

**COMMERCIAL  
PRODUCT SPECIFICATIONS**



072-090 Models



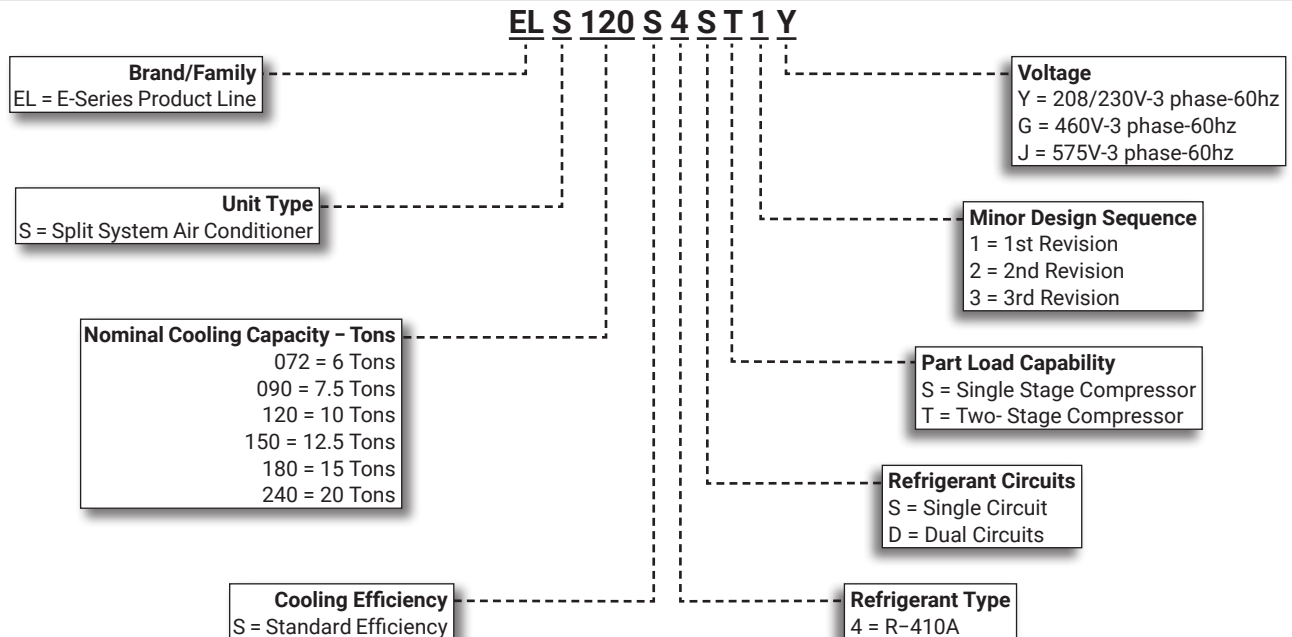
120-150 Models



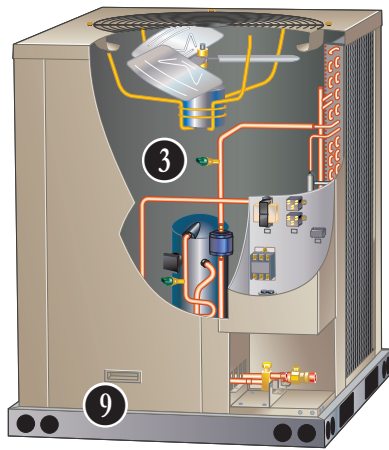
180-240 Models

**EER up to 12.0**  
**6 to 20 Tons**  
**Cooling Capacity - 71,000 to 232,000 Btuh**

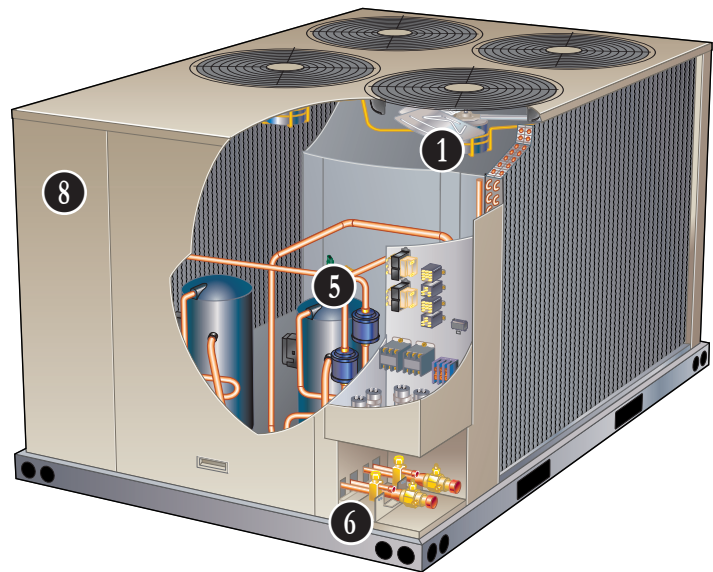
**MODEL NUMBER IDENTIFICATION**



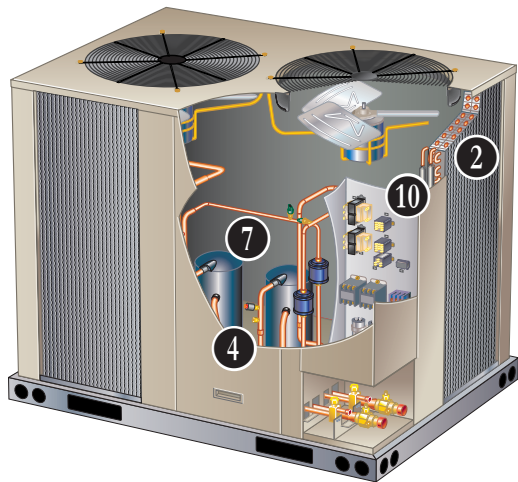
## FEATURE HIGHLIGHTS



072-090 Models



180-240 Models



120-150 Models

1. Outdoor Coil Fans
2. Copper Tube/Enhanced Fin Coils
3. High Pressure Switch
4. Loss of Charge Switch
5. Hi-Capacity Driers
6. Refrigerant Lines and Service Valves
7. Scroll Compressors
8. Heavy Gauge Pre-Painted Steel Cabinet
9. Heavy Duty Steel Base Rails
10. Cabinet

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## APPROVALS AND WARRANTY

### APPROVALS

- AHRI Standard 340/360 Certified
- All units meet two-stage cooling requirements of ASHRAE 90.1, IECC 2015, and California Code of Regulations, Title 24
- Tested in an ETL certified environmental testing facility
- Sound tested in accordance with test conditions included in AHRI Standard 270 or 370
- ETL listed
- Unit and components UL, ULC, NEC and CEC bonded for grounding to meet safety standards for servicing
- All models are ASHRAE 90.1-2010 energy efficiency compliant and meet or exceed requirements of Section 6.8
- ISO 9001 Registered Manufacturing Quality System

### WARRANTY

- Compressors - Limited five years in non-residential applications
- All other covered components - Limited one year

## FEATURES AND BENEFITS

### APPLICATIONS

- One Compressor - 6, 7.5, 10 ton models
- Two Compressors - 10, 12.5, 15 and 20 ton models
- Applicable to matching indoor air handlers
- Shipped completely factory assembled, piped, and wired
- Test operated at the factory insuring proper operation

### REFRIGERATION SYSTEM

#### R-410A Refrigerant

- Non-chlorine, ozone friendly

**NOTE** - Refrigerant is not furnished and must be field supplied.

#### 1 Outdoor Coil Fans

- One Outdoor Fan - ELS072 and ELS090
- Two Outdoor Fans - ELS120 and ELS150
- Four Outdoor Fans - ELS180 and ELS240
- Direct drive fans moves large volumes of air uniformly through entire condenser coil for high refrigerant cooling capacity
- Totally enclosed fan motors
- Overload protected
- Rain shield furnished

#### 2 Copper Tube/Enhanced Fin Coils

- Wrap-around "U" Shaped Coil - ELS072-090-120 models
- Two "L" Shaped Coils - ELS150-180-240 models
- Ripple-edge aluminum fins
- Seamless copper tube construction
- Lanced fins for maximum fin surface exposure
- Fin collars grip tubing for maximum contact area
- Flared shoulder tubing connections
- Machine brazed silver soldering
- Factory tested under high pressure
- Completely accessible for cleaning

#### 3 High Pressure Switch

- Protects the system from high pressure conditions
- Manual reset

#### 4 Loss of Charge Switch

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

#### 5 Hi-Capacity Driers

- Traps moisture or dirt

#### 6 Refrigerant Lines and Service Valves

- Suction and liquid lines located on corner of unit
- Sweat connections
- See dimension drawings
- Fully serviceable suction and liquid line service valves 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
- Accessible outside of unit cabinet

### SCROLL COMPRESSORS

- 7 • One Two-Stage Compressor - ELS072**S4S**, ELS090**S4S** and ELS120**S4S** models
- Two-Single-Stage Compressors - ELS120**S4D**, ELS150**S4D**, ELS180**S4D** and ELS240**S4D**
- High efficiency with uniform suction flow
- Constant discharge flow, high volumetric efficiency and quiet operation
- Low gas pulses during compression reduces operational sound levels
- Compressor motor is internally protected from excessive current and temperature
- Muffler in discharge line reduces operating sound levels
- Compressor is installed in the unit on resilient rubber mounts for vibration free operation

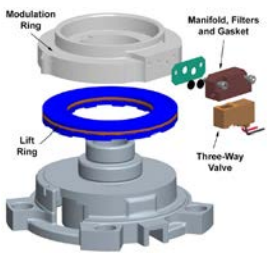
## FEATURES AND BENEFITS

### COMPRESSORS (continued)

#### Scroll Compressor Operation

- Two involute spiral scrolls matched together 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 the 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
- 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

#### ELS072S4S, ELS090S4S and ELS120S4S Two-Stage Models



- A 24-volt DC solenoid valve inside the compressor controls staging
- When the 3-way solenoid is energized it moves the lift ring assembly to block the ports and the compressor operates at full-load or 100% capacity
- When the solenoid is de-energized the lift ring assembly moves to unblock the compressor ports and the compressor operates at part-load or approximately 67% of its full-load capacity
- The “loading” and “unloading” of the two stage scroll is done “on the fly” without shutting off the single-speed compressor motor between stages

#### Crankcase Heater

- Crankcase heater(s) prevents migration of liquid refrigerant into compressor(s) and ensures proper compressor lubrication

### CABINET

- 8 • Heavy-gauge, pre-painted steel cabinet
- Removable panels for unit servicing
- 9 • Heavy duty steel base rails raise the unit off of mounting surface
- Unit lifting holes and forklift slots furnished in base rails
- See dimension drawings
- 10 • Control Box
- Control box located in separate compartment in unit cabinet
- All controls are pre-wired at the factory
- Control box is large enough for field installed DDC or other field supplied control modules

### Options/Accessories

#### Factory Installed

##### Corrosion Protection

- Available for enhanced condenser coil corrosion protection
- Polymeric epoxy coating deposited by electrical transport (electrophoresis) using a process known as electrocoat (e-coat)
- Painted base pan furnished

#### Field Installed

##### Combination Coil/Hail Guards

- Heavy gauge steel frame with expanded metal mesh to protect the outdoor coil from damage

## FEATURES AND BENEFITS

### **CONTROLS**

#### Options/Accessories

#### **Field Installed**

##### **Low Ambient Control**

- Air conditioning units operate satisfactorily down to 45°F outdoor air temperature without any additional controls
- Kit allows unit operation down to 0°F
- Head pressure speed controller reduces outdoor fan operation during low ambient conditions until head pressure rises to the setpoint
- Pressure transducers are mounted on the liquid lines
- High pressure switches are furnished to replace existing switches
- Wiring harnesses are furnished for simple plug-in wiring to fans and controller

##### **Indoor Air Quality (CO<sub>2</sub>) Sensors**

- Monitors CO<sub>2</sub> levels
- Adjusts economizer dampers as needed

##### **Thermostat**

- Thermostat is not furnished with unit and must be ordered extra

##### **Aftermarket Unit Controller Options**

- See Options/Accessories table for selection

### **ELECTRICAL**

#### **Field Installed**

##### **GFI Service Outlets (2)**

- 115V ground fault circuit interrupter (GFCI) type
- Non-powered
- Field wired

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SPECIFICATIONS			6 TON   7.5 TON	
General	Model No.	ELS072S4S	ELS090S4S	
Data	Nominal Size - Tons	6	7.5	
Connections (sweat)	Liquid line - in. (o.d)	(1) 3/8	(1) 5/8	
	Suction line - in. (o.d)	(1) 1-1/8	(1) 1-1/8	
Refrigerant (R-410A)	Factory Charge	R-410A holding charge (2 lbs. per circuit)		
	No. of Circuits	1	1	
	<sup>1</sup> Field charge (25 ft. line set)	18 lbs. 0 oz. (includes holding charge)	20 lbs. 0 oz. (includes holding charge)	
Compressor		(1) Two Stage Scroll	(1) Two Stage Scroll	
Condenser Coil	Net face area - sq. ft. Outer coil	29.3	29.3	
	Inner coil	14.2	28.4	
	Tube diameter - in. & no. of rows	3/8 - 1.5	3/8 - 2	
	Fins per inch	20	20	
Condenser Fan(s)	Diameter - in. & no. of blades	(1) 24 - 3	(1) 24 - 4	
	Motor hp	(1) 1/3	(1) 1/2	
	Total air volume - cfm	4700	5600	
	Rpm	1075	1075	
	Watts	400	580	

ELECTRICAL DATA							
Line voltage data - 60 hz - 3 phase		208/230V	460V	575V	208/230V	460V	575V
<sup>2</sup> Maximum Overcurrent Protection (amps)		40	15	15	60	25	20
<sup>3</sup> Minimum circuit ampacity		24	12	9	37	17	13
Compressor	No. of Compressors	1	1	1	1	1	1
	Rated load amps	17.6	8.5	6.3	26.9	12	9
	Locked rotor amps	136	66	55	165	94	65
Condenser Fan Motor (1 phase)	No. of motors	1	1	1	1	1	1
	Full load amps	1.7	0.8	1	3	1.5	1.2
	Locked rotor amps	4.3	2.4	1.9	6	3	2.9

NOTE - All units have a minimum Short Circuit Current Rating (SCCR) of 5000 amps.

