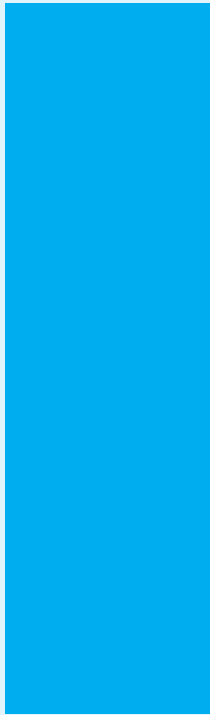
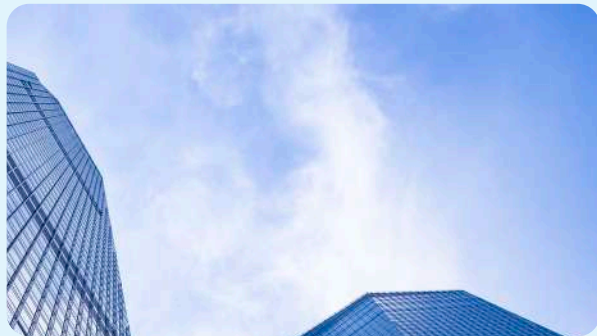




Air Cooled Screw Chiller / Heat Pump



Literature No.: CA-UAA/UAY-202001

Supersedes: CA-UAA/UAY-201901



Overview

Air-cooled screw chiller/heat pump units are the central air conditioning units with air as the cold (hot) source, and water as the heat transfer medium. The units need no additional equipment room, cooling tower, cooling pump, or cooling pipe and can be installed on the building roof and outdoors. The heat pump units can provide heat as a hot water boiler.

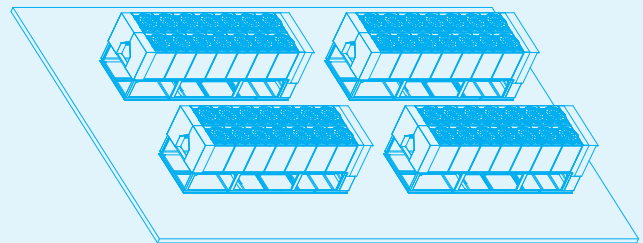
As the designer and manufacturer of large air-cooled heat pump units, DAIKIN has been committed to the technical improvement and innovation and leads the development of air-cooled heat pump technology. For the consideration of environment protection and energy-saving, DAIKIN applies the advanced technology for the latest ultra-efficient air-cooled heat pump units. Moreover, DAIKIN has built a large 1900kW full performance lab to ensure the quality and performance.

Outstanding Features

Widely applied to hotel, hospital, factory, public building, etc



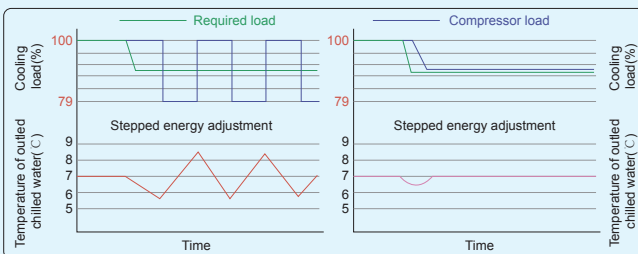
Easy installation, install outside & no need equipment room



Large capacity, single unit capacity up to 1600kW



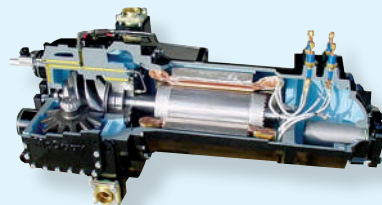
Stepless capacity modulation, automatically match the building demands, accurate water temperature control, accuracy $\pm 0.5^{\circ}\text{C}$, more comfortable



No need cooling tower, no need boiler, save water source and cost



Semi-hermetic structure, maintainable



Main Parts

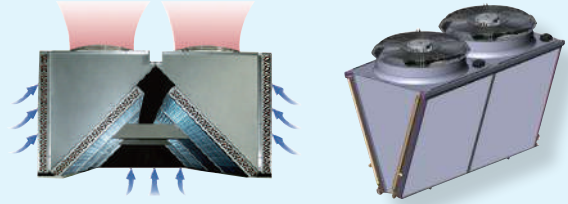
Compressor

- ◆ High efficiency single screw compressor
- ◆ Partial load COP is 25% higher than conventional screw compressor
- ◆ 10%-100% stepless capacity modulation



Condenser

- ◆ M-shape or V-shape for more even air distribution



Evaporator

- ◆ New high efficiency counter flow shell-and-tube evaporator
- ◆ Efficient internal thread heat exchange tubes
- ◆ Anti-freezing protection, equipped with electric heater



