



## Air Conditioning

# SUBMITTAL DATA SHEET

MODEL: Heat Pump 60Hz - RHXYQ54ATL

### PROJECT NAME:

|               |               |
|---------------|---------------|
| Location:     | Approval:     |
| Engineer:     | Date:         |
| Submitted to: | Construction: |
| Submitted by: | Unit #:       |
| Reference:    | Drawing #:    |

### FEATURES AND BENEFITS

Large capacity unit. A single VRV IV outdoor unit (RHXYQ-A) capacity ranges from 8 HP to 22 HP in increments of 2 HP, and the capacity of a triple outdoor unit system is up to 66 HP

Offers compact outdoor units to achieve maximum utilization of expensive space in modern buildings.

Long piping length provides more design flexibility, which can match even large-sized buildings.

High-efficiency DC Inverter Scroll Compressor with high-pressure and low-pressure chambers, which can dramatically enhance compression efficiency by making full use of the compression chamber.

VRT technology, automatically adjusts refrigerant temperature to individual building and climate requirement, thus further improving annual energy efficiency and maintaining comfort.

New generation intelligent control main PC board with SMT packaging that improves the anti-clutter performance and protects your computer boards from the adverse effect of sandy and humid weather.

Chip liquid-cooled isothermal technology which cools the main PC board with low temperature refrigerant and takes away large amount of heat emitted by main PC board.

Double Backup Operation Functions.

More Accurate Test Operation and Stable System.

### EXTERNAL APPEARANCE

# VRV IV



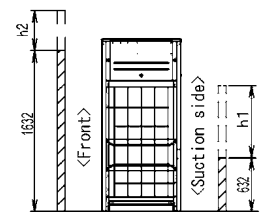
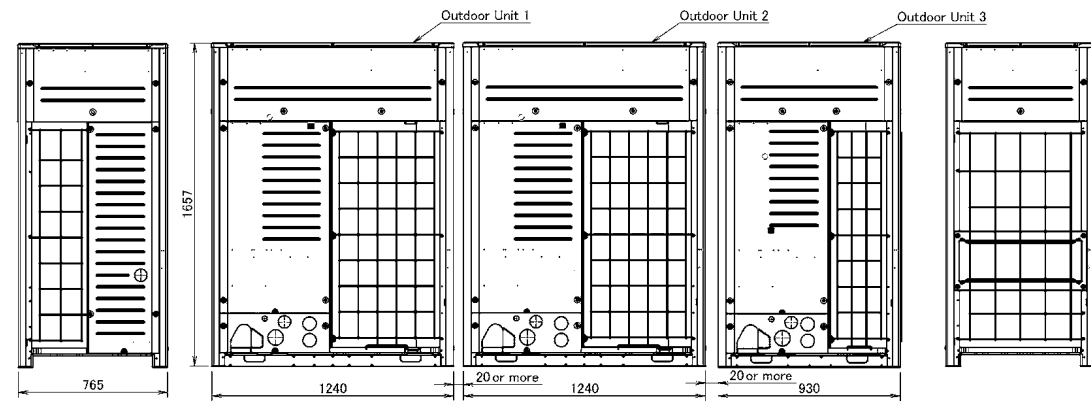
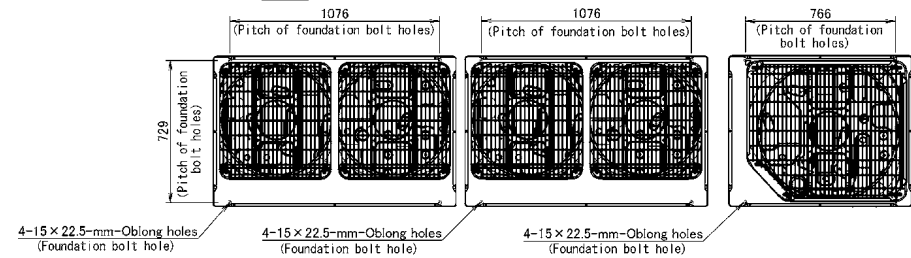
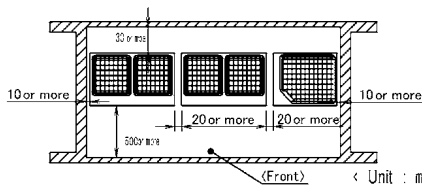
**INVERTER** **R-410A**