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

<sup>1</sup> Field provided charge with 25 ft. line set. <sup>2</sup> HACR type circuit breaker or fuse.

<sup>3</sup> Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements.

SPECIFICATIONS - 10 TON			10 TON			
General	Model No.	ELS120S4S	ELS120S4D			
Data	Nominal Size - Tons	10	10			
Connections (sweat)	Liquid line - in. (o.d)	(1) 5/8	(2) 3/8			
	Suction line - in. (o.d)	(1) 1-1/8	(2) 1-1/8			
Refrigerant (R-410A)	Factory Charge	R-410A holding charge (2 lbs. per circuit)				
	No. of Circuits	1	2			
	<sup>1</sup> Field charge (25 ft. line set)	Circuit 1 23 lbs. 0 oz. (includes holding charge)	Circuit 2 12 lbs. 0 oz. (includes holding charge)		12 lbs. 0 oz. (includes holding charge)	
Compressor		(1) Two Stage Scroll	(2) Single Stage Scroll			
Condenser Coil	Net face area - sq. ft. Outer coil	29.3	29.3			
	Inner coil	28.4	28.4			
	Tube diameter - in. & no. of rows	3/8 - 2	3/8 - 2			
	Fins per inch	20	20			
Condenser Fan(s)	Diameter - in. & no. of blades	(2) 24 - 3	(2) 24 - 3			
	Motor hp	(2) 1/3	(2) 1/3			
	Total air volume - cfm	8300	8300			
	Rpm	1075	1075			
	Watts	830	830			

ELECTRICAL DATA							
Line voltage data - 60 hz - 3 phase		208/230V	460V	575V	208/230V	460V	575V
<sup>2</sup> Maximum Overcurrent Protection (amps)		80	30	25	45	20	15
<sup>3</sup> Minimum circuit ampacity		47	21	16	33	16	13
Compressor	No. of Compressors	1	1	1	2	2	2
	Rated load amps (total)	34.6	14.8	11.1	13.2 (26.4)	6.3 (12.6)	4.9 (9.8)
	Locked rotor amps (total)	240	130	94	93 (186)	60 (120)	41 (82)
Condenser Fan Motor (1 phase)	No. of motors	2	2	2	2	2	2
	Full load amps (total)	1.7 (3.4)	0.8 (1.6)	1 (2)	1.7 (3.4)	0.8 (1.6)	1 (2)
	Locked rotor amps (total)	4.3 (8.6)	2.4 (4.8)	1.9 (3.8)	4.3 (8.6)	2.4 (4.8)	1.9 (3.8)

NOTE - All units have a minimum Short Circuit Current Rating (SCCR) of 5000 amps.

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

<sup>1</sup> Field provided charge with 25 ft. line set. <sup>2</sup> HACR type circuit breaker or fuse.

<sup>3</sup> Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements.

## SPECIFICATIONS

12.5 TON | 20 TON

General Data		Model No.	ELS150S4D	ELS180S4D	ELS240S4D
Nominal Size - Tons			12.5	15	20
Connections (sweat)	Liquid line - in. (o.d)		(2) 3/8	(2) 5/8	(2) 5/8
	Suction line - in. (o.d)		(2) 1-1/8	(2) 1-1/8	(2) 1-1/8
Refrigerant (R-410A)	Factory Charge	R-410A holding charge (2 lbs. per circuit)			
	No. of Circuits		2	2	2
	<sup>1</sup> Field charge (25 ft. line set)	Circuit 1	15 lbs. 0 oz. (includes holding charge)	24 lbs. 0 oz. (includes holding charge)	22 lbs. 4 oz. (includes holding charge)
Circuit 2		15 lbs. 0 oz. (includes holding charge)	24 lbs. 0 oz. (includes holding charge)	23 lbs. 3 oz. (includes holding charge)	
Compressor			(2) Single Stage Scroll	(2) Single Stage Scroll	(2) Single Stage Scroll
Condenser Coil	Net face area - sq. ft. Outer coil		34.2	58.7	58.7
	Inner coil		33.3	57.7	57.7
	Tube diameter - in. & no. of rows		3/8 - 2	3/8 - 2	3/8 - 2
	Fins per inch		20	20	20
Condenser Fan(s)	Diameter - in. & no. of blades		(2) 24 - 4	(4) 24 - 3	(4) 24 - 3
	Motor hp		(2) 1/2	(4) 1/3	(4) 1/3
	Total air volume - cfm		10,300	16,600	16,600
	Rpm		1075	1075	1075
	Watts		1130	1660	1660

## ELECTRICAL DATA

Line voltage data - 60 hz - 3 phase		208/230V	460V	575V	208/230V	460V	575V	208/230V	460V	575V
<sup>2</sup> Maximum Overcurrent Protection (amps)		60	25	25	80	40	30	90	50	40
<sup>3</sup> Minimum circuit ampacity		50	21	20	63	31	25	70	36	30
Compressor	No. of Compressors	2	2	2	2	2	2	2	2	2
	Rated load amps (total)	19.6 (39.2)	8.2 (16.4)	6.6 (13.2)	25 (50)	12.2 (24.4)	9 (18)	28.2 (56.4)	14.7 (29.4)	11.3 (22.6)
	Locked rotor amps (total)	136 (272)	66 (132)	55 (110)	164 (328)	100 (200)	78 (156)	240 (480)	130 (260)	93.7 (187.4)
Condenser Fan Motor (1 phase)	No. of motors	2	2	2	4	4	4	4	4	4
	Full load amps (total)	3 (6)	1.5 (3)	1.2 (2.4)	1.7 (6.8)	0.8 (3.2)	1 (4)	1.7 (6.8)	0.8 (3.2)	1 (4)
	Locked rotor amps (total)	6 (12)	3 (6)	2.9 (5.8)	4.3 (17.2)	2.4 (9.6)	1.9 (7.6)	4.3 (17.2)	2.4 (9.6)	1.9 (7.6)

NOTE - All units have a minimum Short Circuit Current Rating (SCCR) of 5000 amps.

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

<sup>1</sup> Field provided charge with 25 ft. line set. <sup>2</sup> HACR type circuit breaker or fuse.

<sup>3</sup> Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements.

## WEIGHT DATA

Model No.	Net		Shipping	
	lbs.	kg	lbs.	kg
072S4S	318	144	338	153
090S4S	345	157	365	166
120S4S	452	205	477	216
120S4D	480	218	505	229
150S4D	535	243	560	254
180S4D	775	352	800	363
240S4D	832	377	857	389

## OPTIONS / ACCESSORIES

### COMBINED COIL/HAIL GUARDS

T2GARD20L-1	40	18	45	20
T2GARD20M-1	45	20	50	23
T2GARD21M-1	45	20	50	23
T2GARD20N-1-	90	41	100	45



## OPTIONS / ACCESSORIES

Item	Catalog No.	ELS	ELS	ELS	ELS	ELS	ELS	ELS
		072 S4S	090 S4S	120 S4S	120 S4D	150 S4D	180 S4D	240 S4D
<b>CABINET</b>								
Combined Coil/Hail Guards	T2GARD51L-1	13T29	X	X				
	T2GARD51M11	13T30			X	X		
	T2GARD51M21	13T32					X	
	T2GARD51N-1	13T37					X	X
Corrosion Protection	Factory	O	O	O	O	O	O	O

## CONTROLS

BACnet® Module	A0CTRL31LS1	17A08	X	X	X	X	X	X	X
BACnet® Sensor with Display	K0SNSR01FF1	97W23	X	X	X	X	X	X	X
BACnet® Sensor without Display	K0SNSR00FF1	97W24	X	X	X	X	X	X	X
Low Ambient Control (0°F)	A2CWKT01LM1-	16F18	X	X					
	A2CWKT04M-1-	16F26			X				
	A2CWKT02M-1-	16F24				X	X		
	A2CWKT03N-1-	16F25						X	X

## ELECTRICAL

GFI Service Outlets	15 amp non-powered, field-wired (208/230V, 460V only) LTAGFIK10/15/15	74M70	X	X	X	X	X	X	X
	20 amp non-powered, field-wired (575V only) C1GFIC120FF1	67E01	X	X	X	X	X	X	X

## INDOOR AIR QUALITY

Sensor - Wall-mount, off-white plastic cover with LCD display	C0SNSR50AE1L	77N39	X	X	X	X	X	X	X
Sensor - Wall-mount, off-white plastic cover, no display	C0SNSR52AE1L	87N53	X	X	X	X	X	X	X
Sensor - Black plastic case with LCD display, rated for plenum mounting	C0SNSR51AE1L	87N52	X	X	X	X	X	X	X
Sensor - Wall-mount, black plastic case, no display, rated for plenum mounting	C0SNSR53AE1L	87N54	X	X	X	X	X	X	X
CO <sub>2</sub> Sensor Duct Mounting Kit	C0MISC19AE1-	85L43	X	X	X	X	X	X	X
Aspiration Box - for duct mounting non-plenum rated CO <sub>2</sub> sensor (77N39)	C0MISC16AE1-	90N43	X	X	X	X	X	X	X

NOTE - The catalog and model numbers that appear here are for ordering field installed accessories only.

O - Factory Installed with extended lead time.

X - Field Installed

## SOUND DATA

1 Unit Model No.	Octave Band Linear Sound Power Levels dB, re 10 <sup>-12</sup> Watts Center Frequency - HZ							1 Sound Rating Number (dB)
	125	250	500	1000	2000	4000	8000	
ELS072S4S	65	68	73	76	72	68	63	81
ELS090S4S	64	69	73	77	74	70	63	81
ELS120S4S	70	77	82	81	77	75	71	86
ELS120S4D	71	77	80	80	77	72	67	85
ELS150S4D	68	77	80	82	78	73	65	86
ELS180S4D	73	80	83	83	79	74	66	88
ELS240S4D	73	80	85	84	80	78	74	89

NOTE - the octave sound power data does not include tonal correction.

<sup>1</sup> Tested according to AHRI Standard 270 test conditions.

**AHRI SYSTEM MATCHES ONE OUTDOOR UNIT + ONE INDOOR UNIT**

Model	Cooling Btuh	EER	IEER	Air Handler	Expansion Device	AHRI Reference
ELS072S4S	71,000	12.0	16.0	ELA072S4S	Factory TXV	201753420
ELS072S4S	74,000	11.2	14.4	ELA090S4D	Factory TXV	202284837
ELS090S4S	89,000	11.2	14.4	ELA090S4D	Factory TXV	201753421
ELS090S4S	90,000	11.2	12.9	ELA120S4D	Factory TXV	202325344
ELS120S4S	115,000	11.2	14.4	ELA120S4D	Factory TXV	201753423
ELS120S4D	115,000	11.2	12.9	ELA120S4D	Factory TXV	201753422
ELS150S4D	136,000	11.0	12.4	ELA150S4D	Factory TXV	201753424
ELS150S4D	142,000	11.0	12.4	ELA180S4D	Factory TXV	202325470
ELS180S4D	178,000	11.0	12.4	ELA180S4D	Factory TXV	201753975
ELS180S4D	190,000	11.0	12.4	ELA240S4D	Factory TXV	202325343
ELS240S4D	228,000	11.0	12.4	ELA240S4D	Factory TXV	201753426

NOTES - Units with capacity of 65,000 Btuh or greater are AHRI Certified to AHRI Standard 340/360: 95°F outdoor air temperature, 80°F db/67°F wb entering evaporator air (minimum external duct static pressure) with 25 ft. of connecting refrigerant lines.

