

ARUF SERIES MULTI-POSITION AIR HANDLER

THREE-SPEED, 1½- TO 5-TON UNITS

Standard Features

- Suitable for use with the refrigerant R-410A
- All-aluminum evaporator coil
- Check flowrate expansion device for cooling-only and heat pump applications
- Direct-drive, multi-speed motor
- Transformer and blower time-delay on all units
- AHRI Certified
- ETL Listed

Cabinet Features

- Rust-resistant, fully insulated steel cabinet
- Galvanized, leather grain-embossed finish
- Attractive Architectural Gray painted front panels
- Built-in coil has horizontal, vertical and downflow drain pans with secondary drain connections
- Built-in filter rack for 1" filter (filter not included)
- Power supply entry at top; low-voltage entry on left side and top



* Complete warranty details available from your local dealer or at www.amana-hac.com. To receive the 10-Year Parts Limited Warranty, online registration must be completed within 60 days of installation. Online registration is not required in California or Québec.

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NOMENCLATURE

| | A | R | U | F | 3642 | 1 | 6 | AA |
|-------------------------|--|---|---|---|---------|---|----|-------|
| | 1 | 2 | 3 | 4 | 5,6,7,8 | 9 | 10 | 11,12 |
| Brand | | | | | | | | |
| A | Single-piece Air Handler | | | | | | | |
| Unit Application | | | | | | | | |
| C | Ceiling Mount PSC Motor | | | | | | | |
| D | Downflow PSC Motor | | | | | | | |
| E | Multi-Position Variable-Speed Motor | | | | | | | |
| R | Multi-Position PSC Motor | | | | | | | |
| S | Multi-Position EEM Motor | | | | | | | |
| W | Wall Mount PSC Motor | | | | | | | |
| Cabinet Finish | | | | | | | | |
| U | Unpainted | | | | | | | |
| P | Painted | | | | | | | |
| N | Uncased | | | | | | | |
| Expansion Device | | | | | | | | |
| F | Flowrater | | | | | | | |
| T | Expansion Valve | | | | | | | |
| | Engineering * | | | | | | | |
| | Major/ Minor Revisions | | | | | | | |
| | * Not used for inventory management | | | | | | | |
| | Refrigerant Charge | | | | | | | |
| | No Digit = R-22 only | | | | | | | |
| | 6 = R-410A or R-22 | | | | | | | |
| | Electrical | | | | | | | |
| | 1 208/240 V, 1 Phase, 60 Hz | | | | | | | |
| | Nominal Capacity Range @ 13 SEER | | | | | | | |
| | Multi-Position & Downflow Applications | | | | | | | |
| | 1729 1½ to 2½ Tons (for Export Systems) | | | | | | | |
| | 1830 1½-3½ Tons | | | | | | | |
| | 3642 3-3½ Tons | | | | | | | |
| | Ceiling Mount & Wall Mount Applications | | | | | | | |
| | (Nominal Cooling Capacity/ Electric Heat kW) | | | | | | | |
| | 1805 1½ Tons Cooling/ 5 kW Electric Heat | | | | | | | |
| | 2405 2 Tons Cooling/ 5 kW Electric Heat | | | | | | | |
| | 3608 3 Tons Cooling/ 8 kW Electric Heat | | | | | | | |

