

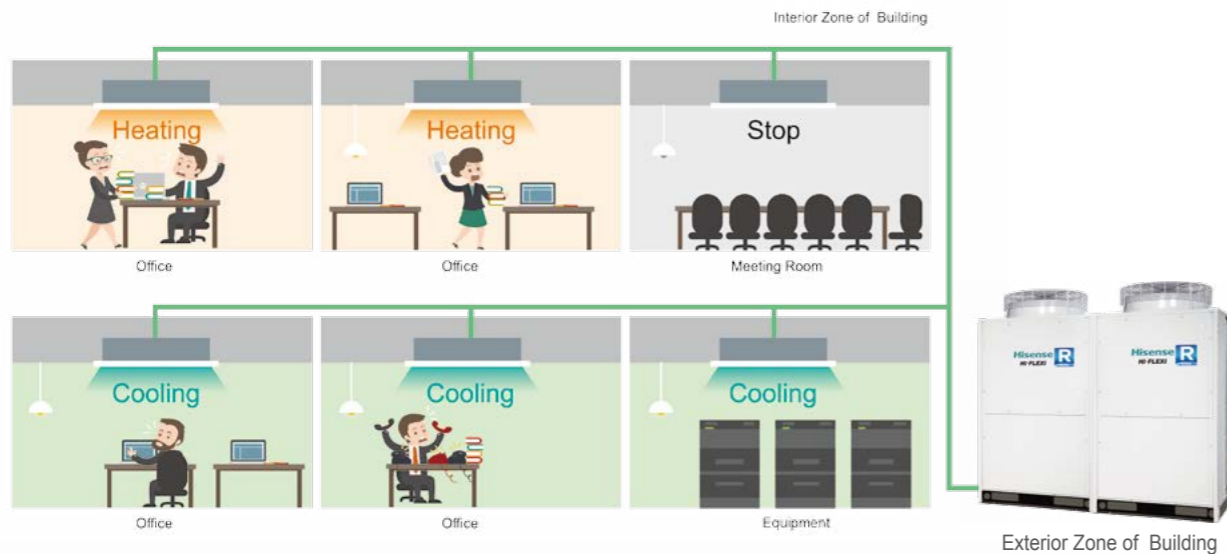
## Hi-FLEXi R Series

Hisense Hi-FLEXi R Series heat recovery air conditioning systems can realize simultaneous cooling and heating operation within one refrigerating system, which not only contributes to energy conservation but also meets various requirements of different consumers.

- High efficiency scroll compressor
- Simultaneous cooling and heating
- Latest inverter control technology
- Intelligent control system



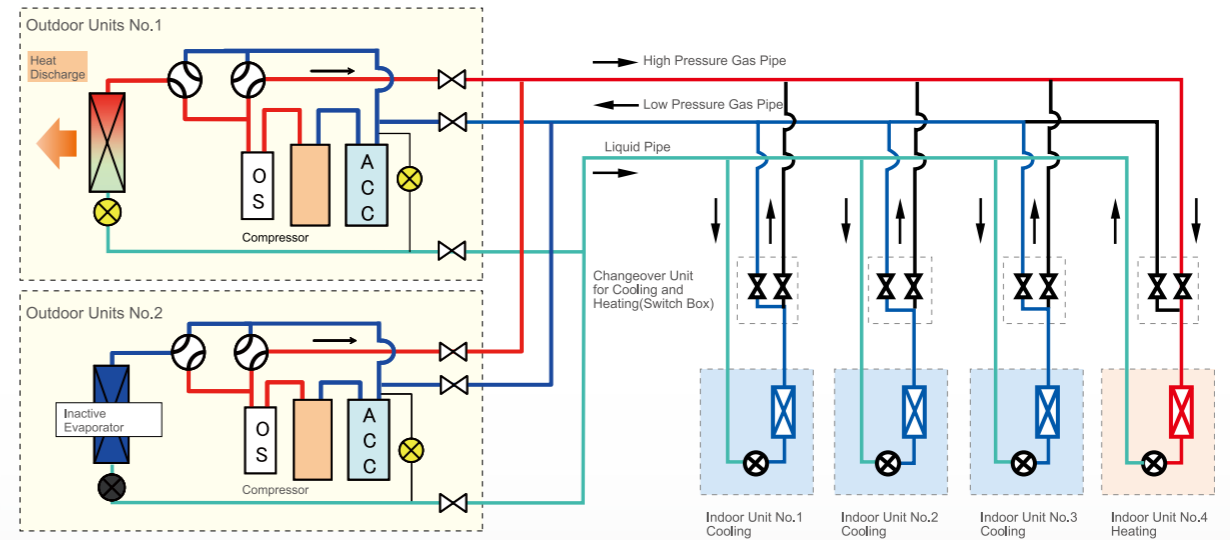
Heat Recovery



Meeting various requirements of customers who are sensitive to temperature and diverse space with different function from the perspective of humanity especially at the transition season, like the complex of equipment rooms and offices, or the guest rooms and dining hall in the same hotel etc.

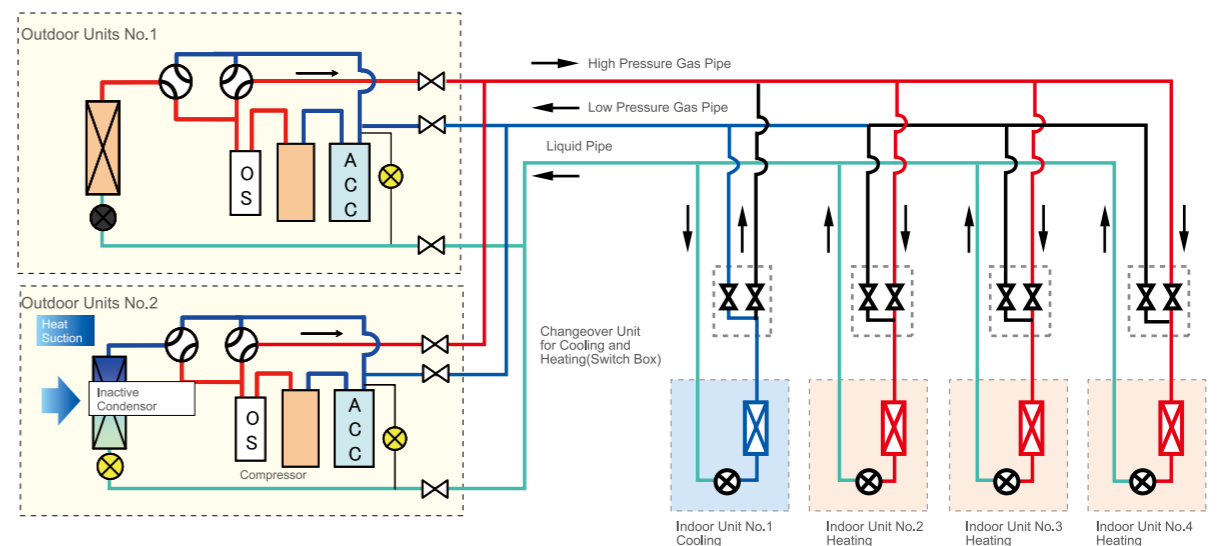
The latest heat recovery multi-split system make season indoor units work in cooling and heating at the same time and being switched between two modes individually, which flexibly satisfies personalized need of different users.