**AHRI SYSTEM MATCHES TWO OUTDOOR UNITS + ONE INDOOR UNIT**

Model	Cooling Btuh	EER	IEER	Indoor Coil or Air Handler	Expansion Device	AHRI Reference
(2) ELS090S4S	172,000	11.0	13.6	ELA180S4D	Factory TXV	202324585
(2) ELS120S4S	232,000	11.0	14.4	ELA240S4D	Factory TXV	202324586

NOTES - Units with capacity of 65,000 Btuh or greater are AHRI Certified to AHRI Standard 340/360: 95°F outdoor air temperature, 80°F db/67°F wb entering evaporator air (minimum external duct static pressure) with 25 ft. of connecting refrigerant lines.

**AHRI SYSTEM MATCHES ONE OUTDOOR UNIT + TWO INDOOR UNITS**

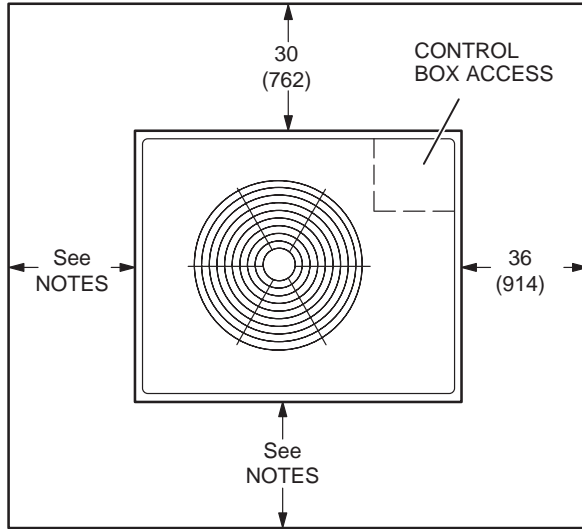
Model	Cooling Btuh	EER	IEER	Indoor Coil or Air Handler	Expansion Device	AHRI Reference
ELS180S4D	178,000	11.0	12.4	(2) ELA090S4D	Factory TXV	202325471
ELS240S4D	232,000	11.0	12.4	(2) ELA120S4D	Factory TXV	202325472

NOTES - Units with capacity of 65,000 Btuh or greater are AHRI Certified to AHRI Standard 340/360: 95°F outdoor air temperature, 80°F db/67°F wb entering evaporator air (minimum external duct static pressure) with 25 ft. of connecting refrigerant lines.

<sup>1</sup> Pairing with two separate air handlers equipped with constant torque or variable speed motors is only applicable to separate duct systems.

## UNIT CLEARANCES

### ELS072 and ELS090



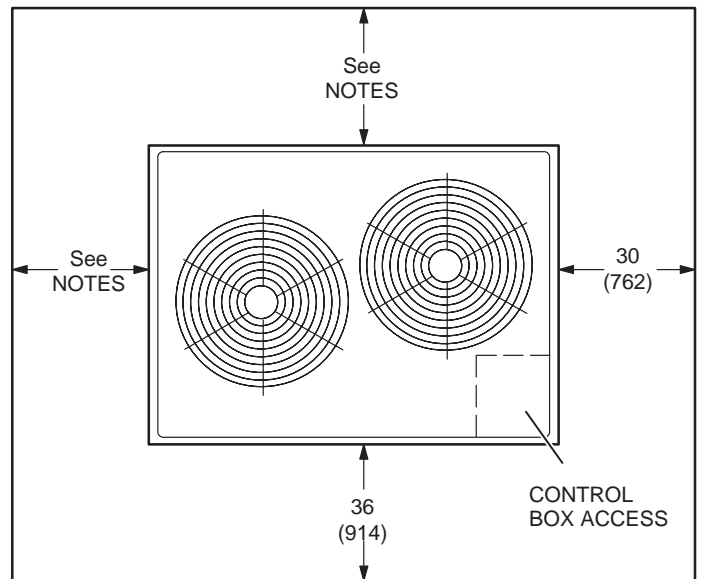
**NOTES:**

Clearance to one of the remaining two sides may be 12 in. (305 mm) and the final side may be 6 in. (152 mm).  
 A clearance of 24 in. (610 mm) must be maintained between two units.  
 48 in. (1219 mm) clearance required on top of unit.

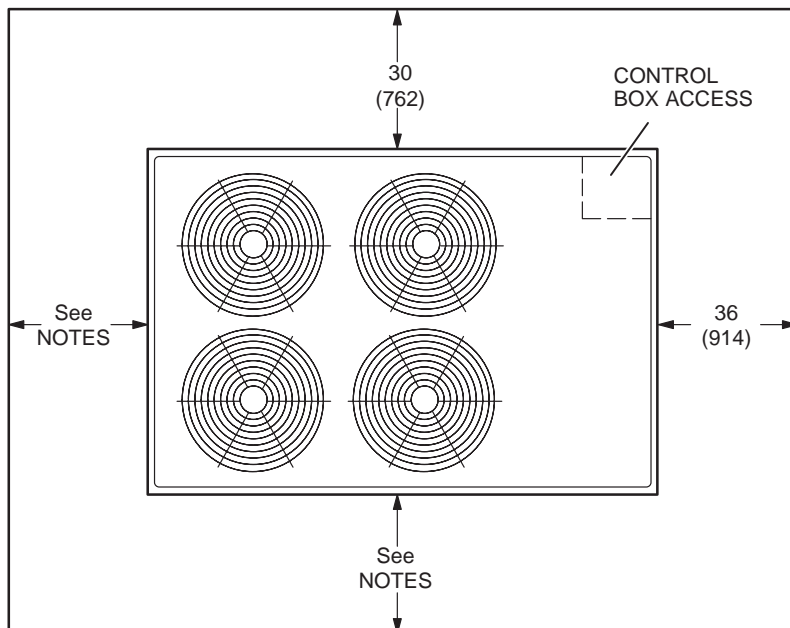
### ELS120 and ELS150

**NOTES:**

Clearance to one of the remaining two sides may be 12 in. (305 mm) and the final side may be 6 in. (152 mm).  
 A clearance of 24 in. (610 mm) must be maintained between two units.  
 48 in. (1219 mm) clearance required on top of unit.



### ELS180 and ELS240



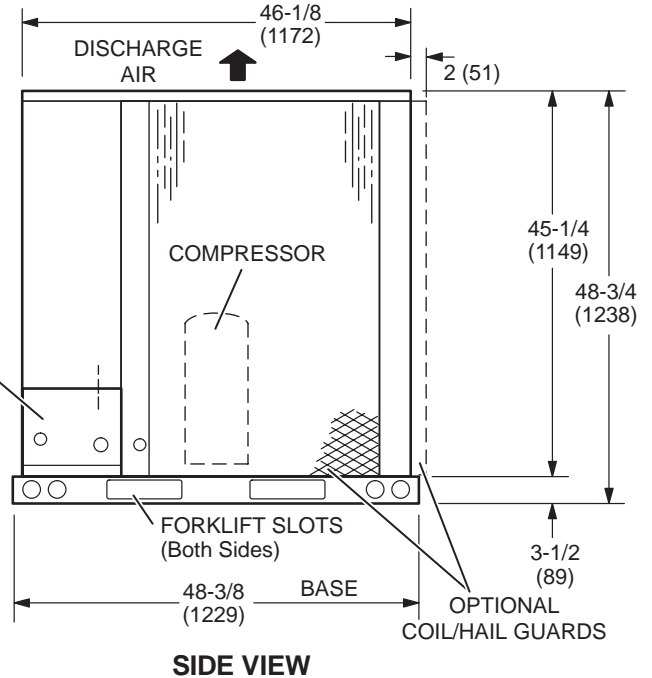
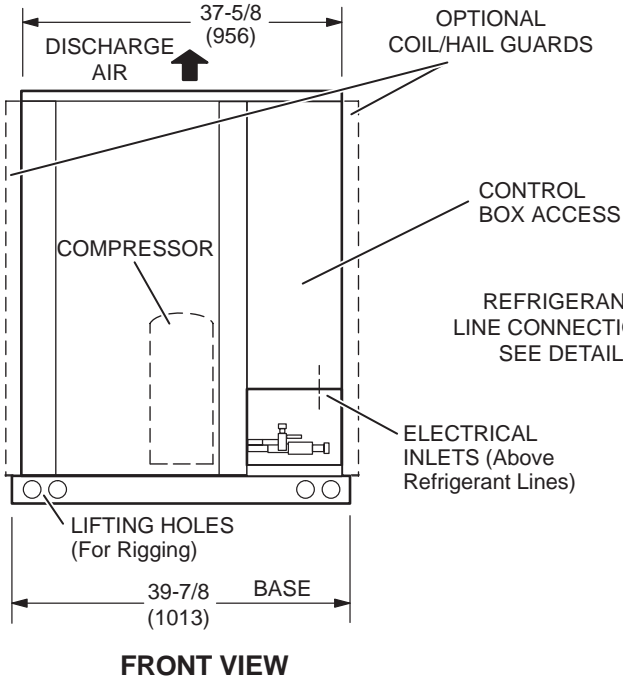
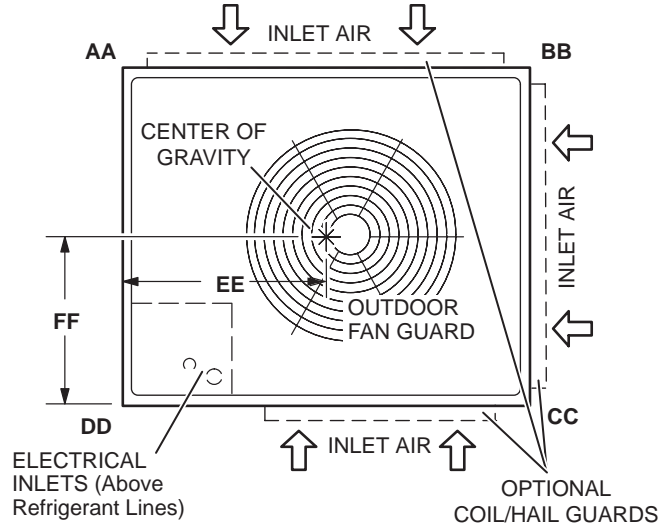
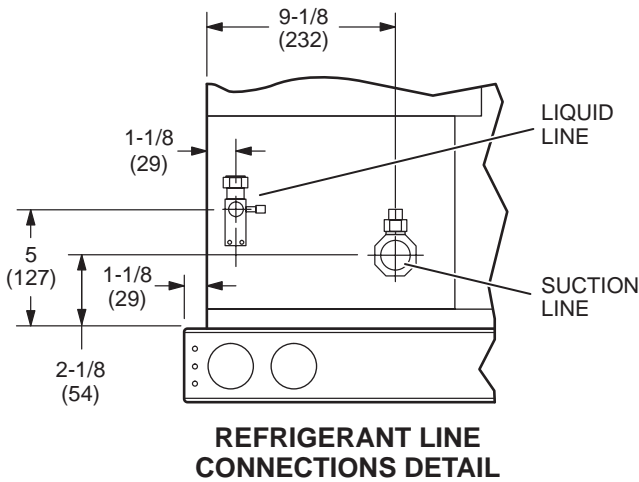
**NOTES:**

Clearance to one of the remaining two sides may be 12 in. (305 mm) and the final side may be 6 in. (152 mm).  
 A clearance of 24 in. (610 mm) must be maintained between two units.  
 48 in. (1219 mm) clearance required on top of unit.

