6600	.79	.99	1.0	29.0	99,000	7250	.82	1.0	1.0	27.7	94,600	7880	.85	1.0	1.0	26.4	90,200	8470	.88	1.0	1.0
67°F (19°C)	2265	4800	29.9	101,900	6550	.52	.64	.78	28.5	97,300	7190	.52	.66	.81	27.1	92,500	7780	.53	.67	.84	25.7	87,600	8340	.54	.69	.88
	2830	6000	30.8	105,000	6640	.55	.70	.89	29.4	100,200	7290	.56	.71	.92	27.9	95,200	7900	.57	.74	.95	26.4	90,100	8470	.58	.77	.97
	3400	7200	31.4	107,300	6710	.58	.77	.97	30.0	102,300	7380	.59	.79	.99	28.5	97,400	8000	.61	.82	1.0	27.0	92,200	8570	.62	.86	1.0
71°F (22°C)	2265	4800	31.9	108,700	6740	.38	.50	.62	30.4	103,800	7420	.39	.51	.63	28.9	98,700	8050	.39	.52	.65	27.4	93,500	8640	.39	.53	.67
	2830	6000	32.7	111,600	6830	.4	.54	.68	31.2	106,500	7520	.4	.55	.69	29.7	101,200	8160	.41	.56	.71	28.0	95,700	8750	.41	.57	.74
	3400	7200	33.3	113,600	6890	.41	.57	.74	31.7	108,300	7580	.41	.59	.77	30.1	102,800	8230	.42	.60	.80	28.5	97,300	8830	.43	.62	.83

NOTE — All values are gross capacities and do not include indoor coil blower motor heat deduction.

**LSA180C – CB17/CBH17–185 – BOTH COMPRESSORS OPERATING**

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb		
						75°F	80°F	85°F				75°F	80°F	85°F				75°F	80°F	85°F				75°F	80°F	85°F
L/s	cfm	kW	Btuh	24°C	27°C	29°C	kW	Btuh	24°C	27°C	29°C	kW	Btuh	24°C	27°C	29°C	kW	Btuh	24°C	27°C	29°C	kW	Btuh	24°C	27°C	29°C
63°F (17°C)	2265	4800	50.3	171,800	14180	.71	.86	.98	47.8	163,000	15150	.72	.88	.99	45.1	154,000	16050	.74	.91	1.0	42.4	144,600	16880	.76	.94	1.0
	2830	6000	52.7	179,900	14510	.76	.93	1.0	50.1	170,800	15520	.78	.96	1.0	47.4	161,700	16490	.81	.97	1.0	44.6	152,200	17380	.84	.98	1.0
	3400	7200	54.7	186,700	14780	.82	.97	1.0	52.0	177,500	15850	.84	.99	1.0	49.2	167,900	16840	.88	1.0	1.0	46.3	158,000	17760	.91	1.0	1.0
67°F (19°C)	2265	4800	53.7	183,400	14640	.56	.68	.81	51.0	174,000	15680	.57	.70	.84	48.1	164,100	16620	.57	.71	.87	45.1	153,800	17480	.59	.73	.91
	2830	6000	55.8	190,300	14920	.58	.73	.90	52.8	180,300	15980	.6	.75	.93	49.8	170,000	16940	.61	.78	.95	46.6	159,100	17830	.62	.81	.97
	3400	7200	57.3	195,400	15130	.61	.79	.96	54.2	185,100	16200	.63	.82	.97	51.1	174,400	17190	.64	.85	.98	47.9	163,300	18100	.66	.88	1.0
71°F (22°C)	2265	4800	57.6	196,400	15160	.42	.54	.65	54.6	186,400	16260	.42	.55	.67	51.6	176,000	17280	.43	.56	.69	48.4	165,100	18200	.43	.57	.71
	2830	6000	59.5	203,100	15430	.43	.57	.71	56.4	192,500	16540	.43	.58	.72	53.2	181,500	17580	.44	.59	.75	49.8	170,000	18520	.44	.61	.78
	3400	7200	60.8	207,600	15600	.44	.60	.76	57.6	196,700	16740	.45	.62	.79	54.3	185,300	17780	.45	.63	.82	50.8	173,500	18730	.46	.65	.86

NOTE — All values are gross capacities and do not include indoor coil blower motor heat deduction.