### SPECIFICATIONS

|   |                               |  |   |
|---|-------------------------------|--|---|
| Model Name  |                               | RHXYQ56ATL (RHXYQ10ATL + RHXYQ22ATL + RHXYQ22ATL)  |   |
| Power Supply  |                               | 3 phase, 220V, 60 Hz   |   |
| *1 Cooling Capacity   | kcal/h                        | 126,000  |   |
|   | Btu/h                         | 498,000  |   |
|   | kW                            | 146.0  |   |
| *2 Heating Capacity   | kcal/h                        | 146,000  |   |
|   | Btu/h                         | 580,000  |   |
|   | kW                            | 170.0  |   |
| Casing Color  |                               | Ivory White (5Y7.5/1)  |   |
| Dimensions: (H×W×D)   |                               | mm   | (1,657×930×765)+(1,657×1,240×765)+(1,657×1,240×765) |
| Heat Exchanger  |                               | Cross Fin Coil   |   |
| Compressor  | Type                          | Hermetically Sealed Scroll Type  |   |
|   | Motor Output× Number of Units | kW   | (5.7×1)+((5.0+7.4)×1)+((5.0+7.4)×1)                 |
|   | Starting Method               | Soft Start   |   |
| Fan   | Type                          | Propeller Fan  |   |
|   | Motor Output                  | kW   | (0.75×1)+(0.75×2)+(0.75×2)                          |
|   | Airflow Rate                  | m <sup>3</sup> /min  | 175+271+271   |
|   | Drive                         | Direct Drive   |   |
| Connecting Pipes  | Liquid Pipe                   | mm   | φ19.1 (Brazeing Connection)                         |
|   | Gas Pipe                      | mm   | φ38.1 (Brazeing Connection)                         |
| Mass  |                               | kg   | 191+317+317   |
| *3 Sound pressure level   |                               | dB(A)  | 67  |
| Safety Devices  |                               | High Pressure Switch, Fan Driver Overload Protector, Over Current Relay, Inverter Overload Protector |   |
| Defrost Method  |                               | Reverse cycle defrosting   |   |
| Capacity Control  |                               | %  | 3-100   |
| Refrigerant   | Refrigerant Name              | R410A  |   |
|   | Charge                        | kg   | 6.0+8.6+8.6   |
|   | Control                       | Electronic Expansion Valve   |   |
| Refrigerator Oil  |                               | Refer to the nameplate of compressor   |   |
| Standard Accessories  |                               | Installation Manual, Operation Manual, Connection Pipes, Clamps                                      |   |
| Drawing No.   | Specification                 | —  |   |
|   | Sound level                   | —  |   |
| Notes:  |                               |  |   |
| *1. Indoor temp.: 27°CDB, 19°CWB / outdoor temp.: 35°CDB / Equivalent piping length: 7.5m, level difference: 0m.  |                               |  |   |
| *2. Indoor temp.: 20°CDB / outdoor temp.: 7°CDB, 6°CWB / Equivalent piping length: 7.5m, level difference: 0m.  |                               |  |   |
| *3. Anechoic chamber conversion value, measured at a point 1 m in front of the unit at a height of 1.5 m. During actual operation, these values are normally somewhat higher as a result of ambient conditions. |                               |  |   |
| 4. Refer to Capacity Tables for the power input (PI) (Compressor + Outdoor fan motor).  |                               |  |   |

### DIMENSIONS



- Notes:
1. Heights of walls  
 Front : 1632mm  
 Suction side : 632mm  
 Side : Height unrestricted  
 The installation space shown in this figure is based on the condition of cooling operation at the outdoor air temperature of 35°C.  
 The installation space of suction side shown above must be expanded in the following case.  
 • Design outdoor temperature becomes over 35°C.  
 • Operating over Max. operating load (In case of causing a heavy heating load at indoor unit side)
  2. If the above wall heights are exceeded then h1/2 and h2/2 should be added to the front and suction side service spaces respectively as shown in the following figure.
  3. When installing the units the most appropriate pattern should be selected from those shown above in order to obtain the best fit in the space available always bearing in mind the need to  
 • Leave enough room for a person to pass between units and wall and for the air to circulate freely.  
 • If more units are to be installed than are catered for in the above patterns your layout should take account of the possibility of short circuits.)
  4. The units should be installed to leave sufficient space at the front for the on site refrigerant piping work to be carried out comfortably.

| MODEL       | OUTDOOR UNIT 1 | DWG. NO. | OUTDOOR UNIT 2 | DWG. NO. | OUTDOOR UNIT 3 | DWG. NO. |
|-------------|----------------|----------|----------------|----------|----------------|----------|
| RHX YQ46ATL | RHX YQ22ATL    | 3D081604 | RHX YQ16ATL    | 3D081604 | RHX YQ8ATL     | 3D081603 |
| RHX YQ48ATL | RHX YQ22ATL    | 3D081604 | RHX YQ16ATL    | 3D081604 | RHX YQ10ATL    | 3D081603 |
| RHX YQ50ATL | RHX YQ22ATL    | 3D081604 | RHX YQ16ATL    | 3D081604 | RHX YQ12ATL    | 3D081603 |
| RHX YQ52ATL | RHX YQ22ATL    | 3D081604 | RHX YQ20ATL    | 3D081604 | RHX YQ10ATL    | 3D081603 |
| RHX YQ54ATL | RHX YQ22ATL    | 3D081604 | RHX YQ22ATL    | 3D081604 | RHX YQ10ATL    | 3D081603 |
| RHX YQ56ATL | RHX YQ22ATL    | 3D081604 | RHX YQ22ATL    | 3D081604 | RHX YQ12ATL    | 3D081603 |
| RUX YQ46AB  | RUX YQ22AB     | 3D081604 | RUX YQ16AB     | 3D081604 | RUX YQ8AB      | 3D081603 |
| RUX YQ48AB  | RUX YQ22AB     | 3D081604 | RUX YQ16AB     | 3D081604 | RUX YQ10AB     | 3D081603 |
| RUX YQ50AB  | RUX YQ22AB     | 3D081604 | RUX YQ16AB     | 3D081604 | RUX YQ12AB     | 3D081603 |
| RUX YQ52AB  | RUX YQ22AB     | 3D081604 | RUX YQ20AB     | 3D081604 | RUX YQ10AB     | 3D081603 |
| RUX YQ54AB  | RUX YQ22AB     | 3D081604 | RUX YQ22AB     | 3D081604 | RUX YQ10AB     | 3D081603 |
| RUX YQ56AB  | RUX YQ22AB     | 3D081604 | RUX YQ22AB     | 3D081604 | RUX YQ12AB     | 3D081603 |

Unit (mm)  
3D082278E