**DIMENSIONS**

**ELS072 | ELS090**

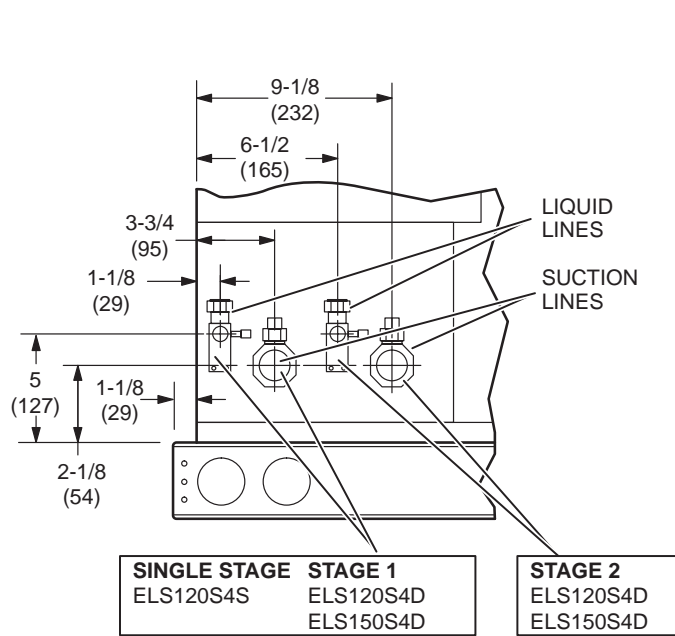
Model No.	CORNER WEIGHTS								CENTER OF GRAVITY			
	AA		BB		CC		DD		EE		FF	
	lbs.	kg	lbs.	kg	lbs.	kg	lbs.	kg	in.	mm	in.	mm
ELS072S4S	66	30	73	33	97	44	82	37	23-1/4	591	19-1/4	489
ELS090S4S	75	34	89	40	112	51	88	40	25	635	20-1/4	514



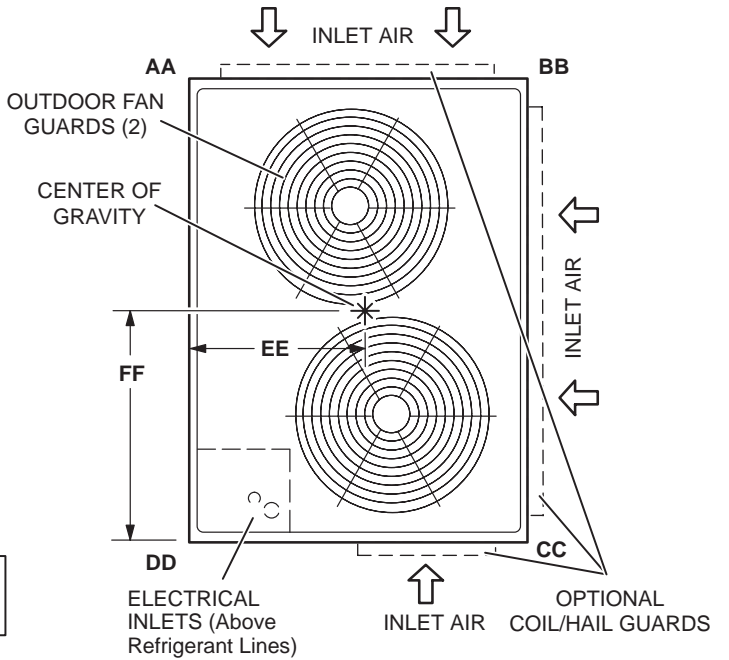
**DIMENSIONS**

**ELS120 | ELS150**

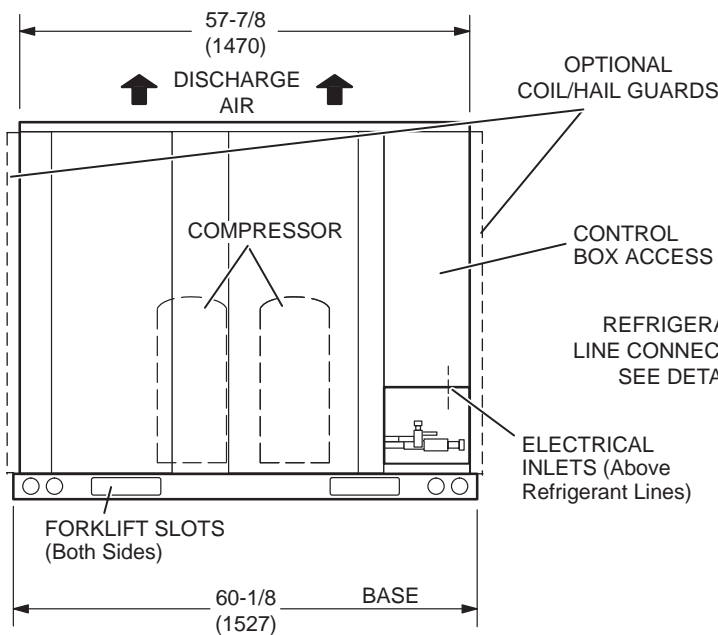
Model No.	CORNER WEIGHTS								CENTER OF GRAVITY			
	AA		BB		CC		DD		EE		FF	
	lbs.	kg	lbs.	kg	lbs.	kg	lbs.	kg	in.	mm	in.	mm
ELS120S4S	130	59	124	56	107	49	111	50	20-1/2	521	33-1/2	851
ELS120S4D	122	55	119	54	127	58	131	59	21	533	28-1/2	724
ELS150S4D	144	66	132	60	133	60	145	66	19	483	30	762



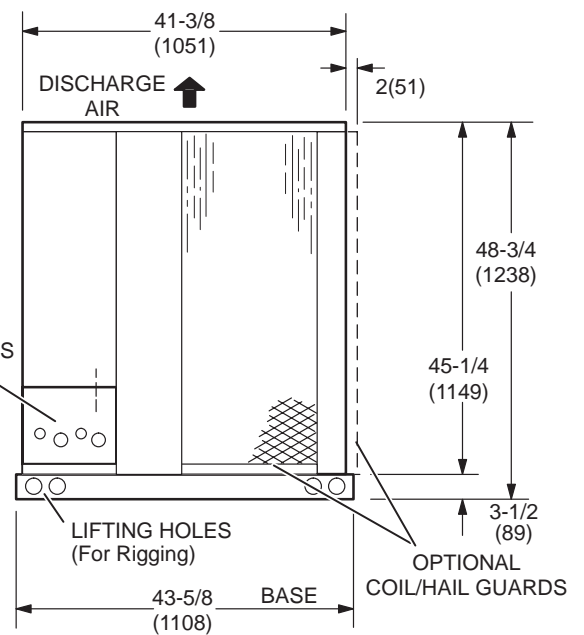
**REFRIGERANT LINE CONNECTIONS DETAIL**



**TOP VIEW**



**FRONT VIEW**

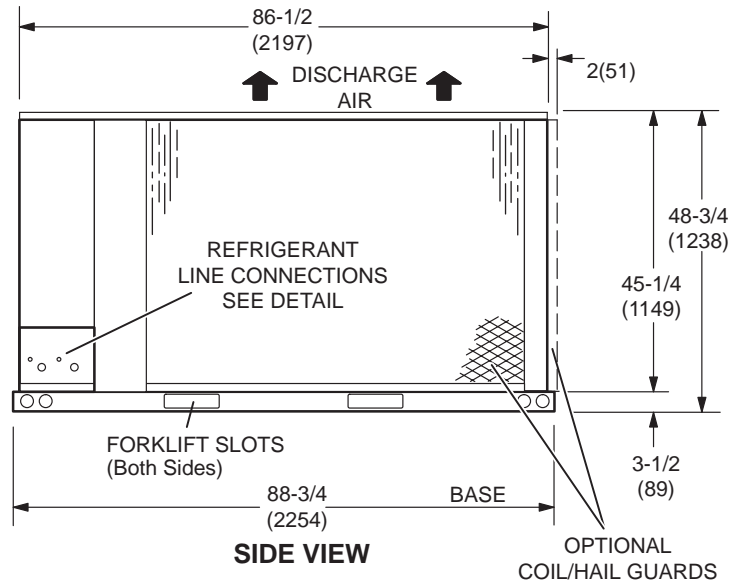
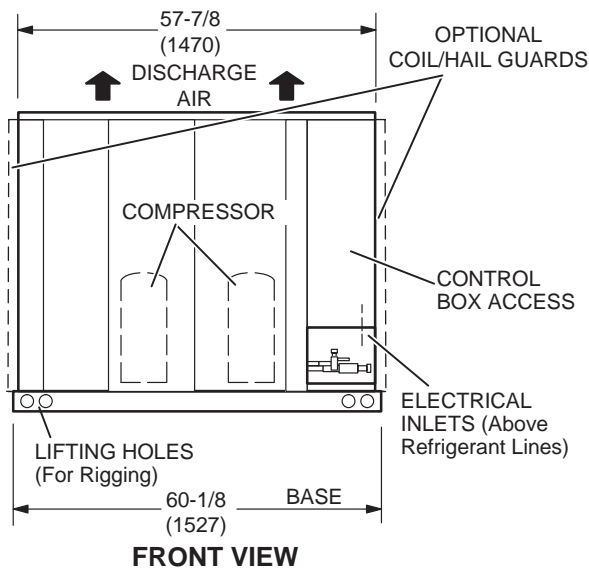
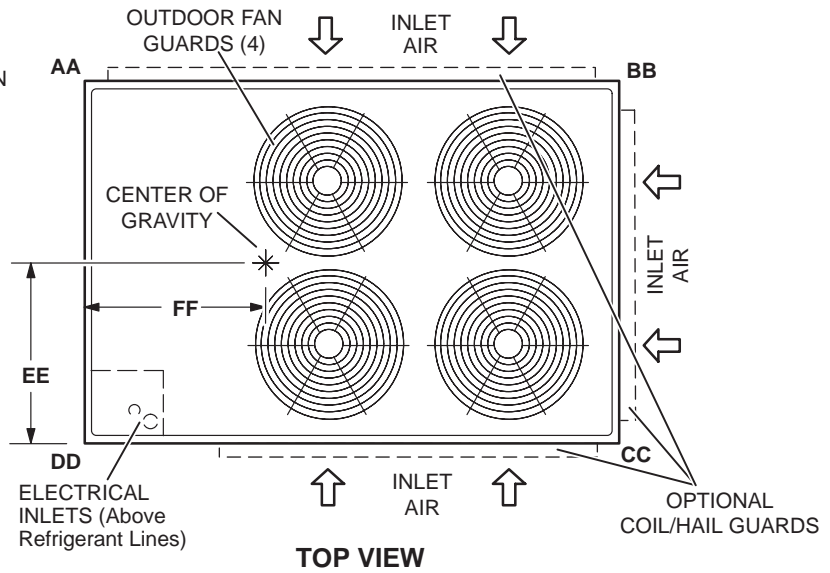
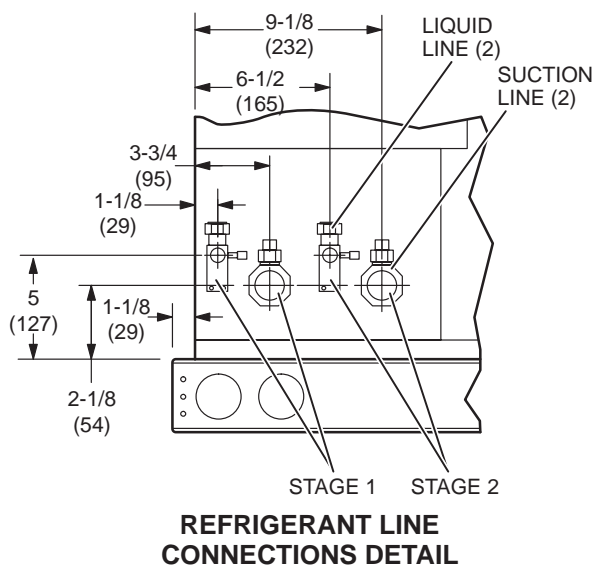


**SIDE VIEW**

**DIMENSIONS**

**ELS180 | ELS240**

Model No.	CORNER WEIGHTS								CENTER OF GRAVITY			
	AA		BB		CC		DD		EE		FF	
	lbs.	kg	lbs.	kg	lbs.	kg	lbs.	kg	in.	mm	in.	mm
ELS180S4D	181	82	177	81	215	98	221	100	29	737	38	965
ELS240S4D	192	87	189	86	232	105	238	108	29	737	37-1/2	953