**LSA180C – (TWO) CB17/CBH17–95's – ONE COMPRESSOR OPERATING**

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			65°F (18°C)						75°F (24°C)						85°F (29°C)						95°F (35°C)					
			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb		
						75°F	80°F	85°F				75°F	80°F	85°F				75°F	80°F	85°F				75°F	80°F	85°F
L/s	cfm	kW	Btuh	24°C	27°C	29°C	kW	Btuh	24°C	27°C	29°C	kW	Btuh	24°C	27°C	29°C	kW	Btuh	24°C	27°C	29°C	kW	Btuh	24°C	27°C	29°C
63°F (17°C)	2265	4800	29.0	98,800	6000	.67	.79	.91	27.6	94,200	6590	.68	.81	.93	26.3	89,600	7140	.69	.83	.95	24.8	84,700	7660	.7	.85	.97
	2830	6000	30.2	103,200	6090	.7	.85	.97	28.8	98,300	6710	.72	.87	.99	27.4	93,400	7290	.74	.89	1.0	25.9	88,400	7820	.76	.92	1.0
	3400	7200	31.2	106,500	6170	.75	.91	1.0	29.7	101,500	6810	.77	.93	1.0	28.3	96,500	7400	.79	.95	1.0	26.8	91,400	7960	.81	.98	1.0
67°F (19°C)	2265	4800	31.0	105,800	6150	.53	.64	.75	29.6	101,000	6790	.54	.65	.77	28.1	96,000	7380	.54	.66	.79	26.6	90,900	7930	.55	.68	.81
	2830	6000	32.2	110,000	6250	.55	.68	.81	30.7	104,800	6900	.56	.69	.83	29.2	99,500	7510	.57	.71	.86	27.5	94,000	8080	.58	.73	.88
	3400	7200	33.1	112,900	6310	.57	.72	.87	31.5	107,500	6980	.58	.74	.90	29.9	102,000	7600	.6	.76	.92	28.2	96,300	8180	.61	.79	.95
71°F (22°C)	2265	4800	33.1	113,100	6320	.41	.51	.61	31.7	108,100	6990	.41	.52	.62	30.1	102,800	7630	.41	.52	.64	28.5	97,400	8220	.41	.53	.65
	2830	6000	34.4	117,300	6410	.41	.53	.65	32.8	111,900	7100	.42	.54	.67	31.2	106,300	7760	.42	.55	.68	29.5	100,500	8360	.42	.56	.70
	3400	7200	35.2	120,200	6480	.42	.56	.70	33.6	114,500	7180	.43	.57	.72	31.9	108,700	7840	.43	.58	.74	30.1	102,700	8450	.44	.60	.76

NOTE — All values are gross capacities and do not include indoor coil blower motor heat deduction.