## Cooling Domination Mode



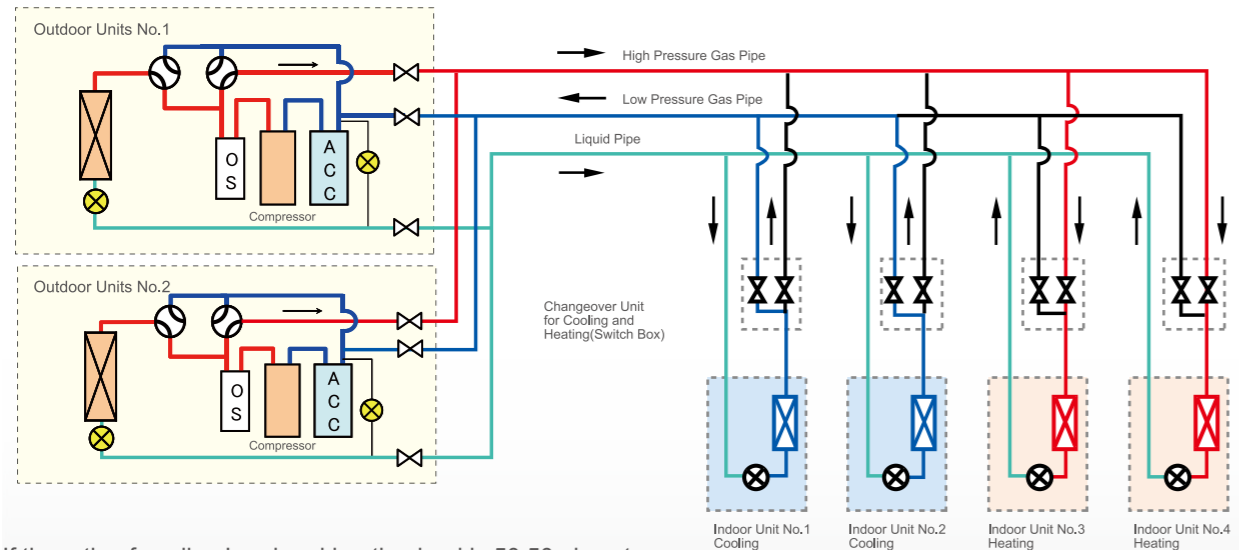
When total indoor heating load is less than cooling load, heat is being transferred from cooling room to heating room, part of heat exchanger is used as condenser to exhaust the redundant heat.

## Heating Domination Mode



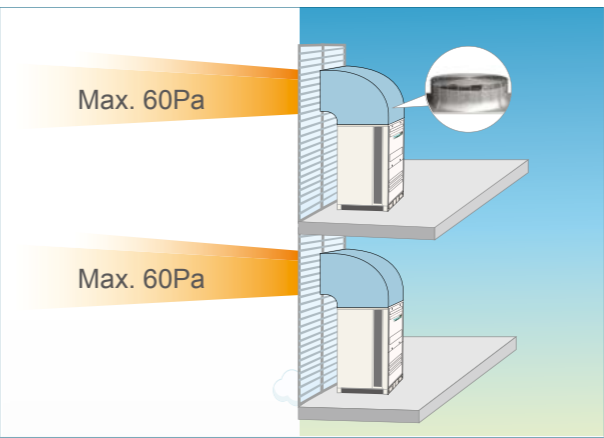
When total indoor heating load is more than cooling load, heat is being transferred from cooling room to heating room, part of heat exchanger is used as evaporator to compensate the required heat.

## Cooling/Heating Equilibrium Mode



If the ratio of cooling Load and heating load is 50:50, almost all the heat is moving among indoor units

## Extra-high External Static Pressure Design

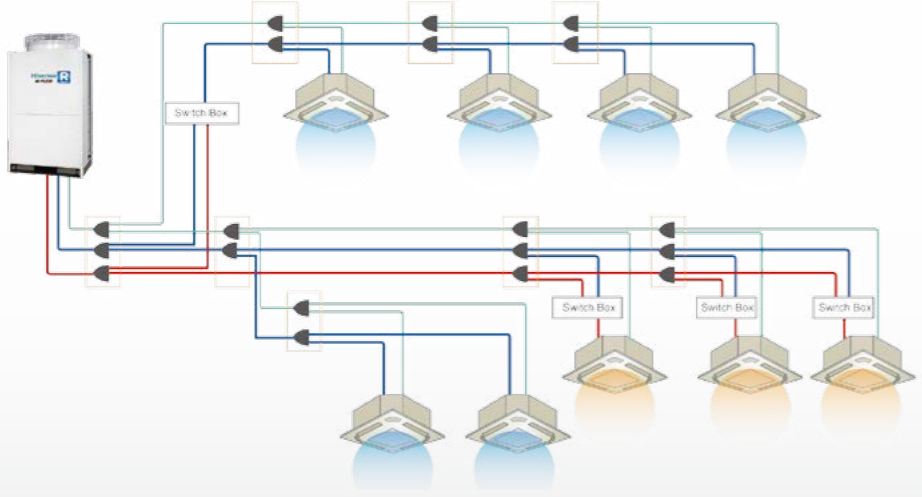


- Adopt high-efficiency DC fan motor
- The use of high-efficiency fan reduces energy consumption of the motor
- Can achieve industry-leading level of external static pressure 60Pa

The efficient axial fan is designed adopting CFD, finite element method, aviation dynamic fluid simulation analysis and other advanced concepts; its air inlet angle and outlet angle are optimized; together with unique horn air vent design, the external static pressure of outdoor unit is higher, which can better exhaust air and ensure smooth air flow.