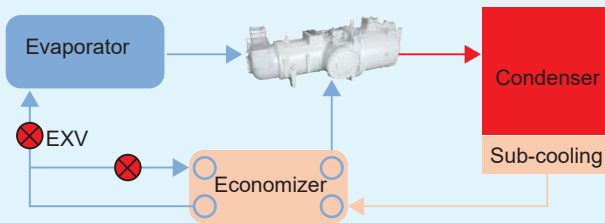
Electronic expansion valve

- ◆ Accurate control the refrigerant flow rate
- ◆ Capacity modulation up to 3810 steps



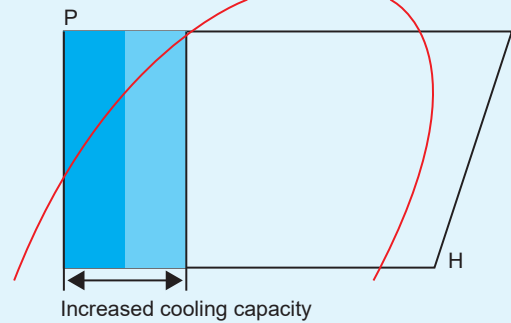
Economizer

- ◆ Enhancing the sub-cooling degree, much higher performance and efficiency



Pressure-enthalpy chart

■ 2-stg sub-cooling ■ 1-stg sub-cooling



PLC controller

- ◆ Automatically load/unload based on building load demand
- ◆ Common fault alarm display
- ◆ Water temperature control to an accuracy to $\pm 0.5^{\circ}\text{C}$
- ◆ Output load PID control
- ◆ Balancing the operating duration of each compressor
- ◆ Compressor load control



Multiple protections

- ◆ High/low pressure protection
- ◆ Fan overload protection
- ◆ High discharge temperature protection
- ◆ Compressor overload protection
- ◆ Low compression ratio protection
- ◆ High oil pressure difference protection
- ◆ Sensor failure protection
- ◆ Compressor startup failure protection
- ◆ Phase protection
- ◆ Evaporator anti-freezing protection
- ◆ Water flow protection



Intelligent Control

Remote monitoring (option)

- External controller can be installed in indoor control room by connecting with main controller, same function as built-in controller, realize remote control



BMS control (option)

- Controller can add Modbus, Lonworks, BACnet protocol gateway, so as to connect with central control or BAS, easy to achieve intelligent management