**RATINGS**

**ONE OUTDOOR UNIT + ONE INDOOR UNIT**

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

**ELS072S4S + ELA072S4S - PART LOAD**

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		65°F					75°F					85°F					95°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)		
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb		
cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	
63°F	1280	54.2	2.17	0.68	0.8	0.92	51.6	2.54	0.69	0.82	0.95	48.6	2.95	0.71	0.84	0.98	45.4	3.42	0.72	0.87	1
	1600	57.7	2.15	0.71	0.86	0.99	54.8	2.53	0.73	0.88	1	51.6	2.95	0.75	0.91	1	48.1	3.42	0.77	0.95	1
	1920	60.2	2.15	0.75	0.92	1	57.1	2.53	0.77	0.94	1	53.8	2.95	0.8	0.98	1	50.2	3.41	0.83	1	1
67°F	1280	57.7	2.15	0.54	0.65	0.76	55.1	2.53	0.55	0.66	0.78	52.2	2.95	0.56	0.68	0.8	48.9	3.42	0.57	0.69	0.83
	1600	61.4	2.14	0.56	0.69	0.81	58.6	2.52	0.57	0.7	0.84	55.4	2.95	0.58	0.72	0.87	51.8	3.41	0.6	0.74	0.9
	1920	64.3	2.14	0.59	0.72	0.87	61.2	2.52	0.6	0.74	0.9	57.8	2.94	0.61	0.77	0.93	53.9	3.41	0.62	0.8	0.97
71°F	1280	61.3	2.14	0.42	0.53	0.62	58.6	2.53	0.42	0.53	0.64	55.6	2.94	0.43	0.54	0.65	52.2	3.41	0.43	0.55	0.67
	1600	65.3	2.13	0.43	0.55	0.66	62.3	2.52	0.43	0.56	0.68	59	2.94	0.44	0.57	0.69	55.3	3.41	0.44	0.58	0.71
	1920	68.3	2.13	0.44	0.57	0.7	65.2	2.52	0.44	0.58	0.71	61.7	2.94	0.45	0.59	0.74	57.8	3.41	0.45	0.61	0.76

**ELS072S4S + ELA072S4S - FULL LOAD**

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		85°F					95°F					105°F					115°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)		
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb		
cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	
63°F	1920	67.9	4.17	0.73	0.86	0.98	64.8	4.73	0.74	0.88	1	61.5	5.39	0.76	0.9	1	58	6.12	0.78	0.93	1
	2400	71.2	4.21	0.77	0.92	1	67.9	4.78	0.79	0.95	1	64.4	5.43	0.81	0.97	1	60.8	6.16	0.83	0.99	1
	2880	73.8	4.24	0.82	0.98	1	70.4	4.81	0.84	1	1	67	5.46	0.86	1	1	63.7	6.2	0.89	1	1
67°F	1920	72	4.22	0.58	0.7	0.82	68.8	4.79	0.59	0.72	0.84	65.4	5.44	0.59	0.73	0.87	61.7	6.17	0.61	0.75	0.89
	2400	75.5	4.27	0.61	0.75	0.89	72.1	4.83	0.61	0.77	0.91	68.6	5.49	0.63	0.79	0.94	64.6	6.22	0.64	0.81	0.97
	2880	78.3	4.3	0.63	0.8	0.95	74.6	4.87	0.65	0.82	0.97	70.7	5.52	0.66	0.84	0.99	66.5	6.24	0.68	0.87	1
71°F	1920	76	4.27	0.44	0.56	0.68	72.8	4.85	0.44	0.57	0.69	69.3	5.5	0.45	0.58	0.71	65.5	6.23	0.45	0.59	0.72
	2400	79.9	4.33	0.45	0.59	0.72	76.2	4.89	0.46	0.6	0.74	72.4	5.54	0.46	0.61	0.76	68.6	6.28	0.47	0.63	0.78
	2880	82.7	4.36	0.46	0.62	0.77	79	4.94	0.47	0.63	0.79	75	5.59	0.48	0.65	0.81	70.7	6.32	0.48	0.67	0.84

**ELS072S4S + ELA090S4D - PART LOAD**

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		65°F					75°F					85°F					95°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)		
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb		
cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	
63°F	1280	57.1	2.16	0.68	0.8	0.93	54.3	2.53	0.69	0.82	0.95	51.3	2.95	0.7	0.84	0.98	47.8	3.42	0.72	0.87	1
	1600	60.8	2.15	0.72	0.86	1	57.6	2.53	0.73	0.89	1	54.3	2.94	0.75	0.92	1	50.6	3.41	0.78	0.96	1
	1920	63.5	2.14	0.76	0.92	1	60.2	2.52	0.78	0.95	1	56.7	2.94	0.8	0.99	1	53.3	3.41	0.83	1	1
67°F	1280	61.3	2.15	0.54	0.65	0.76	58.4	2.53	0.55	0.66	0.78	55.2	2.94	0.56	0.68	0.8	51.8	3.41	0.57	0.69	0.83
	1600	65.2	2.14	0.56	0.69	0.82	62	2.52	0.57	0.7	0.84	58.5	2.94	0.58	0.72	0.87	54.8	3.41	0.6	0.74	0.91
	1920	68	2.13	0.59	0.73	0.88	64.7	2.52	0.6	0.75	0.91	60.9	2.94	0.61	0.77	0.94	57	3.41	0.63	0.8	0.98
71°F	1280	65.6	2.14	0.42	0.52	0.62	62.5	2.52	0.42	0.53	0.63	59.3	2.94	0.42	0.54	0.65	55.7	3.41	0.43	0.55	0.66
	1600	69.6	2.13	0.43	0.55	0.66	66.3	2.51	0.43	0.55	0.68	62.8	2.94	0.43	0.56	0.69	59	3.4	0.44	0.58	0.72
	1920	72.7	2.12	0.44	0.58	0.71	69.3	2.51	0.44	0.58	0.72	65.6	2.94	0.45	0.6	0.74	61.5	3.41	0.45	0.61	0.77

**ELS072S4S + ELA090S4D - FULL LOAD**

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		85°F					95°F					105°F					115°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)		
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb		
cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	
63°F	1920	70.2	4.18	0.73	0.87	0.99	67	4.75	0.74	0.88	1	63.8	5.4	0.76	0.91	1	60.2	6.13	0.78	0.93	1
	2400	73.9	4.23	0.78	0.94	1	70.4	4.79	0.8	0.96	1	66.8	5.44	0.82	0.98	1	63.2	6.17	0.84	1	1
	2880	76.5	4.26	0.83	0.99	1	73.3	4.83	0.85	1	1	70	5.49	0.87	1	1	66.6	6.22	0.9	1	1
67°F	1920	74.7	4.24	0.58	0.71	0.83	71.3	4.8	0.59	0.72	0.85	67.8	5.45	0.6	0.73	0.87	64.2	6.18	0.61	0.76	0.9
	2400	78.3	4.28	0.61	0.76	0.9	74.6	4.85	0.62	0.77	0.92	71	5.5	0.63	0.79	0.95	67	6.23	0.65	0.82	0.98
	2880	80.8	4.32	0.64	0.81	0.96	77	4.88	0.65	0.83	0.98	73.3	5.53	0.66	0.85	1	69	6.26	0.68	0.88	1
71°F	1920	79.1	4.29	0.44	0.56	0.68	75.7	4.87	0.45	0.57	0.69	71.9	5.51	0.45	0.58	0.71	68.2	6.25	0.45	0.59	0.73
	2400	82.8	4.35	0.45	0.6	0.73	79.1	4.91	0.46	0.61	0.75	75.2	5.57	0.46	0.62	0.77	70.9	6.29	0.47	0.63	0.79
	2880	85.3	4.38	0.46	0.62	0.79	81.4	4.95	0.47	0.64	0.8	77.5	5.6	0.47	0.66	0.82	73	6.32	0.48	0.67	0.85

**RATINGS**

**ONE OUTDOOR UNIT + ONE INDOOR UNIT**

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

**ELS090S4S + ELA090S4D - PART LOAD**

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		65°F					75°F					85°F					95°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)		
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb		
cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	
63°F	1600	65	2.76	0.71	0.84	0.96	62.1	3.23	0.73	0.86	0.98	58.9	3.75	0.74	0.88	1	55.5	4.33	0.76	0.91	1
	2000	68.9	2.76	0.76	0.9	1	65.7	3.23	0.77	0.92	1	62.2	3.75	0.79	0.95	1	58.6	4.33	0.82	0.98	1
	2400	72	2.75	0.8	0.96	1	68.5	3.22	0.82	0.98	1	65	3.74	0.85	1	1	61.8	4.32	0.88	1	1
67°F	1600	69.7	2.76	0.57	0.68	0.8	66.7	3.23	0.57	0.7	0.82	63.4	3.75	0.58	0.71	0.84	59.8	4.33	0.59	0.73	0.87
	2000	73.8	2.75	0.59	0.73	0.86	70.6	3.22	0.6	0.74	0.89	66.8	3.74	0.61	0.76	0.91	63	4.32	0.63	0.79	0.94
	2400	76.9	2.75	0.62	0.77	0.92	73.2	3.22	0.63	0.8	0.95	69.4	3.74	0.64	0.82	0.98	65.3	4.32	0.66	0.85	1
71°F	1600	74.6	2.75	0.44	0.55	0.66	71.4	3.22	0.44	0.56	0.67	67.9	3.74	0.44	0.56	0.68	64.1	4.32	0.44	0.57	0.7
	2000	78.9	2.74	0.44	0.57	0.7	75.5	3.21	0.45	0.58	0.72	71.6	3.74	0.45	0.6	0.73	67.6	4.32	0.46	0.61	0.76
	2400	82.1	2.74	0.46	0.6	0.75	78.3	3.21	0.46	0.61	0.77	74.4	3.74	0.47	0.63	0.79	70.2	4.32	0.48	0.65	0.82

**ELS090S4S + ELA090S4D - FULL LOAD**

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		85°F					95°F					105°F					115°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)		
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb		
cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	
63°F	2400	87.5	5.87	0.73	0.87	0.99	83.7	6.49	0.75	0.88	1	79.4	7.18	0.76	0.91	1	75	7.93	0.78	0.93	1
	3000	92.2	5.98	0.78	0.93	1	87.9	6.59	0.8	0.95	1	83.4	7.28	0.82	0.98	1	78.6	8.04	0.84	1	1
	3600	95.6	6.06	0.83	0.99	1	91.4	6.69	0.85	1	1	87.3	7.38	0.87	1	1	82.6	8.15	0.9	1	1
67°F	2400	93.5	6.01	0.58	0.71	0.83	89.3	6.63	0.59	0.72	0.85	84.8	7.32	0.6	0.74	0.87	79.7	8.08	0.61	0.75	0.9
	3000	97.7	6.11	0.61	0.76	0.9	93.3	6.73	0.62	0.77	0.92	88.3	7.41	0.63	0.79	0.95	83.2	8.17	0.65	0.82	0.98
	3600	101.2	6.19	0.64	0.81	0.96	96.4	6.81	0.65	0.82	0.98	91.4	7.49	0.67	0.85	1	86.2	8.25	0.68	0.88	1
71°F	2400	99.2	6.15	0.44	0.56	0.68	94.8	6.77	0.44	0.57	0.69	90	7.45	0.45	0.58	0.71	84.9	8.21	0.45	0.59	0.73
	3000	103.9	6.26	0.45	0.59	0.73	99	6.87	0.46	0.6	0.75	93.9	7.56	0.46	0.62	0.77	88.4	8.3	0.47	0.63	0.79
	3600	107.2	6.34	0.47	0.63	0.78	102	6.95	0.48	0.64	0.8	96.8	7.64	0.48	0.66	0.82	91	8.39	0.49	0.67	0.85

**ELS090S4S + ELA120S4D - PART LOAD**

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		65°F					75°F					85°F					95°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)		
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb		
cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	
63°F	1600	63.7	2.76	0.71	0.84	0.96	60.9	3.23	0.72	0.86	0.98	57.7	3.75	0.74	0.88	1	54.3	4.33	0.76	0.9	1
	2000	67.6	2.75	0.76	0.9	1	64.4	3.22	0.77	0.92	1	61	3.74	0.79	0.95	1	57.5	4.32	0.81	0.98	1
	2400	70.6	2.75	0.8	0.96	1	67.2	3.22	0.82	0.99	1	64	3.74	0.84	1	1	60.7	4.31	0.87	1	1
67°F	1600	68.3	2.75	0.56	0.68	0.8	65.4	3.22	0.57	0.7	0.82	62.2	3.74	0.58	0.71	0.84	58.6	4.32	0.59	0.73	0.86
	2000	72.5	2.74	0.59	0.73	0.86	69.2	3.22	0.6	0.74	0.88	65.6	3.74	0.61	0.76	0.91	61.9	4.32	0.62	0.79	0.94
	2400	75.4	2.74	0.62	0.77	0.92	72	3.21	0.63	0.79	0.95	68.2	3.74	0.64	0.82	0.98	64.1	4.31	0.66	0.85	1
71°F	1600	73.1	2.74	0.43	0.55	0.65	69.9	3.21	0.44	0.55	0.67	66.5	3.74	0.44	0.56	0.68	62.8	4.31	0.44	0.57	0.7
	2000	77.3	2.74	0.43	0.57	0.69	74	3.21	0.45	0.59	0.71	70.2	3.73	0.45	0.59	0.73	66.3	4.31	0.45	0.61	0.76
	2400	80.4	2.74	0.45	0.61	0.74	76.8	3.21	0.46	0.62	0.76	73	3.73	0.47	0.63	0.79	68.9	4.31	0.47	0.65	0.81