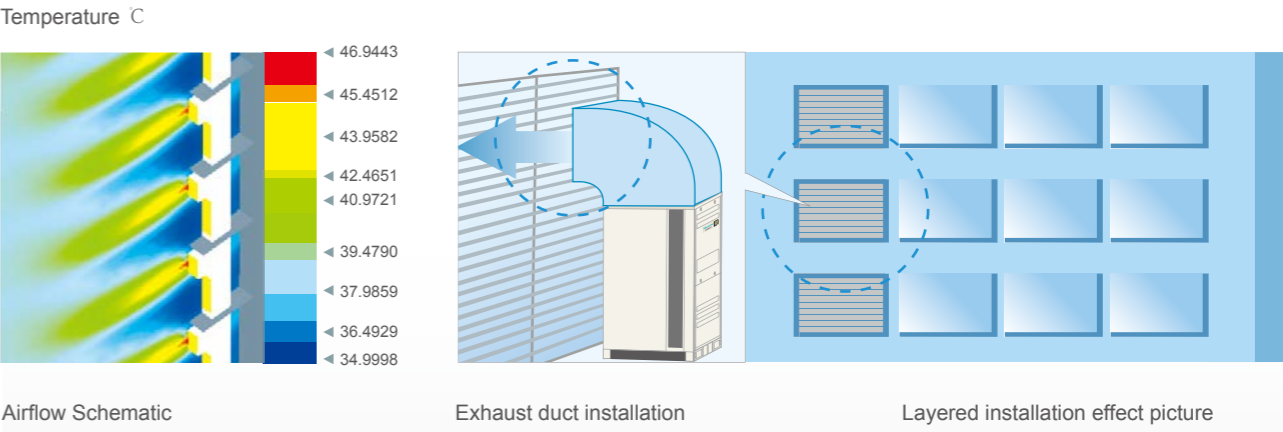
## Configuration of Heat Recovery Operation System

Hi-FLEXi R Series heat recovery operation system is composed of heat recovery outdoor unit, indoor unit, switch box, branch pipes and refrigerant pipes. One switch box unit could connect to one or multiple indoor units. The indoor units equipped with a same switch box unit will keep the same operation mode.



## Layered Installation, Flexibly Corresponding to High-rise Buildings

For high-rise buildings, crawl space can be left to place outdoor units, or machine room can be set up on each floor. By using exhaust duct to exhaust the air, short circuit of return air can be avoided with long exhaust distance, which ensures good ventilation and heat exchange effects of outdoor units.



Airflow Schematic      Exhaust duct installation      Layered installation effect picture

### Outdoor Unit Specifications



| Hi-FLEXi R Series                    |                        | HP     | 8HP             | 10HP            | 12HP            | 14HP            | 16HP            | 18HP            |
|--------------------------------------|------------------------|--------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Model Power Supply                   | AC3Φ380~415V/50Hz      |        | AVWT-76FESR     | AVWT-96FESR     | AVWT-114FESR    | AVWT-136FESS    | AVWT-154FESS    | AVWT-170FESS    |
|                                      | AC3Φ380V/60Hz          |        | AVWT-76F7SR     | AVWT-96F7SR     | AVWT-114F7SR    | AVWT-136F7SS    | AVWT-154F7SS    | AVWT-170F7SS    |
|                                      | AC3Φ220V/60Hz          |        | AVWT-76F9SR     | AVWT-96F9SR     | AVWT-114F9SR    | AVWT-136F9SS    | AVWT-154F9SS    | AVWT-170F9SS    |
| Combination                          |                        |        |                 |                 |                 |                 |                 |                 |
| Cooling Operation                    | Nominal Capacity       | kW     | 22.4            | 28.0            | 33.5            | 40.0            | 45.0            | 50.0            |
|                                      |                        | KBtu/h | 76.5            | 95.5            | 114.3           | 136.5           | 153.5           | 170.6           |
|                                      | Power Consumption      | kW     | 5.65            | 7.65            | 10.18           | 12.25           | 13.74           | 16.60           |
|                                      | EER                    |        | 3.96            | 3.66            | 3.29            | 3.27            | 3.28            | 3.01            |
| Heating Operation                    | Nominal Capacity       | kW     | 25.0            | 31.5            | 37.5            | 45.0            | 50.0            | 56.0            |
|                                      |                        | KBtu/h | 85.3            | 107.5           | 128.0           | 153.5           | 170.6           | 191.1           |
|                                      | Power Consumption      | kW     | 5.81            | 7.76            | 10.12           | 11.30           | 12.60           | 15.30           |
|                                      | COP                    |        | 4.30            | 4.06            | 3.71            | 3.98            | 3.97            | 3.66            |
| Air Flow Rate                        | m³/h                   |        | 9,300           | 10,200          | 10,500          | 11,700          | 11,700          | 11,700          |
| Outer Dimensions (H×W×D)             | mm                     |        | 1,720×950×750   | 1,720×950×750   | 1,720×950×750   | 1,720×1,210×750 | 1,720×1,210×750 | 1,720×1,210×750 |
| Packing Dimension (H×W×D)            | mm                     |        | 1,828×1,018×824 | 1,828×1,018×824 | 1,828×1,018×824 | 1,882×1,278×824 | 1,882×1,278×824 | 1,882×1,278×824 |
| Net Weight                           | Kg                     |        | 225             | 227             | 246             | 298             | 312             | 318             |
| Gross Weight                         | Kg                     |        | 235             | 237             | 255             | 310             | 325             | 330             |
| Compressor Quantity                  |                        |        | 1               | 1               | 1               | 2               | 2               | 2               |
| Condenser Fan Quantity               |                        |        | 1               | 1               | 1               | 1               | 1               | 1               |
| Cabinet Color                        |                        |        | Ivory White     |                 |                 |                 |                 |                 |
| Heat Pump Operation System           | Gas Line               | mm     | Φ19.05          | Φ22.2           | Φ25.4           | Φ25.4           | Φ28.6           | Φ28.6           |
|                                      | Liquid Line            | mm     | Φ9.53           | Φ9.53           | Φ12.7           | Φ12.7           | Φ12.7           | Φ15.88          |
| Heat Recovery Operation System       | Liquid Line            | mm     | Φ9.53           | Φ9.53           | Φ12.7           | Φ12.7           | Φ12.7           | Φ15.88          |
|                                      | High Pressure Gas Line | mm     | Φ15.88          | Φ19.05          | Φ22.2           | Φ22.2           | Φ22.2           | Φ22.2           |
| Max. Connectable No. of Indoor Units |                        |        | 13.0            | 16.0            | 19.0            | 23.0            | 26.0            | 26.0            |
| Max. Piping Length                   | m                      |        | 165(190*)       | 165(190*)       | 165(190*)       | 165(190*)       | 165(190*)       | 165(190*)       |
| Height Difference                    | Between ODU and IDU    | m      | 50(90°)/40(90°) | 50(90°)/40(90°) | 50(90°)/40(90°) | 50(90°)/40(90°) | 50(90°)/40(90°) | 50(90°)/40(90°) |
|                                      | Between IDUs           | m      | 15(30°)         | 15(30°)         | 15(30°)         | 15(30°)         | 15(30°)         | 15(30°)         |
| Noise Level                          | dB(A)                  |        | 58              | 58              | 60              | 62              | 62              | 63              |
| Operation Range                      | Cooling                | °C DB  | -5~48           |                 |                 |                 |                 |                 |
|                                      | Heating                | °C WB  | -20~15.5        |                 |                 |                 |                 |                 |

