

# 4SCU13LE

## PRODUCT SPECIFICATIONS

## 13 SEER SPLIT SYSTEM AIR CONDITIONER

FORM NO. 4SCU13LE-100 (09/2019)



### COMPONENTS

- Filter drier shipped loose for installation flexibility
- Service valves positioned for quick installation with 45 degree gauge ports
- Indoor coil orifice shipped with outdoor unit for correct match
- Charged for 15 ft. of line set
- Factory installed high and low pressure switches
- Sealed contactor with lugs

### DESIGN

- Designed for ambients up to 125°F

### ACCESSORIES

- Low ambient control
- Thermal expansion valve kits
- Crankcase heater
- Hard start kit
- Sound blanket
- Loss of charge kit
- Time delay
- Short cycle protection
- Freezestat kit

### WARRANTY

10 year limited warranty on compressor, 10 year limited warranty on all parts, extended warranty available\*

*\*Warranty provides for a total of 10 years of limited warranty coverage (Standard 5-year limited parts warranty plus an additional 5-year limited extended parts warranty). Warranty must be registered online within 60 days of installation to qualify for 10-year coverage. Unregistered equipment defaults to 5-year coverage. See full warranty at [www.alliedair.com](http://www.alliedair.com) for terms, conditions and exclusions.*

### COMPRESSOR

- High-efficiency scroll compressor
- R410a refrigerant
- Grommet-mounted compressor for quiet operation
- Internally protected against high temperature motor overload conditions
- Heavy-duty compressor sound blanket for quiet operation (optional accessory)

### CABINET

- Full metal louvered panel with 2 screws to remove for ease of coil cleaning and service
- Corner-mounted controls for easy service
- Rounded corners for safety and attractive, clean appearance
- Baked polyester paint finished over galvanized steel for maximum durability
- Removable PVC-coated wire fan discharge grill
- External gauge ports for easy service

### COILS

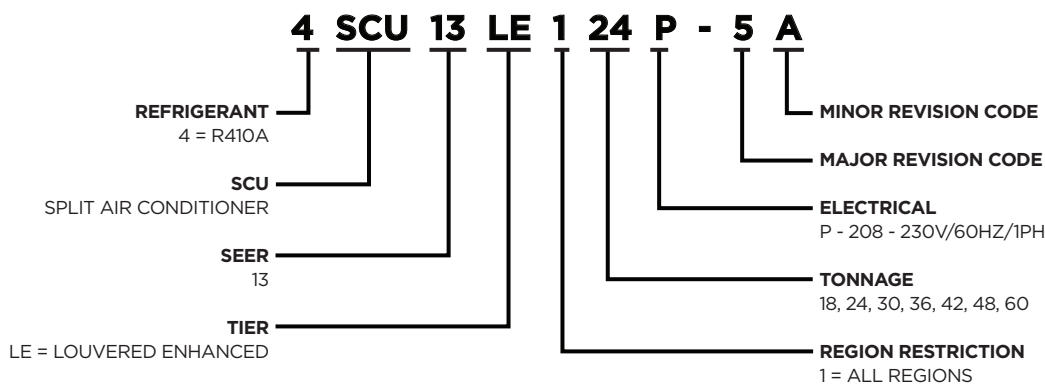
- Enhanced aluminum fins and copper tubing for high efficiency and capacity
- Raised coil prevents debris from collecting in bottom of coil and causing loss of airflow

#### **NOTE:**

For the latest ratings, please see [www.alliedratings.com](http://www.alliedratings.com) or [www.AHRIdirectory.org](http://www.AHRIdirectory.org)