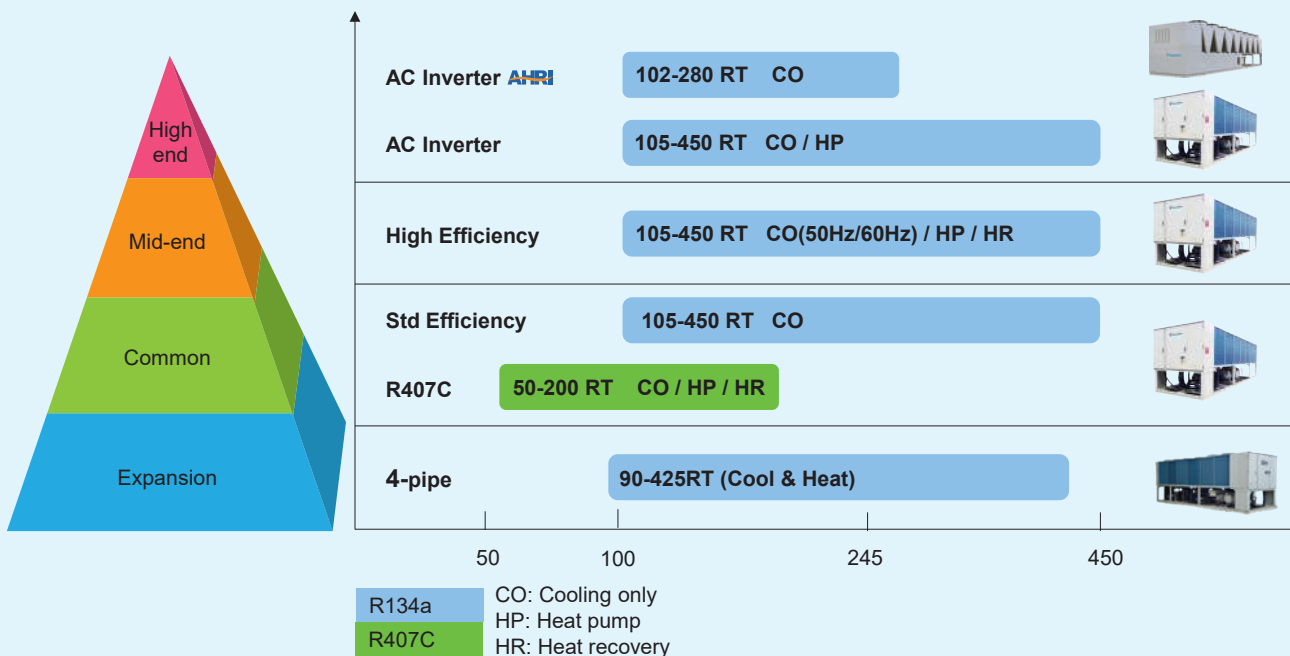


Other optional parts

- Sealed package - Protect the unit during transportation
- Coil guard - Protect the condenser
- Compressor box - Provide sound reduction without performance reduction
- Anti-corrosion condenser (Gold fin/Copper fins/E-coating(MCHE)) - Inhibit coil corrosion and extend equipment life
- FM certified insulation (entire unit) - Excellent flame retardancy insulation
- ASME certified evaporator - Provide evaporator certificated by ASME
- Evaporator water pipe connection at right side - This option provides evaporator water pipe at right side
- Double set-point - Provides special control logic to handle low temperature glycol applications
- Dry contact of unit/compressor run state - Indicate the running state of unit/compressor
- IP55 fan motor - IP55 protection grade motor
- Main electric isolator switch - Disconnect the power supply
- 3-phase 3-wire power supply - Power supply without Neutral line
- Ammeter/Voltmeter - Monitor unit current/voltage
- Spring shock absorber - Anti-vibration
- Harmonic filter - Reduces the levels of harmonic current drawn by VFD
- Touch screen remote controller - Realizes remote control, 7" touch screen

Note: Options are variable for different models, contact DAIKIN for any inquiry.

Product Lineup



Specification

R407C series

► Cooling only UAA-FST4 (Heat recovery for option)

| | | | | | | | | | | | |
|-----------------------------------|--|------|------|------|-------|-------|-------|-------|-------|-------|-------|
| Model UAA-FST4-FEAE | 50.1 | 60.1 | 70.1 | 80.1 | 100.1 | 120.1 | 135.1 | 150.1 | 170.1 | 185.1 | 200.1 |
| Nominal Cooling Cap. (kW) | 164 | 198 | 232 | 270 | 347 | 407 | 439 | 507 | 603 | 631 | 685 |
| Partial Heat Recovery Cap. (kW) | 41 | 49.5 | 58 | 67.5 | 86.8 | 101.8 | 109.8 | 126.8 | 150.8 | 157.8 | 171.3 |
| Total Power Input (C) (kW) | 60.1 | 72.9 | 85.7 | 98 | 123.8 | 143 | 149 | 177 | 212 | 204 | 230.7 |
| Cooling & HR Power Input (kW) | 58.1 | 70.9 | 82.7 | 95 | 119.8 | 138 | 144 | 171 | 204 | 197 | 221.7 |
| Power Supply | 380-400V/3N~/50Hz | | | | | | | | | | |
| Comp. Qty / Circuit Qty | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 |
| Evaporator / Condenser Type | DX Shell-and-tube / M-shape Crossed Fin and Tube | | | | | | | | | | |
| Heat Recovery side Heat Exchanger | BPHE | | | | | | | | | | |
| Unit Length (mm) | 2925 | | 3150 | | 4045 | | 4985 | | 5885 | | |
| Unit Width (mm) | 2260 | | | | | | | | | | |
| Unit Height (mm) | 2290 | | | | | | 2310 | | 2410 | | |

► Heat Pump UAY-FST4 (Heat recovery for option)