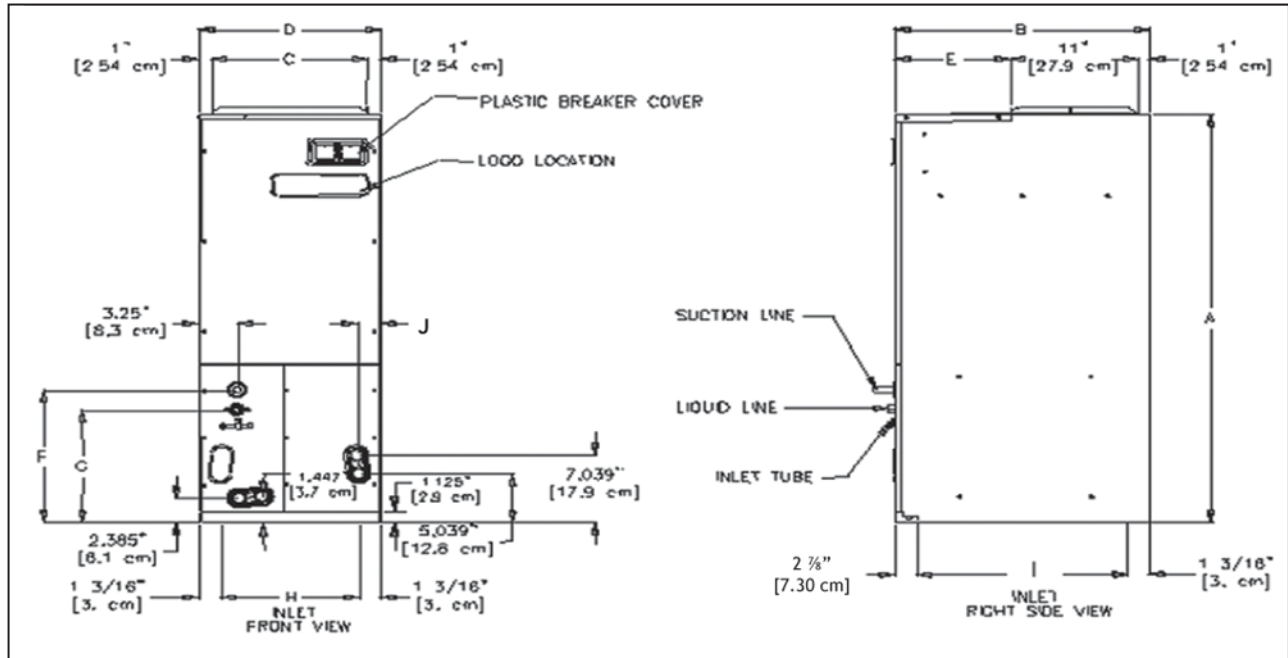


SPECIFICATIONS

| | ARUF 172916* | ARUF 182416* | ARUF 193116* | ARUF 303016* | ARUF 363616* |
|--------------------------------|-----------------|-----------------|-----------------|-------------------|-------------------|
| NOMINAL RATINGS | | | | | |
| Cooling (Btu/h) | 18,000 - 30,000 | 18,000 - 24,000 | 18,000 - 30,000 | 30,000 | 36,000 |
| CFM (High/ Med/ Low) | 1,025/ 790/ 570 | 1,025/ 790/ 570 | 1,025/ 780/ 545 | 1,330/ 1,239/ 980 | 1,230/ 1,140/ 955 |
| BLOWER | | | | | |
| Diameter | 9½" | 9½" | 9½" | 9½" | 9½" |
| Width | 6" | 6" | 6" | 8" | 6" |
| Coil Drain Connect FPT | ¾" | ¾" | ¾" | ¾" | ¾" |
| SERVICE VALVE | | | | | |
| Liquid | ⅜" | ⅜" | ⅜" | ⅜" | ⅜" |
| Suction | ¾" | ¾" | ⅞" | ¾" | ¾" |
| ELECTRICAL DATA | | | | | |
| Voltage | 208/240 | 208/240 | 208/240 | 208/240 | 208/240 |
| Min Circuit Ampacity | 2.1/2.1 | 2.1/2.1 | 1.9/1.9 | 3.3/3.3 | 3.3/3.3 |
| Max. Overcurrent Device (amps) | 15/15 | 15/15 | 15/15 | 15/15 | 15/15 |
| Min. / Max VAC | 197/ 253 | 197/ 253 | 197/ 253 | 197/ 253 | 197/ 253 |
| Blower Motor FLA/ HP | 1.7/ ⅓ | 1.7/ ⅓ | 1.48/ ¼ | 2.64/ ⅓ | 2.64/ ⅓ |
| SHIP WEIGHT (LBS) | 110 | 116 | 155 | 144 | 164 |