**MODEL NUMBER GUIDE**

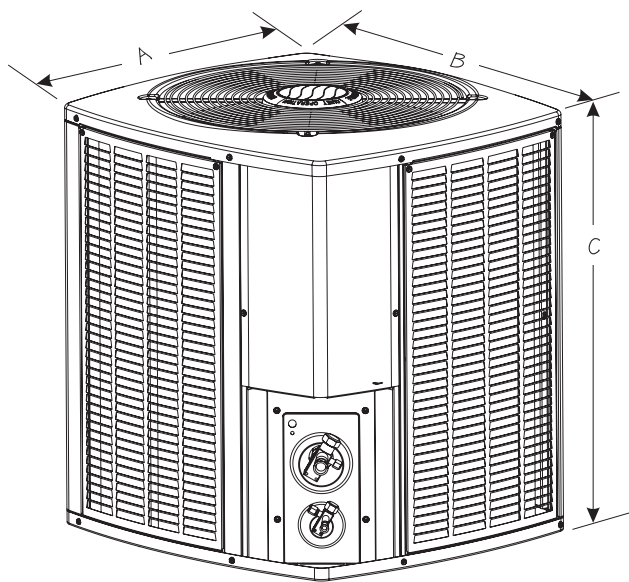


**PHYSICAL AND ELECTRICAL DATA**

Model	Voltage/Hz/ Phase	Voltage Range	Min. Circuit Amp.	Max. Over Current Device (amps)	Compressor		Fan Motor		
					Rated Load (amps)	Locked Rotor (amps)	Rated Load (amps)	Rated HP	Nom. RPM
4SCU13LE118P-5	208-230/60/1	197-253	10.9	15	8.1	39	0.7	1/10	1010
4SCU13LE124P-5	208-230/60/1	197-253	14.1	20	10.7	53	0.7	1/10	1010
4SCU13LE130P-5	208-230/60/1	197-253	15.6	25	11.6	59	1.1	1/5	1090
4SCU13LE136P-5	208-230/60/1	197-253	20.1	35	15.2	70	1.1	1/5	1090
4SCU13LE142P-5	208-230/60/1	197-253	28.1	45	21.1	90	1.7	1/4	825
4SCU13LE148P-5	208-230/60/1	197-253	31.9	50	24.1	100	1.7	1/4	825
4SCU13LE160P-5	208-230/60/1	197-253	29.4	50	22.1	125	1.7	1/4	830

**UNIT DIMENSIONS (IN.)**

Model No.	Dimensions			Shipping Weight (lbs.)
	A - width	B - depth	C - Height	
4SCU13LE118P-5	24.75	26.75	25.75	140
4SCU13LE124P-5	24.75	26.75	25.75	137
4SCU13LE130P-5	24.75	26.75	29.75	149
4SCU13LE136P-5	24.75	26.75	29.75	157
4SCU13LE142P-5	29.38	31.25	29.75	201
4SCU13LE148P-5	29.38	31.25	33.75	204
4SCU13LE160P-5	29.38	31.25	29.75	231



*Note:*  
Weights listed are unit weights with packaging  
Dimensions listed are unit sizes w/o packaging

## SOUND RATINGS

Model	Sound Power <sup>1</sup>	Estimated Sound Pressure (dBA) <sup>2</sup>		
		Approximate Distance <sup>3</sup>		
		3.3 Feet (1 Meter)	6.6 Feet (2 Meters)	9.8 Feet (3 Meters)
4SCU13LE118P-5	72	64	58	54
4SCU13LE124P-5	72	64	58	54
4SCU13LE130P-5	74	66	60	56
4SCU13LE136P-5	74	66	60	56
4SCU13LE142P-5	76	68	62	58
4SCU13LE148P-5	77	69	63	59
4SCU13LE160P-5	78	70	64	60

<sup>1</sup> Rated in accordance with AHRI standard 270 (2015). AHRI Standard 270 establishes a method of rating outdoor unitary equipment in terms of Sound Power.

<sup>2</sup> Rated in accordance with AHRI standard 275 (2010). AHRI Standard 275 provides the calculations for estimating the A-Weighted Sound Pressure at a given distance from the equipment. That is a more useful number because that is what humans will hear.

<sup>3</sup> Based only on distance factor; other factors may change this value such as:

- Unit location (reflective surfaces adjacent to the unit)
- Barrier shielding sources
- Sound path/elevation
- Outside noise sources

## ACCESSORIES

System Accessory	Where Used	Kit Number	Purpose
Liquid Line solenoid	All models	60M52	Prevents liquid migration to the compressor especially for high liquid riser applications
Low ambient (cooling operation)	All models	34M72	Enables cooling demand down to 30 °F. Will require freeze stat, CC heater and TXV
Compressor Short Cycle protector	All models	47J27	Delays compressor start 5-7 minutes to prevent short cycling
Hard Start	18	10J42	Scroll compressors usually do not require hard start; maybe needed for utility brown-out or low voltage areas
Hard Start	24 thru 60	88M91	
Crankcase Heater	18, 24, 30, 36	93M04	Prevents liquid migration to compressor in cold weather
Crankcase Heater	42, 48, 60	93M05	
Sound Cover	Factory Installed		Lowers compressor sound level
Loss of Charge Kit	Factory Installed		Protects the compressor if refrigerant charge is too low
Additional System Accessories (indoor section)			
TXV Kit	18, 24, 30	H4TXV01	TXVs provide superior refrigerant flow control, comfort and efficiency compared to pistons
	36, 42, 48	H4TXV02	
	60	H4TXV03	
Outdoor Thermostat - electric heat	All models	10Z23	Prevents electric heat operation above specific ambient conditions
Outdoor Thermostat - Mounting box	All models	31461	Mounting box for outdoor thermostat
Freeze stat	All models	93G35	Protects the compressor at low suction pressure conditions
Over flow switch	All models	11U75	Turn the system off, if condensate water overflows due to clogged drain pipes
Blower time delay	All models	58M81	Improves system efficiency and comfort
Single point power supply	All models	21H39	Provide single power source in one junction box
Auxiliary blower relay	All models	85W66	Maybe required to select multiple indoor blower speeds

