

4AC16LT

PRODUCT SPECIFICATIONS

16 SEER SPLIT SYSTEM AIR CONDITIONER

FORM NO. 4AC16LT-100 (10/2019)



DESIGN

- Designed for ambients up to 125°F
- All units are ETL and ETLC approved and AHRI listed
- Top discharge with fan orifice to direct hot air away from living area and shrubbery

COMPONENTS

- Service valves positioned for quick installation and easy service
- Thread-on pressure switches with Schrader core for simple, quick replacement
- Comfort Alert 2™ diagnostics is factory installed
- Trade available components
- Factory installed crank case heater
- Charged for 15 ft. of line set

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.*

COMPRESSOR

- High-efficiency 2 stage Copeland UltraTech™ 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 panels remove for easy coil cleaning and service
- Controls located in corner post for easy installation and service
- Rounded corners for safety and attractive, clean appearance
- Baked polyester paint finish over galvanized steel for maximum durability
- PVC-coated wire fan discharge grill
- External gauge ports for easy service

COILS

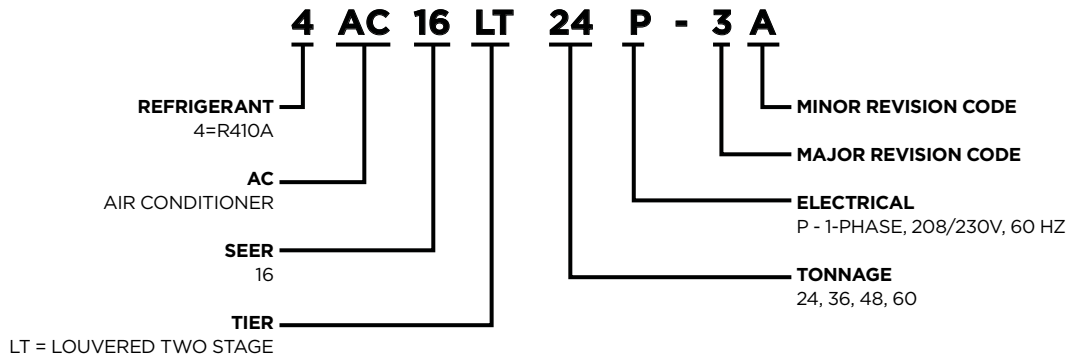
- Enhanced aluminum fins and copper tubing for higher efficiency and capacity
- Raised coil prevents debris from collecting in bottom of coil and causing loss of airflow

NOTE:

For the latest ratings, please see www.alliedratings.com or www.AHRIdirectory.org