| | ARUF 364216* | ARUF 374316* | ARUF 486016* | ARUF 496116* |
|--------------------------------|--------------------|---------------------|---------------------|---------------------|
| NOMINAL RATINGS | | | | |
| Cooling (Btu/h) | 36,000 - 42,000 | 36,000 - 42,000 | 48,000 - 60,000 | 48,000 - 60,000 |
| CFM (High/ Med/ Low) | 1625 / 1400 / 1250 | 1,925/ 1,550/ 1,345 | 1,985/ 1,875/ 1,650 | 1,915/ 1,795/ 1,585 |
| BLOWER | | | | |
| Diameter | 10⅝" | 11 15/16" | 10⅝" | 10⅝" |
| Width | 8" | 10 11/16" | 10⅝" | 10⅝" |
| Coil Drain Connect FPT | ¾" | ¾" | ¾" | ¾" |
| SERVICE VALVE | | | | |
| Liquid | ⅜" | ⅜" | ⅜" | ⅜" |
| Suction | ⅞" | ⅞" | ⅞" | ⅞" |
| ELECTRICAL DATA | | | | |
| Voltage | 208/240 | 208/240 | 208/240 | 208/240 |
| Min Circuit Ampacity | 3.7/3.7 | 4.2/4.2 | 5.4/5.4 | 5.4/5.4 |
| Max. Overcurrent Device (amps) | 15/15 | 15/15 | 15/15 | 15/15 |
| Min. / Max VAC | 197/ 253 | 197/ 253 | 197/ 253 | 197/ 253 |
| Blower Motor FLA/ HP | 2.95/ ⅓ | 3.39/ ⅓ | 4.3/ ¼ | 4.3/ ¼ |
| SHIP WEIGHT (LBS) | 160 | 195 | 183 | 192 |

DIMENSIONS



| MODEL | A | B | C | D | E | F | G | H | I | J |
|-------------|----------------------------------|-----|----------------------------------|----------------------------------|-----|----------------------------------|------------------------------------|-----------------------------------|------------------------------------|---------------------------------|
| ARUF172916* | 42 ¹ / ₈ " | 22" | 13 ¹ / ₂ " | 15 ¹ / ₂ " | 10" | 14 ¹ / ₂ " | 11 ¹⁵ / ₁₆ " | 13 ³ / ₈ " | 17 ¹⁵ / ₁₆ " | 2" |
| ARUF182416* | 42 ¹ / ₈ " | 22" | 13 ¹ / ₂ " | 15 ¹ / ₂ " | 10" | 14 ¹ / ₂ " | 11 ¹⁵ / ₁₆ " | 13 ³ / ₈ " | 17 ¹⁵ / ₁₆ " | 2" |
| ARUF193116* | 46 ³ / ₄ " | 22" | 17 ¹ / ₂ " | 19 ¹ / ₂ " | 10" | 14 ¹ / ₂ " | 11 ¹⁵ / ₁₆ " | 17 ⁷ / ₈ " | 17 ¹⁵ / ₁₆ " | 2" |
| ARUF303016* | 46 ³ / ₄ " | 22" | 17 ¹ / ₂ " | 19 ¹ / ₂ " | 10" | 14 ¹ / ₂ " | 11 ¹⁵ / ₁₆ " | 17 ⁷ / ₈ " | 17 ¹⁵ / ₁₆ " | 2" |
| ARUF363616* | 46 ³ / ₄ " | 22" | 17 ¹ / ₂ " | 19 ¹ / ₂ " | 10" | 14 ¹ / ₂ " | 11 ¹⁵ / ₁₆ " | 17 ⁷ / ₈ " | 17 ¹⁵ / ₁₆ " | 1 ⁴ / ₅ " |
| ARUF364216* | 53 ³ / ₄ " | 24" | 20" | 22" | 12" | 14 ¹ / ₂ " | 11 ¹⁵ / ₁₆ " | 19 ⁹ / ₁₆ " | 19 ¹⁵ / ₁₆ " | 1 ⁴ / ₅ " |
| ARUF374316* | 53 ³ / ₄ " | 24" | 20" | 22" | 12" | 14 ¹ / ₂ " | 11 ¹⁵ / ₁₆ " | 19 ⁹ / ₁₆ " | 19 ¹⁵ / ₁₆ " | 1 ⁴ / ₅ " |
| ARUF486016* | 53 ³ / ₄ " | 24" | 20" | 22" | 12" | 14 ¹ / ₂ " | 11 ¹⁵ / ₁₆ " | 19 ⁹ / ₁₆ " | 19 ¹⁵ / ₁₆ " | 1 ⁴ / ₅ " |
| ARUF496116* | 53 ³ / ₄ " | 24" | 20" | 22" | 12" | 14 ¹ / ₂ " | 11 ¹⁵ / ₁₆ " | 19 ⁹ / ₁₆ " | 19 ¹⁵ / ₁₆ " | 1 ⁴ / ₅ " |
| ARUF496116* | 53 ³ / ₄ " | 24" | 20" | 22" | 12" | 14 ¹ / ₂ " | 11 ¹⁵ / ₁₆ " | 19 ⁹ / ₁₆ " | 19 ¹⁵ / ₁₆ " | 1 ⁴ / ₅ " |