**REFRIGERATION DATA**

Outdoor Model	Charge (oz) <sup>5</sup>	Refrigerant Connection				Refrigerant Line Size		Indoor Expansion Device	
		Outdoor		Indoor (DTC) <sup>6</sup>		Suction	Liquid	Piston	TXV <sup>1</sup>
		Suction	Liquid	Suction	Liquid				
4SCU13LE118P-5	62	5/8	3/8	3/4	3/8	5/8 or 3/4 <sup>3</sup>	3/8 or 1/4 <sup>2</sup>	0.053	H4TXV01
4SCU13LE124P-5	70	5/8	3/8	3/4	3/8	5/8 or 3/4 <sup>3</sup>	3/8 or 1/4 <sup>2</sup>	0.057	H4TXV01
4SCU13LE130P-5	82	3/4	3/8	3/4	3/8	3/4	3/8	0.063	H4TXV01
4SCU13LE136P-5	84	3/4	3/8	7/8	3/8	3/4	3/8	0.072	H4TXV02
4SCU13LE142P-5	104	3/4	3/8	7/8	3/8	3/4	3/8	0.074	H4TXV02
4SCU13LE148P-5	124	7/8	3/8	7/8	3/8	7/8	3/8	0.082	H4TXV02
4SCU13LE160P-5	144	7/8	3/8	7/8	3/8	7/8 or 1 1/8 <sup>4</sup>	3/8	0.090	H4TXV02

Note:  
<sup>1</sup> Required to achieve AHRI rating. If NA (Not Applicable) is in the piston column, then TXV is required.  
<sup>2</sup> Use 3/8 if over 24 feet of line set  
<sup>3</sup> Use 3/4 if over 24 feet of line set  
<sup>4</sup> Use 1 1/8 if over 24 feet of line set. Adapter provided with OD unit  
<sup>5</sup> Charged for 15 ft of line set  
<sup>6</sup> DTC = Designated Tested Combination

**COOLING PERFORMANCE WITH DTC<sup>1</sup>**

Outdoor Model	Indoor Model	Capacity (BTUH)	EER	SEER
4SCU13LE118P-5	E*1P24(A,B)+TDR	17600	11	13
4SCU13LE124P-5	E*1P24(A,B)+TDR	22800	11	13
4SCU13LE130P-5	E*1P24(A,B)+TDR	28000	10.5	13
4SCU13LE136P-5	E*1P36(B,C)+TDR	34000	10.5	13
4SCU13LE142P-5	E*1P43C+TDR	40000	10.5	13
4SCU13LE148P-5	E*1P49C+TDR	47000	11	13
4SCU13LE160P-5	E*1P49C+TDR	57000	10.5	13

<sup>1</sup> DTC = Designated Tested Combination

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**COOLING PERFORMANCE EXTENDED RATINGS**