#### NOTES:

- The nominal cooling capacity and heating capacity are based on following conditions:  
Cooling Operation Conditions  
Indoor Air Inlet Temperature: 27°C DB(80°F DB), 19.0°C WB(66.2°F WB)  
Outdoor Air Inlet Temperature: 35°C DB(95°F DB)  
Piping Length: 7.5 Meters Piping Lift: 0 Meter  
Heating Operation Conditions  
Indoor Air Inlet Temperature: 20°C DB(68°F DB),  
Outdoor Air Inlet Temperature: 7°C DB(45°F DB), 6°C WB(43°F WB)
- The sound pressure is based on the following conditions.1 Meter from the unit service cover surface, and 1.5 Meter from floor level. The above data is based on the cooling mode. In case of heating mode, the sound pressure level increases by approximately 1~2dB. The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.
- Except for the specified combination in the table, there is no other combination of the base unit.
- The width of outer dimension, it is the value when each distance between the base outdoor units is specified to 20mm.
- For Max. pipe length more than 165m, height difference between outdoor unit(ODU)&indoor unit(IDU) more than 50(40)m or height difference between indoor units (IDUs) more than 15m, please contact our professional engineer.



| Hi-FLEXi R Series                    |                        | HP     | 20HP                        | 22HP                        | 24HP                        | 26HP                         |
|--------------------------------------|------------------------|--------|-----------------------------|-----------------------------|-----------------------------|------------------------------|
| Model Power Supply                   | AC3Φ380~415V/50Hz      |        | AVWT-190FESZ                | AVWT-212FESZ                | AVWT-232FESZ                | AVWT-250FESZ                 |
|                                      | AC3Φ380V/60Hz          |        | AVWT-190F7SZ                | AVWT-212F7SZ                | AVWT-232F7SZ                | AVWT-250F7SZ                 |
|                                      | AC3Φ220V/60Hz          |        | AVWT-190F9SZ                | AVWT-212F9SZ                | AVWT-232F9SZ                | AVWT-250F9SZ                 |
| Combination                          |                        |        | AVWT-76FESR<br>AVWT-114FESR | AVWT-76FESR<br>AVWT-136FESS | AVWT-96FESR<br>AVWT-136FESS | AVWT-114FESR<br>AVWT-136FESS |
| Cooling Operation                    | Nominal Capacity       | kW     | 56.0                        | 61.5                        | 69.0                        | 73.0                         |
|                                      |                        | KBtu/h | 190.8                       | 213.0                       | 232.0                       | 250.8                        |
|                                      | Power Consumption      | kW     | 15.83                       | 17.90                       | 19.90                       | 22.43                        |
|                                      | EER                    |        | 3.54                        | 3.44                        | 3.47                        | 3.25                         |
| Heating Operation                    | Nominal Capacity       | kW     | 63.0                        | 69.0                        | 77.5                        | 82.5                         |
|                                      |                        | KBtu/h | 213.3                       | 239.0                       | 261.0                       | 281.5                        |
|                                      | Power Consumption      | kW     | 15.93                       | 17.11                       | 19.06                       | 21.42                        |
|                                      | COP                    |        | 3.95                        | 4.03                        | 4.07                        | 3.85                         |
| Air Flow Rate                        | m³/h                   |        | 19,800                      | 21,000                      | 21,900                      | 22,200                       |
| Outer Dimensions (H×W×D)             | mm                     |        | 1,720×(950+950)×750         | 1,720×(950+1,210)×750       | 1,720×(950+1,210)×750       | 1,720×(950+1,210)×750        |
| Packing Dimension (H×W×D)            | mm                     |        | ---                         | ---                         | ---                         | ---                          |
| Net Weight                           | Kg                     |        | 225+246                     | 225+298                     | 227+298                     | 246+298                      |
| Gross Weight                         | Kg                     |        | 235+255                     | 235+310                     | 237+310                     | 255+310                      |
| Compressor Quantity                  |                        |        | 2                           | 3                           | 3                           | 3                            |
| Condenser Fan Quantity               |                        |        | 2                           | 2                           | 2                           | 2                            |
| Cabinet Color                        |                        |        | Ivory White                 |                             |                             |                              |
| Heat Pump Operation System           | Gas Line               | mm     | Φ28.6                       | Φ28.6                       | Φ28.6                       | Φ31.75                       |
|                                      | Liquid Line            | mm     | Φ15.88                      | Φ15.88                      | Φ15.88                      | Φ19.05                       |
| Heat Recovery Operation System       | Liquid Line            | mm     | Φ15.88                      | Φ15.88                      | Φ15.88                      | Φ19.05                       |
|                                      | High Pressure Gas Line | mm     | Φ22.2                       | Φ25.4                       | Φ25.4                       | Φ25.4                        |
| Max. Connectable No. of Indoor Units |                        |        | 33.0                        | 36.0                        | 40.0                        | 43.0                         |
| Max. Piping Length                   | m                      |        | 165(190*)                   | 165(190*)                   | 165(190*)                   | 165(190*)                    |
| Height Difference                    | Between ODU and IDU    | m      | 50(90°)/40(90°)             | 50(90°)/40(90°)             | 50(90°)/40(90°)             | 50(90°)/40(90°)              |
|                                      | Between IDUs           | m      | 15(30°)                     | 15(30°)                     | 15(30°)                     | 15(30°)                      |
| Noise Level                          | dB(A)                  |        | 62                          | 63                          | 63                          | 64                           |
| Operation Range                      | Cooling                | °C DB  | -5~48                       |                             |                             |                              |
|                                      | Heating                | °C WB  | -20~15.5                    |                             |                             |                              |

