

4AC13

PRODUCT SPECIFICATIONS

13 SEER SPLIT SYSTEM AIR CONDITIONER

FORM NO. 4AC13-100 (07/2021)



FEATURES

- R410a Refrigerant
- High-quality condenser coil with copper tubing and enhanced louvered fin for maximum heat transfer capacity
- Top discharge with fan orifice to direct hot air away from living area and shrubbery
- All units factory run tested
- Available with louvered panel or wire guard coil protection
- Easy access to electrical panels
- Corner mounted service valves for easy hook-up and service
- Liquid line filter drier shipped loose
- Charged for 15 feet of interconnecting tubing
- All units are ETL and ETLC approved and AHRI certified

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 for terms, conditions and exclusions.*

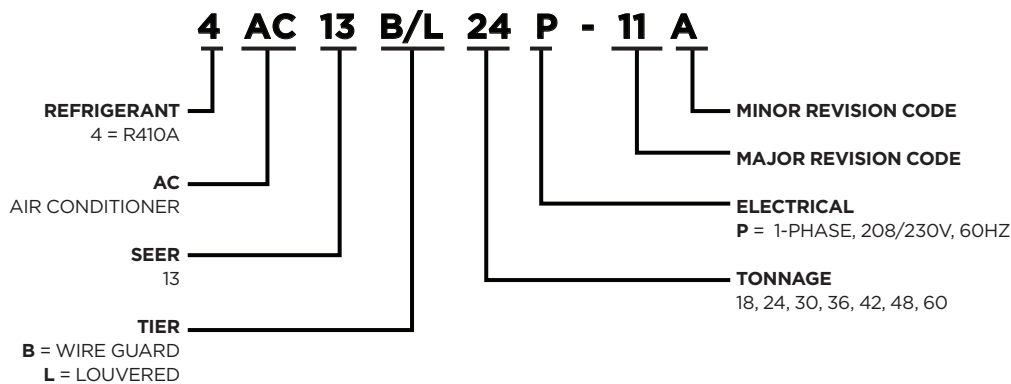


NOTE:

For the latest AHRI system matches please visit www.alliedratings.com or www.AHRIdirectory.org



MODEL NUMBER GUIDE



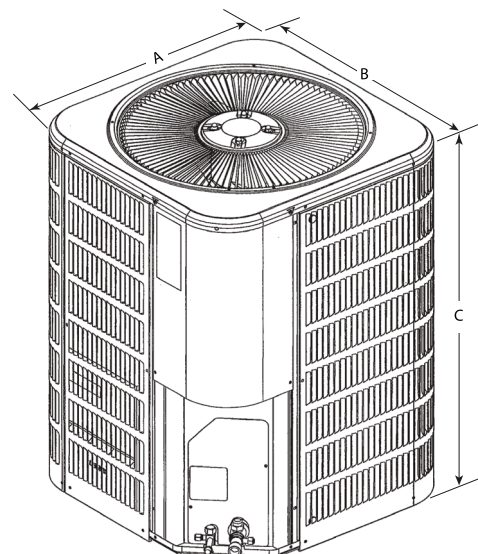
PHYSICAL AND ELECTRICAL DATA

Model	Voltage/Hz/Phase	Voltage Range	Min. Circuit Amp.	Max. Over Current Device (amps) [†]	Compressor		Outdoor Fan Motor		
					Rated Load (amps)	Locked Rotor (amps)	Rated Load (amps)	Rated HP	Nom. RPM
4AC13*18P-10	208-230/60/1	197-253	12.4	20	9.4	57	0.7	1/10	1010
4AC13*18P-11	208-230/60/1	197-253	12.4	20	9.4	57	0.7	1/10	1010
4AC13*24P-10	208-230/60/1	197-253	14.7	25	11.2	61	0.7	1/10	1010
4AC13*24P-11	208-230/60/1	197-253	14.7	25	11.2	61	0.7	1/10	1010
4AC13*30P-10	208-230/60/1	197-253	18.7	30	14.1	64	1.1	1/5	1090
4AC13*30P-11	208-230/60/1	197-253	17.1	25	12.8	68	1.1	1/5	1090
4AC13*36P-10	208-230/60/1	197-253	22.0	35	16.7	79	1.1	1/5	1090
4AC13*36P-11	208-230/60/1	197-253	20.4	35	15.4	84	1.1	1/5	1090
4AC13*42P-10	208-230/60/1	197-253	28.1	45	21.2	90	1.7	1/4	825
4AC13*42P-11	208-230/60/1	197-253	25.7	40	19.2	124	1.7	1/4	825
4AC13*48P-10	208-230/60/1	197-253	31.9	50	24.2	100	1.7	1/4	825
4AC13*48P-11	208-230/60/1	197-253	31.9	50	24.2	100	1.7	1/4	825
4AC13*60P-10	208-230/60/1	197-253	34.7	60	26.4	125	1.7	1/4	825
4AC13*60P-11	208-230/60/1	197-253	34.7	60	26.4	125	1.7	1/4	825