| | | | | | | | | | | | | |
|-----------------------------------|--|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Model UAY-FST4-FEAE | 50.1 | 60.1 | 70.1 | 80.1 | 90.1 | 100.1 | 120.1 | 135.1 | 150.1 | 170.1 | 185.1 | 200.1 |
| Nominal Cooling Cap. (kW) | 164 | 198 | 232 | 270 | 299 | 347 | 388 | 456 | 495 | 607 | 645 | 685 |
| Nominal Heating Cap. (kW) | 172 | 208 | 243 | 284 | 316 | 365 | 413 | 479 | 538 | 650 | 686 | 715 |
| Partial Heat Recovery Cap. (kW) | 41 | 49.5 | 58 | 67.5 | 74.8 | 86.8 | 97 | 114 | 123.8 | 151.8 | 161.3 | 171.3 |
| Total Power Input (C) (kW) | 60.1 | 72.9 | 85.7 | 98 | 101.3 | 123.8 | 134.1 | 159.1 | 166.9 | 203.5 | 223.4 | 230.7 |
| Total Power Input (H) (kW) | 63 | 76.8 | 89.6 | 102.8 | 104.7 | 128 | 140.4 | 155.5 | 171.1 | 222.2 | 227.8 | 239.7 |
| Cooling & HR Power Input (kW) | 58.1 | 70.9 | 82.7 | 95 | 98.3 | 119.8 | 130.1 | 154.1 | 161.9 | 197.5 | 216.4 | 222.7 |
| Power Supply | 380-400V/3N~/50Hz | | | | | | | | | | | |
| Comp. Qty / Circuit Qty | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 |
| Evaporator / Condenser Type | DX Shell-and-tube / M-shape Crossed Fin and Tube | | | | | | | | | | | |
| Heat Recovery side Heat Exchanger | BPHE | | | | | | | | | | | |
| Unit Length (mm) | 2925 | | 3150 | | 4045 | | 4985 | | 5885 | | | |
| Unit Width (mm) | 2260 | | | | | | | | | | | |
| Unit Height (mm) | 2290 | | | | | | 2310 | | 2410 | | | |

R134a standard efficiency UAA-ST3 series

| | | | | | | | | | |
|-----------------------------|--|------|------|------|------|------|------|------------------|------------------|
| Model UAA-ST3-FEAE | 105 | 125 | 140 | 150 | 175 | 204 | 220 | 245 (105+140) | 260 (105+150) |
| Nominal Cooling Cap. (kW) | 375 | 441 | 470 | 562 | 633 | 684 | 780 | 845 | 937 |
| Total Power Input (C) (kW) | 125 | 146 | 155 | 185 | 207 | 227 | 259 | 280 | 310 |
| Power Supply | 380-400V/3N~/50Hz | | | | | | | | |
| Comp. Qty / Circuit Qty | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 2/2 | 2/2 |
| Evaporator / Condenser Type | DX Shell-and-tube / M-shape Crossed Fin and Tube | | | | | | | | |
| Unit Length (mm) | 3580 | 4480 | 4480 | 4480 | 5380 | 5380 | 6280 | 9060 | 9060 |
| Unit Width (mm) | 2260 | | | | | | | | |
| Unit Height (mm) | 2440 | | | 2530 | | | 2440 | 2350 | |

| | | | | | | | | | |
|-----------------------------|--|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Model UAA-ST3-FEAE | 280 (125+150) | 300 (125+175) | 320 (150+150) | 340 (150+175) | 360 (175+175) | 375 (175+204) | 400 (175+220) | 420 (204+220) | 445 (220+220) |
| Nominal Cooling Cap. (kW) | 1003 | 1074 | 1124 | 1195 | 1266 | 1317 | 1413 | 1464 | 1560 |
| Total Power Input (C) (kW) | 331 | 353 | 371 | 393 | 414 | 434 | 466 | 486 | 518 |
| Power Supply | 380-400V/3N~/50Hz | | | | | | | | |
| Comp. Qty / Circuit Qty | 2/2 | 2/2 | 2/2 | 2/2 | 2/2 | 2/2 | 2/2 | 2/2 | 2/2 |
| Evaporator / Condenser Type | DX Shell-and-tube / M-shape Crossed Fin and Tube | | | | | | | | |
| Unit Length (mm) | 9960 | 10860 | 9960 | 10860 | 11760 | 11760 | 12660 | 12660 | 13560 |
| Unit Width (mm) | 2260 | | | | | | | | |
| Unit Height (mm) | 2350 | | | | | | | | |

Specification

R134a high efficiency UAA/UAY-ST3 series

► Cooling only UAA-ST3

| | | | | | | | | | | |
|-----------------------------|--|-------|-------|-------|-------|-------|-------|------|------------------|-------|
| Model UAA-ST3-FBBE | 105 | 125 | 140 | 150* | 175* | 204* | 220* | 245 | 266 (105+150) | 291 |
| Nominal Cooling Cap. (kW) | 370 | 449 | 505 | 586 | 663 | 717 | 802 | 898 | 956 | 1035 |
| Total Power Input (C) (kW) | 115.5 | 138.5 | 151.6 | 178.7 | 201.3 | 216.1 | 242.6 | 277 | 294.2 | 317.2 |
| Power Supply | 380-400V/3N~/50Hz | | | | | | | | | |
| Comp. Qty / Circuit Qty | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 2/2 | 2/2 | 2/2 |
| Evaporator / Condenser Type | DX Shell-and-tube / M-shape Crossed Fin and Tube | | | | | | | | | |
| Unit Length (mm) | 3530 | 4430 | 4430 | 5380 | 6280 | 6280 | 7180 | 8660 | 9310 | 9560 |
| Unit Width (mm) | 2260 | | | | | | | | | |
| Unit Height (mm) | 2425 | | | 2425 | 2425 | 2425 | 2425 | | | |