#### NOTES:

- The nominal cooling capacity and heating capacity are based on following conditions:  
Cooling Operation Conditions  
Indoor Air Inlet Temperature: 27°C DB(80°F DB), 19.0°C WB(66.2°F WB)  
Outdoor Air Inlet Temperature: 35°C DB(95°F DB)  
Piping Length: 7.5 Meters Piping Lift: 0 Meter  
Heating Operation Conditions  
Indoor Air Inlet Temperature: 20°C DB(68°F DB),  
Outdoor Air Inlet Temperature: 7°C DB(45°F DB), 6°C WB(43°F WB)
- The sound pressure is based on the following conditions.1 Meter from the unit service cover surface, and 1.5 Meter from floor level. The above data is based on the cooling mode. In case of heating mode, the sound pressure level increases by approximately 1~2dB. The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.
- Except for the specified combination in the table, there is no other combination of the base unit.
- The width of outer dimension, it is the value when each distance between the base outdoor units is specified to 20mm.
- For Max. pipe length more than 165m, height difference between outdoor unit(ODU)&indoor unit(IDU) more than 50(40)m or height difference between indoor units (IDUs) more than 15m, please contact our professional engineer.

### Outdoor Unit Specifications



28/30/32/34/36HP

| Hi-FLEXi R Series                    |                        | HP                      | 28HP                         | 30HP                         | 32HP                         | 34HP                         | 36HP                         |
|--------------------------------------|------------------------|-------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|
| Model Power Supply                   | AC3Φ380~415V/50Hz      |                         | AVWT-272FESZ                 | AVWT-290FESZ                 | AVWT-308FESZ                 | AVWT-324FESZ                 | AVWT-340FESZ                 |
|                                      | AC3Φ380V/60Hz          |                         | AVWT-272F7SZ                 | AVWT-290F7SZ                 | AVWT-308F7SZ                 | AVWT-324F7SZ                 | AVWT-340F7SZ                 |
|                                      | AC3Φ220V/60Hz          |                         | AVWT-272F9SZ                 | AVWT-290F9SZ                 | AVWT-308F9SZ                 | AVWT-324F9SZ                 | AVWT-340F9SZ                 |
| Combination                          |                        |                         | AVWT-136FESS<br>AVWT-136FESS | AVWT-136FESS<br>AVWT-154FESS | AVWT-154FESS<br>AVWT-154FESS | AVWT-154FESS<br>AVWT-170FESS | AVWT-170FESS<br>AVWT-170FESS |
| Cooling Operation                    | Nominal Capacity       | kW                      | 80.0                         | 85.0                         | 90.0                         | 95.0                         | 100.0                        |
|                                      |                        | KBtu/h                  | 273.0                        | 290.0                        | 307.0                        | 324.1                        | 341.2                        |
|                                      | Power Consumption      | kW                      | 24.50                        | 25.99                        | 27.48                        | 30.34                        | 33.20                        |
|                                      | EER                    |                         | 3.27                         | 3.27                         | 3.28                         | 3.13                         | 3.01                         |
| Heating Operation                    | Nominal Capacity       | kW                      | 90.0                         | 95.0                         | 100.0                        | 106.0                        | 112.0                        |
|                                      |                        | KBtu/h                  | 307.1                        | 324.1                        | 341.2                        | 361.7                        | 382.1                        |
|                                      | Power Consumption      | kW                      | 22.60                        | 23.90                        | 25.20                        | 27.90                        | 30.60                        |
|                                      | COP                    |                         | 3.98                         | 3.97                         | 3.97                         | 3.80                         | 3.66                         |
| Air Flow Rate                        | m³/h                   | 23,400                  | 23,400                       | 23,400                       | 23,400                       | 23,400                       |                              |
| Outer Dimensions (H×W×D)             | mm                     | 1,720×(1,210+1,210)×750 | 1,720×(1,210+1,210)×750      | 1,720×(1,210+1,210)×750      | 1,720×(1,210+1,210)×750      | 1,720×(1,210+1,210)×750      |                              |
| Packing Dimension (H×W×D)            | mm                     | ---                     | ---                          | ---                          | ---                          | ---                          |                              |
| Net Weight                           | Kg                     | 298+298                 | 298+312                      | 312+312                      | 312+318                      | 318+318                      |                              |
| Gross Weight                         | Kg                     | 310+310                 | 310+325                      | 325+325                      | 325+330                      | 330+330                      |                              |
| Compressor Quantity                  |                        | 4                       | 4                            | 4                            | 4                            | 4                            |                              |
| Condenser Fan Quantity               |                        | 2                       | 2                            | 2                            | 2                            | 2                            |                              |
| Cabinet Color                        |                        |                         | Ivory White                  |                              |                              |                              |                              |
| Heat Pump Operation System           | Gas Line               | mm                      | Φ31.75                       | Φ31.75                       | Φ31.75                       | Φ31.75                       | Φ38.1                        |
|                                      | Liquid Line            | mm                      | Φ19.05                       | Φ19.05                       | Φ19.05                       | Φ19.05                       | Φ19.05                       |
| Heat Recovery Operation System       | Liquid Line            | mm                      | Φ19.05                       | Φ19.05                       | Φ19.05                       | Φ19.05                       | Φ19.05                       |
|                                      | Low Pressure Gas Line  | mm                      | Φ31.75                       | Φ31.75                       | Φ31.75                       | Φ31.75                       | Φ31.75                       |
|                                      | High Pressure Gas Line | mm                      | Φ28.6                        | Φ28.6                        | Φ28.6                        | Φ28.6                        | Φ28.6                        |
| Max. Connectable No. of Indoor Units |                        | 47.0                    | 50.0                         | 53.0                         | 56.0                         | 59.0                         |                              |
| Max. Piping Length                   | m                      | 165(190*)               | 165(190*)                    | 165(190*)                    | 165(190*)                    | 165(190*)                    |                              |
| Height Difference                    | Between ODU and IDU    | m                       | 50(90°)/40(90°)              | 50(90°)/40(90°)              | 50(90°)/40(90°)              | 50(90°)/40(90°)              | 50(90°)/40(90°)              |
|                                      | Between IDUs           | m                       | 15(30°)                      | 15(30°)                      | 15(30°)                      | 15(30°)                      | 15(30°)                      |
| Noise Level                          |                        | dB(A)                   | 65                           | 65                           | 65                           | 66                           | 66                           |
| Operation Range                      | Cooling                | °C DB                   | -5~48                        |                              |                              |                              |                              |
|                                      | Heating                | °C WB                   | -20~15.5                     |                              |                              |                              |                              |