**LSA180C – (TWO) CB17/CBH17–95's – BOTH COMPRESSORS OPERATING**

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb		
						75°F	80°F	85°F				75°F	80°F	85°F				75°F	80°F	85°F				75°F	80°F	85°F
L/s	cfm	kW	Btuh	24°C	27°C	29°C	kW	Btuh	24°C	27°C	29°C	kW	Btuh	24°C	27°C	29°C	kW	Btuh	24°C	27°C	29°C	kW	Btuh	24°C	27°C	29°C
63°F (17°C)	2265	4800	51.6	176,000	14450	.69	.83	.95	48.8	166,500	15460	.71	.85	.97	46.0	156,800	16390	.73	.87	.99	43.0	146,700	17250	.75	.90	1.0
	2830	6000	53.8	183,600	14730	.74	.89	1.0	50.9	173,700	15800	.76	.92	1.0	47.9	163,600	16780	.78	.94	1.0	44.9	153,200	17690	.81	.97	1.0
	3400	7200	55.6	189,700	14980	.79	.95	1.0	52.7	179,800	16070	.81	.97	1.0	49.7	169,600	17110	.84	.99	1.0	46.9	159,900	18100	.87	1.0	1.0
67°F (19°C)	2265	4800	55.3	188,800	14930	.55	.67	.79	52.3	178,600	16030	.56	.68	.81	49.3	168,100	17030	.56	.70	.84	46.1	157,200	17930	.58	.72	.87
	2830	6000	57.4	195,700	15200	.57	.71	.86	54.2	185,000	16320	.58	.73	.88	51.0	173,900	17340	.6	.76	.91	47.6	162,400	18280	.61	.78	.94
	3400	7200	58.8	200,500	15400	.6	.76	.92	55.5	189,500	16520	.61	.79	.94	52.2	178,100	17570	.63	.81	.97	48.7	166,200	18520	.65	.85	.99
71°F (22°C)	2265	4800	59.2	202,100	15450	.42	.53	.64	56.1	191,400	16620	.42	.54	.65	52.9	180,500	17700	.42	.55	.67	49.5	169,000	1			



NOTE — For Temperatures and Capacities not shown in tables, see bulletin — Cooling Unit Rating Table Correction Factor Data in Miscellaneous Engineering Data section.

**LSA240C – CB17-275 – ONE COMPRESSOR OPERATING**

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			65°F (18°C)						75°F (24°C)						85°F (29°C)						95°F (35°C)					
			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)		
						Dry Bulb						Dry Bulb						Dry Bulb						Dry Bulb		
L/s	cfm	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	Compressor Motor Watts Input	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	Compressor Motor Watts Input	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	Compressor Motor Watts Input	75°F/24°C	80°F/27°C	85°F/29°C		
63°F (17°C)	3020	6400	38.9	132,900	8340	.64	.78	.91	37.3	127,300	9110	.65	.79	.93	35.5	121,000	9830	.66	.82	.96	33.5	114,300	10530	.68	.84	.98
	3775	8000	40.6	138,500	8510	.68	.85	.98	38.8	132,400	9290	.7	.87	1.0	36.8	125,700	10040	.72	.90	1.0	34.8	118,900	10770	.74	.93	1.0
	4530	9600	41.9	142,900	8620	.74	.92	1.0	40.0	136,400	9430	.76	.94	1.0	38.0	129,600	10210	.78	.97	1.0	36.1	123,100	10960	.81	.99	1.0
67°F (19°C)	3020	6400	41.5	141,700	8590	.51	.62	.74	39.7	135,400	9390	.51	.63	.75	37.7	128,500	10160	.52	.64	.78	35.6	121,500	10890	.53	.65	.80
	3775	8000	43.0	146,700	8730	.53	.66	.81	41.0	139,800	9550	.54	.67	.83	38.9	132,600	10330	.55	.69	.86	36.8	125,400	11080	.56	.72	.89
	4530	9600	44.0	150,200	8830	.56	.71	.88	41.9	143,000	9660	.57	.73	.91	39.7	135,500	10460	.58	.76	.94	37.6	128,300	11220	.59	.78	.96
71°F (22°C)	3020	6400	44.3	151,100	8850	.39	.49	.59	42.2	144,100	9690	.39	.50	.60	40.1	136,900	10510	.39	.50	.62	38.1	129,900	11280	.39	.51	.63
	3775	8000	45.7	155,900	8980	.4	.52	.64	43.5	148,500	9850	.4	.53	.65	41.3	140,900	10670	.4	.54	.67	39.2	133,800	11460	.41	.55	.69
	4530	9600	46.7	159,200	9080	.41	.54	.69	44.4	151,400	9950	.41	.56	.71	42.1	143,700	10780	.41	.57	.73	39.9	136,300	11580	.42	.58	.76

NOTE — All values are gross capacities and do not include indoor coil blower motor heat deduction.