AIRFLOW DATA

| MODEL | MOTOR SPEED | CFM DELIVERED AGAINST EXTERNAL STATIC PRESSURE | | | | |
|-------------|-------------|--|-------|-------|-------|-------|
| | | 0.1" | 0.2" | 0.3" | 0.4" | 0.5" |
| ARUF172916* | High | 1,155 | 1,090 | 1,025 | 950 | 895 |
| | Med | 940 | 890 | 860 | 815 | 755 |
| | Low | 695 | 665 | 650 | 610 | 550 |
| ARUF182416* | High | 1,155 | 1,090 | 1,025 | 950 | 895 |
| | Med | 940 | 890 | 860 | 815 | 755 |
| | Low | 695 | 665 | 650 | 610 | 550 |
| ARUF193116* | High | 1,135 | 1,085 | 1,025 | 965 | 915 |
| | Med | 860 | 825 | 780 | 750 | 680 |
| | Low | 600 | 570 | 545 | 500 | 465 |
| ARUF303016* | High | 1,385 | 1,315 | 1,240 | 1,155 | 1,065 |
| | Med | 1,340 | 1,290 | 1,230 | 1,140 | 1,050 |
| | Low | 1,075 | 1,030 | 980 | 910 | 840 |
| ARUF363616* | High | 1,310 | 1,240 | 1,155 | 1,090 | 1,020 |
| | Med | 1,270 | 1,210 | 1,140 | 1,075 | 980 |
| | Low | 1,045 | 1,005 | 955 | 885 | 805 |
| ARUF364216* | High | 1,700 | 1,660 | 1,625 | 1,545 | 1,505 |
| | Med | 1,500 | 1,440 | 1,400 | 1,350 | 1,345 |
| | Low | 1,300 | 1,300 | 1,250 | 1,230 | 1,220 |
| ARUF374316* | High | 2,065 | 2,000 | 1,925 | 1,860 | 1,780 |
| | Med | 1,685 | 1,635 | 1,550 | 1,470 | 1,410 |
| | Low | 1,490 | 1,425 | 1,345 | 1,280 | 1,205 |
| ARUF486016* | High | 2,150 | 2,120 | 2,070 | 2,000 | 1,940 |
| | Med | 1,940 | 1,930 | 1,905 | 1,860 | 1,790 |
| | Low | 1,610 | 1,600 | 1,590 | 1,575 | 1,550 |
| ARUF496116* | High | 2,150 | 2,105 | 2,040 | 1,970 | 1,880 |
| | Med | 1,960 | 1,935 | 1,895 | 1,825 | 1,750 |
| | Low | 1,670 | 1,625 | 1,585 | 1,525 | 1,455 |