| | | | | | | | | | |
|-----------------------------|--|-------|------------------|-------|------------------|-------|------------------|------------------|-------|
| Model | 300 (125+175) | 348 | 355 (150+175) | 380** | 390 (175+204) | 400** | 415 (175+220) | 424 (204+220) | 450** |
| Nominal Cooling Cap. (kW) | 1112 | 1172 | 1249 | 1326 | 1380 | 1434 | 1465 | 1519 | 1604 |
| Total Power Input (C) (kW) | 339.8 | 357.4 | 380 | 402.6 | 417.4 | 432.2 | 443.9 | 458.7 | 485.2 |
| Power Supply | 380-400V/3N~/50Hz | | | | | | | | |
| Comp. Qty / Circuit Qty | 2/2 | 2/2 | 2/2 | 2/2 | 2/2 | 2/2 | 2/2 | 2/2 | 2/2 |
| Evaporator / Condenser Type | DX Shell-and-tube / M-shape Crossed Fin and Tube | | | | | | | | |
| Unit Length (mm) | 11110 | 10490 | 12060 | 12290 | 12960 | 12290 | 13860 | 13860 | 14090 |
| Unit Width (mm) | 2260 | | | | | | | | |
| Unit Height (mm) | 2425 | | | | | | | | |

Note: * means 2 circuit for option; ** means dual control for option.

► Heat Pump UAY-ST3

| | | | | | | | | | | | |
|-----------------------------|--|-------|-------|-------|-------|-------|-------|-------|------------------|-------|------------------|
| Model UAY-ST3-FBBE | 105 | 125 | 140 | 150 | 175 | 204 | 220 | 245 | 266 (105+150) | 291 | 300 (125+175) |
| Nominal Cooling Cap. (kW) | 352 | 448 | 502 | 583 | 659 | 703 | 794 | 891 | 935 | 1029 | 1107 |
| Nominal Heating Cap. (kW) | 352 | 452 | 495 | 577 | 660 | 696 | 793 | 905 | 929 | 1029 | 1112 |
| Total Power Input (C) (kW) | 110 | 139.1 | 152.1 | 182.1 | 203.3 | 218.3 | 246.1 | 275.8 | 292.1 | 320.5 | 342.4 |
| Total Power Input (H) (kW) | 116.1 | 138.5 | 164.6 | 175.8 | 194.1 | 207.1 | 238.4 | 278.7 | 291.9 | 315.1 | 332.6 |
| Power Supply | 380-400V/3N~/50Hz | | | | | | | | | | |
| Comp. Qty / Circuit Qty | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 2/2 | 2/2 | 2/2 | 2/2 |
| Evaporator / Condenser Type | DX Shell-and-tube / M-shape Crossed Fin and Tube | | | | | | | | | | |
| Unit Length (mm) | 3730 | 4630 | 4630 | 5580 | 6480 | 6480 | 7380 | 9060 | 9710 | 9960 | 11510 |
| Unit Width (mm) | 2260 | | | | | | | | | | |
| Unit Height (mm) | 2425 | | | | | | | | | | |

| | | | | | | | | |
|-----------------------------|--|------------------|-------|------------------|------------------|------------------|------------------|------------------|
| Model | 348 | 355 (150+175) | 380 | 390 (175+204) | 400 (204+204) | 415 (175+220) | 424 (204+220) | 450 (220+220) |
| Nominal Cooling Cap. (kW) | 1166 | 1242 | 1325 | 1362 | 1406 | 1453 | 1497 | 1588 |
| Nominal Heating Cap. (kW) | 1154 | 1237 | 1319 | 1356 | 1392 | 1453 | 1489 | 1586 |
| Total Power Input (C) (kW) | 364.3 | 385.4 | 408.9 | 421.6 | 436.6 | 449.4 | 464.4 | 492.2 |
| Total Power Input (H) (kW) | 351.5 | 369.9 | 385.9 | 401.2 | 414.3 | 432.5 | 445.6 | 476.9 |
| Power Supply | 380-400V/3N~/50Hz | | | | | | | |
| Comp. Qty / Circuit Qty | 2/2 | 2/2 | 2/2 | 2/2 | 2/2 | 2/2 | 2/2 | 2/2 |
| Evaporator / Condenser Type | DX Shell-and-tube / M-shape Crossed Fin and Tube | | | | | | | |
| Unit Length (mm) | 10890 | 12460 | 12690 | 13360 | 13360 | 14260 | 14260 | 15160 |
| Unit Width (mm) | 2260 | | | | | | | |
| Unit Height (mm) | 2425 | | | | | | | |