**ELS090S4S + ELA120S4D - FULL LOAD**

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		85°F					95°F					105°F					115°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)		
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb		
cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	
63°F	2400	88.3	5.91	0.73	0.87	0.99	84.2	6.53	0.74	0.89	1	79.8	7.21	0.76	0.91	1	75.2	7.96	0.78	0.94	1
	3000	92.9	6.02	0.78	0.94	1	88.6	6.64	0.8	0.96	1	83.8	7.32	0.82	0.98	1	79.4	8.08	0.85	1	1
	3600	96.5	6.11	0.83	1	1	92.2	6.74	0.85	1	1	88.1	7.43	0.88	1	1	83.6	8.2	0.91	1	1
67°F	2400	94.1	6.05	0.58	0.7	0.83	89.7	6.67	0.59	0.72	0.85	85.2	7.36	0.59	0.73	0.87	80.4	8.11	0.61	0.75	0.9
	3000	98.9	6.16	0.61	0.75	0.9	94.3	6.78	0.62	0.78	0.92	89.2	7.45	0.63	0.79	0.95	84	8.21	0.65	0.82	0.98
	3600	102.3	6.25	0.64	0.81	0.97	97.3	6.86	0.65	0.83	0.99	92.2	7.54	0.66	0.85	1	86.6	8.29	0.69	0.88	1
71°F	2400	100.3	6.2	0.44	0.56	0.68	95.7	6.82	0.44	0.57	0.69	90.8	7.5	0.44	0.58	0.71	85.7	8.26	0.45	0.59	0.73
	3000	104.8	6.31	0.45	0.59	0.73	100.3	6.93	0.45	0.6	0.75	95.1	7.62	0.46	0.62	0.77	89.6	8.37	0.47	0.64	0.8
	3600	108.5	6.4	0.46	0.63	0.78	103.3	7.02	0.47	0.64	0.8	98	7.69	0.48	0.65	0.83	92.3	8.45	0.49	0.67	0.86



**RATINGS**

**ONE OUTDOOR UNIT + ONE INDOOR UNIT**

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

**ELS120S4S + ELA120S4D - PART LOAD**

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		65°F					75°F					85°F					95°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)		
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb		
cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	
63°F	2240	88.8	3.53	0.72	0.84	0.97	84.9	4.16	0.73	0.86	0.99	80.1	4.87	0.75	0.89	1	74.3	5.67	0.78	0.93	1
	2800	93.5	3.49	0.77	0.91	1	89.7	4.12	0.78	0.93	1	84.5	4.83	0.8	0.96	1	78.5	5.63	0.83	0.99	1
	3360	97	3.48	0.81	0.98	1	93.2	4.1	0.83	0.99	1	88.6	4.79	0.85	1	1	83.3	5.58	0.88	1	1
67°F	2240	94.5	3.49	0.57	0.69	0.81	90.5	4.11	0.58	0.7	0.83	85.7	4.81	0.59	0.72	0.85	80	5.61	0.6	0.75	0.88
	2800	99.1	3.46	0.6	0.74	0.88	95.5	4.08	0.61	0.76	0.9	90.5	4.79	0.61	0.78	0.92	84	5.58	0.64	0.8	0.96
	3360	102.5	3.44	0.63	0.79	0.95	99.1	4.06	0.64	0.81	0.96	93.7	4.76	0.65	0.82	0.99	87.2	5.54	0.67	0.85	1
71°F	2240	100.2	3.46	0.44	0.56	0.67	96.4	4.07	0.43	0.55	0.67	91.9	4.77	0.44	0.58	0.69	85.7	5.56	0.45	0.58	0.71
	2800	104.8	3.43	0.45	0.59	0.71	101.2	4.04	0.45	0.59	0.73	96.1	4.74	0.46	0.6	0.75	90	5.53	0.46	0.62	0.77
	3360	107.9	3.42	0.46	0.62	0.77	104.6	4.02	0.46	0.63	0.78	99.4	4.72	0.47	0.64	0.8	93.2	5.51	0.48	0.66	0.83

**ELS120S4S + ELA120S4D - FULL LOAD**

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		85°F					95°F					105°F					115°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)		
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb		
cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	
63°F	3200	112.6	7.39	0.73	0.87	0.99	107.1	8.19	0.74	0.88	1	101.5	9.15	0.76	0.91	1	94.6	10.21	0.78	0.94	1
	4000	118.1	7.46	0.78	0.93	1	112.4	8.27	0.8	0.96	1	106.1	9.22	0.82	0.98	1	99.6	10.31	0.85	1	1
	4800	122.5	7.53	0.83	0.99	1	116.9	8.35	0.85	1	1	111.1	9.3	0.88	1	1	104.6	10.4	0.91	1	1
67°F	3200	119.5	7.48	0.58	0.7	0.83	114.2	8.31	0.59	0.72	0.85	107.9	9.25	0.59	0.73	0.87	100.9	10.34	0.61	0.76	0.9
	4000	125.5	7.57	0.61	0.76	0.9	119.4	8.39	0.62	0.77	0.92	112.8	9.33	0.63	0.79	0.95	105.2	10.39	0.65	0.82	0.98
	4800	129.6	7.64	0.64	0.81	0.96	123.2	8.46	0.65	0.83	0.98	116.3	9.39	0.67	0.85	1	108.8	10.46	0.68	0.88	1
71°F	3200	127	7.59	0.44	0.56	0.68	121.3	8.42	0.45	0.57	0.69	114.9	9.37	0.45	0.58	0.71	107.7	10.43	0.45	0.6	0.74
	4000	133	7.69	0.45	0.59	0.73	126.9	8.52	0.46	0.6	0.75	119.8	9.45	0.46	0.62	0.77	112	10.52	0.47	0.64	0.8
	4800	137.1	7.75	0.47	0.63	0.79	130.8	8.57	0.47	0.64	0.8	123.6	9.51	0.48	0.66	0.83	115.3	10.58	0.49	0.68	0.86

**ELS120S4D + ELA120S4D - PART LOAD (1 Compressor Operating)**

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		65°F					75°F					85°F					95°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)		
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb		
cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	
63°F	2240	53.7	2.75	0.63	0.75	0.87	51.4	3.14	0.64	0.76	0.89	49	3.54	0.65	0.78	0.91	46.3	3.95	0.66	0.8	0.94
	2800	57.4	2.78	0.66	0.8	0.94	54.9	3.16	0.67	0.82	0.96	52.1	3.55	0.69	0.84	0.99	49.3	3.97	0.71	0.87	1
	3360	60.2	2.8	0.7	0.86	1	57.6	3.18	0.71	0.88	1	54.6	3.56	0.73	0.91	1	51.6	3.99	0.76	0.94	1
67°F	2240	57.6	2.78	0.51	0.61	0.7	55.2	3.16	0.52	0.62	0.72	52.7	3.55	0.52	0.63	0.74	49.9	3.97	0.53	0.64	0.76
	2800	61.6	2.8	0.53	0.64	0.76	58.9	3.19	0.53	0.65	0.78	56	3.57	0.54	0.66	0.8	53.1	4	0.55	0.68	0.82
	3360	64.5	2.82	0.55	0.67	0.81	61.7	3.2	0.55	0.68	0.84	58.7	3.59	0.56	0.7	0.86	55.5	4.01	0.57	0.72	0.89
71°F	2240	61.5	2.8	0.4	0.49	0.58	59.1	3.19	0.4	0.5	0.59	56.4	3.58	0.41	0.5	0.6	53.6	3.99	0.41	0.51	0.61
	2800	65.8	2.83	0.41	0.51	0.61	62.9	3.21	0.41	0.52	0.62	60.1	3.6	0.41	0.52	0.63	56.9	4.02	0.42	0.53	0.65
	3360	68.8	2.85	0.41	0.53	0.64	66	3.23	0.42	0.54	0.66	62.8	3.61	0.42	0.55	0.67	59.6	4.04	0.42	0.56	0.69

**ELS120S4D + ELA120S4D - FULL LOAD (2 Compressors Operating)**

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		85°F					95°F					105°F					115°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)		
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb		
cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	
63°F	3200	111.8	7.11	0.75	0.89	1	106	7.94	0.76	0.91	1	100	8.92	0.78	0.94	1	93.7	10.08	0.81	0.97	1
	4000	117.4	7.14	0.8	0.96	1	111.6	7.97	0.82	0.98	1	105.6	8.96	0.85	1	1	99.9	10.14	0.88	1	1
	4800	122.3	7.17	0.85	1	1	117	8.02	0.88	1	1	111.6	9.01	0.91	1	1	105.7	10.21	0.94	1	1
67°F	3200	119.7	7.15	0.59	0.72	0.85	113.7	8	0.6	0.74	0.87	107.6	8.97	0.61	0.76	0.9	101	10.14	0.62	0.78	0.93
	4000	125.4	7.18	0.62	0.78	0.93	119.1	8.03	0.63	0.79	0.95	112.7	9.02	0.64	0.82	0.98	105.7	10.2	0.66	0.85	1
	4800	129.5	7.21	0.65	0.83	0.98	123.2	8.06	0.67	0.85	1	116.3	9.06	0.68	0.88	1	109.1	10.25	0.7	0.91	1
71°F	3200	127.4	7.19	0.45	0.57	0.69	121.5	8.05	0.45	0.58	0.71	115.3	9.04	0.45	0.59	0.73	108.6	10.24	0.46	0.6	0.75
	4000	133.6	7.24	0.45	0.6	0.75	127.4	8.09	0.46	0.62	0.77	120.8	9.1	0.47	0.63	0.79	113.8	10.31	0.47	0.65	0.81
	4800	138	7.27	0.46	0.64	0.8	131.7	8.13	0.48	0.65	0.82	124.6	9.14	0.48	0.67	0.85	117.5	10.35	0.49	0.69	0.88

**RATINGS**

**ONE OUTDOOR UNIT + ONE INDOOR UNIT**

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

**ELS150S4D + ELA150S4D - PART LOAD (1 Compressor Operating)**

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																							
		65°F						75°F						85°F						95°F					
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)						
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb						
cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F					
63°F	2800	68.9	3.17	0.67	0.77	0.88	66.2	3.62	0.68	0.79	0.89	63.3	4.11	0.69	0.8	0.91	60.3	4.67	0.7	0.82	0.93				
	3500	73.2	3.21	0.7	0.82	0.94	70.2	3.65	0.71	0.83	0.95	67	4.15	0.72	0.85	0.97	63.5	4.7	0.74	0.88	1				
	4200	76.3	3.23	0.73	0.87	0.99	73.1	3.68	0.75	0.89	1	69.7	4.17	0.76	0.91	1	66	4.73	0.78	0.93	1				
67°F	2800	73.2	3.21	0.54	0.64	0.74	70.3	3.65	0.55	0.65	0.75	67.3	4.14	0.55	0.66	0.76	64.1	4.71	0.56	0.67	0.78				
	3500	77.7	3.25	0.56	0.68	0.79	74.5	3.69	0.57	0.69	0.8	71.2	4.19	0.57	0.7	0.82	67.6	4.74	0.58	0.71	0.84				
	4200	81	3.28	0.58	0.71	0.84	77.7	3.72	0.59	0.72	0.85	73.9	4.21	0.6	0.74	0.87	70	4.77	0.61	0.75	0.9				
71°F	2800	77.5	3.25	0.43	0.53	0.62	74.5	3.69	0.43	0.53	0.63	71.4	4.19	0.43	0.53	0.63	67.9	4.74	0.43	0.54	0.65				
	3500	82.2	3.28	0.43	0.54	0.65	78.9	3.73	0.44	0.55	0.66	75.4	4.23	0.44	0.56	0.67	71.6	4.78	0.44	0.57	0.69				
	4200	85.6	3.32	0.44	0.56	0.68	82.1	3.77	0.45	0.57	0.7	78.4	4.26	0.45	0.58	0.71	74.2	4.82	0.45	0.59	0.73				