Note: Assumes dry coil with filter in place; SCFM correction for wet coil = 4% (208V / 240V)

HEAT KIT APPLICATIONS

| | ARUF 172916* | ARUF 182416* | ARUF 193116* | ARUF 303016* | ARUF 363616* | ARUF 364216* | ARUF 374316* | ARUF 486016* | ARUF 496116* |
|-------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| HKR-03* | X | X | X | X | X | X | X | X | X |
| HKR-05*, HKR-05C* | X | X | X | X | X | X | X | X | X |
| HKR-06* | X | X | X | X | X | X | X | X | X |
| HKR-08*, HKR-08C* | X ¹ | X ¹ | X ¹ | X | X | X | X | X | X |
| HKR-10*, HKR-10C* | X ¹ | X ¹ | X ¹ | X ¹ | X | X | X | X | X |
| HKR-15C* | X ² | X ² | X ² | X ² | X ² | X ³ | X ³ | X | X |
| HKR-20C* | | | | X ² | | X ³ | X ³ | X | X |
| HKR-21C* | | | | X ² | | X ³ | X ³ | X | X |
| ^ HKR3-15* | | | | X ² | X ² | X ³ | X ³ | X | X |
| ^ HKR3-20* | | | | X ² | | X ³ | X ³ | X | X |

- * Revision level that may or may not be designated
- C Circuit breaker option
- ^ Heat kit requires three-phase power supply

- ¹ Air handler must either be on medium or high speed
- ² Air handler must be on high speed
- ³ For static pressure of 0.6 or higher, air handler must be on medium or high speed

SINGLE-POINT KIT **

| MODEL | HKR-15C | HKR-20C | HKR-21C |
|--------|---------|---------|---------|
| SPW-01 | X | X | X |

** Must be installed along with any of the above compatible heat kits. This kit will fit any ARUF air handler as long as a compatible heat kit is installed in the unit.

ACCESSORIES

EXPANSION VALVE KITS FOR AIR CONDITIONING AND HEAT PUMP APPLICATIONS

| KIT NUMBER | DESCRIPTION | APPLICATION | REFRIGERANT | TONNAGE: OUTDOOR UNIT |
|------------|-----------------|-------------|-------------|-----------------------|
| XVB18-36C | 20% Bleed Valve | AC Only | R-22 | 1½ - 3 Ton |
| XVB42-60C | 20% Bleed Valve | AC Only | R-22 | 3½ - 5 Ton |
| XV18-36C | Non-bleed Valve | AC Only | R-22 | 1½ - 3 Ton |
| XV42-60C | Non-bleed Valve | AC Only | R-22 | 3½ - 5 Ton |
| TX2N2 | Non-bleed Valve | AC or HP | R-22 | 1½ - 2 Ton |
| TX3N2 | Non-bleed Valve | AC or HP | R-22 | 2½ - 3 Ton |
| TX5N2 | Non-bleed Valve | AC or HP | R-22 | 3½ - 5 Ton |
| TX2N4 | Non-bleed Valve | AC or HP | R-410A | 1½ - 2 Ton |
| TX3N4 | Non-bleed Valve | AC or HP | R-410A | 2½ - 3 Ton |
| TX5N4 | Non-bleed Valve | AC or HP | R-410A | 3½ - 5 Ton |

DRAIN PAN INSULATION KIT FOR DOWNFLOW APPLICATIONS

| CHASSIS SIZE | INSULATION KIT |
|---------------|----------------|
| Small (15½") | DPI18-30/20 |
| Medium (19½") | DPI36-42/20 |
| Large (22") | DPI48-60/20 |

Note: Each kit contains enough material to modify 20 coils

FILTERS

| MODEL | FILTER # | QTY REQUIRED |
|------------|-----------|--------------|
| 1729/ 1824 | FIL 18-32 | 1 |
| 1931 | FIL-36-42 | 1 |
| 3030/ 3636 | FIL-36-42 | 1 |
| 3642/ 3743 | FIL 48-61 | 1 |
| 4860/4961 | FIL 48-61 | 1 |