Specification

► Heat Pump (Total Heat Recovery) UAY-SR3

| | | | | | | |
|-----------------------------------|--|-------|-------|-------|-------|-------|
| Model UAY-SR3-FBAE | 105 | 125 | 150 | 175 | 204 | 220 |
| Nominal Cooling Cap. (kW) | 352 | 448 | 583 | 659 | 703 | 794 |
| Nominal Heating Cap. (kW) | 352 | 452 | 577 | 660 | 696 | 793 |
| Total Heat Recovery Cap. (kW) | 445 | 565 | 738 | 830 | 887 | 1001 |
| Total Power Input (C) (kW) | 110 | 139.1 | 182.1 | 203.3 | 218.3 | 246.1 |
| Total Power Input (H) (kW) | 116.1 | 138.5 | 175.8 | 194.1 | 207.1 | 238.4 |
| Cooling & HR Power Input (kW) | 98 | 123.1 | 162.1 | 179.3 | 194.3 | 218.1 |
| Power Supply | 380-400V/3N~/50Hz | | | | | |
| Comp. Qty / Circuit Qty | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 |
| Evaporator / Condenser Type | DX Shell-and-tube / M-shape Crossed Fin and Tube | | | | | |
| Heat Recovery side Heat Exchanger | BPHE | | | | | |
| Unit Length (mm) | 3730 | 4630 | 5580 | 6480 | 6480 | 7380 |
| Unit Width (mm) | 2260 | | | | | |
| Unit Height (mm) | 2385 | | | 2425 | | |

■ R134a inverter UAA/UAY-SV3 series

► Cooling Only UAA-SV3

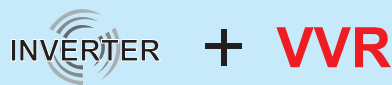
| | | | | | | | | | | | | |
|-----------------------------|--|-------|-------|-------|-------|-------|-------|------------------|------------------|------------------|------------------|------------------|
| Model UAA-SV3-FAAE | 105 | 125 | 150 | 204 | 220 | 245 | 291 | 348 (150+150) | 380 (150+204) | 400 (204+204) | 424 (204+220) | 450 (220+220) |
| Nominal Cooling Cap. (kW) | 341 | 469 | 571 | 694 | 818 | 938 | 1040 | 1142 | 1265 | 1388 | 1512 | 1636 |
| Total Power Input (C) (kW) | 109.6 | 149.4 | 180.9 | 217.3 | 261.3 | 298.8 | 330.3 | 361.8 | 398.4 | 434.6 | 478.2 | 522.6 |
| Power Supply | 380V/3N~/50Hz | | | | | | | | | | | |
| Comp. Qty / Circuit Qty | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 2/2 | 2/2 | 2/2 | 2/2 | 2/2 | 2/2 | 2/2 |
| Evaporator / Condenser Type | DX Shell-and-tube / M-shape Crossed Fin and Tube | | | | | | | | | | | |
| Unit Length (mm) | 3710 | 4610 | 5560 | 6460 | 7360 | 8850 | 9750 | 11540 | 12440 | 13340 | 14240 | 15140 |
| Unit Width (mm) | 2260 | | | | | | | | | | | |
| Unit Height (mm) | 2530 | | | | | | | | | | | |

► Heat Pump UAY-SV3

| | | | | | | | | | | | | |
|-----------------------------|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Nominal Cooling Cap. (kW) | 341 | 469 | 571 | 694 | 818 | 938 | 1040 | 1142 | 1265 | 1388 | 1512 | 1636 |
| Nominal Heating Cap. (kW) | 364 | 483 | 588 | 686 | 820 | 966 | 1071 | 1176 | 1274 | 1372 | 1506 | 1640 |
| Total Power Input (C) (kW) | 109.6 | 149.4 | 180.9 | 217.3 | 261.3 | 298.8 | 330.3 | 361.8 | 398.4 | 434.6 | 478.2 | 522.6 |
| Total Power Input (H) (kW) | 116.9 | 149.8 | 177.1 | 205.9 | 250.7 | 299.6 | 326.9 | 354.2 | 383.1 | 411.8 | 456.2 | 501.4 |
| Power Supply | 380V/3N~/50Hz | | | | | | | | | | | |
| Comp. Qty / Circuit Qty | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 2/2 | 2/2 | 2/2 | 2/2 | 2/2 | 2/2 | 2/2 |
| Evaporator / Condenser Type | DX Shell-and-tube / M-shape Crossed Fin and Tube | | | | | | | | | | | |
| Unit Length (mm) | 3870 | 4770 | 5810 | 6710 | 7610 | 9310 | 10250 | 12040 | 12940 | 13840 | 14740 | 15640 |
| Unit Width (mm) | 2260 | | | | | | | | | | | |
| Unit Height (mm) | 2530 | | | | | | | | | | | |