**LSA240C – CB17/CBH17-275 – BOTH COMPRESSORS OPERATING**

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)		
						Dry Bulb						Dry Bulb						Dry Bulb						Dry Bulb		
L/s	cfm	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	Compressor Motor Watts Input	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	Compressor Motor Watts Input	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	Compressor Motor Watts Input	75°F/24°C	80°F/27°C	85°F/29°C		
63°F (17°C)	3020	6400	70.2	239,500	19820	.7	.84	.97	66.3	226,200	21230	.72	.87	1.0	62.5	213,100	22580	.74	.90	1.0	59.1	201,700	23830	.76	.93	1.0
	3775	8000	72.9	248,700	20240	.75	.92	1.0	68.9	235,200	21710	.78	.95	1.0	65.3	222,800	23080	.8	.97	1.0	62.1	211,800	24410	.83	1.0	1.0
	4530	9600	75.1	256,400	20570	.81	.98	1.0	71.4	243,500	22090	.84	1.0	1.0	67.9	231,700	23550	.87	1.0	1.0	65.1	222,100	24940	.89	1.0	1.0
67°F (19°C)	3020	6400	74.5	254,200	20470	.55	.68	.81	70.5	240,400	21940	.56	.69	.83	66.6	227,400	23340	.57	.71	.86	63.4	216,200	24630	.58	.73	.88
	3775	8000	76.8	262,200	20810	.58	.73	.89	72.7	248,000	22320	.59	.75	.92	68.8	234,900	23740	.61	.77	.94	65.6	224,000	25050	.62	.80	.96
	4530	9600	78.5	268,000	21060	.61	.79	.96	74.4	253,700	22600	.63	.81	.98	70.6	240,800	24040	.64	.84	1.0	67.4	230,100	25360	.66	.86	1.0
71°F (22°C)	3020	6400	79.4	270,800	21170	.41	.53	.65	75.3	256,900	22730	.42	.54	.67	71.6	244,300	24210	.42	.55	.68	68.6	234,000	25560	.42	.56	.70
	3775	8000	81.6	278,600	21490	.42	.57	.71	77.5	264,400	23080	.43	.58	.73	73.8	251,700	24570	.43	.59	.75	70.8	241,700	25940	.44	.60	.76
	4530	9600	83.2	284,000	21710	.44	.60	.77	79.0	269,400	23320	.44	.62	.79	75.2	256,700	24830	.45	.63	.81	72.4	246,900	26200	.45	.64	.83

NOTE — All values are gross capacities and do not include indoor coil blower motor heat deduction.

**LSA240C – (TWO) CB17/CBH17-135's – ONE COMPRESSOR OPERATING**

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			65°F (18°C)						75°F (24°C)						85°F (29°C)						95°F (35°C)					
			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)		
						Dry Bulb						Dry Bulb						Dry Bulb						Dry Bulb		
L/s	cfm	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	Compressor Motor Watts Input	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	Compressor Motor Watts Input	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	Compressor Motor Watts Input	75°F/24°C	80°F/27°C	85°F/29°C		
63°F (17°C)	3020	6400	39.1	133,400	8280	.68	.80	.92	37.4	127,600	9040	.69	.82	.93	35.5	121,000	9770	.7	.84	.96	33.5	114,200	10470	.72	.86	.98
	3775	8000	40.7	139,000	8430	.72	.86	.98	38.9	132,600	9220	.73	.88	.99	36.8	125,700	9980	.75	.90	1.0	34.8	118,800	10680	.77	.93	1.0
	4530	9600	42.0	143,300	8550	.76	.92	1.0	40.0	136,600	9360	.78	.94	1.0	38.0	129,500	10130	.8	.96	1.0	36.1	123,100	10960	.83	.99	1.0
67°F (19°C)	3020	6400	41.7	142,400	8530	.54	.65	.77	39.9	136,000	9330	.55	.66	.78	37.8	128,900	10100	.56	.68	.80	35.7	121,800	10840	.56	.69	.83
	3775	8000	43.3	147,600	8670	.56	.70	.83	41.2	140,500	9490	.57	.71	.85	39.0	133,100	10280	.58	.73	.87	36.9	125,800	11020	.59	.75	.90
	4530	9600	44.3	151,200	8770	.59	.74	.89	42.1	143,700	9600	.6	.76	.91	39.9	136,000	10400	.61	.78	.93	37.7	128,700	11160	.62	.80	.96
71°F (22°C)	3020	6400	44.5	151,700	8780	.42	.52	.63	42.4	144,600	9630	.42	.53	.64	40.2	137,200	10450	.42	.54	.65	38.2	130,200	11230	.42	.55	.67
	3775	8000	46.0	156,800	8920	.42	.55	.67	43.7	149,100	9790	.43	.56	.69	41.5	141,500	10620	.43	.57	.71	39.3	134,200	11410	.43	.58	.72
	4530	9600	47.0	160,300	9020	.43	.57	.72	44.6	152,300	9900	.43	.59	.74	42.3	144,300	10730	.44	.60	.76	40.2	137,000	11540	.45	.61	.78