#### NOTES:

- The nominal cooling capacity and heating capacity are based on following conditions:  
Cooling Operation Conditions  
Indoor Air Inlet Temperature: 27°C DB(80°F DB), 19.0°C WB(66.2°F WB)  
Outdoor Air Inlet Temperature: 35°C DB(95°F DB)  
Piping Length: 7.5 Meters Piping Lift: 0 Meter  
Heating Operation Conditions  
Indoor Air Inlet Temperature: 20°C DB(68°F DB),  
Outdoor Air Inlet Temperature: 7°C DB(45°F DB), 6°C WB(43°F WB)
- The sound pressure is based on the following conditions. 1 Meter from the unit service cover surface, and 1.5 Meter from floor level. The above data is based on the cooling mode. In case of heating mode, the sound pressure level increases by approximately 1~2dB. The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.
- Except for the specified combination in the table, there is no other combination of the base unit.
- The width of outer dimension, it is the value when each distance between the base outdoor units is specified to 20mm.
- For Max. pipe length more than 165m, height difference between outdoor unit(ODU)&indoor unit(IDU) more than 50(40)m or height difference between indoor units (IDUs) more than 15m, please contact our professional engineer.



38/40/42HP

| Hi-FLEXi R Series                    |                        | HP                        | 38HP   | 40HP   | 42HP   |
|--------------------------------------|------------------------|---------------------------|--|--|--|
| Model Power Supply                   | AC3Φ380~415V/50Hz      |                           | AVWT-364FESZ                                 | AVWT-382FESZ                                 | AVWT-398FESZ                                 |
|                                      | AC3Φ380V/60Hz          |                           | AVWT-364F7SZ                                 | AVWT-382F7SZ                                 | AVWT-398F7SZ                                 |
|                                      | AC3Φ220V/60Hz          |                           | AVWT-364F9SZ                                 | AVWT-382F9SZ                                 | AVWT-398F9SZ                                 |
| Combination                          |                        |                           | AVWT-114FESR<br>AVWT-114FESR<br>AVWT-136FESS | AVWT-114FESR<br>AVWT-114FESR<br>AVWT-154FESS | AVWT-114FESR<br>AVWT-114FESR<br>AVWT-170FESS |
| Cooling Operation                    | Nominal Capacity       | kW                        | 109.0  | 112.0  | 118.0  |
|                                      |                        | KBtu/h                    | 365.1  | 382.1  | 399.2  |
|                                      | Power Consumption      | kW                        | 32.61  | 34.10  | 36.96  |
|                                      | EER                    |                           | 3.34   | 3.28   | 3.19   |
| Heating Operation                    | Nominal Capacity       | kW                        | 118.0  | 125.0  | 132.0  |
|                                      |                        | KBtu/h                    | 409.5  | 426.5  | 447.5  |
|                                      | Power Consumption      | kW                        | 31.54  | 32.84  | 35.54  |
|                                      | COP                    |                           | 3.74   | 3.81   | 3.71   |
| Air Flow Rate                        | m³/h                   | 32,700                    | 32,700                                       | 32,700                                       |  |
| Outer Dimensions (H×W×D)             | mm                     | 1,720×(950+950+1,210)×750 | 1,720×(950+950+1,210)×750                    | 1,720×(950+950+1,210)×750                    |  |
| Packing Dimension (H×W×D)            | mm                     | ---                       | ---  | ---  |  |
| Net Weight                           | Kg                     | 246+246+298               | 246+246+312                                  | 246+246+318                                  |  |
| Gross Weight                         | Kg                     | 255+255+310               | 255+255+325                                  | 255+255+330                                  |  |
| Compressor Quantity                  |                        | 4                         | 4  | 4  |  |
| Condenser Fan Quantity               |                        | 3                         | 3  | 3  |  |
| Cabinet Color                        |                        |                           | Ivory White                                  |  |  |
| Heat Pump Operation System           | Gas Line               | mm                        | Φ38.1  | Φ38.1  | Φ38.1  |
|                                      | Liquid Line            | mm                        | Φ19.05                                       | Φ19.05                                       | Φ19.05                                       |
| Heat Recovery Operation System       | Liquid Line            | mm                        | Φ19.05                                       | Φ19.05                                       | Φ19.05                                       |
|                                      | Low Pressure Gas Line  | mm                        | Φ38.1  | Φ38.1  | Φ38.1  |
|                                      | High Pressure Gas Line | mm                        | Φ31.75                                       | Φ31.75                                       | Φ31.75                                       |
| Max. Connectable No. of Indoor Units |                        | 64.0                      | 64.0   | 64.0   |  |
| Max. Piping Length                   | m                      | 165(190*)                 | 165(190*)                                    | 165(190*)                                    |  |
| Height Difference                    | Between ODU and IDU    | m                         | 50(90°)/40(90°)                              | 50(90°)/40(90°)                              | 50(90°)/40(90°)                              |
|                                      | Between IDUs           | m                         | 15(30°)                                      | 15(30°)                                      | 15(30°)                                      |
| Noise Level                          |                        | dB(A)                     | 66   | 66   | 66   |
| Operation Range                      | Cooling                | °C DB                     | -5~48  |  |  |
|                                      | Heating                | °C WB                     | -20~15.5                                     |  |  |