Outdoor Model	Indoor Model	Indoor Temp DB/ WB °F	Outdoor Temp - DB°F														
			65°			82°			95°			105°			115°		
			Btuh	S/T	kW	Btuh	S/T	kW	Btuh	S/T	kW	Btuh	S/T	kW	Btuh	S/T	kW
4SCU13LE118P-5	E*1P24	85/72	23,500	0.63	1.27	21,200	0.65	1.52	20,700	0.68	1.66	18,500	0.70	1.83	18,000	0.73	2.00
		80/67	21,600	0.68	1.25	20,600	0.70	1.41	19,000	0.73	1.64	18,000	0.78	1.80	16,600	0.81	2.02
		75/63	20,200	0.74	1.26	18,500	0.76	1.35	17,000	0.80	1.64	15,100	0.83	1.80	14,200	0.88	1.99
		75/57	18,200	1.00	1.26	16,300	1.00	1.30	15,700	1.00	1.65	14,300	1.00	1.81	13,400	1.00	1.99
4SCU13LE124P-5	E*1P24	85/72	29,500	0.63	1.61	27,400	0.65	1.99	25,900	0.68	2.12	23,500	0.72	2.34	22,400	0.73	2.58
		80/67	27,200	0.70	1.59	25,300	0.72	1.95	23,600	0.76	2.10	20,500	0.79	2.31	19,600	0.83	2.54
		75/63	25,500	0.73	1.57	24,100	0.75	1.91	21,200	0.80	2.08	19,600	0.81	2.29	17,600	0.87	2.50
		75/57	22,800	1.00	1.56	21,600	1.00	1.89	19,200	1.00	2.06	18,400	1.00	2.28	16,600	1.00	2.50
4SCU13LE130P-5	E*1P24	85/72	35,100	0.62	1.96	33,100	0.65	2.41	31,000	0.67	2.57	28,400	0.69	3.00	26,800	0.72	3.17
		80/67	33,000	0.68	1.92	31,500	0.69	2.39	29,500	0.75	2.56	26,500	0.79	2.97	23,800	0.82	3.13
		75/63	31,000	0.71	1.90	29,100	0.73	2.31	26,200	0.77	2.51	24,300	0.82	2.95	21,900	0.84	3.09
		75/57	29,500	1.00	1.89	26,400	1.00	2.10	24,000	1.00	2.48	22,100	1.00	2.89	19,600	1.00	3.01
4SCU13LE136P-5	E*1P36	85/72	42,100	0.61	2.4	39,890	0.64	2.86	38,200	0.67	3.22	35,650	0.7	3.61	33,100	0.73	3.99
		80/67	39,900	0.68	2.38	37,010	0.73	2.85	34,800	0.76	3.21	32,150	0.79	3.58	29,500	0.81	3.95
		75/63	37,900	0.71	2.36	34,727	0.75	2.82	32,300	0.78	3.17	29,600	0.82	3.53	26,900	0.86	3.88
		75/57	35,800	1.00	2.33	32,570	1.00	2.77	30,100	1.00	3.11	27,150	1.00	3.47	24,200	1.00	3.82
4SCU13LE142P-5	E*1P43	85/72	52,200	0.61	2.97	49,100	0.63	3.56	46,900	0.65	3.91	44,800	0.69	4.62	41,300	0.7	4.79
		80/67	48,300	0.68	2.92	44,200	0.73	3.49	42,300	0.75	3.89	40,200	0.77	4.52	36,400	0.79	4.69
		75/63	45,100	0.72	2.88	41,600	0.72	3.35	39,200	0.77	3.80	37,100	0.81	4.49	32,400	0.83	4.59
		75/57	40,300	1.00	2.83	38,200	1.00	3.34	35,500	1.00	3.74	34,000	1.00	4.45	32,200	1.00	4.5
4SCU13LE148P-5	E*1P49	85/72	61,100	0.63	3.56	57,870	0.65	4.5	55,400	0.66	4.57	52,000	0.69	5.03	48,600	0.71	5.48
		80/67	56,800	0.69	3.49	53,230	0.71	4.06	50,500	0.73	4.50	46,800	0.76	4.95	43,100	0.79	5.39
		75/63	53,300	0.72	3.44	49,447	0.75	4.01	46,500	0.77	4.44	42,800	0.80	4.92	39,100	0.83	5.39
		75/57	47,000	1.00	3.39	43,713	1.00	3.95	41,200	1.00	4.38	38,500	1.00	4.85	35,800	1.00	5.31
4SCU13LE160P-5	E*1P49	85/72	69,800	0.61	4.02	66,457	0.63	4.75	63,900	0.64	5.30	59,950	0.67	5.87	56,000	0.69	6.44
		80/67	65,400	0.68	3.96	61,490	0.70	4.72	58,500	0.71	5.30	54,600	0.74	5.83	50,700	0.77	6.36
		75/63	61,400	0.71	3.90	56,923	0.73	4.59	53,500	0.75	5.12	49,650	0.78	5.70	45,800	0.81	6.27
		75/57	45,400	1.00	3.83	46,760	1.00	4.54	47,800	1.00	5.09	45,600	1.00	5.67	43,400	1.00	6.24



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All specifications and illustrations subject to change without notice and without incurring obligations.