



ENGINEERED SYSTEMS 4AC17L Split System Air Conditioner Up To 17 Seer Owner's Manual

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ENGINEERED SYSTEMS 4AC17L Split System Air Conditioner Up To 17 Seer



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COMPRESSOR

- High-efficiency scroll compressor
- R410A refrigerant
- Internally protected against high temperature motor overload conditions
- Heavy-duty compressor sound blanket for quiet operation (optional accessory)

CABINET

- Full metal louvered construction to protect the coil/hail protection
- Individual louver panels; 4 screws to remove for ease of coil cleaning and service
- Corner-mounted controls for easy service
- Baked polyester paint finished over galvanized steel for maximum durability
- 45-degree offset valves for easy service

COILS

- Omni guard TM total corrosion protection technology designed coil
- Enhanced tube-and-fin coil design featuring MHTTM Technology
- Lanced fins for maximum heat transfer
- Every coil factory tested for leakproof construction
- Raised coil prevents debris from impeding airflow

COMPONENTS

- Factory installed high and low pressure switches
- Thread-on pressure switches with Schrader core for simple, quick replacement
- Filter drier shipped loose for installation flexibility
- Fan orifice for smoother airflow and sound level reduction

- Charged for 15 feet of line set

WARRANTY

10 year limited warranty on compressor

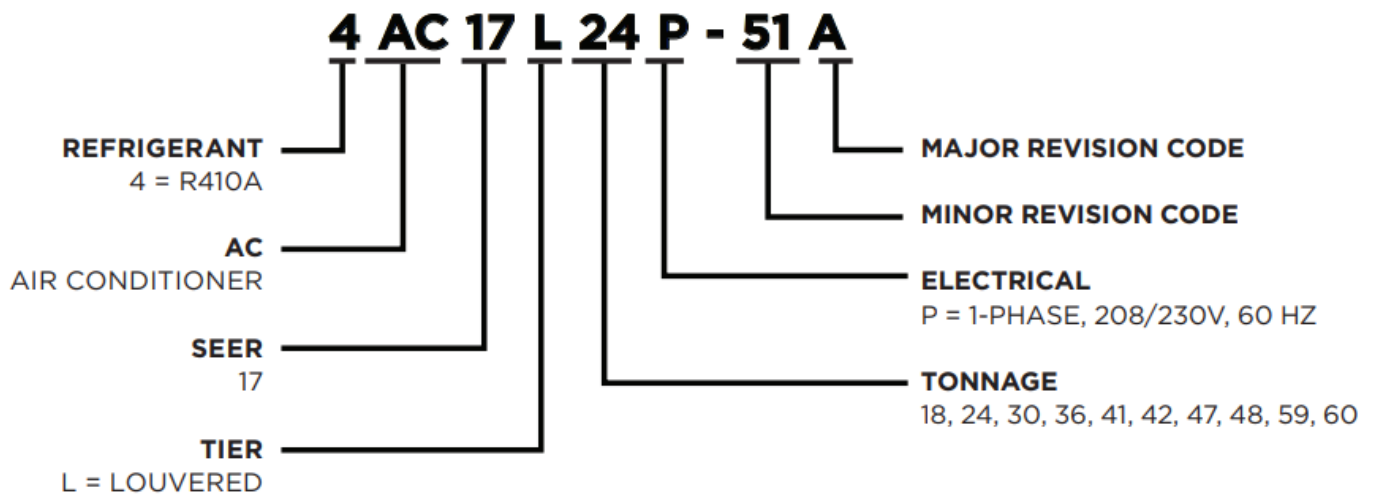
10 year limited warranty on all parts, extended warranty available*

*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.

NOTE:

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

MODEL NUMBER GUIDE

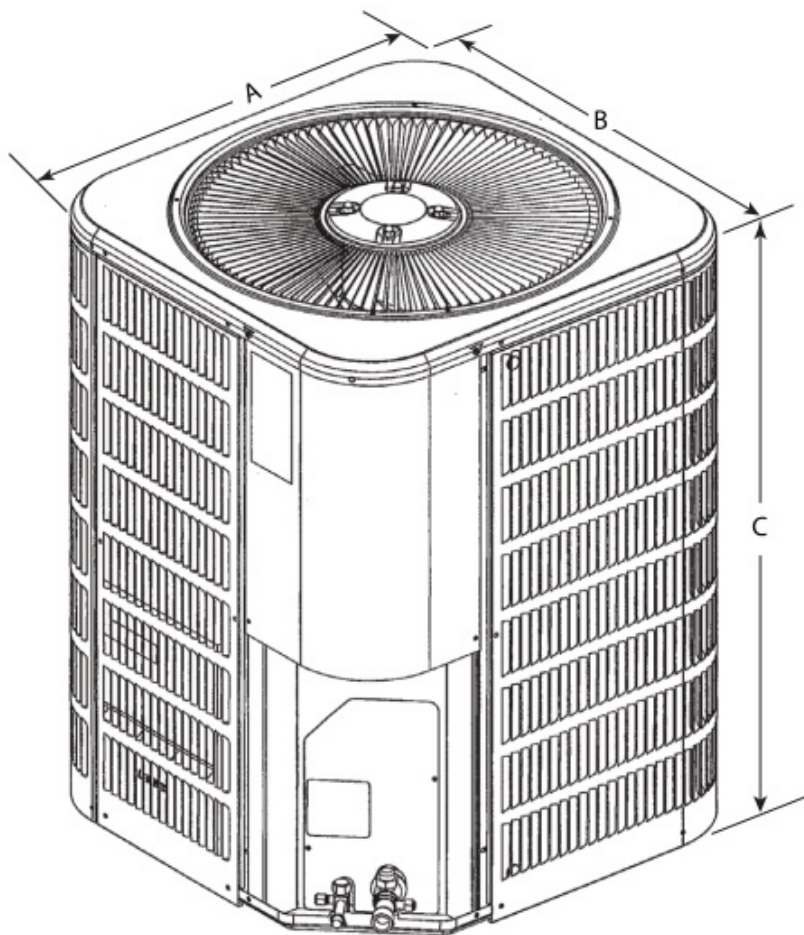


PHYSICAL AND ELECTRICAL DATA

| 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 |
| 4AC17L18P | 208-230/60/1 | 197-253 | 12.0 | 15 | 8.8 | 42.6 | 1.0 | 1/6 | 825 |
| 4AC17L24P | 208-230/60/1 | 197-253 | 15.4 | 20 | 11.7 | 59.5 | 0.7 | 1/8 | 1075 |
| 4AC17L30P | 208-230/60/1 | 197-253 | 18.4 | 25 | 14.1 | 71.3 | 0.7 | 1/8 | 1075 |
| 4AC17L36P | 208-230/60/1 | 197-253 | 17.4 | 30 | 13.1 | 83.1 | 1.0 | 1/6 | 825 |
| 4AC17L41P | 208-230/60/1 | 197-253 | 21.9 | 35 | 15.4 | 92.1 | 2.6 | 1/3 | 825 |
| 4AC17L42P | 208-230/60/1 | 197-253 | 24.6 | 35 | 18.6 | 110.0 | 1.4 | 1/4 | 825 |
| 4AC17L47P | 208-230/60/1 | 197-253 | 27.5 | 35 | 19.9 | 110.0 | 2.6 | 1/3 | 825 |
| 4AC17L48P | 208-230/60/1 | 197-253 | 33.0 | 50 | 25.0 | 120.0 | 1.7 | 1/4 | 825 |
| 4AC17L59P | 208-230/60/1 | 197-253 | 35.5 | 50 | 26.3 | 140.6 | 2.6 | 1/3 | 825 |
| 4AC17L60P | 208-230/60/1 | 197-253 | 31.3 | 50 | 23.9 | 124.5 | 1.4 | 1/4 | 825 |

UNIT DIMENSIONS (IN.)

| Model | Dimensions (inch) | | | Shipping Weight (Lbs.) |
|-----------|-------------------|-----------|------------|------------------------|
| | A – Width | B – Depth | C – Height | |
| 4AC17L18P | 28.25 | 28.25 | 29.25 | 155 |
| 4AC17L24P | 28.25 | 28.25 | 37.25 | 170 |
| 4AC17L30P | 28.25 | 28.25 | 29.25 | 180 |
| 4AC17L36P | 28.25 | 28.25 | 37.25 | 200 |
| 4AC17L41P | 32.25 | 32.25 | 33.25 | 225 |
| 4AC17L42P | 32.25 | 32.25 | 33.25 | 225 |
| 4AC17L47P | 32.25 | 32.25 | 33.25 | 225 |
| 4AC17L48P | 28.25 | 28.25 | 43.25 | 230 |
| 4AC17L59P | 32.25 | 32.25 | 43.25 | 260 |
| 4AC17L60P | 32.25 | 32.25 | 43.25 | 260 |



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) |
| 4AC17L18P | 73 | 65 | 59 | 55 |
| 4AC17L24P | 75 | 67 | 61 | 57 |
| 4AC17L30P | 76 | 68 | 62 | 58 |
| 4AC17L36P | 76 | 68 | 62 | 58 |
| 4AC17L41P | 75 | 67 | 61 | 57 |
| 4AC17L42P | 76 | 68 | 62 | 58 |
| 4AC17L47P | 76 | 68 | 62 | 58 |
| 4AC17L48P | 78 | 70 | 64 | 60 |
| 4AC17L59P | 78 | 70 | 64 | 60 |
| 4AC17L60P | 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 (2018). 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 Us ed | 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 | Copeland | 10J42 | Scroll compressors usually do not require hard start; maybe needed for utility brown-out or low voltage areas |
| | LG | 88M91 | |
| Crankcase Heater | 18, 24, 30, 36, 42 | 93M04 | Prevents liquid migration to compressor in cold weather |
| | 41, 47, 48, 59, 60 | Factory Installed | |
| Sound Cover | 18, 24, 30, 36, 41 | 14W00 | Lowers compressor sound level |
| | 42, 47, 48, 59, 60 | 14W01 | |
| Additional System Accessories (indoor section) | | | |
| | 18, 24, 30 | H4TXV01 | |
| | | | |