NOTE — All values are gross capacities and do not include indoor coil blower motor heat deduction.

**LSA240C – (TWO) CB17/CBH17-135's – BOTH COMPRESSORS OPERATING**

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)		
						Dry Bulb						Dry Bulb						Dry Bulb						Dry Bulb		
L/s	cfm	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	Compressor Motor Watts Input	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	Compressor Motor Watts Input	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	Compressor Motor Watts Input	75°F/24°C	80°F/27°C	85°F/29°C		
63°F (17°C)	3020	6400	70.2	239,400	19780	.71	.84	.95	66.2	226,000	21240	.72	.86	.97	62.3	212,500	22650	.74	.88	.99	58.8	200,500	23950	.76	.91	1.0
	3775	8000	72.9	248,700	20180	.75	.90	1.0	68.9	235,000	21690	.77	.92	1.0	65.0	221,700	23130	.8	.95	1.0	61.6	210,100	24490	.82	.97	1.0
	4530	9600	75.1	256,400	20490	.8	.95	1.0	71.1	242,600	22040	.82	.98	1.0	67.4	229,900	23550	.85	.99	1.0	64.3	219,400	24990	.87	1.0	1.0
67°F (19°C)	3020	6400	74.8	255,100	20430	.56	.68	.80	70.7	241,200	21980	.57	.70	.82	66.7	227,700	23430	.57	.71	.85	63.2	215,800	24790	.58	.73	.87
	3775	8000	77.3	263,600	20780	.58	.73	.87	73.0	249,000	22350	.59	.75	.89	69.0	235,500	23830	.61	.77	.92	65.6	223,800	25210	.62	.79	.94
	4530	9600	79.0	269,700	21020	.61	.78	.93	74.7	254,800	22610	.63	.80	.95	70.7	241,100	24130	.64	.83	.97	67.3	229,700	25520	.65	.85	.99
71°F (22°C)	3020	6400	79.7	271,800	21100	.42	.54	.66	75.5	257,700	22730	.42	.55	.67	71.7	244,600	24280	.43	.56	.68	68.5	233,700	25720	.43	.57	.70
	3775</																									

**COOLING AND HEATING RATINGS**

**HEAT PUMPS**

NOTE — For Temperatures and Capacities not shown in tables, see bulletin — Cooling Unit Rating Table Correction Factor Data in Miscellaneous Engineering Data section.