**ELS150S4D + ELA150S4D - FULL LOAD (2 Compressors Operating)**

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																							
		85°F						95°F						105°F						115°F					
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)						
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb						
cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F					
63°F	4000	138	8.32	0.75	0.9	1	131.1	9.44	0.77	0.92	1	123.5	10.75	0.79	0.95	1	115.4	12.26	0.82	0.98	1				
	5000	144.3	8.37	0.81	0.97	1	136.8	9.5	0.83	0.99	1	129.3	10.8	0.85	1	1	122	12.35	0.89	1	1				
	6000	149.6	8.43	0.86	1	1	142.9	9.57	0.89	1	1	135.6	10.87	0.91	1	1	127.7	12.38	0.95	1	1				
67°F	4000	146.8	8.4	0.59	0.73	0.86	139.3	9.52	0.6	0.74	0.88	131.5	10.82	0.61	0.76	0.91	122.6	12.33	0.63	0.79	0.94				
	5000	152.7	8.46	0.63	0.78	0.94	145	9.59	0.64	0.8	0.96	136.7	10.88	0.66	0.83	0.99	127.4	12.38	0.67	0.86	1				
	6000	157.4	8.51	0.66	0.84	0.99	149.1	9.63	0.67	0.87	1	140.2	10.92	0.69	0.89	1	130.6	12.42	0.72	0.93	1				
71°F	4000	155.2	8.49	0.44	0.58	0.7	147.6	9.6	0.45	0.59	0.72	139.4	10.9	0.45	0.6	0.74	130.4	12.41	0.46	0.61	0.77				
	5000	161.7	8.56	0.46	0.61	0.76	153.4	9.68	0.46	0.62	0.78	144.8	10.97	0.47	0.64	0.81	135.2	12.47	0.48	0.66	0.84				
	6000	166.3	8.61	0.47	0.65	0.82	157.7	9.73	0.48	0.67	0.84	148.6	11.02	0.49	0.68	0.87	138.6	12.52	0.5	0.71	0.91				

**ELS150S4D + ELA180S4D - PART LOAD (1 Compressor Operating)**

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																							
		65°F						75°F						85°F						95°F					
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)						
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb						
cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F					
63°F	2800	71	3.17	0.68	0.78	0.87	68.5	3.61	0.68	0.79	0.89	65.8	4.1	0.69	0.8	0.9	63.1	4.67	0.7	0.81	0.92				
	3500	75.5	3.21	0.71	0.82	0.93	72.8	3.65	0.72	0.83	0.95	69.7	4.14	0.72	0.85	0.96	66.6	4.7	0.74	0.86	0.98				
	4200	78.9	3.23	0.74	0.86	0.98	75.8	3.68	0.75	0.88	0.99	72.7	4.17	0.76	0.9	1	69.3	4.73	0.77	0.92	1				
67°F	2800	74.9	3.2	0.55	0.65	0.75	72.3	3.65	0.56	0.66	0.75	69.5	4.13	0.56	0.67	0.77	66.5	4.7	0.57	0.67	0.78				
	3500	79.8	3.24	0.57	0.68	0.79	76.9	3.69	0.57	0.69	0.8	73.7	4.18	0.58	0.7	0.81	70.4	4.73	0.58	0.71	0.83				
	4200	83.3	3.27	0.58	0.71	0.83	80.2	3.72	0.59	0.72	0.85	76.8	4.21	0.6	0.74	0.86	73.2	4.77	0.61	0.75	0.88				
71°F	2800	78.8	3.23	0.43	0.53	0.62	76	3.68	0.43	0.54	0.63	73.1	4.17	0.44	0.54	0.64	70.1	4.73	0.44	0.55	0.65				
	3500	83.8	3.28	0.43	0.55	0.65	80.9	3.72	0.43	0.55	0.66	77.5	4.21	0.45	0.56	0.67	74.2	4.78	0.43	0.57	0.69				
	4200	88	3.32	0.45	0.56	0.69	84.3	3.76	0.45	0.58	0.7	80.9	4.26	0.44	0.58	0.71	77.1	4.81	0.44	0.59	0.73				

**ELS150S4D + ELA180S4D - FULL LOAD (2 Compressors Operating)**

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																							
		85°F						95°F						105°F						115°F					
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)						
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb						
cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F					
63°F	4000	138.6	8.34	0.75	0.88	1	132.1	9.48	0.76	0.9	1	125.1	10.77	0.78	0.93	1	117.5	12.31	0.8	0.95	1				
	5000	144.9	8.41	0.8	0.95	1	137.8	9.53	0.82	0.97	1	130.7	10.83	0.84	0.99	1	123.1	12.36	0.86	1	1				
	6000	149.8	8.47	0.85	1	1	143.1	9.6	0.87	1	1	136.2	10.89	0.89	1	1	128.7	12.42	0.92	1	1				
67°F	4000	146.7	8.43	0.59	0.73	0.85	139.8	9.55	0.6	0.74	0.87	132.5	10.86	0.61	0.76	0.9	124.6	12.39	0.62	0.78	0.92				
	5000	153.3	8.5	0.62	0.78	0.92	145.7	9.62	0.63	0.8	0.94	138.1	10.92	0.65	0.82	0.97	129.5	12.43	0.66	0.84	0.99				
	6000	158	8.55	0.65	0.83	0.98	150	9.67	0.67	0.85	1	141.9	10.98	0.68	0.87	1	132.7	12.47	0.7	0.9	1				
71°F	4000	154.4	8.51	0.45	0.58	0.7	147.3	9.64	0.46	0.59	0.72	139.8	10.94	0.45	0.6	0.73	131.6	12.47	0.46	0.61	0.76				
	5000	161.5	8.59	0.46	0.61	0.75	153.8	9.72	0.46	0.62	0.77	145.7	11.01	0.46	0.63	0.8	136.7	12.52	0.46	0.65	0.82				
	6000	166.4	8.65	0.47	0.64	0.81	158.1	9.77	0.46	0.66	0.83	149.6	11.07	0.47	0.67	0.85	140	12.56	0.49	0.7	0.88				

**RATINGS**

**ONE OUTDOOR UNIT + ONE INDOOR UNIT**

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

**ELS180S4D + ELA180S4D - PART LOAD (1 Compressor Operating)**

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		65°F					75°F					85°F					95°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)		
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb		
cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	
63°F	3200	85.9	4.62	0.65	0.75	0.84	82.6	5.16	0.66	0.76	0.85	79	5.74	0.67	0.77	0.86	75.2	6.44	0.68	0.78	0.88
	4000	92.1	4.69	0.67	0.78	0.88	88.4	5.22	0.68	0.79	0.9	84.5	5.82	0.69	0.81	0.92	80.1	6.48	0.7	0.83	0.94
	4800	96.9	4.75	0.7	0.82	0.93	92.7	5.28	0.71	0.83	0.95	88.5	5.87	0.72	0.85	0.97	83.9	6.53	0.74	0.87	0.99
67°F	3200	91	4.68	0.54	0.63	0.71	87.5	5.2	0.54	0.63	0.72	83.7	5.81	0.54	0.64	0.73	79.8	6.47	0.55	0.65	0.75
	4000	97.5	4.75	0.55	0.65	0.75	93.7	5.28	0.55	0.66	0.76	89.5	5.87	0.56	0.67	0.77	85.1	6.55	0.56	0.68	0.79
	4800	102.3	4.82	0.56	0.67	0.78	98.5	5.35	0.57	0.68	0.8	93.9	5.93	0.57	0.7	0.82	89	6.6	0.58	0.71	0.84
71°F	3200	96	4.75	0.43	0.51	0.6	92.3	5.27	0.43	0.52	0.6	88.5	5.87	0.43	0.52	0.61	84.3	6.54	0.43	0.53	0.62
	4000	102.6	4.83	0.42	0.53	0.62	98.9	5.35	0.43	0.53	0.63	94.6	5.95	0.44	0.54	0.64	89.9	6.6	0.44	0.55	0.65
	4800	107.8	4.9	0.44	0.55	0.65	103.8	5.42	0.44	0.55	0.66	99.3	6	0.44	0.56	0.67	94.2	6.67	0.44	0.57	0.68

**ELS180S4D + ELA180S4D - FULL LOAD (2 Compressors Operating)**

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		85°F					95°F					105°F					115°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)		
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb		
cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	
63°F	4800	178.4	11.62	0.72	0.85	0.97	169.1	12.96	0.74	0.87	0.99	159.4	14.5	0.75	0.9	1	148.6	16.33	0.78	0.93	1
	6000	187.5	11.71	0.76	0.91	1	177.3	13.05	0.78	0.94	1	166.9	14.58	0.81	0.97	1	155.5	16.36	0.83	0.99	1
	7200	194.1	11.79	0.81	0.97	1	183.6	13.1	0.83	0.99	1	173	14.65	0.86	1	1	162.8	16.46	0.89	1	1
67°F	4800	189.3	11.75	0.57	0.7	0.81	179.6	13.08	0.58	0.71	0.84	169.6	14.62	0.59	0.73	0.86	158.6	16.39	0.61	0.75	0.89
	6000	199	11.85	0.6	0.74	0.88	188.6	13.16	0.61	0.76	0.9	177.6	14.7	0.62	0.78	0.93	165.6	16.47	0.64	0.81	0.96
	7200	205.9	11.93	0.63	0.78	0.94	194.8	13.25	0.64	0.81	0.96	183.3	14.78	0.65	0.83	0.99	170.7	16.55	0.67	0.87	1
71°F	4800	199.8	11.87	0.44	0.56	0.67	190	13.19	0.44	0.57	0.68	179.5	14.75	0.45	0.58	0.7	168.3	16.52	0.45	0.59	0.72
	6000	210.2	11.98	0.45	0.58	0.72	199.3	13.3	0.45	0.6	0.73	188.2	14.82	0.46	0.61	0.76	175.9	16.59	0.47	0.63	0.78
	7200	217.4	12.07	0.46	0.61	0.76	206.3	13.38	0.47	0.63	0.78	194.3	14.91	0.47	0.64	0.81	181.6	16.68	0.48	0.66	0.84

**ELS180S4D + ELA240S4D - PART LOAD (1 Compressor Operating)**

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		65°F					75°F					85°F					95°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)		
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb		
cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	
63°F	3200	91.2	4.54	0.64	0.73	0.82	88.4	5.04	0.64	0.74	0.83	85.4	5.62	0.65	0.75	0.85	82	6.29	0.65	0.76	0.86
	4000	97.6	4.61	0.66	0.77	0.88	94.3	5.13	0.67	0.78	0.89	90.9	5.7	0.68	0.79	0.91	87	6.34	0.68	0.8	0.92
	4800	102.1	4.67	0.69	0.81	0.93	98.6	5.17	0.7	0.82	0.94	95	5.74	0.7	0.83	0.97	90.8	6.38	0.72	0.85	0.98
67°F	3200	96.6	4.6	0.52	0.61	0.7	93.8	5.12	0.53	0.61	0.7	90.5	5.68	0.53	0.62	0.71	86.8	6.33	0.53	0.63	0.72
	4000	103.2	4.69	0.53	0.63	0.73	100	5.19	0.54	0.64	0.74	96.6	5.77	0.54	0.65	0.76	92.4	6.4	0.55	0.66	0.77
	4800	108.2	4.75	0.55	0.66	0.77	104.7	5.26	0.55	0.67	0.78	100.6	5.81	0.56	0.68	0.8	96.4	6.45	0.56	0.69	0.81
71°F	3200	102.1	4.67	0.42	0.5	0.58	99	5.17	0.42	0.5	0.59	95.6	5.74	0.42	0.51	0.59	91.9	6.4	0.42	0.51	0.6
	4000	108.9	4.76	0.42	0.51	0.61	105.5	5.26	0.42	0.52	0.62	101.7	5.83	0.42	0.52	0.62	97.7	6.48	0.42	0.53	0.63
	4800	114.1	4.83	0.42	0.53	0.64	110.3	5.33	0.42	0.54	0.64	106.3	5.89	0.43	0.54	0.65	101.7	6.53	0.43	0.55	0.66

**(2) ELS180S4S + ELA240S4D - FULL LOAD (2 Compressors Operating)**

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		85°F					95°F					105°F					115°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)		
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb		
cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	
63°F	4800	190.8	11.24	0.71	0.84	0.97	182.5	12.5	0.72	0.85	0.99	173.3	13.98	0.73	0.88	1	163.7	15.71	0.75	0.9	1
	6000	199.8	11.36	0.75	0.9	1	190.8	12.62	0.77	0.93	1	181.5	14.09	0.79	0.96	1	171.3	15.77	0.81	0.98	1
	7200	206.6	11.43	0.8	0.97	1	197.7	12.7	0.82	0.99	1	187.8	14.15	0.85	1	1	178.3	15.85	0.87	1	1
67°F	4800	202.2	11.37	0.57	0.68	0.8	193.6	12.63	0.57	0.7	0.82	184.2	14.1	0.58	0.71	0.84	174.4	15.82	0.59	0.73	0.87
	6000	211.8	11.51	0.59	0.73	0.87	202.8	12.77	0.6	0.75	0.89	192.9	14.21	0.61	0.77	0.92	181.5	15.9	0.62	0.79	0.95
	7200	219	11.6	0.62	0.78	0.94	209.4	12.85	0.63	0.8	0.96	198.8	14.29	0.65	0.82	0.99	186.8	15.94	0.66	0.84	1
71°F	4800	213.8	11.53	0.43	0.55	0.66	204.7	12.78	0.43	0.55	0.67	194.9	14.23	0.44	0.56	0.69	184.5	15.95	0.44	0.57	0.7
	6000	223.8	11.65	0.44	0.58	0.7	214	12.91	0.45	0.59	0.72	203.7	14.35	0.44	0.6	0.74	192.2	16.04	0.45	0.61	0.76
	7200	231	11.75	0.45	0.6	0.76	220.9	13.01	0.46	0.62	0.78	210.1	14.46	0.46	0.64	0.8	198.2	16.12	0.47	0.65	0.82