| | | | |
|------------------------------------|--------------------|---------|--|
| TXV Kit | 36, 41, 42, 47, 48 | H4TXV02 | TXVs provide superior refrigerant flow control, comfort and efficiency compared to pistons |
| | 59, 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 |
| Freezestat | 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 |
| 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

| Model | Refrig. Charge (oz.) * | Piston Size | TXV | Refrigerant Line Size | | Outdoor Unit Connection | | Indoor Unit Connection | |
|-----------|------------------------|-------------|----------|-----------------------|--------|-------------------------|--------|------------------------|--------|
| | | | | Suction | Liquid | Suction | Liquid | Suction | Liquid |
| 4AC17L18P | 72 | 0.051 | H4TXV 01 | 3/4 | 3/8 | 3/4 | 3/8 | 3/4 | 3/8 |
| 4AC17L24P | 82 | 0.059 | H4TXV 01 | 3/4 | 3/8 | 3/4 | 3/8 | 3/4 | 3/8 |
| 4AC17L30P | 104 | 0.067 | H4TXV 01 | 3/4 | 3/8 | 3/4 | 3/8 | 3/4 | 3/8 |
| 4AC17L36P | 136 | 0.072 | H4TXV 02 | 7/8 | 3/8 | 7/8 | 3/8 | 7/8 | 3/8 |
| 4AC17L41P | 140 | N/A | H4TXV 02 | 7/8 | 3/8 | 7/8 | 3/8 | 7/8 | 3/8 |
| 4AC17L42P | 146 | 0.081 | H4TXV 02 | 7/8 | 3/8 | 7/8 | 3/8 | 7/8 | 3/8 |
| 4AC17L47P | 157 | N/A | H4TXV 02 | 7/8 | 3/8 | 7/8 | 3/8 | 7/8 | 3/8 |
| 4AC17L48P | 152 | 0.084 | H4TXV 02 | 7/8 | 3/8 | 7/8 | 3/8 | 7/8 | 3/8 |
| 4AC17L59P | 190 | N/A | H4TXV 03 | 1-1/8 | 3/8 | 1-1/8 | 3/8 | 7/8 | 3/8 |
| 4AC17L60P | 200 | 0.092 | H4TXV 03 | 1-1/8 | 3/8 | 1-1/8 | 3/8 | 7/8 | 3/8 |

*Factory charged for 15 feet of line set

** Adapter shipped with unit

† TXV only

COOLING PERFORMANCE WITH DTC1

| Outdoor Model | Indoor Model | Capacity (BTU H) | EER2 | SEER2 |
|---------------|--------------|------------------|------|-------|
| 4AC17L18P | EAC4X24B | 17600 | 11.7 | 14.3 |
| 4AC17L24P | EAC4X30B | 23200 | 11.7 | 14.3 |
| 4AC17L30P | EAC4X30B | 28600 | 11.7 | 14.3 |
| 4AC17L36P | EAC4X36B | 34200 | 11.7 | 14.3 |
| 4AC17L41P | EAC4X49C | 40500 | 12.2 | 14.8 |
| 4AC17L42P | EAC4X49C | 41500 | 11.7 | 14.3 |
| 4AC17L47P | EAC4X60C | 45500 | 11.7 | 14.3 |
| 4AC17L48P | EAC4X60C | 47000 | 11.2 | 13.8 |
| 4AC17L59P | EAC4X60C | 55000 | 11.7 | 14.3 |
| 4AC17L60P | EAC4X60C | 57000 | 11.2 | 13.8 |

1 DTC = Designated Tested Combination

NOTE:

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

Customer Support

1-800-448-5872

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


FORM NO. 4AC17L-100 (05/2022)

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Documents / Resources

| | |
|---|---|
|  | <p>ENGINEERED SYSTEMS 4AC17L Split System Air Conditioner Up To 17 Seer [pdf] Owner's Manual</p> <p>4AC17L, Split System Air Conditioner Up To 17 Seer, 4AC17L Split System Air Conditioner Up To 17 Seer, 4AC17L Split System Air Conditioner, Split System Air Conditioner, Air Conditioner</p> |
|---|---|

References

- [AHRI directory.org](#)
- [Allied Air Enterprises | Premier Heating & Cooling Solutions](#)
- [alliedratings.com](#)