**LSA090P – COOLING CAPACITY – CB17/CBH17–95**

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)		
						Dry Bulb						Dry Bulb						Dry Bulb						Dry Bulb		
L/s	cfm	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C
63°F (17°C)	1135	2400	26.3	89,800	7290	.68	.82	.95	24.9	84,900	7780	.70	.85	.98	23.4	79,800	8230	.72	.88	1.0	21.9	74,600	8640	.74	.91	1.0
	1415	3000	27.4	93,500	7450	.73	.89	1.0	25.9	88,500	7960	.75	.92	1.0	24.4	83,300	8430	.78	.95	1.0	22.8	77,900	8870	.81	.98	1.0
	1700	3600	28.3	96,700	7580	.78	.96	1.0	26.8	91,500	8110	.81	.98	1.0	25.3	86,400	8610	.84	1.0	1.0	23.9	81,500	9090	.87	1.0	1.0
67°F (19°C)	1135	2400	28.2	96,200	7550	.54	.66	.78	26.7	91,000	8080	.55	.67	.81	25.1	85,500	8560	.55	.69	.84	23.4	79,800	8990	.57	.71	.87
	1415	3000	29.2	99,600	7700	.56	.70	.86	27.5	94,000	8230	.57	.72	.89	25.9	88,400	8720	.59	.75	.92	24.1	82,400	9160	.60	.78	.95
	1700	3600	29.9	102,000	7790	.59	.76	.92	28.2	96,300	8340	.60	.78	.95	26.5	90,400	8840	.62	.81	.98	24.7	84,300	9290	.64	.85	1.0
71°F (22°C)	1135	2400	30.2	103,000	7830	.41	.52	.63	28.5	97,400	8390	.41	.53	.65	26.9	91,700	8910	.41	.54	.66	25.1	85,700	9380	.42	.55	.69
	1415	3000	31.2	106,400	7970	.42	.55	.68	29.5	100,500	8540	.42	.56	.70	27.7	94,500	9070	.42	.57	.72	25.8	88,100	9550	.43	.59	.75
	1700	3600	31.9	108,800	8060	.43	.58	.73	30.1	102,700	8640	.43	.59	.76	28.3	96,400	9180	.44	.61	.79	26.3	89,900	9650	.45	.63	.82

NOTE — All values are gross capacities and do not include indoor coil blower motor heat deduction.

**LSA120P – COOLING CAPACITY – CB17/CBH17–135**

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)		
						Dry Bulb						Dry Bulb						Dry Bulb						Dry Bulb		
L/s	cfm	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C
63°F (17°C)	1510	3200	34.6	118,000	9660	.71	.84	.96	32.6	111,300	10360	.73	.87	.98	30.7	104,800	11030	.75	.89	1.0	28.9	98,700	11670	.77	.92	1.0
	1890	4000	36.0	122,700	9840	.76	.91	1.0	33.9	115,800	10580	.78	.93	1.0	32.0	109,300	11280	.80	.96	1.0	30.4	103,600	11930	.83	.98	1.0
	2265	4800	37.1	126,600	10000	.81	.96	1.0	35.1	119,800	10750	.83	.98	1.0	33.3	113,500	11490	.86	1.0	1.0	31.8	108,400	12190	.88	1.0	1.0
67°F (19°C)	1510	3200	36.9	126,000	9970	.56	.69	.81	34.9	119,000	10720	.57	.70	.83	32.9	112,300	11420	.58	.72	.86	31.2	106,300	12080	.59	.74	.88
	1890	4000	38.2	130,200	10130	.59	.74	.88	36.0	122,900	10900	.60	.76	.90	34.0	116,100	11620	.61	.78	.93	32.3	110,300	12280	.62	.80	.95
	2265	4800	39.0	133,200	10250	.62	.79	.94	36.9	125,800	11020	.63	.81	.96	34.9	119,000	11760	.65	.83	.98	33.2	113,200	12430	.66	.86	.99
71°F (22°C)	1510	3200	39.4	134,500	10290	.42	.54	.66	37.3	127,400	11090	.43	.55	.67	35.4	120,800	11840	.43	.56	.69	33.8	115,400	12530	.43	.57	.71
	1890	4000	40.6	138,700	10450	.43	.57	.71	38.5	131,400	11260	.44	.58	.73	36.5	124,700	12020	.44	.60	.75	35.0	119,300	12730	.45	.61	.77
	2265	4800	41.5	141,700	10560	.44	.60	.76	39.3	134,100	11380	.45	.62	.79	37.3	127,400	12160	.45	.63	.81	35.8	122,200	12860	.46	.64	.83

NOTE — All values are gross capacities and do not include indoor coil blower motor heat deduction.