■ AHRI certified R134a inverter UAA-MV3 series

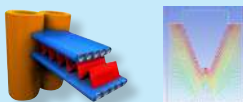
◆ INV compressor with variable volume ratio technology



◆ Falling film evaporator (335-395MV3)



◆ V-shape Microchannel condenser



◆ High IPLV



| | | | | | | | | | |
|-----------------------------|--------------------------|-------|-------|-------|-------|-------|---------------------|-------|-------|
| Model | 145 | 185 | 215 | 240 | 275 | 315 | 335 | 365 | 395 |
| Nominal Cooling Cap. (kW) | 360 | 467 | 538 | 599 | 684 | 790 | 834 | 908 | 984 |
| Total Power Input (C) (kW) | 119.4 | 155.9 | 186.1 | 208.1 | 235.1 | 256.1 | 280.8 | 312.8 | 332.7 |
| Power Supply | 380V/3N~/ 50Hz | | | | | | | | |
| Comp. Qty / Circuit Qty | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 |
| Evaporator / Condenser Type | DX Shell-and-tube / MCHE | | | | | | Falling film / MCHE | | |
| Unit Length (mm) | 4430 | 4985 | | 5535 | 6640 | 7745 | | 8850 | 9955 |
| Unit Width (mm) | 2260 | | | | | | | | |
| Unit Height (mm) | 2530 | | | | | | | | |

Specification

R134a 4-pipe Simultaneous Cooling & Heating UAY-SQ3 Series

- ◆ Applicable for hospital, comprehensive building, swimming pool and other applications which have accurate temperature and humidity requirements.
- ◆ 2 compressor 2 circuits, supply chilled water and hot water simultaneously, precisely temperature control of both chilled and hot water at the same time.
- ◆ Chilled water heat exchanger + hot water heat exchanger + airside heat exchanger design.

| | | | | | | | | | | |
|--|---------------------------|------------------------------|-------|-------|-------------------|-------|-------|-------|-------|-------|
| Model | | 90 | 105 | 125 | 140 | 150 | 175 | 190 | 204 | 235 |
| Cooling Only | Nominal Cooling Cap. (kW) | 315 | 362 | 430 | 496 | 535 | 600 | 663 | 720 | 820 |
| | Total Power Input (kW) | 96.6 | 112.8 | 133.7 | 155 | 166.2 | 186.3 | 206.6 | 225 | 254.1 |
| Heating Only | Nominal Heating Cap. (kW) | 325 | 375 | 440 | 501 | 542 | 605 | 670 | 730 | 830 |
| | Total Power Input (kW) | 97.4 | 112.5 | 136.2 | 147.8 | 168.1 | 177.2 | 208 | 218.6 | 248 |
| Simultaneous Cooling & Heating | Cooling capacity (kW) | 325 | 365 | 435 | 500 | 540 | 610 | 670 | 724 | 825 |
| | Heating capacity (kW) | 403 | 462 | 548 | 634 | 685 | 772 | 846 | 918 | 1048 |
| | Total Power Input (kW) | 82 | 102.1 | 118 | 139.2 | 147 | 166.6 | 181 | 199.2 | 225 |
| Power Supply | | 380V/3N~/50Hz | | | | | | | | |
| Comp. Qty / Circuit Qty | | 2/2 | 2/2 | 2/2 | 2/2 | 2/2 | 2/2 | 2/2 | 2/2 | 2/2 |
| Chilled Water Side Heat Exchanger Type | | BPHE | | | DX Shell-and-tube | | | | | |
| Hot Water Side Heat Exchanger Type | | BPHE | | | | | | | | |
| Air Side Heat Exchanger Type | | M-shape Crossed Fin and Tube | | | | | | | | |
| Unit Length (mm) | | 3880 | | 4780 | 4780 | 5700 | 5700 | 6600 | 6600 | 7500 |
| Unit Width (mm) | | 2260 | | | | | | | | |
| Unit Height (mm) | | 2425 | | | | | | | | |
| Model | | 245 | 260 | 280 | 300 | 320 | 355 | 385 | 400 | 425 |
| Cooling Only | Nominal Cooling Cap. (kW) | 855 | 890 | 970 | 1050 | 1128 | 1257 | 1355 | 1407 | 1499 |
| | Total Power Input (kW) | 265.5 | 275.4 | 302 | 327 | 346.2 | 389.6 | 419.2 | 425.4 | 454.3 |
| Heating Only | Nominal Heating Cap. (kW) | 867 | 900 | 980 | 1060 | 1138 | 1260 | 1365 | 1410 | 1500 |
| | Total Power Input (kW) | 259.6 | 278 | 298 | 316 | 328.2 | 367.2 | 408 | 410.9 | 439.6 |
| Simultaneous Cooling & Heating | Cooling capacity (kW) | 860 | 900 | 980 | 1060 | 1135 | 1265 | 1360 | 1415 | 1505 |
| | Heating capacity (kW) | 1087 | 1150 | 1240 | 1352 | 1427 | 1600 | 1720 | 1777 | 1894 |
| | Total Power Input (kW) | 232.4 | 252 | 265 | 298 | 306.2 | 349.6 | 371.2 | 377.1 | 402.3 |
| Power Supply | | 380V/3N~/50Hz | | | | | | | | |
| Comp. Qty / Circuit Qty | | 2/2 | 2/2 | 2/2 | 2/2 | 2/2 | 2/2 | 2/2 | 2/2 | 2/2 |
| Chilled Water Side Heat Exchanger Type | | DX Shell-and-tube | | | | | | | | |
| Hot Water Side Heat Exchanger Type | | BPHE | | | | | | | | |
| Air Side Heat Exchanger Type | | M-shape Crossed Fin and Tube | | | | | | | | |
| Unit Length (mm) | | 7500 | 7500 | 8260 | 9160 | 10860 | 10860 | 12660 | 12660 | 13560 |
| Unit Width (mm) | | 2260 | | | | | | | | |
| Unit Height (mm) | | 2425 | | | | | | | | |