MODEL NUMBER GUIDE



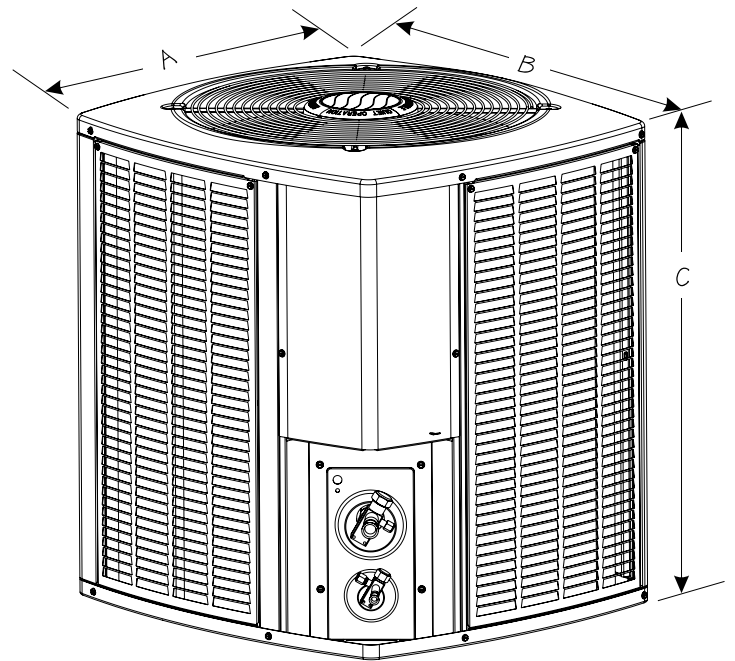
PHYSICAL AND ELECTRICAL

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
4AC16LT24P	230/60/1	197 - 253	13.9	20	11.4	52.0	1.1	1/5	1075
4AC16LT36P	230/60/1	197 - 253	21.9	35	19.0	82.0	1.1	1/6	825
4AC16LT48P	230/60/1	197 - 253	28.1	45	24.0	96.0	1.1	1/6	825
4AC16LT60P	230/60/1	197 - 253	33.8	55	26.0	118.0	1.7	1/4	825

Note: For applications below 230V, use of a Hard Start Kit is recommended

UNIT DIMENSIONS (IN.)

Model	Dimensions (inch)			Weight (lbs.)
	A - Width	B - Depth	C - Height	
4AC16LT24P	26.75	24.75	29.75	200
4AC16LT36P	31.25	29.375	29.75	230
4AC16LT48P	31.25	29.375	37.75	262
4AC16LT60P	31.25	29.375	43.75	310



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)
4AC16LT24P	74	66	60	56
4AC16LT36P	74	66	60	56
4AC16LT48P	76	68	62	58
4AC16LT60P	76	68	62	58

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	Usage
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
Crankcase Heater	All models	Factory Installed	Prevents liquid migration to compressor in cold weather
Sound Cover	All models	Factory Installed	Lowers compressor sound level
Hard Start	24	63W22	Scroll compressors usually do not require hard start; maybe needed for utility brown-out or low voltage areas
	36 & 48	10J42	
	60	63W24	
Loss of Charge Kit	All models	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, 41, 42, 47, 48	H4TXV02	
	59, 60	H4TXV03	
Outdoor Thermostat - electric heat	All models	10Z23 (56A87)	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
Overflow switch	All models	11U75	Turn the system off, if condensate water overflows due to clogged drain pipes
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) ¹	Refrigerant Connection				Refrigerant Line Size		Indoor Expansion Device	
		Outdoor		Indoor (DTC) ²					
		Suction	Liquid	Suction	Liquid	Suction	Liquid	Piston ⁴	TXV
4AC16LT24P	117	3/4	3/8	3/4	3/8	3/4	3/8	NA	H4TXV01
4AC16LT36P	137	7/8	3/8	7/8	3/8	7/8	3/8	NA	H4TXV02
4AC16LT48P	180	7/8	3/8	7/8	3/8	7/8	3/8	NA	H4TXV02
4AC16LT60P	214	7/8 ³	3/8	7/8	3/8	1 1/8 ³	3/8	NA	H4TXV03

Note:
 1 Charged for 15 ft of line set
 2 DTC = Designated Tested Combination
 3 Use 1 1/8 suction line; adapter provided with OD unit
 4 NA = Not Applicable. TXV is required

COOLING PERFORMANCE WITH DTC¹

Outdoor Model	Indoor Model Evaporator Coil or Air Handler ⁴	SEER	EER	AHRI Rated Capacity ² BTUH	Sensible Rated Capacity	CFM	Refrigerant Connection				Refrigerant Line Size		Indoor Expansion Device	
							Outdoor		Indoor		Suction	Liquid	Piston ³	TXV
							Suction	Liquid	Suction	Liquid				
4AC16LT24P	E(U,C,M,H)1P36A,B,C	14.00	11.50	24,000	18,000	800	3/4	3/8	3/4	3/8	3/4	3/8	NA	A4TXV01
4AC16LT36P	E(U,C,M,H)1P36A,B,C	14.00	11.00	34,400	25,800	1200	3/4	3/8	3/4	3/8	7/8	3/8	NA	A4TXV01
	E(U,C,M,H)1P43B,C	14.00	11.00	35,000	26,300	1200	3/4	3/8	3/4	3/8	7/8	3/8	NA	A4TXV01
4AC16LT48P	E(U,C)1P62C	14.00	11.00	46,500	34,900	1600	7/8	3/8	7/8	3/8	7/8	3/8	NA	A4TXV02
	E(U,C)1P62D	14.00	11.00	46,500	34,900	1600	7/8	3/8	7/8	3/8	7/8	3/8	NA	A4TXV02
	EH1P62C,D	14.00	11.00	46,500	34,900	1600	7/8	3/8	7/8	3/8	7/8	3/8	NA	A4TXV02
4AC16LT60P	E(U,C)1P62C	14.00	11.00	57,000	42,800	1800	7/8	3/8	7/8	3/8	1 1/8	3/8	NA	A4TXV02