**LSA090P – HEATING CAPACITY – CB17/CBH17–95**

Indoor Coil Air Volume 70°F db (21°C db)	Air Temperature Entering Outdoor Coil																			
	65°F (18°C)				45°F (7°C)				25°F (-4°C)				5°F (-15°C)				-15°F (-28°C)			
	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input		
L/s	cfm	kW		Btuh	kW		Btuh	kW		Btuh	kW		Btuh	kW		Btuh	kW		Btuh	kW
1135	2400	31.9	109,000	7775	22.6	77,100	6310	12.5	42,800	4735	8.3	28,400	3980	4.2	14,500	3095				
1415	3000	32.6	111,100	7580	23.2	79,200	6115	13.2	44,900	4540	8.9	30,500	3785	4.9	16,600	2900				
1700	3600	33.0	112,700	7435	23.7	80,800	5970	13.6	46,500	4395	9.4	32,100	3640	5.3	18,200	2755				

NOTE — Heating capacities include the effect of defrost cycles in the temperature range where they occur.

**LSA120P – HEATING CAPACITY – CB17/CBH17–135**

Indoor Coil Air Volume 70°F db (21°C db)	Air Temperature Entering Outdoor Coil																			
	65°F (18°C)				45°F (7°C)				25°F (-4°C)				5°F (-15°C)				-15°F (-28°C)			
	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input		
L/s	cfm	kW		Btuh	kW		Btuh	kW		Btuh	kW		Btuh	kW		Btuh	kW		Btuh	kW
1510	3200	42.9	146,500	11355	32.7	111,500	9360	22.3	76,200	7350	13.5	46,000	5645	6.7	22,800	4415				
1890	4000	43.8	149,500	11040	33.6	114,500	9045	23.2	79,200	7035	14.4	49,000	5330	7.6	25,800	4100				
2265	4800	44.3	151,200	10810	34.1	116,200	8815	23.7	80,900	6805	14.9	50,700	5100	8.1	27,500	3870				

NOTE — Heating capacities include the effect of defrost cycles in the temperature range where they occur.

**LSA090P – HEATING PERFORMANCE  
CB17/CBH17–95 AT 3000 cfm (1415 L/s)**

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	7580	111,100	32.6
60	16	7255	104,000	30.5
55	13	6930	97,000	28.4
50	10	6605	90,000	26.4
47	8	6410	85,800	25.1
45	7	6115	79,200	23.2
40	4	5375	62,700	18.4
35	2	4635	46,200	13.5
30	-1	4585	45,500	13.3
25	-4	4540	44,900	13.2
20	-7	4490	44,200	13.0
17	-8	4465	43,800	12.8
15	-9	4335	41,000	12.0
10	-12	4010	34,000	10.0
5	-15	3785	30,500	8.9
0	-18	3565	27,000	7.9
-5	-21	3345	23,500	6.9
-10	-23	3120	20,100	5.9
-15	-26	2900	16,600	4.9
-20	-29	2680	13,100	3.8

\*Outdoor temperature 70% relative humidity. Indoor temperature 70°F (21°C).

**LSA120P – HEATING PERFORMANCE  
CB17/CBH17–135 at 4000 cfm (1890 L/s)**

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	11040	149,500	43.8
60	16	10545	140,900	41.3
55	13	10055	132,300	38.8
50	10	9565	123,700	36.3
47	8	9270	118,500	34.7
45	7	9045	114,500	33.6
40	4	8480	104,600	30.7
35	2	7920	94,700	27.8
30	-1	7475	87,000	25.5
25	-4	7035	79,200	23.2
20	-7	6590	71,500	21.0
17	-8	6325	66,800	19.6
15	-9	6130	63,400	18.6
10	-12	5635	54,700	16.0
5	-15	5330	49,000	14.4
0	-18	5025	43,200	12.7
-5	-21	4715	37,400	11.0
-10	-23	4410	31,600	9.3
-15	-26	4100	25,800	7.6
-20	-29	3795	20,000	5.9

\*Outdoor temperature 70% relative humidity. Indoor temperature 70°F (21°C).