**RATINGS**

**ONE OUTDOOR UNIT + ONE INDOOR UNIT**

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

**ELS240S4D + ELA240S4D - PART LOAD (1 Compressor Operating)**

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																							
		65°F						75°F						85°F						95°F					
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)						
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb						
cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F					
63°F	4500	112.5	6.19	0.67	0.78	0.88	108.6	6.88	0.68	0.78	0.89	104.5	7.69	0.69	0.8	0.91	100.2	8.61	0.69	0.81	0.93				
	5500	119.2	6.25	0.7	0.82	0.93	115	6.94	0.71	0.83	0.95	110.6	7.73	0.71	0.84	0.96	105.9	8.68	0.73	0.86	0.99				
	6500	124.2	6.3	0.73	0.85	0.98	119.8	6.98	0.73	0.87	0.99	115.1	7.8	0.75	0.89	1	110.1	8.73	0.77	0.91	1				
67°F	4500	119.8	6.26	0.55	0.64	0.74	116	6.95	0.55	0.65	0.75	111.6	7.75	0.55	0.66	0.76	107.1	8.69	0.56	0.67	0.77				
	5500	127.3	6.34	0.55	0.67	0.78	122.5	7.02	0.56	0.68	0.79	117.8	7.81	0.56	0.69	0.8	112.9	8.74	0.57	0.7	0.83				
	6500	132.3	6.39	0.57	0.7	0.82	127.6	7.06	0.57	0.7	0.83	123	7.89	0.58	0.72	0.85	117.4	8.81	0.6	0.74	0.87				
71°F	4500	129	6.35	0.42	0.51	0.62	123.6	7.04	0.43	0.53	0.62	118.8	7.83	0.42	0.53	0.63	113.7	8.75	0.44	0.54	0.64				
	5500	135.7	6.44	0.42	0.54	0.64	131.2	7.13	0.42	0.54	0.65	126.2	7.93	0.42	0.54	0.66	120.1	8.81	0.43	0.55	0.67				
	6500	140.6	6.49	0.43	0.55	0.66	135.6	7.17	0.43	0.56	0.68	130.5	7.97	0.43	0.56	0.7	125	8.9	0.43	0.58	0.71				

**ELS240S4D + ELA240S4D - FULL LOAD (2 Compressors Operating)**

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																							
		85°F						95°F						105°F						115°F					
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)						
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb						
cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F					
63°F	6400	229	14.16	0.75	0.89	1	218.1	15.71	0.76	0.91	1	206.9	17.47	0.78	0.93	1	194.3	19.48	0.8	0.96	1				
	8000	239.5	14.31	0.79	0.96	1	228.1	15.86	0.81	0.98	1	216	17.62	0.84	1	1	204.2	19.64	0.86	1	1				
	9600	247.9	14.45	0.84	1	1	236.9	16	0.87	1	1	226.5	17.8	0.89	1	1	214.3	19.81	0.93	1	1				
67°F	6400	244.1	14.39	0.59	0.72	0.85	232.6	15.93	0.59	0.73	0.87	220.3	17.67	0.61	0.75	0.89	207.3	19.68	0.62	0.77	0.92				
	8000	254.8	14.55	0.62	0.77	0.92	242.6	16.09	0.63	0.79	0.94	229.3	17.83	0.64	0.81	0.97	215.7	19.83	0.66	0.84	1				
	9600	262.4	14.68	0.64	0.82	0.98	250	16.21	0.66	0.85	1	236.4	17.95	0.68	0.87	1	221.5	19.94	0.7	0.9	1				
71°F	6400	257.9	14.61	0.43	0.57	0.69	246.5	16.16	0.45	0.58	0.71	234	17.93	0.45	0.59	0.72	220.6	19.93	0.46	0.6	0.75				
	8000	269.4	14.79	0.45	0.6	0.74	256.9	16.33	0.45	0.61	0.76	243.5	18.08	0.46	0.63	0.78	228.9	20.07	0.46	0.64	0.81				
	9600	277.7	14.93	0.45	0.63	0.8	264.5	16.45	0.46	0.65	0.82	250.1	18.2	0.47	0.66	0.85	235.3	20.18	0.47	0.69	0.88				

**RATINGS**

**TWO OUTDOOR UNIT + ONE INDOOR UNIT**

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

**(2) ELS090S4S + ELA180S4D - PART LOAD (1 Compressor Operating)**

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		65°F					75°F					85°F					95°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)		
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb		
cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	
63°F	4800	147.3	5.51	0.79	0.94	1	141.5	6.45	0.8	0.96	1	135.1	7.5	0.82	0.98	1	128.1	8.65	0.84	0.99	1
	6000	154.5	5.5	0.85	1	1	148.2	6.44	0.87	1	1	142.2	7.49	0.89	1	1	135.8	8.64	0.91	1	1
	7200	161.4	5.49	0.9	1	1	155.3	6.43	0.92	1	1	148.9	7.48	0.94	1	1	142.1	8.64	0.97	1	1
67°F	4800	157	5.5	0.61	0.76	0.91	150.3	6.44	0.62	0.78	0.92	143.6	7.49	0.63	0.8	0.94	136	8.64	0.65	0.82	0.97
	6000	163.8	5.49	0.65	0.82	0.97	156.6	6.43	0.66	0.84	0.99	149	7.48	0.67	0.86	1	141	8.64	0.69	0.89	1
	7200	168.5	5.49	0.68	0.88	1	160.9	6.43	0.7	0.9	1	153.3	7.47	0.71	0.92	1	145.2	8.64	0.73	0.94	1
71°F	4800	166.9	5.49	0.44	0.59	0.74	159.6	6.43	0.44	0.61	0.75	152.3	7.48	0.45	0.62	0.77	144.6	8.64	0.45	0.63	0.79
	6000	173.9	5.48	0.45	0.63	0.8	166.2	6.43	0.46	0.65	0.82	158.3	7.47	0.47	0.66	0.84	149.9	8.64	0.48	0.68	0.86
	7200	178.9	5.48	0.48	0.67	0.85	170.8	6.43	0.49	0.69	0.87	162.5	7.47	0.49	0.7	0.9	153.5	8.63	0.51	0.72	0.92

**(2) ELS090S4S + ELA180S4D - FULL LOAD (2 Compressors Operating)**

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		85°F					95°F					105°F					115°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)		
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb		
cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	
63°F	4800	171.4	11.64	0.73	0.86	0.97	163.7	12.88	0.75	0.88	0.99	155.5	14.24	0.76	0.9	1	146.5	15.74	0.78	0.92	1
	6000	179.8	11.83	0.78	0.92	1	171.6	13.06	0.79	0.94	1	162.8	14.43	0.81	0.96	1	153.5	15.93	0.83	0.98	1
	7200	186.2	11.98	0.82	0.97	1	177.5	13.21	0.84	0.99	1	168.7	14.58	0.86	1	1	159.8	16.11	0.88	1	1
67°F	4800	181.6	11.87	0.58	0.71	0.83	173.6	13.11	0.59	0.72	0.84	165	14.48	0.59	0.74	0.86	155.7	16	0.6	0.75	0.89
	6000	190.7	12.08	0.6	0.75	0.88	181.8	13.31	0.61	0.77	0.9	172.7	14.68	0.62	0.79	0.93	162.6	16.17	0.64	0.81	0.95
	7200	197	12.23	0.63	0.79	0.94	187.9	13.46	0.64	0.81	0.96	178.3	14.84	0.66	0.83	0.98	167.7	16.33	0.67	0.86	1
71°F	4800	192.1	12.11	0.43	0.56	0.68	183.4	13.36	0.44	0.57	0.7	175	14.75	0.43	0.58	0.71	165.7	16.28	0.45	0.59	0.73
	6000	202	12.34	0.44	0.59	0.73	193	13.59	0.44	0.6	0.74	183.2	14.96	0.44	0.61	0.76	172.5	16.45	0.45	0.63	0.78
	7200	208.5	12.49	0.44	0.62	0.77	198.9	13.73	0.45	0.63	0.79	188.8	15.1	0.46	0.64	0.81	177.8	16.61	0.47	0.66	0.84

**(2) ELS120S4S + ELA240S4D - PART LOAD (1 Compressor Operating)**

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		65°F					75°F					85°F					95°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)		
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb		
cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	
63°F	4500	178	6.88	0.7	0.83	0.97	169.9	8.1	0.71	0.85	0.99	159.7	9.47	0.73	0.88	1	148	10.98	0.76	0.91	1
	5500	186.1	6.83	0.74	0.9	1	177.7	8.04	0.75	0.92	1	167.6	9.41	0.78	0.95	1	155.6	10.94	0.81	0.99	1
	6500	192.2	6.79	0.79	0.96	1	184.2	8	0.8	0.98	1	173.6	9.36	0.82	1	1	163.2	10.88	0.86	1	1
67°F	4500	189.2	6.81	0.56	0.68	0.79	181.4	8.02	0.56	0.69	0.81	171.6	9.38	0.57	0.7	0.83	159.8	10.91	0.58	0.72	0.87
	5500	197.8	6.76	0.58	0.72	0.86	189.8	7.96	0.59	0.73	0.88	179.6	9.32	0.6	0.75	0.91	167.4	10.86	0.62	0.78	0.95
	6500	203.7	6.73	0.6	0.76	0.92	196.3	7.93	0.62	0.78	0.94	185.4	9.29	0.63	0.79	0.97	172.8	10.82	0.65	0.83	1
71°F	4500	199.8	6.75	0.42	0.54	0.65	192.7	7.94	0.42	0.55	0.66	182.7	9.3	0.43	0.55	0.67	171.4	10.82	0.43	0.57	0.7
	5500	208.5	6.71	0.44	0.57	0.7	201.4	7.89	0.43	0.57	0.71	191.4	9.25	0.44	0.59	0.72	179.5	10.78	0.44	0.6	0.75
	6500	214.7	6.68	0.44	0.59	0.74	208.4	7.86	0.44	0.61	0.75	198	9.21	0.45	0.62	0.77	185	10.74	0.45	0.63	0.8

**(2) ELS120S4S + ELA240S4D - FULL LOAD (2 Compressors Operating)**

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		85°F					95°F					105°F					115°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)		
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb		
cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	
63°F	6400	231.6	14.54	0.72	0.86	0.99	220.6	16.13	0.74	0.88	1	208	17.95	0.75	0.91	1	194.3	20.02	0.78	0.94	1
	8000	242.7	14.71	0.77	0.93	1	230.9	16.31	0.79	0.95	1	217.8	18.12	0.81	0.98	1	203.8	20.18	0.84	1	1
	9600	251.1	14.84	0.82	0.99	1	239.2	16.44	0.84	1	1	226.8	18.27	0.87	1	1	213.4	20.34	0.9	1	1
67°F	6400	246.2	14.76	0.58	0.7	0.82	235.2	16.37	0.58	0.71	0.84	221.6	18.17	0.59	0.73	0.87	208.1	20.25	0.61	0.75	0.9
	8000	257.4	14.94	0.6	0.75	0.89	246.2	16.56	0.61	0.77	0.92	231.9	18.38	0.62	0.79	0.95	216.9	20.43	0.65	0.82	0.98
	9600	266.7	15.09	0.63	0.8	0.96	253.1	16.68	0.64	0.82	0.99	238.9	18.49	0.66	0.85	1	222.8	20.53	0.68	0.88	1
71°F	6400	260.8	14.99	0.43	0.56	0.67	249	16.61	0.44	0.57	0.69	235.5	18.43	0.44	0.58	0.7	220.7	20.5	0.45	0.59	0.72
	8000	272.6	15.18	0.44	0.59	0.72	260.3	16.8	0.44	0.6	0.74	245.9	18.63	0.45	0.61	0.76	229.8	20.67	0.46	0.63	0.79
	9600	281.5	15.34	0.44	0.62	0.78	268.2	16.94	0.46	0.63	0.8	253.2	18.76	0.46	0.65	0.82	236.7	20.81	0.46	0.67	0.85

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## REVISIONS

Sections	Description of Change
Dimensions - Unit	Updated combined coil/hail guards on unit dimension drawings.



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