* = B or L B = Wire Guard L = Louvered
[†] Overcurrent protection device

UNIT DIMENSIONS (IN.)

Model	Dimensions (inch)			Weight (lbs.)	
	A - Width	B - Depth	C - Height	Wire Guard	Louvered
4AC13*18P-10/11	24.25	24.25	25	125	136
4AC13*24P-10/11	24.25	24.25	25	126	137
4AC13*30P-10/11	24.25	24.25	29	139	147
4AC13*36P-10/11	24.25	24.25	29	141	149
4AC13*42P-10/11	28.25	28.25	29	184	194
4AC13*48P-10/11	28.25	28.25	33	181	192
4AC13*60P-10/11	28.25	28.25	29	194	205



* = B or L B = Wire Guard L = Louvered
 Note: Dimensions listed are unit sizes w/o packaging

SOUND RATINGS

Model	Sound Power ¹	Estimated Sound Pressure (dBA) ²		
		Approximate Distance ³		
		3.3 Feet (1 Meter)	6.6 Feet (2 Meters)	9.8 Feet (3 Meters)
4AC13*18P-10/11	74	66	60	56
4AC13*24P-10/11	74	66	60	56
4AC13*30P-10/11	74	66	60	56
4AC13*36P-10/11	74	66	60	56
4AC13*42P-10/11	79	71	65	61
4AC13*48P-10/11	79	71	65	61
4AC13*60P-10/11	80	72	66	62

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

² 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.

³ 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	18, 24, 30, 36	14W00	Lowers compressor sound level
Sound Cover	42, 48, 60	14W01	
Loss of Charge Kit	All models	84M23	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

Note: All of the above accessories are field installed

REFRIGERATION DATA

Outdoor Model	Charge (oz) ⁶	Refrigerant Connection				Refrigerant Line Size		Indoor Expansion Device	
		Outdoor		Indoor (DTC) ⁷					
		Suction	Liquid	Suction	Liquid	Suction	Liquid	Piston	TXV ¹
4AC13*18P-10/11	65	5/8	3/8	3/4	3/8	5/8 or 3/4 ³	3/8 or 1/4 ²	0.053	H4TXV01
4AC13*24P-10/11	62	5/8	3/8	3/4	3/8	5/8 or 3/4 ³	3/8 or 1/4 ²	0.057	H4TXV01
4AC13*30P-10	82	3/4	3/8	3/4	3/8	3/4	3/8	0.063	H4TXV01
4AC13*30P-11	82	3/4	3/8	3/4	3/8	3/4	3/8	0.059	H4TXV01
4AC13*36P-10/11	84	3/4	3/8	7/8	3/8	3/4	3/8	0.072	H4TXV02
4AC13*42P-10/11	104	3/4	3/8	7/8	3/8	3/4 ⁵	3/8	0.074	H4TXV02
4AC13*48P-10/11	124	7/8	3/8	7/8	3/8	7/8	3/8	0.082	H4TXV02
4AC13*60P-10/11	144	7/8	3/8	7/8	3/8	7/8 or 1-1/8 ⁴	3/8	0.090	H4TXV02

Note:

¹ Required to achieve AHRI rating. If NA (Not Applicable) is in the piston column, then TXV is required.