Notes:

- ◆ Nominal cooling conditions: LWT 7°C, water flow 0.172 [m³/(h·kW)], outdoor temperature 35°C;
- ◆ Nominal heating conditions: LWT 45°C, water flow 0.172 [m³/(h·kW)], outdoor dry-bulb temperature 7°C, wet-bulb temperature 6°C;
- ◆ Operating conditions of simultaneous cooling and heating: EWT/LWT 12/7°C; EWT/LWT of heating: 40/45°C;
- ◆ Partial heat recovery conditions: EWT/LWT 50/55°C; ambient DB temperature 35°C;
- ◆ Above parameters are based on voltage of 380V;
- ◆ () means dual control model, for example, (105+150) means combination of UAA105 and UAA150.

Operating Range

| Refrigerant Type | R407C | | R134a | | | | | | | | |
|-----------------------------|---------|---------|-----------|---------|-------------|---------|---------------|-----------|--------------|--------------|--------------------------------|
| | Series | | FST4/FSP4 | | ST3/SV3/MV3 | | SR3 | | | SQ3 | |
| Working Mode | Cooling | Heating | Cooling | Heating | Cooling | Heating | Heat Recovery | Hot Water | Cooling Only | Heating Only | Simultaneous Cooling & Heating |
| Ambient Temp Range(°C) | 5~44 | -15~21 | 5~50 | -10~50 | 5~50 | -10~50 | 10(Min) | -10~45 | -10~50 | -10~45 | -10~50 |
| Max Evaporator LWT(°C) | 15 | 50 | 15 | 55 | 15 | 55 | 15 | - | 15 | 60 | 15(Cooling) 60(Heating) |
| Min Evaporator LWT(°C) | 4 | 35 | 4 | 25 | 4 | 25 | 4 | - | 4 | 30 | 4(Cooling) 30(Heating) |
| Max Chilled Water del T(°C) | 8 | 8 | 10 | 10 | 10 | 10 | 8 | - | - | - | - |
| Min Chilled Water del T(°C) | 4 | 4 | 4 | 4 | 4 | 4 | 4 | - | - | - | - |
| Max HR Side Water Temp(°C) | 65 | 65 | - | - | - | - | 60 | 60 | - | - | - |
| Max HR Side Water del T(°C) | 8 | 8 | - | - | - | - | 8 | 8 | - | - | - |
| Min HR Side Water del T(°C) | 4 | 4 | - | - | - | - | 4 | 4 | - | - | - |

Notes:

- ◆ Low ambient cooling for option, please contact factory;
- ◆ Leaving chilled water temp of -8~4°C & 15~35°C for option, please contact factory.