* All matches must be with variable speed air systems - The furnace must be able to provide first and second stage air flows (or only run at high speed)

Note:
 1 DTC = Designated Tested Combination
 2 Certified in accordance with Unitary Air Conditioner Certification Program, which is based on AHRI Standard 210/240
 3 Required to achieve AHRI rating. If NA (Not Applicable) is in the piston column, then TXV is required
 4 A blower time delay relay is required to achieve AHRI rating. This feature is standard on all Allied Air Enterprises Furnace and AH products

NOTE:
 For the latest ratings, please see
www.alliedratings.com or www.AHRIdirectory.org

COOLING PERFORMANCE EXTENDED RATINGS

Outdoor Model	Indoor Model	Indoor Temp DB/WB °F	Outdoor Temp - DB°F														
			65°			82°			95°			105°			115°		
	Piston or Field Installed TXV		Btuh	S/T	kW	Btuh	S/T	kW	Btuh	S/T	kW	Btuh	S/T	kW	Btuh	S/T	kW
4AC16LT24P	E(U,C,M,H)1P 36B/ EFV08B	85/72	27,000	0.67	1.43	26,500	0.68	1.70	25,000	0.72	1.93	23,600	0.73	2.38	22,200	0.76	2.59
		80/67	26,000	0.70	1.40	25,500	0.71	1.67	24,000	0.75	1.90	22,600	0.76	2.35	21,200	0.79	2.56
		75/63	25,000	0.73	1.37	24,500	0.74	1.64	23,000	0.78	1.87	21,600	0.79	2.32	20,200	0.82	2.53
4AC16LT36P	E(U,C,M,H)1P 43B/ EFV12B	85/72	40,200	0.66	1.76	38,200	0.68	2.31	36,400	0.69	2.98	35,000	0.71	3.28	33,000	0.74	3.69
		80/67	39,200	0.69	1.73	37,200	0.71	2.28	35,400	0.72	2.95	34,000	0.74	3.25	32,000	0.77	3.66
		75/63	38,200	0.72	1.70	36,200	0.74	2.25	34,400	0.75	2.92	33,000	0.77	3.22	31,000	0.80	3.63
4AC16LT48P	E(U,C,M,H)1P 62C/ EFV16C	85/72	55,400	0.68	2.93	52,000	0.71	3.43	49,500	0.72	3.89	48,000	0.73	4.23	45,800	0.75	5.53
		80/67	53,400	0.71	2.90	50,000	0.74	3.40	47,500	0.75	0.39	46,000	0.76	4.20	43,800	0.78	5.50
		75/63	51,400	0.74	2.87	48,000	0.77	3.37	45,500	0.78	3.83	44,000	0.79	4.17	41,800	0.81	5.47
4AC16LT60P	E(U,C,M,H)1P 62D/ EFV20D	85/72	61,000	0.64	3.82	60,000	0.65	4.49	59,000	0.68	5.11	55,000	0.69	5.66	52,000	0.72	6.30
		80/67	59,000	0.67	3.79	58,000	0.68	4.46	57,000	0.71	5.08	53,000	0.72	5.63	50,000	0.75	6.27
		75/63	57,000	0.70	3.76	56,000	0.71	4.43	55,000	0.74	5.05	51,000	0.75	5.60	48,000	0.78	6.24



1-800-448-5872

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