² Use 3/8 if over 24 feet of line set

³ Use 3/4 if over 24 feet of line set

⁴ Use 1-1/8 if over 24 feet of line set. Adapter provided with OD unit

⁵ Use 7/8 if over 24 feet of line set

⁶ Charged for 15 ft of line set

⁷ DTC = Designated Tested Combination

COOLING PERFORMANCE WITH DTC¹

Outdoor Model	Indoor Model	Capacity (BTUH)	EER	SEER
4AC13*18P-10/11	E(C,M,U)1P24(A,B)+TDR	17600	11	13
4AC13*24P-10/11	E(C,M,U)1P24(A,B)+TDR	22800	11	13
4AC13*30P-10/11	E(C,M,U)1P24(A,B)+TDR	28000	10.7	13
4AC13*36P-10/11	E(C,H,M,U)1P36(B,C)+TDR	34000	10.5	13
4AC13*42P-10/11	E(C,H,M,U)1P43C+TDR	40000	10.7	13
4AC13*48P-10/11	E(C,H,U)1P49C+TDR	47000	11	13
4AC13*60P-10/11	E(C,H,U)1P49C+TDR	57000	10.7	13

¹ DTC = Designated Tested Combination

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COOLING PERFORMANCE EXTENDED RATINGS

Outdoor Model	Indoor Model Piston or Field Installed TXV	Indoor Temp DB/ WB °F	Outdoor Air Temperature Entering Outdoor Coil														
			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
4AC13*18P-10/11	E*1P19	85/72	19,900	0.67	1.49	19,000	0.71	1.61	18,500	0.74	1.71	17,400	0.76	1.78	16,300	0.77	1.38
		80/67	18,800	0.69	1.38	18,300	0.73	1.74	18,000	0.76	1.64	16,700	0.78	2.19	15,300	0.80	1.33
		75/63	17,400	0.74	1.33	16,900	0.78	1.47	16,700	0.81	1.58	15,500	0.83	1.65	14,200	0.85	1.28
		75/57	16,400	0.83	1.30	16,100	0.88	1.44	16,000	0.91	1.55	14,900	0.93	1.61	13,600	0.95	1.25
4AC13*24P-10/11	E*1P24	85/72	23,200	0.65	1.66	23,100	0.70	1.90	23,100	0.74	2.08	22,300	0.76	2.20	21,400	0.77	1.90
		80/67	22,900	0.69	1.65	23,000	0.73	2.03	23,000	0.76	2.06	21,700	0.79	2.51	20,300	0.81	1.69
		75/63	22,700	0.74	1.65	22,000	0.78	1.84	21,400	0.81	1.99	20,100	0.83	2.06	18,800	0.85	1.76
		75/57	22,300	0.83	1.64	21,500	0.88	1.82	20,800	0.91	1.95	19,500	0.93	2.02	18,200	0.95	1.72
4AC13*30P-10/11	E*1P29	85/72	31,900	0.66	2.14	30,700	0.70	2.46	29,700	0.73	2.72	27,900	0.75	2.81	26,200	0.76	3.02
		80/67	30,100	0.66	2.12	28,900	0.72	2.03	28,000	0.75	2.61	26,300	0.77	2.51	24,700	0.78	2.91
		75/63	27,900	0.79	2.11	26,800	0.80	2.34	25,900	0.80	2.51	24,300	0.82	2.60	22,800	0.84	2.80
		75/57	27,100	0.82	2.07	26,000	0.87	2.29	25,100	0.90	2.46	23,600	0.92	2.55	22,200	0.94	2.74
4AC13*36P-10/11	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
4AC13*42P-10/11	E*1P43	85/72	46,800	0.65	1.66	44,900	0.68	2.91	43,500	0.71	3.86	41,000	0.73	4.02	38,500	0.74	6.17
		80/67	44,500	0.67	1.65	42,500	0.7	2.03	41,000	0.73	3.73	39,600	0.75	2.51	38,200	0.77	6.13
		75/63	44,200	0.68	1.65	40,600	0.74	2.75	37,900	0.78	3.59	35,600	0.8	3.72	33,400	0.82	5.71
		75/57	40,800	0.71	1.64	38,600	0.80	2.70	36,800	0.87	3.51	34,600	0.89	3.64	32,400	0.91	5.60
4AC13*48P-10/11	E*1P49	85/72	61,100	0.63	3.56	57,870	0.65	4.50	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
4AC13*60P-10/11	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



1-800-448-5872

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