#### NOTES:

- The nominal cooling capacity and heating capacity are based on following conditions:  
Cooling Operation Conditions  
Indoor Air Inlet Temperature: 27°C DB(80°F DB), 19.0°C WB(66.2°F WB)  
Outdoor Air Inlet Temperature: 35°C DB(95°F DB)  
Piping Length: 7.5 Meters Piping Lift: 0 Meter  
Heating Operation Conditions  
Indoor Air Inlet Temperature: 20°C DB(68°F DB),  
Outdoor Air Inlet Temperature: 7°C DB(45°F DB), 6°C WB(43°F WB)
- The sound pressure is based on the following conditions. 1 Meter from the unit service cover surface, and 1.5 Meter from floor level. The above data is based on the cooling mode. In case of heating mode, the sound pressure level increases by approximately 1~2dB. The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.
- Except for the specified combination in the table, there is no other combination of the base unit.
- The width of outer dimension, it is the value when each distance between the base outdoor units is specified to 20mm.
- For Max. pipe length more than 165m, height difference between outdoor unit(ODU)&indoor unit(IDU) more than 50(40)m or height difference between indoor units (IDUs) more than 15m, please contact our professional engineer.

### Outdoor Unit Specifications



44/46/48HP

| Hi-FLEXi R Series                    |                        | HP                          | 44HP   | 46HP   | 48HP   |
|--------------------------------------|------------------------|-----------------------------|--|--|--|
| Model Power Supply                   | AC3Φ380~415V/50Hz      |                             | AVWT-420FESZ                                 | AVWT-438FESZ                                 | AVWT-454FESZ                                 |
|                                      | AC3Φ380V/60Hz          |                             | AVWT-420F7SZ                                 | AVWT-438F7SZ                                 | AVWT-454F7SZ                                 |
|                                      | AC3Φ220V/60Hz          |                             | AVWT-420F9SZ                                 | AVWT-438F9SZ                                 | AVWT-454F9SZ                                 |
| Combination                          |                        |                             | AVWT-114FESR<br>AVWT-136FESS<br>AVWT-170FESS | AVWT-114FESR<br>AVWT-154FESS<br>AVWT-170FESS | AVWT-114FESR<br>AVWT-170FESS<br>AVWT-170FESS |
| Cooling Operation                    | Nominal Capacity       | kW                          | 125.0  | 132.0  | 136.0  |
|                                      |                        | KBtu/h                      | 421.4  | 438.4  | 455.5  |
|                                      | Power Consumption      | kW                          | 39.03  | 40.52  | 43.38  |
|                                      |                        | EER                         | 3.20   | 3.26   | 3.14   |
| Heating Operation                    | Nominal Capacity       | kW                          | 140.0  | 145.0  | 150.0  |
|                                      |                        | KBtu/h                      | 472.6  | 494.7  | 511.8  |
|                                      | Power Consumption      | kW                          | 36.72  | 38.02  | 40.72  |
|                                      |                        | COP                         | 3.81   | 3.81   | 3.68   |
| Air Flow Rate                        | m³/h                   | 33,900                      | 33,900                                       | 33,900                                       |  |
| Outer Dimensions (H×W×D)             | mm                     | 1,720×(950+1,210+1,210)×750 | 1,720×(950+1,210+1,210)×750                  | 1,720×(950+1,210+1,210)×750                  |  |
| Packing Dimension (H×W×D)            | mm                     | ---                         | ---  | ---  |  |
| Net Weight                           | Kg                     | 246+298+318                 | 246+312+318                                  | 246+318+318                                  |  |
| Gross Weight                         | Kg                     | 255+310+330                 | 255+325+330                                  | 255+330+330                                  |  |
| Compressor Quantity                  |                        | 5                           | 5  | 5  |  |
| Condenser Fan Quantity               |                        | 3                           | 3  | 3  |  |
| Cabinet Color                        |                        |                             | Ivory White                                  |  |  |
| Heat Pump Operation System           | Gas Line               | mm                          | Φ38.1  | Φ38.1  | Φ38.1  |
|                                      | Liquid Line            | mm                          | Φ19.05                                       | Φ19.05                                       | Φ19.05                                       |
| Heat Recovery Operation System       | Liquid Line            | mm                          | Φ19.05                                       | Φ19.05                                       | Φ19.05                                       |
|                                      | Low Pressure Gas Line  | mm                          | Φ38.1  | Φ38.1  | Φ38.1  |
|                                      | High Pressure Gas Line | mm                          | Φ31.75                                       | Φ31.75                                       | Φ31.75                                       |
| Max. Connectable No. of Indoor Units |                        | 64.0                        | 64.0   | 64.0   |  |
| Max. Piping Length                   | m                      | 165(190*)                   | 165(190*)                                    | 165(190*)                                    |  |
| Height Difference                    | Between ODU and IDU    | m                           | 50(90°)/40(90°)                              | 50(90°)/40(90°)                              | 50(90°)/40(90°)                              |
|                                      | Between IDUs           | m                           | 15(30°)                                      | 15(30°)                                      | 15(30°)                                      |
| Noise Level                          | dB(A)                  | 67                          | 67   | 67   |  |
| Operation Range                      | Cooling                | °C DB                       | -5~48  |  |  |
|                                      | Heating                | °C WB                       | -20~15.5                                     |  |  |

#### NOTES:

- The nominal cooling capacity and heating capacity are based on following conditions:  
Cooling Operation Conditions  
Indoor Air Inlet Temperature: 27°C DB(80°F DB), 19.0°C WB(66.2°F WB)  
Outdoor Air Inlet Temperature: 35°C DB(95°F DB)  
Piping Length: 7.5 Meters Piping Lift: 0 Meter  
Heating Operation Conditions  
Indoor Air Inlet Temperature: 20°C DB(68°F DB),  
Outdoor Air Inlet Temperature: 7°C DB(45°F DB), 6°C WB(43°F WB)
- The sound pressure is based on the following conditions. 1 Meter from the unit service cover surface, and 1.5 Meter from floor level. The above data is based on the cooling mode. In case of heating mode, the sound pressure level increases by approximately 1~2dB. The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.
- Except for the specified combination in the table, there is no other combination of the base unit.
- The width of outer dimension, it is the value when each distance between the base outdoor units is specified to 20mm.
- For Max. pipe length more than 165m, height difference between outdoor unit(ODU)&indoor unit(IDU) more than 50(40)m or height difference between indoor units (IDUs) more than 15m, please contact our professional engineer.



50/52/54HP

| Hi-FLEXi R Series                    |                        | HP                  | 50HP   | 52HP   | 54HP   |
|--------------------------------------|------------------------|---------------------|--|--|--|
| Model Power Supply                   | AC3Φ380~415V/50Hz      |                     | AVWT-476FESZ                                 | AVWT-494FESZ                                 | AVWT-510FESZ                                 |
|                                      | AC3Φ380V/60Hz          |                     | AVWT-476F7SZ                                 | AVWT-494F7SZ                                 | AVWT-510F7SZ                                 |
|                                      | AC3Φ220V/60Hz          |                     | AVWT-476F9SZ                                 | AVWT-494F9SZ                                 | AVWT-510F9SZ                                 |
| Combination                          |                        |                     | AVWT-136FESS<br>AVWT-170FESS<br>AVWT-170FESS | AVWT-154FESS<br>AVWT-170FESS<br>AVWT-170FESS | AVWT-170FESS<br>AVWT-170FESS<br>AVWT-170FESS |
| Cooling Operation                    | Nominal Capacity       | kW                  | 140.0  | 145.0  | 150.0  |
|                                      |                        | KBtu/h              | 477.7  | 494.7  | 511.8  |
|                                      | Power Consumption      | kW                  | 45.45  | 46.94  | 49.80  |
|                                      |                        | EER                 | 3.08   | 3.09   | 3.01   |
| Heating Operation                    | Nominal Capacity       | kW                  | 155.0  | 160.0  | 165.0  |
|                                      |                        | KBtu/h              | 528.9  | 545.9  | 563.0  |
|                                      | Power Consumption      | kW                  | 41.90  | 43.20  | 45.90  |
|                                      |                        | COP                 | 3.70   | 3.70   | 3.59   |
| Air Flow Rate                        | m³/h                   | 35,100              | 35,100                                       | 35,100                                       |  |
| Outer Dimensions (H×W×D)             | mm                     | (1,720×1,210×750)×3 | (1,720×1,210×750)×3                          | (1,720×1,210×750)×3                          |  |
| Packing Dimension (H×W×D)            | mm                     | ---                 | ---  | ---  |  |
| Net Weight                           | Kg                     | 298+318+318         | 312+318+318                                  | 318+318+318                                  |  |
| Gross Weight                         | Kg                     | 310+330+330         | 325+330+330                                  | 330+330+330                                  |  |
| Compressor Quantity                  |                        | 6                   | 6  | 6  |  |
| Condenser Fan Quantity               |                        | 3                   | 3  | 3  |  |
| Cabinet Color                        |                        |                     | Ivory White                                  |  |  |
| Heat Pump Operation System           | Gas Line               | mm                  | Φ38.1  | Φ38.1  | Φ38.1  |
|                                      | Liquid Line            | mm                  | Φ19.05                                       | Φ19.05                                       | Φ19.05                                       |
| Heat Recovery Operation System       | Liquid Line            | mm                  | Φ19.05                                       | Φ19.05                                       | Φ19.05                                       |
|                                      | Low Pressure Gas Line  | mm                  | Φ38.1  | Φ38.1  | Φ38.1  |
|                                      | High Pressure Gas Line | mm                  | Φ31.75                                       | Φ31.75                                       | Φ31.75                                       |
| Max. Connectable No. of Indoor Units |                        | 64.0                | 64.0   | 64.0   |  |
| Max. Piping Length                   | m                      | 165(190*)           | 165(190*)                                    | 165(190*)                                    |  |
| Height Difference                    | Between ODU and IDU    | m                   | 50(90°)/40(90°)                              | 50(90°)/40(90°)                              | 50(90°)/40(90°)                              |
|                                      | Between IDUs           | m                   | 15(30°)                                      | 15(30°)                                      | 15(30°)                                      |
| Noise Level                          | dB(A)                  | 67                  | 67   | 68   |  |
| Operation Range                      | Cooling                | °C DB               | -5~48  |  |  |
|                                      | Heating                | °C WB               | -20~15.5                                     |  |  |

#### NOTES:

- The nominal cooling capacity and heating capacity are based on following conditions:  
Cooling Operation Conditions  
Indoor Air Inlet Temperature: 27°C DB(80°F DB), 19.0°C WB(66.2°F WB)  
Outdoor Air Inlet Temperature: 35°C DB(95°F DB)  
Piping Length: 7.5 Meters Piping Lift: 0 Meter  
Heating Operation Conditions  
Indoor Air Inlet Temperature: 20°C DB(68°F DB),  
Outdoor Air Inlet Temperature: 7°C DB(45°F DB), 6°C WB(43°F WB)
- The sound pressure is based on the following conditions. 1 Meter from the unit service cover surface, and 1.5 Meter from floor level. The above data is based on the cooling mode. In case of heating mode, the sound pressure level increases by approximately 1~2dB. The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.
- Except for the specified combination in the table, there is no other combination of the base unit.
- The width of outer dimension, it is the value when each distance between the base outdoor units is specified to 20mm.
- For Max. pipe length more than 165m, height difference between outdoor unit(ODU)&indoor unit(IDU) more than 50(40)m or height difference between indoor units (IDUs) more than 15m, please contact our professional engineer.